

**02 INFORMATION ABOUT PRINCIPAL INVESTIGATORS/PROJECT DIRECTORS(PI/PD) and
co-PRINCIPAL INVESTIGATORS/co-PROJECT DIRECTORS**

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PI/PD Name: Karen Holbrook

Gender: Male Female
Ethnicity: (Choose one response) Hispanic or Latino Not Hispanic or Latino

Race:
(Select one or more)
 American Indian or Alaska Native
 Asian
 Black or African American
 Native Hawaiian or Other Pacific Islander
 White

Disability Status:
(Select one or more)
 Hearing Impairment
 Visual Impairment
 Mobility/Orthopedic Impairment
 Other
 None

Citizenship: (Choose one) U.S. Citizen Permanent Resident Other non-U.S. Citizen

Check here if you do not wish to provide any or all of the above information (excluding PI/PD name):

REQUIRED: Check here if you are currently serving (or have previously served) as a PI, co-PI or PD on any federally funded project

Ethnicity Definition:

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PI/PD Name: Kathryn M Borman

Gender: Male Female
Ethnicity: (Choose one response) Hispanic or Latino Not Hispanic or Latino

Race:
(Select one or more)
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 Asian
 Black or African American
 Native Hawaiian or Other Pacific Islander
 White

Disability Status:
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PI/PD Name: Sylvia W Thomas

Gender: Male Female
Ethnicity: (Choose one response) Hispanic or Latino Not Hispanic or Latino

Race:
(Select one or more)
 American Indian or Alaska Native
 Asian
 Black or African American
 Native Hawaiian or Other Pacific Islander
 White

Disability Status:
(Select one or more)
 Hearing Impairment
 Visual Impairment
 Mobility/Orthopedic Impairment
 Other
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PI/PD Name: Angel Kwolek-Folland

Gender: Male Female
Ethnicity: (Choose one response) Hispanic or Latino Not Hispanic or Latino

Race:
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 Asian
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 Native Hawaiian or Other Pacific Islander
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PI/PD Name: Cammy R Abernathy

Gender: Male Female
Ethnicity: (Choose one response) Hispanic or Latino Not Hispanic or Latino

Race:
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 American Indian or Alaska Native
 Asian
 Black or African American
 Native Hawaiian or Other Pacific Islander
 White

Disability Status:
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 Hearing Impairment
 Visual Impairment
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PI/PD Name: Anne E Donnelly

Gender: Male Female
Ethnicity: (Choose one response) Hispanic or Latino Not Hispanic or Latino

Race:
(Select one or more)
 American Indian or Alaska Native
 Asian
 Black or African American
 Native Hawaiian or Other Pacific Islander
 White

Disability Status:
(Select one or more)
 Hearing Impairment
 Visual Impairment
 Mobility/Orthopedic Impairment
 Other
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PI/PD Name: Lisa McElwee-White

Gender: Male Female
Ethnicity: (Choose one response) Hispanic or Latino Not Hispanic or Latino

Race:
(Select one or more)
 American Indian or Alaska Native
 Asian
 Black or African American
 Native Hawaiian or Other Pacific Islander
 White

Disability Status:
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PI/PD Name: Penny J Gilmer

Gender: Male Female
Ethnicity: (Choose one response) Hispanic or Latino Not Hispanic or Latino

Race:
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 Asian
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PI/PD Name: Rufina Alamo

Gender: Male Female
Ethnicity: (Choose one response) Hispanic or Latino Not Hispanic or Latino

Race:
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PI/PD Name: Simone P Hruda

Gender: Male Female
Ethnicity: (Choose one response) Hispanic or Latino Not Hispanic or Latino

Race:
(Select one or more)
 American Indian or Alaska Native
 Asian
 Black or African American
 Native Hawaiian or Other Pacific Islander
 White

Disability Status:
(Select one or more)
 Hearing Impairment
 Visual Impairment
 Mobility/Orthopedic Impairment
 Other
 None

Citizenship: (Choose one) U.S. Citizen Permanent Resident Other non-U.S. Citizen

Check here if you do not wish to provide any or all of the above information (excluding PI/PD name):

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PI/PD Name: Ngozi H Ugochukwu

Gender: Male Female
Ethnicity: (Choose one response) Hispanic or Latino Not Hispanic or Latino

Race:
(Select one or more)
 American Indian or Alaska Native
 Asian
 Black or African American
 Native Hawaiian or Other Pacific Islander
 White

Disability Status:
(Select one or more)
 Hearing Impairment
 Visual Impairment
 Mobility/Orthopedic Impairment
 Other
 None

Citizenship: (Choose one) U.S. Citizen Permanent Resident Other non-U.S. Citizen

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PI/PD Name: Berrin Tansel

Gender: Male Female
Ethnicity: (Choose one response) Hispanic or Latino Not Hispanic or Latino

Race:
(Select one or more)
 American Indian or Alaska Native
 Asian
 Black or African American
 Native Hawaiian or Other Pacific Islander
 White

Disability Status:
(Select one or more)
 Hearing Impairment
 Visual Impairment
 Mobility/Orthopedic Impairment
 Other
 None

Citizenship: (Choose one) U.S. Citizen Permanent Resident Other non-U.S. Citizen

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PI/PD Name: Jaroslava Miksovska

Gender: Male Female
Ethnicity: (Choose one response) Hispanic or Latino Not Hispanic or Latino

Race:
(Select one or more)
 American Indian or Alaska Native
 Asian
 Black or African American
 Native Hawaiian or Other Pacific Islander
 White

Disability Status:
(Select one or more)
 Hearing Impairment
 Visual Impairment
 Mobility/Orthopedic Impairment
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Citizenship: (Choose one) U.S. Citizen Permanent Resident Other non-U.S. Citizen

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PI/PD Name: Gustavo A Roig

Gender: Male Female
Ethnicity: (Choose one response) Hispanic or Latino Not Hispanic or Latino

Race:
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List of Suggested Reviewers or Reviewers Not To Include (optional)

SUGGESTED REVIEWERS:

Not Listed

REVIEWERS NOT TO INCLUDE:

Not Listed

List of Suggested Reviewers or Reviewers Not To Include (optional)

SUGGESTED REVIEWERS:

Not Listed

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SUGGESTED REVIEWERS:

Not Listed

REVIEWERS NOT TO INCLUDE:

Not Listed

CERTIFICATION PAGE

Certification for Authorized Organizational Representative or Individual Applicant:

By signing and submitting this proposal, the Authorized Organizational Representative or Individual Applicant is: (1) certifying that statements made herein are true and complete to the best of his/her knowledge; and (2) agreeing to accept the obligation to comply with NSF award terms and conditions if an award is made as a result of this application. Further, the applicant is hereby providing certifications regarding debarment and suspension, drug-free workplace, and lobbying activities (see below), nondiscrimination, and flood hazard insurance (when applicable) as set forth in the NSF Proposal & Award Policies & Procedures Guide, Part I: the Grant Proposal Guide (GPG) (NSF 09-1). Willful provision of false information in this application and its supporting documents or in reports required under an ensuing award is a criminal offense (U. S. Code, Title 18, Section 1001).

Conflict of Interest Certification

In addition, if the applicant institution employs more than fifty persons, by electronically signing the NSF Proposal Cover Sheet, the Authorized Organizational Representative of the applicant institution is certifying that the institution has implemented a written and enforced conflict of interest policy that is consistent with the provisions of the NSF Proposal & Award Policies & Procedures Guide, Part II, Award & Administration Guide (AAG) Chapter IV.A; that to the best of his/her knowledge, all financial disclosures required by that conflict of interest policy have been made; and that all identified conflicts of interest will have been satisfactorily managed, reduced or eliminated prior to the institution's expenditure of any funds under the award, in accordance with the institution's conflict of interest policy. Conflicts which cannot be satisfactorily managed, reduced or eliminated must be disclosed to NSF.

Drug Free Work Place Certification

By electronically signing the NSF Proposal Cover Sheet, the Authorized Organizational Representative or Individual Applicant is providing the Drug Free Work Place Certification contained in Exhibit II-3 of the Grant Proposal Guide.

Debarment and Suspension Certification

(If answer "yes", please provide explanation.)

Is the organization or its principals presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency?

Yes

No

By electronically signing the NSF Proposal Cover Sheet, the Authorized Organizational Representative or Individual Applicant is providing the Debarment and Suspension Certification contained in Exhibit II-4 of the Grant Proposal Guide.

Certification Regarding Lobbying

The following certification is required for an award of a Federal contract, grant, or cooperative agreement exceeding \$100,000 and for an award of a Federal loan or a commitment providing for the United States to insure or guarantee a loan exceeding \$150,000.

Certification for Contracts, Grants, Loans and Cooperative Agreements

The undersigned certifies, to the best of his or her knowledge and belief, that:

(1) No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure of Lobbying Activities," in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

Certification Regarding Nondiscrimination

By electronically signing the NSF Proposal Cover Sheet, the Authorized Organizational Representative is providing the Certification Regarding Nondiscrimination contained in Exhibit II-6 of the Grant Proposal Guide.

Certification Regarding Flood Hazard Insurance

Two sections of the National Flood Insurance Act of 1968 (42 USC §4012a and §4106) bar Federal agencies from giving financial assistance for acquisition or construction purposes in any area identified by the Federal Emergency Management Agency (FEMA) as having special flood hazards unless the:

- (1) community in which that area is located participates in the national flood insurance program; and
- (2) building (and any related equipment) is covered by adequate flood insurance.

By electronically signing the NSF Proposal Cover Sheet, the Authorized Organizational Representative or Individual Applicant located in FEMA-designated special flood hazard areas is certifying that adequate flood insurance has been or will be obtained in the following situations:

- (1) for NSF grants for the construction of a building or facility, regardless of the dollar amount of the grant; and
- (2) for other NSF Grants when more than \$25,000 has been budgeted in the proposal for repair, alteration or improvement (construction) of a building or facility.

AUTHORIZED ORGANIZATIONAL REPRESENTATIVE		SIGNATURE		DATE	
NAME		Electronic Signature		Feb 24 2009 4:20PM	
Judy Erickson					
TELEPHONE NUMBER	ELECTRONIC MAIL ADDRESS	FAX NUMBER			
813-974-5431	jerickso@research.usf.edu	813-974-4962			

* EAGER - EARly-concept Grants for Exploratory Research

** RAPID - Grants for Rapid Response Research

COVER SHEET FOR PROPOSAL TO THE NATIONAL SCIENCE FOUNDATION

PROGRAM ANNOUNCEMENT/SOLICITATION NO./CLOSING DATE/if not in response to a program announcement/solicitation enter NSF 09-1					FOR NSF USE ONLY	
NSF 09-504			02/24/09		NSF PROPOSAL NUMBER	
FOR CONSIDERATION BY NSF ORGANIZATION UNIT(S) (Indicate the most specific unit known, i.e. program, division, etc.)					0930237	
HRD - ADVANCE-PAID						
DATE RECEIVED	NUMBER OF COPIES	DIVISION ASSIGNED	FUND CODE	DUNS# (Data Universal Numbering System)	FILE LOCATION	
02/24/2009	5	11060000 HRD	7568	969663814	07/01/2009 1:32pm S	
EMPLOYER IDENTIFICATION NUMBER (EIN) OR TAXPAYER IDENTIFICATION NUMBER (TIN)		SHOW PREVIOUS AWARD NO. IF THIS IS <input type="checkbox"/> A RENEWAL <input type="checkbox"/> AN ACCOMPLISHMENT-BASED RENEWAL		IS THIS PROPOSAL BEING SUBMITTED TO ANOTHER FEDERAL AGENCY? YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> IF YES, LIST ACRONYM(S)		
596002052						
NAME OF ORGANIZATION TO WHICH AWARD SHOULD BE MADE			ADDRESS OF AWARDEE ORGANIZATION, INCLUDING 9 DIGIT ZIP CODE			
University of Florida			University of Florida 1 University of Florida Gainesville, FL. 326112002			
AWARDEE ORGANIZATION CODE (IF KNOWN)						
0015354000						
NAME OF PERFORMING ORGANIZATION, IF DIFFERENT FROM ABOVE			ADDRESS OF PERFORMING ORGANIZATION, IF DIFFERENT, INCLUDING 9 DIGIT ZIP CODE			
PERFORMING ORGANIZATION CODE (IF KNOWN)						
IS AWARDEE ORGANIZATION (Check All That Apply) (See GPG II.C For Definitions)		<input type="checkbox"/> SMALL BUSINESS <input type="checkbox"/> FOR-PROFIT ORGANIZATION		<input type="checkbox"/> MINORITY BUSINESS <input type="checkbox"/> WOMAN-OWNED BUSINESS		<input type="checkbox"/> IF THIS IS A PRELIMINARY PROPOSAL THEN CHECK HERE
TITLE OF PROPOSED PROJECT Collaborative Research: Alliance for the Advancement of Florida's Academic Women in Chemistry > and Engineering (AAFAWCE)						
REQUESTED AMOUNT \$	PROPOSED DURATION (1-60 MONTHS)	REQUESTED STARTING DATE	SHOW RELATED PRELIMINARY PROPOSAL NO. IF APPLICABLE			
157,852	36 months					
CHECK APPROPRIATE BOX(ES) IF THIS PROPOSAL INCLUDES ANY OF THE ITEMS LISTED BELOW						
<input type="checkbox"/> BEGINNING INVESTIGATOR (GPG I.G.2)		<input type="checkbox"/> HUMAN SUBJECTS (GPG II.D.7) Human Subjects Assurance Number _____				
<input type="checkbox"/> DISCLOSURE OF LOBBYING ACTIVITIES (GPG II.C)		Exemption Subsection _____ or IRB App. Date _____				
<input type="checkbox"/> PROPRIETARY & PRIVILEGED INFORMATION (GPG I.D, II.C.1.d)		<input type="checkbox"/> INTERNATIONAL COOPERATIVE ACTIVITIES: COUNTRY/COUNTRIES INVOLVED (GPG II.C.2.j)				
<input type="checkbox"/> HISTORIC PLACES (GPG II.C.2.j)		_____				
<input type="checkbox"/> EAGER* (GPG II.D.2) <input type="checkbox"/> RAPID** (GPG II.D.1)		<input type="checkbox"/> HIGH RESOLUTION GRAPHICS/OTHER GRAPHICS WHERE EXACT COLOR REPRESENTATION IS REQUIRED FOR PROPER INTERPRETATION (GPG I.G.1)				
<input type="checkbox"/> VERTEBRATE ANIMALS (GPG II.D.6) IACUC App. Date _____		PHS Animal Welfare Assurance Number _____				
PI/PD DEPARTMENT			PI/PD POSTAL ADDRESS			
Center for Women's Studies & Gender Res			PO Box 117352			
PI/PD FAX NUMBER			Gainesville, FL 32611			
352-392-4873			United States			
NAMES (TYPED)	High Degree	Yr of Degree	Telephone Number	Electronic Mail Address		
PI/PD NAME						
Angel Kwolek-Folland	PhD	1987	352-392-3365	halohead@ufl.edu		
CO-PI/PD						
Cammy R Abernathy	PhD	1985	352-846-1087	caberr@mse.ufl.edu		
CO-PI/PD						
Anne E Donnelly	PhD	1996	352-846-1194	adonnelly@erc.ufl.edu		
CO-PI/PD						
Lisa McElwee-White	PH.D.	1984	352-392-8768	lmwhite@chem.ufl.edu		
CO-PI/PD						

CERTIFICATION PAGE

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(If answer "yes", please provide explanation.)

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(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure of Lobbying Activities," in accordance with its instructions.

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- (2) for other NSF Grants when more than \$25,000 has been budgeted in the proposal for repair, alteration or improvement (construction) of a building or facility.

AUTHORIZED ORGANIZATIONAL REPRESENTATIVE		SIGNATURE		DATE	
NAME		Electronic Signature		Feb 27 2009 4:44PM	
Brian E Prindle					
TELEPHONE NUMBER	ELECTRONIC MAIL ADDRESS		FAX NUMBER		
352-392-3516	prindle@ufl.edu		352-846-1839		

* EAGER - EARly-concept Grants for Exploratory Research

** RAPID - Grants for Rapid Response Research

COVER SHEET FOR PROPOSAL TO THE NATIONAL SCIENCE FOUNDATION

PROGRAM ANNOUNCEMENT/SOLICITATION NO./CLOSING DATE/if not in response to a program announcement/solicitation enter NSF 09-1				FOR NSF USE ONLY	
NSF 09-504		02/24/09		NSF PROPOSAL NUMBER	
FOR CONSIDERATION BY NSF ORGANIZATION UNIT(S) (Indicate the most specific unit known, i.e. program, division, etc.)				0930164	
HRD - ADVANCE-PAID					
DATE RECEIVED	NUMBER OF COPIES	DIVISION ASSIGNED	FUND CODE	DUNS# (Data Universal Numbering System)	FILE LOCATION
02/24/2009	5	11060000 HRD	7568	790877419	07/01/2009 1:32pm S
EMPLOYER IDENTIFICATION NUMBER (EIN) OR TAXPAYER IDENTIFICATION NUMBER (TIN)		SHOW PREVIOUS AWARD NO. IF THIS IS <input type="checkbox"/> A RENEWAL <input type="checkbox"/> AN ACCOMPLISHMENT-BASED RENEWAL		IS THIS PROPOSAL BEING SUBMITTED TO ANOTHER FEDERAL AGENCY? YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> IF YES, LIST ACRONYM(S)	
591961248					
NAME OF ORGANIZATION TO WHICH AWARD SHOULD BE MADE		ADDRESS OF AWARDEE ORGANIZATION, INCLUDING 9 DIGIT ZIP CODE			
Florida State University		Florida State University			
AWARDEE ORGANIZATION CODE (IF KNOWN)		874 Traditions Way, 3rd Floor			
0014894000		TALLAHASSEE, FL. 323064166			
NAME OF PERFORMING ORGANIZATION, IF DIFFERENT FROM ABOVE		ADDRESS OF PERFORMING ORGANIZATION, IF DIFFERENT, INCLUDING 9 DIGIT ZIP CODE			
PERFORMING ORGANIZATION CODE (IF KNOWN)					
IS AWARDEE ORGANIZATION (Check All That Apply) (See GPG II.C For Definitions)		<input type="checkbox"/> SMALL BUSINESS	<input type="checkbox"/> MINORITY BUSINESS	<input type="checkbox"/> IF THIS IS A PRELIMINARY PROPOSAL THEN CHECK HERE	
		<input type="checkbox"/> FOR-PROFIT ORGANIZATION	<input type="checkbox"/> WOMAN-OWNED BUSINESS		
TITLE OF PROPOSED PROJECT Collaborative Research: Alliance for the Advancement of Florida's Academic Women in Chemistry and Engineering (AAFAWCE)					
REQUESTED AMOUNT	PROPOSED DURATION (1-60 MONTHS)	REQUESTED STARTING DATE	SHOW RELATED PRELIMINARY PROPOSAL NO. IF APPLICABLE		
\$ 123,408	36 months	08/01/09			
CHECK APPROPRIATE BOX(ES) IF THIS PROPOSAL INCLUDES ANY OF THE ITEMS LISTED BELOW					
<input type="checkbox"/> BEGINNING INVESTIGATOR (GPG I.G.2)		<input type="checkbox"/> HUMAN SUBJECTS (GPG II.D.7) Human Subjects Assurance Number _____			
<input type="checkbox"/> DISCLOSURE OF LOBBYING ACTIVITIES (GPG II.C)		Exemption Subsection _____ or IRB App. Date _____			
<input type="checkbox"/> PROPRIETARY & PRIVILEGED INFORMATION (GPG I.D, II.C.1.d)		<input type="checkbox"/> INTERNATIONAL COOPERATIVE ACTIVITIES: COUNTRY/COUNTRIES INVOLVED (GPG II.C.2.j)			
<input type="checkbox"/> HISTORIC PLACES (GPG II.C.2.j)		_____			
<input type="checkbox"/> EAGER* (GPG II.D.2) <input type="checkbox"/> RAPID** (GPG II.D.1)		<input type="checkbox"/> HIGH RESOLUTION GRAPHICS/OTHER GRAPHICS WHERE EXACT COLOR REPRESENTATION IS REQUIRED FOR PROPER INTERPRETATION (GPG I.G.1)			
<input type="checkbox"/> VERTEBRATE ANIMALS (GPG II.D.6) IACUC App. Date _____		_____			
PHS Animal Welfare Assurance Number _____					
PI/PD DEPARTMENT		PI/PD POSTAL ADDRESS			
Department of Chemistry and Biochemistry		Tallahassee, FL 323064390			
PI/PD FAX NUMBER		United States			
850-644-8281					
NAMES (TYPED)	High Degree	Yr of Degree	Telephone Number	Electronic Mail Address	
PI/PD NAME					
Penny J Gilmer	PhD	1972	850-644-4026	gilmer@chem.fsu.edu	
CO-PI/PD					
Rufina Alamo	ScD	1981	850-410-6376	alamo@eng.fsu.edu	
CO-PI/PD					
CO-PI/PD					
CO-PI/PD					

CERTIFICATION PAGE

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- (2) for other NSF Grants when more than \$25,000 has been budgeted in the proposal for repair, alteration or improvement (construction) of a building or facility.

AUTHORIZED ORGANIZATIONAL REPRESENTATIVE		SIGNATURE		DATE	
NAME Kirby W Kemper		Electronic Signature		Feb 24 2009 2:40PM	
TELEPHONE NUMBER 850-644-5260	ELECTRONIC MAIL ADDRESS nsfaward@res.fsu.edu			FAX NUMBER 850-644-1464	

* EAGER - EARly-concept Grants for Exploratory Research

** RAPID - Grants for Rapid Response Research

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PROGRAM ANNOUNCEMENT/SOLICITATION NO./CLOSING DATE/if not in response to a program announcement/solicitation enter NSF 09-1					FOR NSF USE ONLY	
NSF 09-504			02/24/09		NSF PROPOSAL NUMBER	
FOR CONSIDERATION BY NSF ORGANIZATION UNIT(S) (Indicate the most specific unit known, i.e. program, division, etc.)					0930172	
HRD - ADVANCE-PAID						
DATE RECEIVED	NUMBER OF COPIES	DIVISION ASSIGNED	FUND CODE	DUNS# (Data Universal Numbering System)	FILE LOCATION	
02/24/2009	5	11060000 HRD	7568	623751831	07/01/2009 1:33pm S	
EMPLOYER IDENTIFICATION NUMBER (EIN) OR TAXPAYER IDENTIFICATION NUMBER (TIN)		SHOW PREVIOUS AWARD NO. IF THIS IS <input type="checkbox"/> A RENEWAL <input type="checkbox"/> AN ACCOMPLISHMENT-BASED RENEWAL		IS THIS PROPOSAL BEING SUBMITTED TO ANOTHER FEDERAL AGENCY? YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> IF YES, LIST ACRONYM(S)		
590977035						
NAME OF ORGANIZATION TO WHICH AWARD SHOULD BE MADE			ADDRESS OF AWARDEE ORGANIZATION, INCLUDING 9 DIGIT ZIP CODE			
Florida Agricultural and Mechanical University			Florida Agricultural and Mechanical University			
AWARDEE ORGANIZATION CODE (IF KNOWN)			1500 Wahnish Way			
0014803000			Tallahassee, FL. 323077310			
NAME OF PERFORMING ORGANIZATION, IF DIFFERENT FROM ABOVE			ADDRESS OF PERFORMING ORGANIZATION, IF DIFFERENT, INCLUDING 9 DIGIT ZIP CODE			
PERFORMING ORGANIZATION CODE (IF KNOWN)						
IS AWARDEE ORGANIZATION (Check All That Apply) (See GPG II.C For Definitions)		<input type="checkbox"/> SMALL BUSINESS	<input type="checkbox"/> MINORITY BUSINESS	<input type="checkbox"/> IF THIS IS A PRELIMINARY PROPOSAL THEN CHECK HERE		
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TITLE OF PROPOSED PROJECT Collaborative Research: Alliance for the Advancement of Florida's Academic Women in Chemistry and Engineering (AAFAWCE)						
REQUESTED AMOUNT	PROPOSED DURATION (1-60 MONTHS)	REQUESTED STARTING DATE	SHOW RELATED PRELIMINARY PROPOSAL NO. IF APPLICABLE			
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CHECK APPROPRIATE BOX(ES) IF THIS PROPOSAL INCLUDES ANY OF THE ITEMS LISTED BELOW						
<input type="checkbox"/> BEGINNING INVESTIGATOR (GPG I.G.2)		<input type="checkbox"/> HUMAN SUBJECTS (GPG II.D.7) Human Subjects Assurance Number _____				
<input type="checkbox"/> DISCLOSURE OF LOBBYING ACTIVITIES (GPG II.C)		Exemption Subsection _____ or IRB App. Date _____				
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<input type="checkbox"/> HISTORIC PLACES (GPG II.C.2.j)		_____				
<input type="checkbox"/> EAGER* (GPG II.D.2) <input type="checkbox"/> RAPID** (GPG II.D.1)		<input type="checkbox"/> HIGH RESOLUTION GRAPHICS/OTHER GRAPHICS WHERE EXACT COLOR REPRESENTATION IS REQUIRED FOR PROPER INTERPRETATION (GPG I.G.1)				
<input type="checkbox"/> VERTEBRATE ANIMALS (GPG II.D.6) IACUC App. Date _____		_____				
PHS Animal Welfare Assurance Number _____						
PI/PD DEPARTMENT		PI/PD POSTAL ADDRESS				
Department of Mechanical Engineering		College of Engineering, Room 229				
PI/PD FAX NUMBER		2525 Pottsdamer Street				
850-410-6337		Tallahassee, FL 32310				
		United States				
NAMES (TYPED)	High Degree	Yr of Degree	Telephone Number	Electronic Mail Address		
PI/PD NAME	PhD	1992	850-410-6372	simone.hruda@famuedu		
CO-PI/PD	PhD	1989	850-412-7124	ngozi.ugochukwu@famuedu		
CO-PI/PD						
CO-PI/PD						
CO-PI/PD						

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- (2) for other NSF Grants when more than \$25,000 has been budgeted in the proposal for repair, alteration or improvement (construction) of a building or facility.

AUTHORIZED ORGANIZATIONAL REPRESENTATIVE		SIGNATURE	DATE
NAME Garlen D Wesson		Electronic Signature	Feb 24 2009 2:56PM
TELEPHONE NUMBER 850-410-6159	ELECTRONIC MAIL ADDRESS sponsor@famu.edu	FAX NUMBER 850-410-6150	

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COVER SHEET FOR PROPOSAL TO THE NATIONAL SCIENCE FOUNDATION

PROGRAM ANNOUNCEMENT/SOLICITATION NO./CLOSING DATE/If not in response to a program announcement/solicitation enter NSF 09-1				FOR NSF USE ONLY	
NSF 09-504		02/24/09		NSF PROPOSAL NUMBER	
FOR CONSIDERATION BY NSF ORGANIZATION UNIT(S) (Indicate the most specific unit known, i.e. program, division, etc.)				0930187	
HRD - ADVANCE-PAID					
DATE RECEIVED	NUMBER OF COPIES	DIVISION ASSIGNED	FUND CODE	DUNS# (Data Universal Numbering System)	FILE LOCATION
02/24/2009	5	11060000 HRD	7568	071298814	07/01/2009 1:33pm S
EMPLOYER IDENTIFICATION NUMBER (EIN) OR TAXPAYER IDENTIFICATION NUMBER (TIN)		SHOW PREVIOUS AWARD NO. IF THIS IS <input type="checkbox"/> A RENEWAL <input type="checkbox"/> AN ACCOMPLISHMENT-BASED RENEWAL		IS THIS PROPOSAL BEING SUBMITTED TO ANOTHER FEDERAL AGENCY? YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> IF YES, LIST ACRONYM(S)	
650177616					
NAME OF ORGANIZATION TO WHICH AWARD SHOULD BE MADE		ADDRESS OF AWARDEE ORGANIZATION, INCLUDING 9 DIGIT ZIP CODE			
Florida International University		Florida International University			
AWARDEE ORGANIZATION CODE (IF KNOWN)		11200 SW 8TH ST			
0096354000		Miami, FL. 331990001			
NAME OF PERFORMING ORGANIZATION, IF DIFFERENT FROM ABOVE		ADDRESS OF PERFORMING ORGANIZATION, IF DIFFERENT, INCLUDING 9 DIGIT ZIP CODE			
PERFORMING ORGANIZATION CODE (IF KNOWN)					
IS AWARDEE ORGANIZATION (Check All That Apply) (See GPG II.C For Definitions)		<input type="checkbox"/> SMALL BUSINESS		<input type="checkbox"/> MINORITY BUSINESS	
		<input type="checkbox"/> FOR-PROFIT ORGANIZATION		<input type="checkbox"/> WOMAN-OWNED BUSINESS	
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TITLE OF PROPOSED PROJECT ADVANCE-PAID: AAFAWCE					
REQUESTED AMOUNT	PROPOSED DURATION (1-60 MONTHS)	REQUESTED STARTING DATE	SHOW RELATED PRELIMINARY PROPOSAL NO. IF APPLICABLE		
\$ 50,613	36 months	08/01/09			
CHECK APPROPRIATE BOX(ES) IF THIS PROPOSAL INCLUDES ANY OF THE ITEMS LISTED BELOW					
<input type="checkbox"/> BEGINNING INVESTIGATOR (GPG I.G.2)		<input type="checkbox"/> HUMAN SUBJECTS (GPG II.D.7) Human Subjects Assurance Number _____			
<input type="checkbox"/> DISCLOSURE OF LOBBYING ACTIVITIES (GPG II.C)		Exemption Subsection _____ or IRB App. Date _____			
<input type="checkbox"/> PROPRIETARY & PRIVILEGED INFORMATION (GPG I.D, II.C.1.d)		<input type="checkbox"/> INTERNATIONAL COOPERATIVE ACTIVITIES: COUNTRY/COUNTRIES INVOLVED (GPG II.C.2.j)			
<input type="checkbox"/> HISTORIC PLACES (GPG II.C.2.j)					
<input type="checkbox"/> EAGER* (GPG II.D.2) <input type="checkbox"/> RAPID** (GPG II.D.1)					
<input type="checkbox"/> VERTEBRATE ANIMALS (GPG II.D.6) IACUC App. Date _____		<input type="checkbox"/> HIGH RESOLUTION GRAPHICS/OTHER GRAPHICS WHERE EXACT COLOR REPRESENTATION IS REQUIRED FOR PROPER INTERPRETATION (GPG I.G.1)			
PHS Animal Welfare Assurance Number _____					
PI/PD DEPARTMENT		PI/PD POSTAL ADDRESS			
Department of Civil & Environmental Eng.		Center for Engineering & Applied Science			
PI/PD FAX NUMBER		Civil and Environmental Engineering Dept			
305-348-2802		Miami, FL 33174			
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CERTIFICATION PAGE

Certification for Authorized Organizational Representative or Individual Applicant:

By signing and submitting this proposal, the Authorized Organizational Representative or Individual Applicant is: (1) certifying that statements made herein are true and complete to the best of his/her knowledge; and (2) agreeing to accept the obligation to comply with NSF award terms and conditions if an award is made as a result of this application. Further, the applicant is hereby providing certifications regarding debarment and suspension, drug-free workplace, and lobbying activities (see below), nondiscrimination, and flood hazard insurance (when applicable) as set forth in the NSF Proposal & Award Policies & Procedures Guide, Part I: the Grant Proposal Guide (GPG) (NSF 09-1). Willful provision of false information in this application and its supporting documents or in reports required under an ensuing award is a criminal offense (U. S. Code, Title 18, Section 1001).

Conflict of Interest Certification

In addition, if the applicant institution employs more than fifty persons, by electronically signing the NSF Proposal Cover Sheet, the Authorized Organizational Representative of the applicant institution is certifying that the institution has implemented a written and enforced conflict of interest policy that is consistent with the provisions of the NSF Proposal & Award Policies & Procedures Guide, Part II, Award & Administration Guide (AAG) Chapter IV.A; that to the best of his/her knowledge, all financial disclosures required by that conflict of interest policy have been made; and that all identified conflicts of interest will have been satisfactorily managed, reduced or eliminated prior to the institution's expenditure of any funds under the award, in accordance with the institution's conflict of interest policy. Conflicts which cannot be satisfactorily managed, reduced or eliminated must be disclosed to NSF.

Drug Free Work Place Certification

By electronically signing the NSF Proposal Cover Sheet, the Authorized Organizational Representative or Individual Applicant is providing the Drug Free Work Place Certification contained in Exhibit II-3 of the Grant Proposal Guide.

Debarment and Suspension Certification

(If answer "yes", please provide explanation.)

Is the organization or its principals presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency?

Yes

No

By electronically signing the NSF Proposal Cover Sheet, the Authorized Organizational Representative or Individual Applicant is providing the Debarment and Suspension Certification contained in Exhibit II-4 of the Grant Proposal Guide.

Certification Regarding Lobbying

The following certification is required for an award of a Federal contract, grant, or cooperative agreement exceeding \$100,000 and for an award of a Federal loan or a commitment providing for the United States to insure or guarantee a loan exceeding \$150,000.

Certification for Contracts, Grants, Loans and Cooperative Agreements

The undersigned certifies, to the best of his or her knowledge and belief, that:

- (1) No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure of Lobbying Activities," in accordance with its instructions.
- (3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

Certification Regarding Nondiscrimination

By electronically signing the NSF Proposal Cover Sheet, the Authorized Organizational Representative is providing the Certification Regarding Nondiscrimination contained in Exhibit II-6 of the Grant Proposal Guide.

Certification Regarding Flood Hazard Insurance

Two sections of the National Flood Insurance Act of 1968 (42 USC §4012a and §4106) bar Federal agencies from giving financial assistance for acquisition or construction purposes in any area identified by the Federal Emergency Management Agency (FEMA) as having special flood hazards unless the:

- (1) community in which that area is located participates in the national flood insurance program; and
- (2) building (and any related equipment) is covered by adequate flood insurance.

By electronically signing the NSF Proposal Cover Sheet, the Authorized Organizational Representative or Individual Applicant located in FEMA-designated special flood hazard areas is certifying that adequate flood insurance has been or will be obtained in the following situations:

- (1) for NSF grants for the construction of a building or facility, regardless of the dollar amount of the grant; and
- (2) for other NSF Grants when more than \$25,000 has been budgeted in the proposal for repair, alteration or improvement (construction) of a building or facility.

AUTHORIZED ORGANIZATIONAL REPRESENTATIVE		SIGNATURE	DATE
NAME Roberto M Gutierrez		Electronic Signature	Feb 25 2009 4:13PM
TELEPHONE NUMBER 305-348-2494	ELECTRONIC MAIL ADDRESS gutierrez@fui.edu	FAX NUMBER 305-348-4117	

* EAGER - EARly-concept Grants for Exploratory Research

** RAPID - Grants for Rapid Response Research

Alliance for the Advancement of Florida's Academic Women in Chemistry and Engineering (AAFAWCE)

Overview

Colleges of Engineering and Departments of Chemistry at five large state universities in Florida join together to form the Alliance for the Advancement of Florida's Academic Women in Chemistry and Engineering (AAFAWCE). The University of South Florida (USF) is the lead institution with Vice President of Research Karen Holbrook serving as the Principal Investigator of the proposed project and Professor Kathryn Borman as our project leader. Other key personnel at the participating universities include Professors Penny J. Gilmer and Rufina Alamo, Florida State University; Simone Peterson Hrudá and Ngozi Ugochukwu, Florida Agricultural and Mechanical University; Anne Donnelly, University of Florida; Berrin Tansel, Florida International University. The proposed project includes a social science research component, directed by USF Professor Will Tyson, including a faculty climate survey, first developed by the ADVANCE WISELI program at the University of Wisconsin, Madison, and an external evaluation conducted by Professor Kate Scantlebury, University of Delaware. The proposed program of work includes modifying and adapting successful programs developed in the context of other ADVANCE projects, namely strategies for 1) recruiting women in academic searches conducted in chemistry and engineering, also developed by the WISELI project; 2) transforming careers via leadership workshops provided by COACH programs, developed at University of Oregon; and 3) advising and mentoring academic women at the assistant and associate levels using programs developed by the ADVANCE program at the University of Texas-EI Paso (UTEP). Dissemination includes 1) Global Educational Outreach and 2) a published monograph with chapters by a) project personnel on the objectives and activities of the program, b) the women academics recruited and mentored by this alliance, c) the social scientist's results of the research, and d) the external evaluation.

Intellectual Merit

The plan proposed here is a well integrated approach to providing women faculty members at five major state universities in the state of Florida access to workshops and programs of high quality. Women across the science disciplines and in each of the participating campuses' engineering programs will be provided compelling and thought-provoking workshops covering recruitment, open to faculty, department chairs, deans and other administrators; strategies for advancing in one's career as a faculty member provided by trained individuals from the COACH program and; finally, participants will engage in the mentoring and advising program developed by UTEP's Evelyn Posey.

Broader Impacts

The broader impacts of this project include opportunities for women at all ranks and with varying levels of experience in academe to engage in activities with others from Florida campuses and on their own campus. Participants will engage in activities including the provision of advances in understanding effective recruitment and retention practices; mentoring practices; and personal development as an academic. In short, the series of proposed activities will assure the creation of the next generation of leaders in science and engineering. Dissemination includes 1) Global Educational Outreach and 2) a published monograph with chapters by a) project personnel on the objectives of the program, b) the women academics recruited and mentored by this alliance, c) the social scientist's results of the research, and d) external evaluation results.

TABLE OF CONTENTS

For font size and page formatting specifications, see GPG section II.B.2.

	Total No. of Pages	Page No.* (Optional)*
Cover Sheet for Proposal to the National Science Foundation		
Project Summary (not to exceed 1 page)	1	_____
Table of Contents	1	_____
Project Description (Including Results from Prior NSF Support) (not to exceed 15 pages) (Exceed only if allowed by a specific program announcement/solicitation or if approved in advance by the appropriate NSF Assistant Director or designee)	15	_____
References Cited	1	_____
Biographical Sketches (Not to exceed 2 pages each)	11	_____
Budget (Plus up to 3 pages of budget justification)	8	_____
Current and Pending Support	8	_____
Facilities, Equipment and Other Resources	1	_____
Special Information/Supplementary Documentation	6	_____
Appendix (List below.) (Include only if allowed by a specific program announcement/ solicitation or if approved in advance by the appropriate NSF Assistant Director or designee)	_____	_____
Appendix Items:		

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TABLE OF CONTENTS

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Budget (Plus up to 3 pages of budget justification)	9	_____
Current and Pending Support	6	_____
Facilities, Equipment and Other Resources	1	_____
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Alliance for the Advancement of Florida's Academic Women in Chemistry and Engineering (AAFAWCE)

Introduction

Recently, the National Academies' Committee on Maximizing the Potential of Women in Academic Science and Engineering issued its report (NAS, 2007), suggesting that organizational structures and the rules that govern academic institutions are disadvantageous to the welfare and success of women in the ranks of the professoriate in engineering and the sciences. In alignment with the mandates of this timely report, the Alliance for the Advancement of Florida's Academic Women has as its primary goals and objectives the recruitment of women faculty, mentoring and advising academic women at the assistant and associate levels, and the promotion of leadership among academic women. Further, not taking action is likely to be detrimental to the welfare of the nation, now highly dependent on the full employment and inclusion of qualified women, especially in the fields of engineering and chemistry, the centerpiece of our program of work for this proposed project.

This ADVANCE PAID proposal is a call to action to increase the capacity and practices of search committees, administrators, including department chairs, and faculty members to recruit women and also to assure the mentoring of women faculty in academic chemistry and engineering departments in five state universities in Florida: University of South Florida, Florida State University, the University of Florida, Florida Agricultural and Mechanical University (an historically black institution) and Florida International University (a Hispanic-serving institution).

Our work during the three years of the proposed project focuses on three major project objectives:

- **Recruitment of Women Faculty:** *To assure the recruitment of women faculty to the sciences and engineering by providing opportunities, best practices and strategies for hiring women faculty in these areas.* The workshops, designed by the Women in Science & Engineering Leadership Institute (WISELI) program at the University of Wisconsin, Madison, will cover proven strategies and methodologies, including Running an Effective and Efficient Search Committee; Actively Recruiting an Excellent and Diverse Applicant Pool; and Raising Awareness of Unconscious Assumptions and their Influence on the Evaluation of Candidates. Key participants from all Alliance Institutions will attend an initial Train-the-Trainer(s) workshop conducted by WISELI representatives in a central location and later (years two and three) conduct workshops at participating campuses for search committee chairs, administrators, faculty and human resource staff to begin incorporating these practices into the framework of each institution's practices. Lead administrative officer (VP Research, College of Engineering Deans, etc.) from the five universities will promote and support these workshops and send representatives to the Training workshops during the first year of the project. Our goal is to not lose a single woman faculty member during the three years of the project.
- **Retention of Women Faculty through Mentoring and Advising:** *To assure the retention of women faculty in the sciences and engineering the Alliance will provide opportunities, infrastructure, and resources for mentoring and advising assistant and associate professors.* To facilitate the mentoring and advising process, we will rely upon the practices established by the successful University of Texas-El Paso (UTEP) program designed and modified by Evelyn Posey. As an example, the UTEP team has learned that it is important for (a) mentees to select their mentors, (b) mentors be faculty from outside the mentee's academic department, and (c) male mentors are as effective as female mentors for women mentees. Initial implementations will begin with a Train-the-Trainers program in line with UTEP's 'breaking patterns of academic isolation' during the first year. Subsequently in years two and three, tenure-earning female faculty will be invited to participate in the program, matching tenure-earning women with senior faculty. Mentoring and advising of the participants over years two and three of the program will

include Alliance forums, on-line portal, and brown bag lunches. Newly hired tenure-track female faculty will be invited to join the Alliance mentoring network. Our goal over the three years is to involve at least 20-30 mentees on each university campus in our mentoring work.

- Promotion of Leadership Among Women Faculty: *To increase the number of women in chemistry and engineering capitalizing on their leadership skills for career advancement and the attainment of leadership positions.* In years one and three of the projected set of activities, the Alliance will provide COACH leadership workshops for women in chemistry, engineering and in the STEM disciplines, particularly those who are motivated and interested in advancing in academic leadership positions. Years one and three of the project are critical in cultivating Alliance participants (year 1) and preparing participants to transition into the final phase of the tenure process and potential leadership roles (year 3) at their respective universities. We anticipate that Alliance supporters and participants will hold leadership roles within the university infrastructure, institutionalizing the Alliance for the Advancement of Florida Academic Women. Our goal is to realize the appointment of at least three women to academic leadership positions on each participating campus.

We intend to include faculty in all the sciences and engineering in our program of activities whenever possible, and as a result, we expect to find by the final year of our program that women faculty are well prepared for promotion across all ranks and for taking on leadership positions in research or in academic leadership positions. We also expect to see increased attention to eligible women doctoral candidates in the STEM sciences and engineering derived from meeting the Alliance's three objectives.

Related Literature

The Importance of Women to the U.S. Scientific and Engineering Workforce

The US economy depends on its workforce to be productively employed. The *America Creating Opportunities to Meaningfully Promote Excellence in Technology, Education, and Science* (COMPETES) Act (2009) signed into law in August 2007 was "to ensure our nation's competitive position in the world through improvements to math and science education and a strong commitment to research." Congress passed this law in response to the NAS report, *Rising Above the Gathering Storm* (NAS, 2005). Interestingly, the NAS wrote the report in response to the Congressional request to address the following questions:

- What are the top 10 actions, in priority order, that federal policymakers could take to enhance the science and technology enterprise so that the United States can successfully compete, prosper, and be secure in the global community of the 21st century?
- What strategy, with several concrete steps, could be used to implement each of those actions?

Rising Above the Gathering Storm (NAS, 2005) points out, "Only a quarter of this [S&E] workforce consists of women, although women are almost half the total US workforce" (NAS, 2005, p. 343). Therefore, to improve our competitive position we must retain and mentor women who serve as academic scientists and engineers.

Women earn around half of all doctoral degrees, an increase from 30 percent in 1979-80 (National Center for Educational Statistics [NCES], 2007). The percentage of college graduates earning degrees in the sciences and engineering who are women increased from 25 percent in 1966 to 50 percent in 2005, although the percentage of those graduating in computer science is in decline, from a high of 28 percent women in 2000 to 22 percent in 2005. Women graduating in the physical

sciences increased gradually from 37 percent in 1996 to 43 percent in 2005. In engineering, the percentage of women B.S. graduates increased from 18 percent to 20 percent from 1996 to 2005 (National Science Foundation [NSF], 2008).

Figure 1 shows that since 1974, the percentage of women earning doctorates in science and engineering has increased at a similar slope for the life sciences (from 17 percent to 49 percent) and similarly in the social sciences (from 23 percent to 55 percent) (Figure 1). However, in the physical sciences and in engineering, both the percentages of women earning Ph.D. degrees in 1974 and the rate of the increase in this percentage since then are less than those for the life sciences and the social sciences. In 2004, 27 percent of the Ph.D. degrees in the physical sciences and 19 percent of the Ph.D. degrees in engineering went to women (NAS, p. 14, 2007, from the NSF 2006 report).

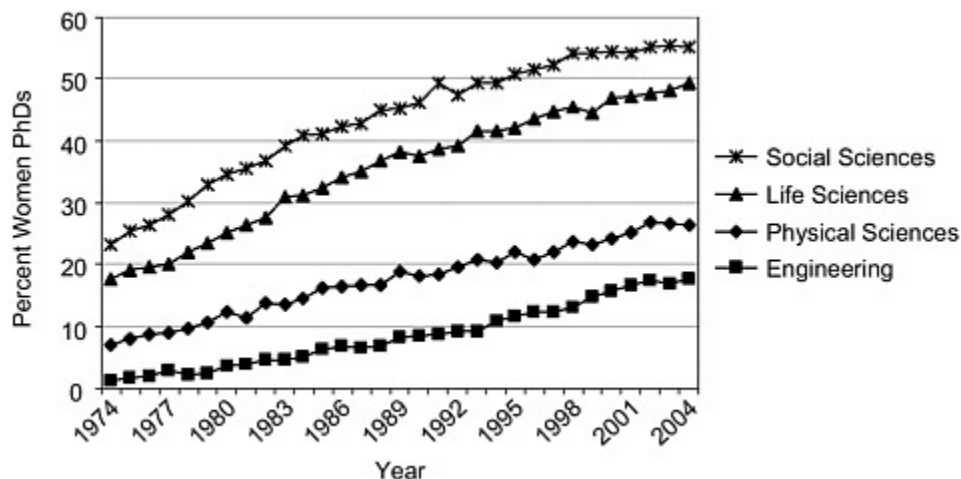


Figure 1. Percentage of science and engineering PhDs awarded to women, 1974-2004.

Source: National Science Foundation (2006). Survey of Earned Doctorates, 1974-2004. Arlington, VA.

Despite gains in doctoral degree attainment, women make up only around 40 percent of all faculty at Title IV degree-granting institutions, and the gender gap widens as faculty move up the academic ladder. Women make up 48 percent of faculty not on the tenure-track, 45 percent of faculty on tenure-track, but only 33 percent of faculty with tenure. Better stated, among faculty who work at institutions with tenure systems, 32 percent of female faculty are not on the tenure-track compared to only 23 percent of male faculty. A quarter of female faculty is on the tenure-track; however, they have not yet earned tenure compared to 20 percent of men. Only 39 percent of all female faculty have tenure compared to 52 percent of male faculty (Knapp, Kelly-Reid, Whitmore, and Miller, 2007). Much of this disparity in tenure status is due to lingering disparities in educational opportunities, but some is related to challenges tenure-earning women face today.

The story in engineering and the sciences more generally is much less promising. In the biological sciences the percentage of women in the doctorate pool has been over 20 percent over the past 30 years, yet the percentage of women in faculty positions in the top universities is less than 15 percent. There is a large disparity between the percentages of female recent doctoral degree recipients compared to assistant professors. Among the top 100 chemistry departments, women made up 32 percent of PhD recipients from 1996 to 2005, but today make up only 21 percent of assistant professors and 20 percent of associate professors. Interestingly, engineering programs have done a better job of utilizing the recent talent pool, as a larger percentage of women make up assistant professors in engineering than recent PhD recipients. There is still plenty of work to do

because women make up only between 12 and 18 percent of associate professors in chemical, civil, electrical, and mechanical engineering programs (Nelson, 2007). Therefore, the pipeline is not the only problem! Rather it is access to academic positions and the resources and support that academic women receive once hired.

It is critically important to address the leaks in the pipeline while also acknowledging that women’s career pathways are likely to take on a different profile from their male counterparts. For example, in an NSF-sponsored ROLE study of engineers who graduated from institutions in the Florida state university system, researchers determined that women who remained in the state pursuing either academic or other workforce positions were likely to suffer negative effects of stopouts taken during their employment. Specifically, logistic regression results show that, except for length of stopouts, none of the interaction effects involving gender and any of the independent variables (i.e., number of semesters of work, pursuance of a post-BA degree, and frequency of stopout) was significant (Wao, Borman, Lee & Tyson, 2007).

This study examined the influence of career timing on gender earning differentials among 1996-97 civil engineering bachelor’s degree recipients from Florida public four-year universities. Female graduates earned 98 cents for every dollar earned by their male peers immediately after graduation in 1997. However, by 2004, the females earned only 82 cents for every dollar earned by their male counterparts. Despite no evidence of personal effects of characteristics, such as race, pursuit of a second degree, or employment during undergraduate enrollment either on the gender wage gap or on annual earnings, career factors such as timing and length of stopouts influenced annual earnings but not the gender wage gap (Wao, Borman, Lee & Tyson, 2007). These findings are indicative of a chilly climate for women engineers in the state.

Since our focus is on women faculty in chemistry and engineering, if one considers the number of doctoral degree holding women that are employed in academia in chemistry and engineering departments, the percentage of women falls with increasing rank. The data listed below in Table 1 for “chemistry” include both chemistry and chemical engineering, and the data for engineering include aeronautics, civil, electrical, environmental, industrial, mechanical, and other engineering fields. These data only include those who earned their doctorates in the U.S. As shown in Table 1, at Research I universities, approximately 18 percent and 20 percent of assistant professors in chemistry and engineering, respectively, are women. At the associate professor level the values are 19 percent and 9 percent, respectively and at the full professor the values are 11 percent and 2 percent, respectively.

Table 1. Percentage of Women in Rank at Research I Universities

Rank	Chemistry	Engineering
Assistant Professor	18	20
Associate Professor	19	9
Full Professor	11	2

Source: NAS, 2007, p. 107

In 2001, Massachusetts Institute of Technology President Vest organized a meeting of other university administrators and women scientists from prestigious universities to discuss issues of importance to the success of women in academe. Those attending this meeting agreed that, “barriers still exist” for women in academia. Those attending pledged to “work toward a faculty that reflects the diversity of the student body” (Campbell, 2001, p. 1). What is clear almost ten years after this meeting is that even at the level of assistant professor, our Research I universities in chemistry do not come close to approximating the percentage of women who graduate with doctoral degrees. Faculty hires are not comparable to the number of women comprising Bachelors and Masters degree recipients, indicating the lack of role models for women, in addition to female sponsorship for

women students at these levels to be guided into research, a clear connection to doctoral studies and research.

The NAS committee (2007) noted that the pipeline for women in science and engineering is leaking at every juncture on the academic ladder. The committee recommends “deans and department chairs and their tenured faculty should expand their faculty recruitment efforts to ensure that they reach adequately and proactively into the existing and ever-increasing pool of women candidates” (NAS, 2007, p. 52). This is part of the agenda in our proposed work as we work on recruitment of women into academia and mentor them (and the faculty and administrators with whom they work).

A major goal in this proposed ADVANCE PAID project is to increase recruitment of women into academic appointments in chemistry and engineering, because “there are proportionately fewer women than men in the applicant pool for tenure-track positions; active recruiting can overcome this deficit” (NAS, 2007, p. 2). The committee cites the need to learn more about faculty turnover and recommends that universities keep track of data on faculty retention and promotion by sex and ethnicity, in science and engineering departments. Included in this proposal are data just of this type, and we will continue to collect the data annually in a repository.

Another main goal for this ADVANCE PAID grant is to mentor the women in academia, especially those at the assistant professor level who are not yet tenured but also the associate professors in chemistry and engineering. We want to promote and encourage both male and female faculty to mentor the newer women in academia. Wadsworth (2002) of Purdue University writes about mentoring in her *Giving Much, Gaining More* book, focusing on positive actions in contrast to the negative aspects of engineering departments: “welcoming vs. excluding, communicating vs. bickering, trusting vs. doubting, accepting vs. rejecting, and affirming vs. ridiculing” (Rosser, 2004, p. 146) while mentoring academic women. Another valuable resource on mentoring is *A Hand Up: Women Mentoring Women in Science* by the Association for Women in Science (AWIS, 2005). Our proposed program of activities will include mentoring opportunities for all women in the ranks of assistant and associate professor in chemistry and engineering and the sciences more generally as the institutional climate at each of the Alliance universities is cultivated to embrace and support the strategies from this ADVANCE PAID grant.

Institutional Overview

The Florida Alliance is comprised of Colleges of Engineering (COEs) and Departments of Chemistry at five participating institutions, the University of Florida, the University of South Florida, Florida State University, Florida Agricultural and Mechanical University and Florida International University. Most face similar problems in a number of areas: (1) recruitment of female faculty in engineering and chemistry, particularly at senior levels; (2) retention of female faculty who depart for careers in industry or to academic settings elsewhere; and (3) employment of instructional faculty who are largely female. Kathryn Borman, instrumental in forming the Alliance, conducted research under the auspices of a STEP Type II research award over a three year period on each of the campuses comprising the Alliance, growing familiar with the needs and issues confronting women faculty (and students) in chemistry and engineering, the focus of her research. In addition, Borman built a network of colleagues on all campuses involved in the proposed project.

University of Florida (UF) is the state's largest and most comprehensive university. UF COE has 253 tenured and tenure-track faculty members, 24 of whom are women. The UF Department of Chemistry currently has 47 tenured or tenured track faculty members, 5 of whom are women.

University of South Florida (USF) offers 219 degree programs at the undergraduate, graduate, specialist and doctoral levels, including the doctor of medicine. USF COE has 86 tenured or tenure-

earning faculty members, 6 of whom are women. USF Department of Chemistry has 24 faculty members, tenured or tenure-earning faculty members, 4 of whom are women.

Founded in 1972, Florida International University (FIU) was Miami-Dade County's first public four-year university. FIU COE has 128 tenured or tenure-earning faculty members, 6 of whom are women. FIU Department of Chemistry and Biochemistry has 26 tenured or tenure-earning faculty members, 2 of whom are women.

Florida State University (FSU) is the oldest university in the State of Florida, founded in 1851; it is a comprehensive university with graduate, undergraduate, and professional programs, including medicine, currently enrolling more than 41,000 students. FSU Chemistry and Biochemistry faculty includes 32 tenured or tenure-track faculty members, 4 of whom are women.

Florida Agricultural and Mechanical University (FAMU) is an historically black college, founded on October 3, 1887, as the State Normal College for Colored Students, and began classes with 15 students and two instructors. FAMU Department of Chemistry has 8 tenured or tenure-track faculty members, one of whom is a woman.

FAMU and FSU have a joint College of Engineering with 80 tenured or tenure-earning faculty members, 10 of whom are women (but only one is full professor). The male and female tenured faculty members at each institution are displayed in Figures 1 and 2.

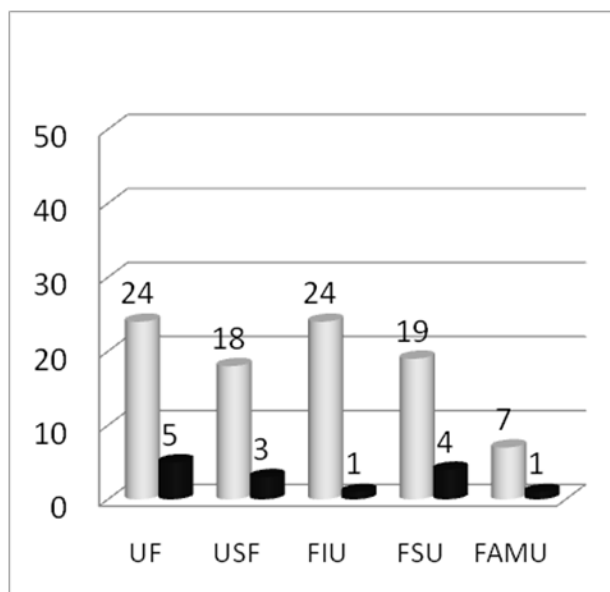


Figure 2. Tenured Chemistry Faculty by University and Gender

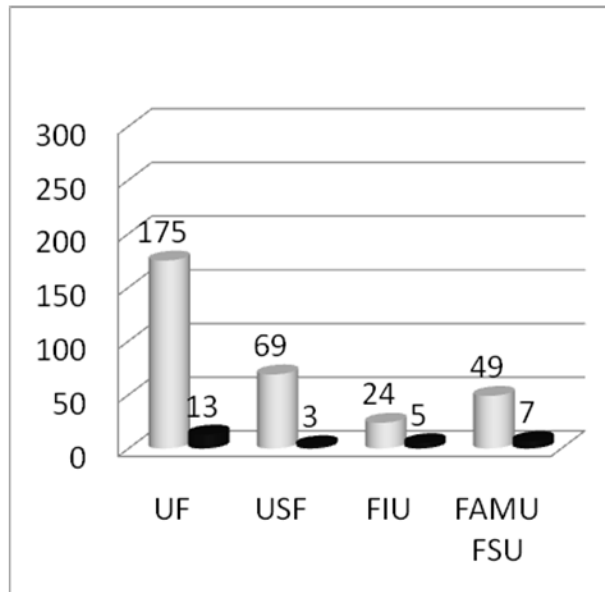


Figure 3. Tenured Engineering Faculty by University and Gender

As the data in figure 2 and 3 indicate, there are very small numbers of tenured women faculty across the board at the five participating Florida institutions. As an example, at the University of Florida in Chemistry among a faculty of 29, only 5 are tenured women. At UF COE, the ratios are even more dismal, for example, with a tenured faculty numbering 188, only 13 tenured women. These patterns are similar for all of the participating institutions.

Indeed our research is premised on the fact that there is an overwhelming need across the institutions represented in this Alliance for a focus on the three prongs of our project: (1) *recruitment*; (2) *mentoring and advising*; and (3) *preparation for leadership*. Only two institutional members of the Alliance to our knowledge have undertaken systematic studies of the conditions facing faculty across the colleges including engineering and the sciences. "A Study of Climate and Practices Affecting Faculty at Florida State University" in 2002 yielded some not surprising results. First, the College of Engineering reported the lowest percentage of female faculty at only 8 percent and only 16 percent of the Natural Sciences faculty. In addition, only 31 percent of women held the rank of professor compared to 54 percent of men. Similar dismal findings characterize the condition of women in leadership positions, with women holding only 24 percent of academic leadership positions in academic units at FSU. Clearly, the situation at Florida State is not unique across the participating institutions.

Beginning in 2004 and repeated in 2005 and 2007, UF has also conducted a faculty survey to assess faculty perceptions on a variety of campus issues. One question asked faculty to respond to the statement, "This University provides a working environment that is accepting of gender differences" and the percentage of favorable responses increased from 67 to 73 percent from 2004-2007 showing improvement in this area but still below the 2004 national norm of 87 percent cited in the study. A number of measures including career development, diversity, empowerment, and engagement were disaggregated by several categories including gender, and the only statistically significant measure of 15 items was with respect to diversity. In this case women had a negative rating of this item while men responded favorably. The gap between the two groups narrowed from 7 to 2 points over the time period, primarily due to decreasing negative responses by females. Over the three surveys five areas studied improved (including benefits, and recognition, and reward) while five declined (including empowerment and communication). Survey data for the College of Engineering was disaggregated by gender. The list below includes statements showing significant differences between male and female faculty respondents (female responses were lower).

- UF does as good a job as others in helping faculty balance work and family responsibilities
- Current qualifications for tenure are clear to me
- I receive sufficiently regular feedback on my performance
- Opinion of child care benefits
- The university supports diversity in the workplace
- The university provides an environment accepting of gender differences
- My college is placing sufficient emphasis on recruiting a diverse faculty
- My college is placing sufficient emphasis on promoting a diverse faculty
- Most of the time it is safe to speak up here
- The people in my department usually get along well together
- Faculty receive adequate information on University policies and practices

As one of the first activities to be undertaken by the Alliance, Will Tyson, a sociologist at the University of South Florida, plans to modify a systematic survey, developed by the WISELI project, to be administered on-line to all faculty in chemistry, the sciences, and engineering. Through this social science research project, we plan to learn which aspects of the campus climate at each institution are in need of improvement. In addition, using Harold Kroto's Global Educational Outreach portal, we will both webcast and widely distribute both the UTEP mentoring session in Fall 2009 and the recruitment workshop presented by the WISELI program from the University of Wisconsin-Madison. These will be distributed widely in Spring 2010.

Programs to Be Implemented

Three proven programs are to be implemented over the course of the Alliance's work. Workshops will be hosted either by Professors Penny J. Gilmer and Rufina Alamo at FSU or by Professors Simone Peterson Hruda and Ngozi Ugochukwu at FAMU and will include at least two representatives from each of the five participating institutions. Since two of our five universities are in the same city of Tallahassee, we would save travel funds using this location.

Recruitment. The University of Wisconsin's WISELI Program

The first program, developed at the University of Wisconsin, Madison, targets the need for diversity in the sciences and engineering by focusing on recruitment and retention, preparing search committee chairs, Deans, and department chairs with strategies and a rationale for broadening the reach of search committees to include a diversity of candidates, particularly women. Established during the University of Wisconsin's ADVANCE PAID grant period as a component of the Women in Science and Engineering Leadership Institute (WISELI), the "Searching for Excellence and Diversity" program has produced a guide for search committee chairs and others.

In addition, Dr. Eve Fine and Dr. Jennifer Sheridan, University of Wisconsin-Madison offer training at other campuses and have agreed to support our project and to provide workshop instruction and training during the first year of our project should it be funded. The WISELI workshop includes information on the "essential elements" of a successful search: 1. Run an effective and efficient search committee; 2. Actively recruit an excellent and diverse pool of candidates; 3. Raise awareness of unconscious assumptions and their influence on evaluation of candidates; 4. Ensure a fair and thorough review of candidates; 5. Develop and implement an effective interview process.

The representatives from all five participating universities should come away prepared to take on the role of search committee chair in their departments. The representatives will form committees on their respective campuses to tailor the WISELI workshop to meet the needs of their senior faculty and administrators. After piloting and revising the WISELI workshop, the workshops will be presented to senior faculty and administrators involved in hiring faculty in the STEM departments. In addition to providing this training the trainers event, WISELI will also provide access to their climate measure for use in assessing the climate of Colleges Engineering, Chemistry department and other STEM departments.

Mentoring and Advising. The second prong of our approach involves mentoring and advising the assistant and associate professors in the relevant departments. The University of Texas at El Paso (UTEP) provides mentoring and advising experiences for women as a part of their program to enhance the success of women in gaining promotion and tenure. The goals of the UTEP program include *providing access* to resources and information *promoting the academic enterprise* as well as networking opportunities; *balancing workloads* by aiding women faculty in the discussion of conflicting work and family demands in order to balance demands of teaching, research and service with family life, and; *acculturating* new faculty women in the art of managing relationships with colleagues. Because academic culture encourages independent research, especially during the tenure-earning years, many new women faculty feel isolated and removed from other faculty, staff and administrators as they develop a research agenda. Breaking patterns of academic isolation are best accomplished by the UTEP plan that includes both (1) a period of advising/coaching/ and mentoring over the course of 18 months and (2) the opportunity for mentors and their mentees to meet for brown bag lunches and seminars to discuss on-going research activities.

The representatives from all five participating universities should come away from the UTEP training ready to form faculty committees on their individual campuses to develop a mentoring program tailored to their women faculty needs. This committee will present topics chosen with the guidance of climate survey results at mentorship workshop once a month during the academic year. The

committee will also take a leading role in assigning interested junior female faculty members with senior faculty mentors. The mentors and mentees will meet at minimum every 2 weeks through the academic year.

Leadership. COACH Professional Development Workshop

The Alliance will provide an outlet for COACH to disseminate their model of transforming the careers of chemists and engineers to the women faculty at the FSU or FAMU campus in the Spring of 2010 and 2012. COACH provides professional skills workshops to sharpen skills in managing academic careers and serves as a complement to UTEP’s advising and mentoring program. Chemistry, Engineering and other interested STEM women faculty members from each institution will attend the COACH workshop, which will help them develop leadership skills for career advancement and network with their colleagues. After consultation with COACH staff, the decision was made to feature two COACH workshops, one in spring of year one and the other, building on the first, in spring of year three:

- Year 1: COACHing Strong Women in the Power of Strategic Persuasion
- Year 3: Uses of Influence, Power and Conflict Resolution in Negotiation

Timeline and Activities

The planning committee will conduct weekly conference call meetings during the 2009 and 2010 academic years. In early Fall 2009, a climate survey will be administered online by Dr. Will Tyson to STEM faculty members at participating institutions. In late Fall 2009, the University of Wisconsin-Madison and the University of Texas, El Paso “Train the Trainers” workshop with key faculty and administrator committee members from all institutions will also be held in Tallahassee and hosted by FSU. Subsequently, the trainers on their own campuses will work with faculty and administrator committee members to develop and effectively implement recruitment practices that promote hiring diversity on their campuses.

Faculty committees at each institution will meet on a regular basis during years 2 and 3 to develop presentations based on topics identified by the climate survey. The faculty committee on each campus will research materials, discuss, and tailor these topics to their institution, and develop workshop presentations. Faculty who participated in the training workshop will convey the training to their colleagues on these committees. Presentations will be piloted and evaluated in Fall 2010. After the revisions, the presentations will be administered to Chemistry, Engineering and other interested STEM faculty members on each campus from Spring 2011 to Spring 2012. The presentations, taking the form of seminars and workshops, will have a pre- and post-evaluation questionnaire administered by our external evaluator, Professor Kate Scantlebury. Materials developed by the University of Wisconsin-Madison will be distributed at these seminars and workshops. Webcasts of these workshops and seminars will be made available on-line.

In Spring 2010 and Spring 2012, Committee on the Advancement of Women Chemists (COACH) workshops will be held in Tallahassee and hosted by FAMU and FSU, respectively.

The table below presents a timeline of proposed activities.

Table 2. Proposed Program Activities

Proposed Activities	Year 1		Year 2		Year 3	
	Fall 09	Spring 10	Fall 10	Spring 11	Fall 11	Spring 12
Climate Survey	X					X
“Train the Trainers” Workshops	X	X				
COACH Workshops		X				X
Workshops Advertised on Alliance Campuses		X				

Webcasts of Workshops Prepared			X			
Workshop Presentations on Alliance Campuses			X	X	X	X
Brown Bag Lunches/Seminars			X	X	X	X
Faculty Repository	X	X	X	X	X	X
Alliance Mentoring Network			X	X	X	X
Evaluation/Dissemination		X	X	X	X	X

During the last two years of the proposed project, on each of the five participating campuses, the trainees involved in the “train the trainer” workshops during year one will be instrumental in setting up two additional important sets of activities: (1) the workshops that will provide administrators, HR staff, and faculty with recruitment strategies for hiring women in academic positions in STEM fields; (2) the mentoring/advising activities that are associated with the UTEP program.

Management Plan

The project’s PI, Dr. Karen A. Holbrook, (1 percent of time) is currently Vice President for Research and Innovation at the University of South Florida. She will promote the program at USF, lead institutional commitments and ensure that they are fully implemented.

Dr. Kathryn Borman (3 percent of time), professor of Anthropology and is affiliated with the Alliance for Applied Research in Education and Anthropology (AAREA) in the Department of Anthropology at the University of South Florida. She will supervise the planning of the COACH workshops in year 1 and 3, the UTEP mentorship “train the trainers” workshop in year 1 and WISELI “train the trainers” workshop in year 1. She will also take the lead role in coordinating and implementing the ongoing program activities at USF on a daily basis and led the proposal writing efforts with Chrystal Smith.

Dr. Penny Gilmer (2 percent of time), professor in the Chemistry and Biochemistry Department took a lead role in writing the proposal. She will take the lead role in coordinating and implementing the ongoing program activities at FSU. She will organize the FSU hosting activities for the WISELI workshop which will be held in spring of year 1 and the COACH workshop in spring of year 1. She will be responsible for disseminating the results of this program in the state of Florida and nationally.

Dr. Simone Peterson Hruđa (1 percent of time), professor in the Mechanical Engineering department will take the lead role in coordinating and implementing the ongoing program activities at FAMU. She will organize the FAMU hosting activities for the UTEP mentoring workshop which will be held in spring of year 1 and the COACH workshop in spring of year 3.

Dr. Anne Donnelly (2 percent of time), is the Associate Director for Education for the Particle Engineering Research Center, a former NSF Engineering Research Center at UF. She will take the lead role in coordinating and implementing the ongoing program activities at UF. She will organize the FSU hosting activities for the WISELI workshop which will be held in spring of year 1 and the COACH workshop in spring of year 1.

Dr. Berrin Tansel (1 percent of time) is an associate professor in the Civil and Environmental Engineering Department and Associate Director of Center for Diversity in Engineering and Computing at Florida International University. She will take the lead role in coordinating and implementing the ongoing program activities at FIU.

Dr. Jennifer Lewis (1 percent of time) is an Associate Professor of Chemistry at the University of South Florida. She will take the lead role supervising the ongoing program activities in the Chemistry department and other STEM disciplines at USF. She will also help identify and pair faculty mentors and mentees in USF Chemistry.

Dr. Sylvia Thomas (1 percent of time) is the Assistant Dean for Diversity and External Programs in the USF’s College of Engineering and is on faculty in the Department of Electrical Engineering. She will take the lead role supervising the ongoing program activities in the College of

Engineering and other STEM disciplines at USF. She will also help identify and pair faculty mentors and mentees in USF COE.

Dr. Will Tyson (1 percent of time), is an assistant professor in the Sociology department. He will modify and administer the climate survey in spring of year 1. He will analyze the results and provide feedback to identify the topics of relevance to women faculty. The topics will be presented at the mentorship luncheons.

Eva Fernandez (1 percent of time), is the Director of Recruitment and Retention at USF COE. She is well known in the STEM disciplines on the USF campus and will take a leadership in facilitating the development of the recruitment practice workshops.

Each institution will have a project assistant to help with administrative duties such as sending emails, preparing materials for publications, making arrangements for workshops and the associated travel. In addition, the senior personnel from each participating institution will be responsible for submitting data to USF for annual reports.

The table that follows details the other faculty members who have committed to take active roles in the program activities on the five Florida campuses.

Table 3. Faculty Committed to Proposed Program

University	Discipline	Faculty Member	Activity
FIU	Civil and Environmental Engineering	Gustavo Roig Associate Professor Director, Center for Diversity in Engineering and Computing	Recruitment practices committee, serve as a mentor and support ADVANCE PAID activities on campus
	Chemistry & Biochemistry	Jaroslave Miksovsk Assistant Professor	Mentorship training and will lead mentorship faculty committee
USF	Engineering	Rafael A. Perez Professor and Associate Dean, Academics and Student Affairs	Will serve as a mentor
	Mechanical Engineering	Delcie R. Durham Professor	Mentorship training and lead mentorship faculty committee
FAMU	Chemistry	Ngozi Ugochukwu Chair and Professor	Recruitment practices training, will lead faculty committee and encourage faculty participation
FSU	Psychology	Karen Glendenning Professor	Will serve as a mentor
	Chemistry & Biochemistry	Harry Kroto Professor and Nobel Laureate	Will serve as a mentor and conduct global outreach
	Oceanography	Nancy Marcus Dean of Graduate School	Will actively promote faculty participate in program.
	Chemistry & Biochemistry	Tyler McQuade Professor	Recruitment practices committee
FAMU-FSU COE	Electrical & Computing Engineering	Jim P. Zheng Professor	Will serve as a mentor
	Electrical & Computing Engineering	Reginald J. Perry Professor & Associate Dean for Student Affairs and Curriculum	Will actively promote faculty participate in program.

UF	History and Women's Studies	Angel Kwolek-Folland Associate Provost for Academic Affairs and Acting Associate Provost for Faculty Development	Lead workshop development and implementation
	Materials Science and Engineering	Cammy Abernathy, Associate Dean for Academic Affairs	Will serve as liaison for engineering faculty and serve on mentoring/recruiting committee
	Chemistry	Lisa McElwee White Professor	Will serve as liaison for chemistry faculty and serve on mentoring/recruiting committee

Commitment and Sustainability

The institutions comprising the Florida consortium are committed to sustaining the recruitment practices and mentoring activities promoted by the ADVANCE PAID program. In the third year, the institutional representatives will meet and develop action plans for each campus based on the most effective strategies. These plans will be presented to the respective Provosts who have committed to the development of supportive institutional policies and processes with the goal of institutional transformation.

To ensure that the sustainability of the recruitment practices and mentoring activities, the PI and co-PIs as well as the other senior personnel of the ADVANCE PAID award will continue to meet regularly via conference call. During these meetings, strategies to effectively share resources and sustain mentoring and recruitment practices will be discussed and developed further. In addition, funding sources will be identified and pursued in order to provide support to these nascent programs as well as women faculty.

Social Science Research Project

The proposed project aims to improve recruitment, mentoring, and opportunities for academic leadership advancement of female faculty in engineering and the sciences. This social science research component adapts Waves 1 and 2 of UW-Madison climate surveys to examine factors that influence satisfaction with recruitment, mentoring and leadership advancement efforts at each institution. The primary goal of this research agenda is to examine how race, gender, and tenure status influence how faculty describe their own recruitment and how faculty describe their experiences with mentorship.

Two central research questions guide this research agenda:

1. How do male and female faculty members differ in their perceptions of faculty recruitment and mentoring practices in their departments?
2. How do the values of female non-tenured faculty as they pertain to recruitment, mentoring, and support in the tenure process influence overall satisfaction?

Primary analyses of survey responses will use descriptive analyses and tests of association such as t-tests and ANOVAs to determine the significant effects of gender and other potential causal factors on perceptions of faculty recruitment, mentoring and leadership advancement. If recruitment to complete the online survey is highly successful and data include an overrepresentation of female and minority faculty necessary to meet criteria for more rigorous techniques, advanced analyses such as logistic and ordinary least squares will be used. The primary product will be a report of descriptive analyses of key findings.

During Summer 2009 and early Fall 2009, senior research associate, Dr. Will Tyson, and other research associates, will adapt the 2003 and 2006 surveys from the Study of Faculty Worklife at the University of Wisconsin-Madison for use at each project university, with the assistance of Dr.

Jennifer Sheridan and other University of Wisconsin-Madison scholars who collaborated on the original research project. Anticipated changes to the original measure include removing specific references to UW-Madison and their programs in order to generalize the measure to all five participating institutions. Open-ended questions will be used to ask faculty about programs specific to their own department and university.

Faculty will be recruited to participate in this survey through e-mails from the project team and additional encouragement from department deans from engineering and chemistry programs at each university. Faculty will be given a \$20 gift card for their participation. There are 547 tenured and tenure-track faculty in engineering at our five institutions, including 46 women. In addition, there are 137 tenured and tenure-track faculty in chemistry, including 16 women. Based on findings from UW-Madison, we anticipate a conservative response rate of 60%. This response rate would yield around 300 male engineering faculty and 30 female engineering faculty along with 80 male chemistry faculty and 10 female chemistry faculty for an estimated sample of 420 respondents.

Evaluation Plan

The evaluation plan will be carried out by Kathryn Scantlebury, Professor of Chemistry & Biochemistry at the University of Delaware (UD), a co-PI on UD’s ADVANCE PAID project.

Table 4. Evaluation Matrix for AAFWCE

Objective 1: Provide background on recruitment and retention of women in chem. & engineering to senior faculty			
PROJECT ACTIVITIES	PROJECTED OUTCOMES	EVALUATION ACTIVITIES	TIMELINE
<ul style="list-style-type: none"> • WISLEI workshops (train trainers) • Develop AAFWCE materials for each campus based on WISLEI materials 	<ul style="list-style-type: none"> • Increased awareness of biases in the recruitment and retention of women faculty in STEM fields. • Increased awareness of and commitment to best practices in recruitment and retention of women 	<ul style="list-style-type: none"> • Climate Survey (WISLEI) (pre/post) • Workshop Evaluation (WISLEI) (post) • Interview randomly selected faculty (“train the trainers” workshop participants) • Faculty in STEM fields, leading to an increase in the number of women recruited and retained. 	<ul style="list-style-type: none"> • Pre- and post-workshop questionnaires to be administered for workshops held during the 2010-2012 • Post-workshop interviews to be held for the 2010-11 and 2011-12 workshops. • Review of AAFWCE modified materials • Monitor staffing numbers of STEM faculty, data collected each spring.
Objective 2: Provide chemistry and engineering female faculty with mentoring experiences			
PROJECT ACTIVITIES	PROJECTED OUTCOMES	EVALUATION ACTIVITIES	TIMELINE
<ul style="list-style-type: none"> • UTEP “train the trainers” mentoring workshops • Develop mentoring workshops for 	<ul style="list-style-type: none"> • Improve mentoring experiences for female faculty in chem. & eng depts. • Improve rates of tenure & promotion for assistant to 	<ul style="list-style-type: none"> • Increase in number of women associate & full professors in STEM depts. • Increase in # of women in leadership roles in STEM depts. • AAFWCE workshops 	<ul style="list-style-type: none"> • Pre- and post-workshop questionnaires to be administered for workshops held during the 2010-2012 • Post-workshop

AAFAWCE participants • Modification of materials for AAFWCE • Present AAFWCE workshops	associate; improve promotion for associate to full professors in chem. & eng depts. • Mentor 20-30 women on each campus	(evaluation) • Self report by female faculty on mentoring experiences • Document use of on-line portals, video, participation in Alliance forums & brown bag lunches	interviews to be held for the 2010-11 and 2011-12 workshops. • Review of # faculty 2011-2012 • Review of new materials & webcasts, 2010 • Review use of on-line portals, attendance of female STEM faculty at Alliance forums & brown bag lunches, 2010-2012.
Objective 3: Increase the number of female chemistry & engineering faculty in leadership positions through mentoring			
PROJECT ACTIVITIES	PROJECTED OUTCOMES	EVALUATION ACTIVITIES	TIMELINE
• COACH Workshops, Years 1 & 3	• Women faculty prepared for promotion • Women faculty prepared for leadership positions • At least 3 women to academic leadership positions on each campus	• Increase in number of women associate & full professors in STEM depts. • Increase in # of women in leadership roles in STEM depts. • COACH (workshop evaluation) • Self report by female faculty on leadership experiences • On-site project leaders to report leadership appointments	• Pre- and post-workshop questionnaires to be administered for workshops held during 2010-2012. • Interviews with faculty • Review number of female STEM faculty in leadership positions each spring/summer.

Dissemination

First, we plan to record by video-streaming parts of both the UTEP mentoring in Fall 2009 and the recruitment workshop presented by the WISELI program from the University of Wisconsin-Madison. These will be distributed widely in Spring 2010. We plan to upload the videostreams of the two presentations and upload them to Harold Kroto's Global Educational Outreach (GEO) portal (2009). The presentations can be viewed by a wide audience as well as by members of the Alliance who may have missed the presentation. Therefore, we would start our dissemination in the first year of the grant. Gilmer (2008), the PI on the FSU campus, has utilized this GEO site to teach a class of 118 graduate students in a distance-learning venue. Thus we have experience in using this technology and can utilize it for this ADVANCE PAID project, if funded. In the second and third years of the project, we will continue this form of dissemination during the mentoring and recruitment workshops and related work, videostreaming these workshop sessions. We will also use other venues including making presentations at American Association for the Advancement of Science (AAAS), and the American Sociological Association (ASA) to report outcomes of the social science study.

In the final year we will write and edit a monograph to distribute the findings of the social science research project and other results including those of the evaluation of our ADVANCE PAID project. This monograph would include an introductory chapter, followed by chapters written by the women academics that experienced the program and would report on program impact on their lives and

careers. The final two chapters would include a) a report on results of the social science study, including the climate survey results, and b) the evaluation of the program by our external evaluator. Gilmer has edited five monographs so far reporting findings from previous projects including two funded by the National Science Foundation. In 2006, the NSF honored FSU with the first GK-12 Dissemination Award for the monograph on the GK-12 program (Gilmer, Granger & Butler, 2005). This ADVANCE monograph will address a diverse audience of audience of women academics in the sciences and engineering, their male colleagues, and university administrators. We will print 1,000 copies and distribute worldwide, at conferences, advertisement via listservs, and in downloadable form from the Internet at no cost.

Intellectual Merit

The plan proposed here is a well integrated approach to providing women faculty members at five major state universities in the state of Florida access to workshops and programs of high quality. Women across the science disciplines and in each of the participating campuses' engineering programs will be provided compelling and thought-provoking workshops covering recruitment, open to faculty, department chairs, deans and other administrators; strategies for advancing in one's career as a faculty member provided by trained individuals from the COACH program and; finally, participants will engage in the mentoring and advising program developed by UTEP's Evelyn Posey.

Broader Impacts

The broader impacts of this project include opportunities for women at all ranks and with varying levels of experience in academe to engage in activities with others from Florida campuses and on their own campus. Participants will engage in activities including the provision of advances in understanding effective recruitment and retention practices; mentoring practices; and personal development as an academic. In short, the series of proposed activities will assure the creation of the next generation of leaders in science and engineering. Dissemination includes 1) Global Educational Outreach and 2) a published monograph with chapters by a) project personnel on the objectives of the program, b) the women academics recruited and mentored by this alliance, c) the social scientist's results of the research, and d) external evaluation results.

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Karen A. Holbrook, PI

(i). Professional Preparation

University of Wisconsin, Madison	B.S., Zoology	1963
University of Wisconsin, Madison	M.S., Zoology (Protozoology)	1966
University of Washington, Seattle	Ph.D., Biological Structure	1972
University of Washington, Seattle	Senior Fellow, Dermatology	1976-79

(ii). Appointments

Vice President for Research & Innovation, University of South Florida, 2007-Present
President, The Ohio State University, 2002-2007
Professor, Internal Medicine, Dermatology, Professor, Physiology and Cell Biology,
The Ohio State University, 2002-2007
Adjunct Professor of Anatomy, Cell Biology and Medicine, Medical College of Georgia,
1998-2002
Senior Vice President for Academic Affairs and Provost, Professor, Cell Biology, University
of Georgia, 1998-2002
Vice President for Research, Dean of the Graduate School, Professor, Anatomy and
Dermatology, University of Florida, 1993-98
Associate Dean, Scientific Affairs, University of Washington, School of Medicine, 1985-94
Professor, Biological Structure, Adjunct Associate Professor, Dermatology, University of
Washington, School of Medicine, 1984-93
Associate Chairman, Biological Structure, University of Washington, School of Medicine,
1981-85
Associate Professor, Biological Structure, Adjunct Associate Professor, Dermatology,
University of Washington, School of Medicine, 1979-84
Assistant Professor, Biological Structure, Adjunct Assistant Professor, Dermatology,
University of Washington, School of Medicine, 1975-79
Instructor, Biological Structure, University of Washington, School of Medicine, 1972-75
Teaching Assistant, Biological Structure, University of Washington, 1969-72
NSF Summer Institute, Instructor, 1969
Instructor, Upward Bound Program, Ripon College, 1967
Instructor of Biology, Ripon College, 1966-69
Teaching Assistant, Zoology, University of Wisconsin, 1963-66

(iii). Publications

Five Most Relevant:

Holbrook KA, Smith LT, Kaplan ED, Minami SI, Hebert G, Underwood RA: The expression
of morphogens during human follicle development *in vivo* and a model for studying
follicle morphogenesis *in vitro*. *J Invest Dermatol* 101:39s-49s, 1993.
Dale BA, Holbrook KA, Kimball JR, Hoff MS, Sun T-T: Expression of epidermal keratins and
filaggrin during human fetal skin development. *J Cell Biol* 101:1257-1269, 1986.
Hennings H, Holbrook KA: Calcium regulation of cell-cell contact and differentiation of
epidermal cells in culture: An ultrastructural study. *Exp Cell Res* 143:127-142, 1983.
Holbrook KA: The biology of human fetal skin at ages related to prenatal diagnosis. *Pediatr
Dermatol* 1:97-111, 1983.
Holbrook KA, Dale BA, Brown KS: Abnormal epidermal keratinization in the repeated
epilation mutant mouse. *J Cell Biol* 92:387-397, 1982

Five Others:

- Holbrook KA, Byers PH: Skin is a window on heritable disorders of connective tissue. *Am J Med Genetics* 34:105-121, 1989.
- Holbrook KA, Underwood RA, Vogel AM, Gown AM, Kimball H: The appearance, density and distribution of melanocytes in human embryonic and fetal skin revealed by the anti-melanoma monoclonal antibody HMB-45. *Anat Embryol* 180:443-455, 1989.
- Holbrook KA, Dale BA, Williams ML, Perry TB, Hoff MS, Hamilton EF, Fisher C, Senikas V: The expression of congenital ichthyosiform erythroderma in second trimester fetuses of the same family: morphologic and biochemical studies. *J Invest Dermatol* 91 521-531, 1988.
- Foster CA, Holbrook KA, Farr AG: Langerhans cells in human embryonic/fetal skin express HLA-DR and OKT6 antigens. *J Invest Dermatol* 86:240-243, 1986.
- Holbrook KA, Byers PH: Ultrastructural characteristics of the skin in a form of Ehlers-Danlos syndrome type IV: Storage in the rough endoplasmic protein. *Lab Invest* 44:342-350, 1981.
- Holbrook KA, Odland GF: Regional development of the human epidermis in the first trimester embryo and the second trimester fetus (ages related to the timing of amniocentesis and fetal biopsy). *J Invest Dermatol* 80:161-168, 1980.

(iv). Synergistic Activities

Chair, Science and Technology Campus Corporation Board, The Ohio State University, 2002-2007

Development of Metro School, a STEM high school founded by Ohio State University, Battelle Memorial Institute and the Franklin Company Education Council in 2006.

Member, International Advisory Council (IAC), King Abdullah University of Science & Technology (KAUST), 2007

Co-Chair, Science and Mathematics Education Policy Advisory Council, Governor of Ohio, Ohio Board of Regents and State Superintendent of Schools, 2005-2007

Initiator and Chair, Florida/American Association for the Advancement of Science (AAAS) Meeting, "The Future of Science and Technology in Florida: High Tech Florida Means Business," 1997

(v). Collaborators and Other Affiliations**Collaborators and Co-Editors within the past 48 months:**

Not applicable

Graduate Advisors and Postdoctoral Sponsors:

Dr. Lowell E. Noland (M.S. – University of Wisconsin)

Dr. James K. Koehler (Ph.D. – University of Washington)

Dr. George F. Odland (Post-Doc – University of Washington)

KATHRYN BORMAN

Professional Preparation

Miami University, Oxford, Ohio	English	BA 1963
Mills College, Oakland, California	English	MA 1972
University of Minnesota, Minneapolis, Minnesota	Sociology of Education	PhD 1976

Appointments:

Professor of Anthropology and lead researcher at the Alliance for Applied Research in Education and Anthropology (AAREA), University of South Florida: 8/05-Present
College of Arts and Sciences, Department of Anthropology

Associate Director and Professor of Anthropology, University of South Florida: 12/93-8/05
College of Arts and Sciences and David C. Anchin Center

Associate Dean of Research and Development
College of Education, University of Cincinnati: 9/92-11/93

Associate Dean of Graduate Studies and Research
College of Education, University of Cincinnati: 7/87-9/92

Professor of Education and Sociology
Department of Educational Foundations and Department of Sociology
University of Cincinnati: 9/87-11/93

Associate Professor of Education
Department of Educational Foundations, University of Cincinnati: 9/81-9/87

Assistant Professor of Education
Department of Educational Foundations, University Of Cincinnati: 9/76-9/81

Instructor, University of Minnesota: 9/74-6/76
Department of Psychological and Philosophical Foundations of Education

Instructor
Department of Sociology, Hamline University: Fall, 1976, 1975

Co-Instructor
Department of Psychology, University of Minnesota: 1973

Selected Publications

- Borman, K. M. (ed.) (Projected 2009). *Becoming an Engineer: Pathways for Women and Minorities*. Palgrave Press, under contract.
- Tyson, W., Lee, R., Borman, K. M., & Hanson, M.A. (2007). Science, technology, engineering, and mathematics (STEM) pathways: High school science and math coursework and postsecondary degree attainment. *Journal of Education for Students Placed At Risk*, 12(3), 243-270.
- Borman, K.M., Kersaint, G., Cotner, B., Lee, R., Boydston, T., Uekawa, K., Kromrey, J., Katzenmeyer, W., Baber, M.Y., & Barber, J. (2005). *Meaningful urban education reform: Confronting the learning crisis in mathematics and science*. SUNY Press.
- Borman, K. M. et al. (2004). Accountability in a post-secondary Era: The continuing significance of racial segregation in Florida's schools. *American Educational Research Journal*, 4, 605-631.
- Dubeck, Paula and Borman, K.M. (1997). *Women and Work: A Reader*. New Brunswick, NJ: Rutgers University Press.

Synergistic Activities

Dr. Kathryn Borman is Professor of Anthropology and lead researcher at the Alliance for Applied Research in Anthropology and Education, Department of Anthropology, University of South Florida. Dr. Borman has extensive experience in educational reform and policy as well as evaluation studies. Dr. Borman's program of research has focused on urban school districts with high levels of minority students, implementing a science professional development program for elementary teachers to increase science achievement, and understanding STEM pathways to post-secondary education. Her research has focused on including groups that are underrepresented in science, mathematics, engineering and technology, namely minority students, females, and urban populations. Her replication and efficacy

randomized control trial is implementing a professional development program for science that focuses on inquiry practice and equity, empowerment, and exploration for the students. This project is making changes in how teachers teach science and how students learn science. As a professor in Anthropology, Dr. Borman is involved in training graduate students for research and teaches courses on mixed method designs and analysis. Graduate and post-doctoral students benefit professionally by being involved in every aspect of the ongoing research projects. Dr. Borman's participation in research workshops with the American Educational Research Association (AERA) and national committees has had policy implications for education.

Collaborators

Daniel Aladjem, American Institutes for Research
Charles E. Bidwell, University of Chicago
Rolf K. Blank, State Education Assessment Center of the Council of Chief State School Officers
Jomills Henry Braddock II, University of Miami
B. Bradford Brown, University of Wisconsin-Madison
Mihaly Csikszentmihalyi, University of Chicago
Jeanne K. Diesen, Indian River Community College
Adam Gamoran, University of Wisconsin-Madison
Rebecca Herman, American Institutes for Research
Harold S. Himmelfarb, Office of Educational Research and Improvement, U.S. Dept of Education
Mary Hess, National Opinion Research Center, University of Chicago
Thomas B. Hoffer, University of Chicago
Joseph Murphy, Vanderbilt University
Fred M. Newmann, University of Wisconsin, Madison
Alan R. Sadovnik, CUNY
Barbara Schneider, National Opinion Research Center, University of Chicago
Becky Smerdon, The Urban Institute
Samuel Stringfield, Johns Hopkins University

Doctoral Students Advised

Amina Alio, 2000
Krystal Bishop, 2000, 4-Year Liberal Arts College, Tennessee
Jonathan Gayles, 2002, University of South Florida
Reginald S. Lee, current, University of South Florida
Melinda Hess, 2005, University of South Florida
Jason Miller, current, University of South Florida
Arland Nguema, current, University of South Florida
Caroline Peterson, current, University of South Florida
Nebiyu Taddesse, 1995, Office of Educational Research and Improvement, U.S. Dept of Education

Graduate Advisor

John Weidman, University of Pittsburgh

Sylvia W. Thomas, Ph.D.

PROFESSIONAL PREPARATION

Vanderbilt University, College of Engineering, Nashville, TN	BS	1984-1988	Elec. Engineering
Vanderbilt University, College of Engineering, Nashville, TN	ME	1988-1990	Elec. Engineering
Howard University, College of Engineering, Washington, DC	PhD	1994-1998	Elec. Engineering/Materials

APPOINTMENTS

Academic Positions

2005-Present	Faculty, Assistant Professor	– Electrical Engineering, University of South Florida, COE
2005-2009	Assistant Dean	– College of Engineering, University of South Florida
2006-2008	Director of Undergraduate Research	– College of Engineering, University of South Florida
2003-2005	Faculty	- Electronics and Engineering Technology, ITT Technical Institute
1994-1998	Graduate Student Researcher	– Department of Electrical Engineering, Howard University

Other Positions

1998-2003	Member of Technical Staff ,	VLSI Technology, Lucent Bell Labs/Agere Systems
1992-1994	Recruiter/Corporate Representative ,	National GEM Fellowship Office, University of Notre Dame
1991-1992	Faculty ,	Electronics, Southeast College of Technology
1990-1992	Operations Manager ,	Kimberly Clark, Inc.

International Positions

2000	Member of Technical Staff ,	VLSI Technology at Lucent Bell Labs/Agere Systems(Singapore)
1997	NSF Research Ambassador/Engineer ,	Chonbuk National University (Korea)

PUBLICATIONS

A.W. Vittetoe, M.U. Niemann, S.S. Srinivasan, K. McGrath, A. Kumar, D.Y. Goswami, E.K. Stefanakos, and **S. Thomas**, "Destabilization of LiAlH₄ by Nanocrystalline MgH₂ International Journal of Hydrogen Energy, Reference-HE4293 (January, 2009).

K. D. Thomas, **S. W. Thomas**, E. Fernandez, J. A. Howard, E. Omisca, A. Gerken, L. Tyler, S. Carpenter-van Dijk, and M. A. Trotz, "K-12 Exposure to Water Quality, Treatment, Resources and Management at the Florida Aquarium as an Outreach Activity During a Large Professional Conference", Submitted Southeastern Section Meeting of ASEE, Memphis, TN, (April, 2008).

S. W. Thomas, R. Schlaf, A. Kumar, N. Alcantar, S. Bhansali, M. Zaworotko, J. Wolan, L. Dunleavy, F. Pyrtle, C. Baylis, C. Ferekides, S. Hariharan, T. Weller, "Advanced Nano Materials for Bio and Device Engineering REU Site" NSF Grantees Conference, Arlington, VA, (October, 2007).

Patents filed in United States Patent and Trademark Office: (1) "Method of Developing a Thin Film Trench Capacitor in Copper Dual Damascene Technology", September, 2002 and (2) "Method for Improved Encapsulation of Thick Metal Features in Integrated Circuit Fabrication", (January, 2000).

S. Wilson, M.G. Spencer, S. Rendakova, Y. Melnik, V. Dmitriev, I. Niktina, A. Babanin, M. Minbaeva, A. Zubrilov, "AlN and GaN Epitaxy on Silicon Carbide Wafers with Reduced Micropipe Density", and W.L. Sarney, L. Salamanca-Riba, P. Zhou, **S. Wilson**, M.G. Spencer, K. Jones, "Investigation of Crystalline Quality and Polytype Morphology of AlN Films Grown on Sapphire by MOCVD Using Transmission Electron Microscopy", Materials Research Society, Spring Conf., San Francisco, CA, (April, 1999).

S. W. Thomas, N. Alcantar, M. A. Trotz, and R. Perez, "Institutional Partnering to Sustain Engineering Innovation", 7th Annual ASEE Global Colloquium Proceedings, Cape Town, South Africa, (October, 2008).

M. Carroll, T. Ivanov, S. Kuehne, J. Chu, C. King*, M. Frei*, M. Mastrapasqua*, R. Johnson*, K. Ng*, S. Moinian*, S. Martin*, L. Fritzinger, T. Esry, W. Moller, B. Kane, G. Abeln, D. Dennis, E. Harris, **S. Thomas**, R. Gregor, P. Sana, W. Wu, et. al., "COM2 SiGe Modular BiCMOS Technology for Digital, Mixed Signal, and RF Applications", IEDM (International Electron Devices Meeting), San Francisco, CA (December, 2000).

W.L. Sarney, L. Salamanca,-Riba, P. Zhou, **S. Wilson**, M.G. Spencer, K. Jones, "Investigation of Crystalline Quality and Polytype Morphology of AlN Films Grown on Sapphire by MOCVD Using Transmission Electron Microscopy", Materials Research Society, Spring Conf., San Francisco, CA (April, 1999).

S. Wilson, M.G. Spencer, S. Rendakova, Y. Melnik, V. Dmitriev, I. Niktina, A. Babanin, M. Minbaeva, A. Zubrilov, "AlN and GaN Epitaxy on Silicon Carbide Wafers with Reduced Micropipe Density", Materials Research Society, Spring Conf., San Francisco, CA (April, 1999).

S. Wilson, C. Dickens, M.G. Spencer, J. Griffin, "Comparative Growth of AlN on Singular and Off-Axis 6H and 4H-SiC by MOCVD", Materials Research Society Internet J. Nitride Semicond. Res. 4S1, G3.61 (1999).

SYNERGISTIC ACTIVITIES

1. National Science Foundation (NSF) Research Exp. for Undergraduates (REU) Site Principal Investigator (PI) and 2006 NSF REU EED Reviewer
2. Faculty Co-Advisor to Society of Women Engineers, National Society of Black Engineers, Tau Beta Pi, and Society of Hispanic Professional Engineers
3. Appointed to USF President's Title IX Committee on Equity and Florida Education Fund Board of Directors, Appointed by The Florida Senate (Senator Tom Lee, President), University of South Florida Representative - Inclusive of McKnight Doctoral Fund
4. College Administrative Lead/Liaison for 3+2 Dual Degree Program with Bethune Cookman University, Research Experience for Students and Teachers (REST), NSF GK STARS and Graduate School Diversity Advisory Committee(s), National Institute of Health MARC U-STAR Selection Committee, Alfred P. Sloan Minority Ph.D. Program, National GEM Consortium
5. Presenter and speaker for American Society of Engineering Education, Engineering Deans Institute, San Juan, PR (April, 2007), National Science Foundation Summer Intern Conference (August, 2006), **United Nations-NGO** - "Girls & Technology: New Educational Opportunities" (March, 2004), National Engineers' Week Satellite Broadcast, February/PBS Channel One, (April, 2000).

COLLABORATORS AND OTHER AFFILIATIONS

Collaborators: Norma Alcantar, Chem Engr, USF - Shekhar Bhansali, Electrical Engr, USF – Corey Dickens, Elec.Engr., Morgan State University - Gary Harris, Elec. Engr., Howard U - William Hemme, St. Petersburg College - Ashok Kumar, Mech. Engr, USF – Morrison Obeng, Engineering, Bethune Cookman University - Ivonne Olivares, Mexican CONACyT – Rafael Perez, Associate Dean, USF Engineering - Peter Stroot, Civil & Environmental Engr, USF - Carlos Soto, Hillsborough Community College - Maya Trotz, Civil & Environmental Engr, USF

Graduate Advisors: Prof. Michael Spencer, Cornell University and Prof. Gary Harris, Howard University

EVA FERNANDEZ

Professional Preparation

University of South Florida, Tampa, Florida	Psychology	BA 1979
University of South Florida, Tampa, Florida	Civil Engineering	BS 1989
University of South Florida, Tampa, Florida progress	Career and Technical Ed.	MA In

Appointments:

Director of Recruitment and Retention, University of South Florida: 7/00-Present, College of Engineering
Engineering Teacher, State of Florida Hillsborough County School District: 6/97- 7/00,
Tampa Bay Technical High School
Project Engineer, Post, Buckley, Schuh, & Jernigan, Inc.: 1/86-5/97
Tampa, Florida Office

Publications:

N/A

Synergistic Activities:

Eva Fernandez is Director of Recruitment and Retention in the College of Engineering. Ms. Fernandez creates and directs the recruitment and retention programs; and implements and directs the Florida Georgia Louis Stokes Alliance for Minority Programs. Ms. Fernandez has experience in engineering education and educational reform. Her research focuses on student retention and satisfaction with an emphasis on minority and underrepresented populations. As Director she develops, implements and manages programs and strategies with design to recruit, retain and graduate students in the College of Engineering with emphasis on underrepresented minorities and women. Ms. Fernandez serves as the Institutional Coordinator for NSF funded *Florida Georgia Louis Stokes Alliance for Minority Participation*, a state-wide collaborative designed to increase the graduation rates of minority students in mathematics, science and engineering. She also served as Co-Principle Investigator for *YES! We Care! SECME*, an activity based Saturday enrichment programs designed for middle and high school students to explore science, mathematics and engineering through team work and competitions. Ms. Fernandez was the Program manager for *Ciencia y Matematica Para Mi*, a pilot program that promotes science, and mathematics education in a mostly Hispanic urban middle school, 2002. She has served as Support Personnel for NSF funded *Undergraduate Engineering Educations Enhancement via Parallel Participation in the Visual and Performing Arts*, implemented through the Colleges of Engineering and Visual and Performing Arts, and as a lead researcher a on University study *The Relationship Between Test and Study Anxiety and College Attrition of Engineering Student*. As Director for *Engineering: A Smart Start* summer enhancement program she created a program that provides freshmen a thorough review of engineering and mathematics, calculus and chemistry to prepare them for the rigors of an engineering curriculum.

Collaborators:

Michael Labrador, University of South Florida
Connie Leggett Albany State University
Rudy Henning University of South Florida
Bruce Furino University of Central Florida
Douglas Lunsford University of South Florida
Nancy Marsh, School District of Hillsborough County
Melissa Morrow, Florida Department of Education
Donna Parrino University of South Florida
Gustavo Roig, Florida International University
C. Spielberger, University of South Florida
Ralph Turner, Florida A&M University

Graduate Advisor:

William Blank, University of South Florida

Jennifer E. Lewis

Associate Professor
Department of Chemistry
Department of Secondary Education
(813) 974-1286

University of South Florida
4202 E. Fowler Avenue CHE205A
Tampa, FL 33620-5250
jlewis@cas.usf.edu

Professional Preparation:

North Dakota State University	Chemistry	B.S. 1992
The Pennsylvania State University	Chemistry	Ph.D. 1998
Beloit College (ChemLinks Coalition)	Chemistry Education	1998-2000

Appointments:

2007-present	Associate Professor, University of South Florida
2001-2007	Assistant Professor, University of South Florida
2000-2001	Assistant Professor, University of Wisconsin-Milwaukee
1998-2000	Visiting Assistant Professor, Beloit College
1997	Lecturer, The Pennsylvania State University

Honors and Awards

Outstanding Undergraduate Teaching Award 2004/2005 University of South Florida

5 Most Relevant Publications:

Names in italics denote USF graduate students

1. *S.E. Lewis*, and *J.E. Lewis* "Seeking Effectiveness and Equity in a Large College Chemistry Course: An HLM Investigation of Peer-Led Guided Inquiry" *Journal of Research in Science Teaching* 45 (2008) 794-811
2. G. Kersaint, *J.E. Lewis*, R. Potter, and G. Meisels "Why Teachers Leave: Factors that Influence Retention or Resignation" *Teaching and Teacher Education*, 23 (2007) 775-794.
3. *S.E. Lewis* and *J.E. Lewis* "Effectiveness of a Workshop to Encourage Action: Evaluation from a Post-Workshop Survey" *Journal of Chemical Education*, 83 (2006) 299-304.
4. *S.E. Lewis* and *J.E. Lewis* "Departing from Lectures: An Evaluation of a Peer-Led Guided Inquiry Alternative" *Journal of Chemical Education*, 82 (2005) 135-139.
5. *S.E. Lewis* and *J.E. Lewis* "The Same or Not the Same: Equivalence as an Issue in Educational Research" *Journal of Chemical Education*, 82 (2005) 1408-1412.

Other Significant Publications:

1. *S.E. Lewis* and *J.E. Lewis* "Predicting At-risk Students in College Chemistry: Comparing Formal Thought to a General Achievement (SAT) Measure" *Chemistry Education Research and Practice*, 8 (2007) 32-51.
2. *B. Jiang* and *J.E. Lewis* "Two Tests of Formal Reasoning and their Applications in College Chemistry" submitted to *Journal of Chemical Education* 2007
3. *J.E. Lewis* "Should I Do It And If So, How? Reflections on Choosing and Using a Quasi-Experimental Method" *Annals of Research on Engineering Education*, 1:2 (2005)
<http://www.areeonline.org>
4. *T. D. Sadler*, *T. M. Eckart*, *K. M. Whitley*, and *J.E. Lewis* "It's a Gas! An Exploration of the Physical Nature of Gases" *Science Scope* Nov/Dec (2005) 10-12.
5. *J.E. Lewis* and *M. Maroncelli*, "On the (Uninteresting) Dependence of the Absorption and Emission Transition Moments of C153 on Solvent," *Chemical Physics Letters*, 282 (1998) 197-203

Synergistic Activities:

i) Grant activity involving curriculum reform, assessment, and dissemination:

- 2006-present PI, NSF-DUE #0618758, Collaborative Research: The POGIL Project
- 2005-present PI, NSF-DUE #0443026, Collaborative Research: The Molecules of Life – A Partnership to Enhance Undergraduate Science Education for Non-Majors
- 2003-2007 PI and Project Director, NSF-DUE #0310954, Sustainable Reform for General Chemistry: Phased Implementation of Lecture-Based Reforms and Peer-Led Guided Inquiry

i) Grant activity involving research on K12 settings:

- 2003-2005 co-PI, US-DOE #1520-543-21 subcontract #R00123 and #R00314, Understanding Resignations of Science, Mathematics, and Reading Teachers, Pilot Project (#R00123) and Phase Two (#R00314)

ii) Evaluation activity for curricular innovations:

- 2007-present Evaluator, NSF-DUE 0196527, POGIL Biochem Advancing Active Learning Approaches in Biochemistry
- 2005-present Evaluator, NSF-DUE 0512526, Adapting IMMEX to Provide Problem Solving Assessment Materials from the ACS Exams Institute
- 2000-2004 Evaluator, NSF-DUE 0196527, Strategies to Promote Active Learning in Chemistry Courses: Multi-Initiative Dissemination (MID) Project

iii) Other relevant professional service

- 2003-present Workshop leader, Hillsborough County School District, Tampa, FL
Develop and present one-day workshops for new middle and high school science teachers regarding alternative conceptions, models and their use in science, inquiry-based teaching, and reflective practice
- 2000-2003 Mentor, National Curriculum Reform Institute, University of Wisconsin-Oshkosh, University of Wisconsin-System Women and Science Program
Mentors advised and supported teams of faculty. The focus was new course development or modification of existing courses to meet the needs of women and other under-represented groups in science.
- 2000-present American Chemical Society Division of Chemical Education:
Alternate Councilor, elected 2007-2009
Chair, New Member Committee, appointed 2004 (member since 2002)
member, Program Committee, appointed 2005-2007, 2007-2009
member, Chemical Education Research Committee; elected 2000-2006

Collaborators, Past 48 Months:

Diane Bunce, Catholic Univ.
Tom Holme, Iowa State Univ.
Trace Jordan & Neville Kallenbach, New York Univ.
Jenny Loerstcher & Vicky Minderhout, Seattle Univ.
Richard Moog, Franklin and Marshall College

Graduate Advisees (4):

Rod Bass, US Air Force
Beverly Barker, Univ Alaska Anchorage
Scott Lewis, Kennesaw State Univ.
Lilia Usher, Gaither High School
plus 8 current advisees, USF

Graduate & Post-doctoral Advisors:

Mark Maroncelli, Penn State University; Brock Spencer, Beloit College

WILL TYSON

Professional Preparation

Duke University	Sociology	Ph.D., 2004
Duke University	Women's Studies	Graduate Certificate., 2003
Duke University	Sociology	M.A., 2001
Wake Forest University	Sociology and Psychology	B.A., 1998

Appointments

2005-present	Assistant Professor, Department of Sociology, University of South Florida, Tampa, FL
2004-2005	Post-doctoral Research Associate, College of Education, University of South Florida, Tampa, FL
2000-2004	Research Assistant, Duke University

Selected Publications

Journal Publications and Book Chapters

Wao, Hesborn, Kathryn M. Borman, Reginald Lee, & Will Tyson. (Under review). Testing the Glass Ceiling Effect among Civil Engineers

Tyson, Will. (Under review). High School Biology, Chemistry, and Physics Coursetaking and Achievement Pathways to Science, Technology, Engineering, and Mathematics (STEM) Degree Attainment.

Tyson, Will & Kathryn M. Borman. (Under review). Can You Beat an A in Calculus? High School Math Coursetaking and Achievement Effects on STEM Bachelor's Degree Attainment.

Tyson, Will. (Under review). Demographic, Academic, and Economic Determinants of Science, Technology, Engineering and Mathematics (STEM) Graduate Degree Attainment.

Tyson, Will, Reginald Lee, Kathryn Borman, & Mary Ann Hanson. (2007). Science, Technology, Engineering and Mathematics (STEM) Pathways: High School Science and Math Coursework and Postsecondary Degree Attainment. *Journal of Education of Students Placed At Risk*, 12 (3): 243-270.

Borman, Kathryn M., Reginald Lee, & Will Tyson. 2006. "Florida's A+ Plan: Education Reform Policies and Student Outcomes." Pp. 300-346 in *Educational Reform in Florida: Diversity and Equity in Public Policy*, edited by Kathryn Borman and Sherman Dorn.

Synergistic Activities

1. National Science Foundation Research and Evaluation of Engineering and Science Education (REESE) Review Panelist, April 2007
 2. Co-Coordinator of American Sociological Association Sociology of Education Workshop, "Key Developments in the Sociology of Education," August 2006.
 3. Invited participant in American Sociological Association Spivack Workshop on School Composition and School Outcomes, May 2006.
 4. Member of Committee for Racial and Ethnic Minorities, Southern Sociological Society, 2006-present
 5. Participant in American Sociological Association Sociology of Education Section Conference, August 2005
 6. Participant in American Sociological Association Sociology of Education Section Policy Conference on No Child Left Behind, August 2004.
-

Collaborators

Kathryn Borman, University of South Florida
Theodore Micceri, University of South Florida
Sherman Dorn, University of South Florida
Reginald Lee, University of South Florida
Mary Ann Hanson, Center for Career and Community
Hesborn Wao, University of South Florida

Doctoral Students Advised

Joshua Miller, current, University of South Florida
Keona Lewis, current, University of South Florida

Graduate Advisor

Kenneth I. Spenner, Duke University

Angel Kwolek-Folland
Curriculum Vitae

Contact Information

Academic Affairs Office, University of Florida, PO Box 113175, Gainesville, FL 32611
Office: 352-392-4792 Cell: 352-226-2280 FAX: 352-392-8735

Education

1987 Ph.D., History, University of Minnesota
1983 M.A., History, Kansas State University
1979 B.A., History and Art History, University of Missouri, Kansas City

Appointments

2007--P Associate Provost, Academic Affairs and Faculty Development
2005-07 Associate Dean, College of Liberal Arts and Sciences
2000-05 Director, Center for Women's Studies & Gender Research
2001--P Professor, History and Women's Studies, University of Florida
2000-01 Associate Professor, History and Women's Studies, University of Florida
1994-2000 Associate Professor, History, University of Kansas
1990-94 Assistant Professor, History, University of Kansas
1998-90 Visiting Assistant Professor, History and Women's Studies, University of Kansas

Fellowships and Awards (Selected)

2004-09 Fulbright Senior Specialist, Council for International Exchange of Scholars (England, 2006; Russia, 2008)
2004 Distinguished Faculty, Florida Blue Key Leadership Award
2002 Harold F. Williamson Award, Career Achievement, Business History Conference
1998-2001 Trustee, Business History Conference (national election).
1997-98 Chair, Sierra Prize Committee, Western Association of Women Historians
1995 Sierra Prize, Best Historical Monograph, Western Association of Women Historians
1995 Research Grant, Hagley Museum & Library, Wilmington, Delaware
1994 Graduate Research Fund, Graduate School, University of Kansas
1993 Nominee, CLAS Graduate Mentor of the Year Award, University of Kansas
1989/1991 Nominee, Honors for Outstanding Progressive Educator Award, University of Kansas

Professional Service/Synergistic Activities (selected)

2005-- Research Funding, Co-PI, Pathways for Women's Leadership Working Group, \$30,000 various sources (University of Michigan, University of Florida, Indiana University).
2007-10 Editorial Board, *Business History* (United Kingdom)
2003-08 Editorial Board, *Business History Review*
2001-10 Editorial Board, *Enterprise & Society: The International Journal of Business History*
2001-10 Editorial Board, *American Studies*

Publications Most Closely Related to This Proposal

Cindy A. Schipani, Terry M. Dworkin, **Angel Kwolek-Folland**, Virginia G. Maurer, "Pathways for Women to Obtain Positions of Organizational Leadership: The Significance of Mentoring and Networking," *Duke Journal of Gender Law and Policy*, 16:1 (January 2009): 89-136..

Terry Dworkin, **Angel Kwolek-Folland**, Cindy Schipani, and Virginia Maurer, "Pathways to Success for Women Scientists in Higher Education in the U.S.," in *Gender Equality Programmes in Higher Education: International Perspectives*, eds., Sabine Grenz, Beate Kortendiek, Marianne sind Kriszio, and Andrea Lothar, (Berlin: VS Verlag fuer Sozialwissenschaften, forthcoming 2009).

Other Significant Recent Publications

Incorporating Women: A History of Women and Business in the United States (New York: Twayne Publishers, 1998).

With Margaret Walsh, co-editors of special issue of *Business History Review* on "Gender and the Service Industries in Business History: Some International Comparisons," vol 81, no. 3 (Autumn 2007).

Special Issue on "Gender and Business History," "Introduction," *Enterprise & Society: The International Journal of Business History* 2:1 (Spring 2001): 1-10.

With Margaret Walsh, "Introduction," *Business History Review*, special issue on "Gender and the Service Industries in Business History: Some International Comparisons," vol. 81, no. 3 (Autumn 2007): 421-27.

"Gender and the Service Sector in United States Business History," *Business History Review* vol. 81, no. 3 (Autumn 2007): 429-50.

Women and the New Corporate Governance: Pathways for Obtaining Positions of Corporate Leadership," with Cindy A Schipani, Terry Morehead Dworkin, Virginia Maurer, and Marina v.N. Whitman, *University of Maryland Law Review*, 65: 101 (2006): 101-33.

"Women's Businesses, New and Old," in Regina Lee Blaszczyk and Philip B. Scranton, eds., *Major Problems in American Business History* (New York: Houghton Mifflin, 2006, pp. 289-94; reprinted from *Incorporating Women*.

Collaborators

UF College of Business: Virginia Maurer
University of Michigan, College of Business, Cindy Schipani
Indiana University, College of Business, Terry Dworkin
Margaret Walsh, University of Nottingham (UK)

Ph.D. Students (2004-2009):

Nancy Engle, History, 2005
Emily Case, History, current

Postdoctoral Associates (2004-2008):

Not applicable.

P.I.'s Advisors:

Sara Evans, History

CAMMY R. ABERNATHY

Professional Preparation:

MIT, Cambridge, Massachusetts	Materials Sci. and Eng.	S.B. 1980
Stanford University, Stanford, California	Materials Sci. and Eng.	M.S. 1982
Stanford University, Stanford, California	Materials Sci. and Eng.	Ph.D. 1985

Appointments:

Assoc. Dean for Academic Affairs, College of Engineering, Univ. of Fl.	2004-Present
Alumni Chair, Materials Sci. and Eng., Univ. of Florida, Gainesville, FL	2000-2004
Professor, Materials Science and Eng., Univ. of Florida, Gainesville, FL	1993-Present
Member of Technical Staff, AT&T Bell Laboratories, Murray Hill, NJ	1985-1993

Related Publications:

1. "Band offsets in the Mg_{0.5}Ca_{0.5}O/GaN heterostructure system," Chen, JJ; Hlad, M; Gerger, AP; Gila, BP; Ren, F; Abernathy, CR; Pearton, SJ, Journal Of Electronic Materials, 36, 368, (2007).
2. "Effect of SiCo doping on ferromagnetic properties of GaGdN," Hite, JK; Frazier, RM; Davies, RP; Thaler, G. T; Abernathy, CR; Pearton, SJ; Zavada, JM; Brown, E; Hommerich, U, Journal Of Electronic Materials, 36, 391(2007).
3. "Effect of proton irradiation on interface state density in Sc₂O₃/GaN and Sc₂O₃/MgO/GaN diodes," Allums, KK; Hlad, M; Gerger, AP; Gila, BP; Abernathy, CR; Pearton, SJ; Ren, F; Dwivedi, R; Fogarty, TN; Wilkins, Journal Of Electronic Materials, 36, 519 (2007).
4. "pH sensor using AlGaN/GaN high electron mobility transistors with Sc₂O₃ in the gate region," Kang, BS; Wang, HT; Ren, F; Gila, BP; Abernathy, CR; Pearton, SJ; Johnson, JW; Rajagopal, P; Roberts, JC; Piner, EL; Linthicum, KJ, Applied Physics Letters, 91, 012110 (2007).
5. "GaN Enhancement Mode Metal-Oxide Semiconductor Field Effect Transistors," Y. Irokawa, Y. Nakano, M. Ishiko, T. Kachi, J. Kim, F. Ren, B.P. Gila, A.H. Onstine, C.R. Abernathy, S.J. Pearton, C.-C. Pan, G.-T. Chen, J.-I. Chyi, Phys. Stat. Solidi C 1-4 (2005).

Other Significant Publications

1. "Effect of Mn concentration on the structural, optical, and magnetic properties of GaMnN," G. Thaler, R. Frazier, B. Gila, J. Stapleton, Mark Davidson, C. R. Abernathy, et. al., Appl. Phys. Lett. 84, 1314 (2004)
2. "Properties of (Ga, Mn)N With and Without Detectable Second Phases," G. T. Thaler, R. M. Frazier, J. Stapleton, C. R. Abernathy, et. al., Electrochem. Solid-State Lett. 7, G34 (2004)
3. "Observation of sphere resonance peak in ferromagnetic GaN:Mn," S. S. A. Seo, M. W. Kim, Y. S. Lee, T. W. Noh, Y. D. Park, G. T. Thaler, M. E. Overberg, C. R. Abernathy, and S. J. Pearton, Appl. Phys. Lett. 82, 4749 (2003)
4. "Characteristics of MgO/GaN Gate-Controlled MOS Diodes," J. Kim, R. Mehandru, B. Luo, F. Ren, B.P. Gila, A.H. Onstine, C.R. Abernathy, et. al. , Appl. Phys. Lett. 80, 4555 (2002).
5. "Inversion Behavior in Sc₂O₃/GaN Gated Diodes," J. Kim, R. Mehandru, B. Luo, F. Ren, B.P. Gila, A.H. Onstine, C.R. Abernathy, S.J. Pearton, et. al., Appl. Phys. Lett. 81, 373 (2002).

Synergistic Activities:

1. Fellow of the Electrochemical Society, 2000, and of the AVS, 2002

2. Associate Editor - Journal of Crystal Growth, 1998-2004 and Assoc. Ed. - JVST 1996-1998
3. Board of Directors of the AVS, 1999-2001 and Councilor of the MRS, 1995-1998
4. Program chair: 47th Int. Symp. of the AVS, 2000; 5th Int. CBE Conf., San Diego, 1995.
5. Curriculum Chair and Graduate Student Coordinator for the UF MSE Dept. 2002-2004.

Collaborators and Other Affiliations:

Collaborators:

A. G. Baca (Sandia), A. Allerman (Sandia), G. Y. Chung (Sterling Semiconductor), R. Fitch (WPAFB), D. C. Look (WrightState), Laurie MacNeil (UNC), Y. D. Park (Seoul National University), A. Y. Polyakov (Institute Rare Metals, Moscow), J. M. Zavada (ARO)

Graduate Advisor C. W. Bates, Jr. (Stanford Univ., now at Howard Univ.)

Graduate Students: (22)

Ph.D. Kimberley Allums, NASA, Mark Antonell, RFMicrodevices; Sean Donovan, Boise State Univ.; Rachel Frazier, Univ. of Alabama, Brent Gila, Univ. of Florida; Jennifer Hite, Naval Research Lab., M. Hlad, Intel, K. N. Lee, Samsung; Devin MacKenzie, Cambridge Univ.; Andrea Onstine, Intel; Mark Overberg, Sandia National Labs; Danielle Stodilka, Gerald Thaler, Sandia National Labs, Karen Waldrip, Sandia National Labs; Allen West, Intel; **M.S.** Kimberly Allums, NASA; Keiko Harris, TI; Winston Schoenfeld, Univ. of Central Florida; Dominique White, Agere; **Current:** R. Davies, A. Gerger, A. Herrero, A. Stewart

Post-Docs: (3)

B. Gila, Univ. of Florida; M. Overberg, Sandia National Labs; G. Thaler, Sandia National Labs.

ANNE E. DONNELLY

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Associate Director for Education and Outreach, Particle Engineering Research Center
206 Particle Science & Technology, University of Florida, Gainesville, FL, 32611
Phone: (352) 846-0153 Fax: (352) 846 –1196 Email: adonnelly@erc.ufl.edu

Professional Preparation

Ohio Wesleyan University	Zoology	BA	1975
Georgia State University	Finance	M.B.A.	1982
University of Florida	Instruction & Curriculum	Ph.D	1996

Appointments

2005-present Director, South East Alliance for Graduate Education and the Professoriate Program and the UF Social, Behavioral and Economic Sciences Alliance, University of Florida, Gainesville, Florida

1997-Present Associate Director for Education and Outreach, PERC, UF

1996-1997: Education Coordinator, PERC, University of Florida, Gainesville, FL

1995-1996: Undergraduate Pre-intern Field Advisor, University of Florida, Gainesville, FL

1994-1995: Graduate Teaching Assistant, University of Florida, Gainesville, FL

1983-1987: Marine Science Educator, University of Georgia Marine Extension Center, Skidaway Island, GA

1982-1983: Science Teacher, Dekalb County School District, Atlanta, GA

1981-1982: Program Manager, The Georgia Conservancy, Atlanta, GA

1978-1981: Environmental Specialist, Department of Natural Resources, The State of Georgia, Atlanta, GA

1975-1978: Education Specialist, Univ. of Georgia Marine Extension Center, Sapelo Island, GA

Selected Publications/Presentations

5 most relevant

Donnelly, Anne E. "NSF Centers Approach to the Integration of Research and Education, " *International Conference on Engineering Education – ICEE 2007*, Coimbra, Portugal, September 3-7, 2007.

Donnelly, Anne E. "The South East Alliance for Graduate Education and the Professoriate Program: Graduate Retention and Preparedness for Academic Careers, " *American Society for Engineering Education Annual Conference*, Honolulu, Hawaii, June 24-27, 2007.

Donnelly, Anne E., "The South East Alliance for Graduate Education and the Professoriate-LACCEI Connection," *The Third Latin American and Caribbean Conference for Engineering and Technology*, Cartagena, Columbia, June 8-10, 2005.

Donnelly, A.E. and E. Hodge, "How to Develop an Education Program Evaluation Plan", a workshop presented at the *NSF Research Centers Educators Network Meeting*, Gainesville, Florida, March 4-6, 2004.

Hodge, E. and A.E. Donnelly, "Identification of Strategies of the ERC for Particle Science & Technology at The University of Florida to Attract Female Undergraduate Students in Engineering Research," *Proceedings of the WEPAN 2002 Annual Conference* San Juan, Puerto Rico, June 8-11, 2002.

5 additional relevant publications/presentations

- Donnelly, Anne E., E. Hodge, C.Y.Wu, and P. Biswas. "The Importance of Assessing Educational Materials Development Projects," *2006 International Aerosols Conference*, St. Paul, Minnesota, Sept. 10-15, 2006.
- Donnelly, Anne E, E. Hodge, M. Budak, H. Wintz, R. Switt, C.Y.Wu , P. Kumar, P. Biswas, P. Chapman, and A. L. Allen. "A Model for Teaching Materials Evaluation: Development and Testing of Interactive Computer Simulations Modules for Undergraduate Education", *Proceedings of the American Society of Engineering Education Annual Conference*, Salt Lake City, Utah, June, 2004.
- Davies, R., A.E. Donnelly, B.M. Moudgil, B. Scarlett, M. Ghadiri, S. Lawson, K.J. Roberts, and R.A. Williams, "Developments in Particle Science and Technology Research and Training: UK and USA Perspective" *World Congress on Particle Technology 4*, Sydney, Australia, July 21-25, 2002.
- Hargis, J. and A.E. Donnelly, "Engineering Education and the Internet: A Study of the Effectiveness of Web Formats on Student Learning," *Proceedings of the American Society of Engineering Education Annual Conference*, Albuquerque, New Mexico, June 24-27, 2001.
- Donnelly, A.E, D. Gamble, and J. Glover, "Leveraging Institutional and Governmental Resources to Benefit Minority and Women Engineering and Science Students," *Proceedings of the NAMEPA/WEPAN 2001 Joint Conference*, Alexandria, Virginia, April 21-24, 2001.
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Synergistic Activities

Co-PI for the NSF SEAGEP program designed to increase the number of minority faculty in Science and Engineering disciplines. To date, 60 minority students in STEM PhD programs in nineteen science and engineering departments have been supported at UF.

PI and Director of the UF Atlantic Coast Alliance for the Social, Behavioral, and Economic Sciences Program

Program Director - The Advanced Training in Technology: Particle Science Summer School in Winter at the PERC. This International graduate training program has included over 200 graduate students in an intensive program of modules taught by global experts.

Developed the PERC Undergraduate Research Program that has provided research experience to over 700 undergraduate students over the past 10 years. This program has consistently had high representation of women and minority participants.

PI - PERC NSF Research Experience for Undergraduates Program that over the past 11 years has provided 110 non-UF students with the opportunity to conduct summer research at the center.

Program Director - PERC NSF International Research Experience for Undergraduates program Conduct education program evaluation, on the PERC education programs as well as other NSF funded CCLI grants.

Founding Member of the NSF Research Centers Educators Network (NRCEN)

Collaborators

Pratim Biswas (U. Washington, St Louis), Brij Moudgil (UF) C.Y. Wu (UF)

Graduate Advisor : John J Koran (deceased)

Graduate Student Committees in the Past 5 years: none

Lisa McElwee-White
Curriculum Vitae

Contact Information

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Gainesville, FL 32611-7200

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Education

1979 B.S., Chemistry, with Highest Distinction and Honors
in Chemistry, University of Kansas
1983 Ph.D., Chemistry, California Institute of Technology
1983-1985 Postdoctoral Research Affiliate, Stanford University

Appointments

1998-2002 Associate Dean for Administrative Affairs, College of Liberal Arts and Sciences,
University of Florida
1997-present Professor, University of Florida
1993-1997 Associate Professor, University of Florida
1985-1993 Assistant Professor, Stanford University

Fellowships and Awards

1975-1976 National Merit Scholarship
1978 Phi Beta Kappa, Phi Kappa Phi, Phi Lambda Upsilon
1978 Dow Undergraduate Chemistry Achievement Award, University of Kansas
1979 Robert Kent Scholarship, University of Kansas
1979 E.V. McCollum Symposium Award, University of Kansas
1979 Alpha Chi Sigma Award, University of Kansas
1979-1980 Institute Fellowship, California Institute of Technology
1980-1983 National Science Foundation Predoctoral Fellowship
1989 DuPont Young Faculty Award
1996, 1998, Anderson Scholar Faculty Honoree, University of Florida
1999, 2005
1996 Teaching Improvement Program Award, University of Florida
2007 HHMI Distinguished Mentor Award
2007-2009 University of Florida Research Foundation Professorship
2009 UF Doctoral Dissertation Mentoring Award

Professional Service/Synergistic Activities (selected)

2009-2010 Member at Large, Executive Committee, ACS Division of Inorganic Chemistry
2008-2010 Chair, Division of Organic Chemistry, American Chemical Society
(2008 Chair Elect, 2009 Chair, 2010 Past Chair)
2006-2007 Committee of Visitors, NSF Chemistry Division
2006 NIH Review Panel, Chemical and Bioanalytical Sciences (Fellowships)
2006- Editorial Advisory Board, *Letters in Organic Chemistry*
2004-2007 Editorial Advisory Board, *Journal of Organic Chemistry*
2004-2006 Member at Large, Executive Committee, ACS Division of Organic Chemistry
2003 Review Panel, NSF CAREER Awards
2002-2005 Titular Member, IUPAC Organic and Biomolecular Chemistry Division Committee
2001 Search Committee for Editor, *Journal of Organic Chemistry*
2001-2003 Advisory Panel, NSF Inorganic Workshops
2000-2003 National Program Chair, Division of Organic Chemistry, American Chemical Society
2000-2002 Editorial Advisory Board, *Organometallics*
1995-1999 Member, Medicinal Chemistry Study Section, National Institutes of Health
1995-1998 Executive Guest Editor, *Current Organic Chemistry*

Publications Most Closely Related to This Proposal

1. "The Tungsten Allylimido Complexes $Cl_4(RCN)W(NC_3H_5)$ as Single-source CVD Precursors for WN_xC_y Thin Films. Correlation of Precursor Fragmentation to Film Properties," Bchir, O.J.; Green, K.M.; Ajmera, H.M.; Zapp, E.A.; Anderson, T.J.; Brooks, B.C.; Reitfort, L.L.; Powell, D.H.; Abboud, K.A.; McElwee-White, L., *J. Am. Chem. Soc.*, **2005**, *127*, 7825-7833.
2. "Homogeneous Decomposition of Aryl- and Alkylimido Precursors for the CVD of Tungsten Nitride: A Combined Density Functional Theory and Experimental Study," Won, Y.S.; Kim, Y.S.; Anderson, T.J.; Reitfort, L.L.; Ghiviriga, I.; McElwee-White, L., *J. Am. Chem. Soc.*, **2006**, *128*, 13781-13788.
3. "Design of Precursors for the CVD of Inorganic Thin Films," McElwee-White, L. *Dalton Trans.* **2006**, 5327-5333.
4. "Synthesis and Characterization of Diorganohydrazido(2-) Tungsten Complexes," Koller, J.; Ajmera, H.M.; Abboud, K.A.; Anderson, T.J.; McElwee-White, L., *Inorg. Chem.*, **2008**, *47*, 4457-4462.
5. "Computational Study of the Gas Phase Reactions of Isopropylimido and Allylimido Tungsten Precursors for Chemical Vapor Deposition of Tungsten Carbonitride Films: Implications for the Choice of Carrier Gas," Won, Y.S.; Kim, Y.S.; Anderson, T.J.; McElwee-White, L. *Chem. Mater.*, **2008**, *20*, 7246-7251.

Other Significant Recent Publications

6. "Electronic Interactions in Fe- and Ru-Containing Heterobimetallic Complexes: Structural and Spectroscopic Investigations," Serra, D.; Abboud, K.A.; Hilliard, C.R.; McElwee-White, L., *Organometallics*, **2007**, *26*, 3085-3093.
7. "Ir/TaN as a bilayer diffusion barrier for advanced Cu interconnects," Leu, L.C.; Norton, D.P.; McElwee-White, L.; Anderson, T.J. *Appl. Phys. Lett.*, **2008**, *92*, 111917.
8. "Deposition of WN_xC_y Using the Allylimido Complexes $Cl_4(RCN)W(NC_3H_5)$: Effect of NH_3 on Film Properties," Ajmera, H.M.; Heitsch, A.T.; Bchir, O.J.; Anderson, T.J.; Reitfort, L.L.; McElwee-White, L., *J. Electrochem. Soc.*, **2008**, *155*, H829-H835.
9. "Deposition of WN_xC_y for Diffusion Barrier Application Using the Imido Guanidinato Complex $W(N^iPr)Cl_3[PrNC(NMe_2)N^iPr]$," Ajmera, H.M.; Heitsch, A.T.; Anderson, T.J.; Wilder, C.B.; Reitfort, L.L.; McElwee-White, L.; Norton, D.P., *J. Vac. Sci. Technol. B*, **2008**, *26*, 1800-1807.
10. "NaO₄-oxidized carbonylation of amines to ureas," Shelton, P.A.; Zhang, Y.; Nguyen, T.H.H.; McElwee-White, L., *Chem. Commun.*, **2009**, 947-949.

Collaborators

UF Chemical Engineering: Tim Anderson, Jason Weaver, Helena Hagelin-Weaver, Kirk Ziegler, Aravind Asthagiri; UF Materials Science and Engineering: David Norton, Valentin Craciun; UF Mechanical and Aerospace Engineering: David Hahn, David Mikolaitis; UCLA Chemical Engineering: Jane Chang; USF Engineering: Lee Stefanakos, Yogi Goswami; University of Toronto Chemistry: Deryn Fogg; University of Illinois Chemistry: Greg Girolami; University of Illinois Materials Science: John Abelson; Intel: Steve Johnston, Hiral Ajmera; Novellus: John Kelly; Applied Materials: Olga Kryliouk; Samsung: Yong Sun Won; Tokyo Electron, Ltd., Frank Cerio.

Ph.D. Students (2004-2009):

Keisha-Gay Hylton	May 2004	Delmy Diaz	May 2007	Marie Correia	current
Yue Zhang	Dec. 2004	Laurel Reitfort	May 2008	Dan Denomme	current
Ying Yang	Dec. 2004	Jürgen Koller	Dec. 2008	Ahmed Moghieb	current
Corey Wilder	Aug. 2005	Seth Dumbris	current	Sarah Goforth	current
Corey Anthony	May 2006	Philip Shelton	current	Ciera Gerack	current
Daniel Serra	Jan. 2007	Ampofo Darko	current	Jennifer Johns	current

Total Graduate Students: 38 (Ph.D. + M.S.)

Postdoctoral Associates (2004-2008):

Chatu T. Sirimanne	2004-2005, 2008	Ramasamy Pothiraja	2006
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Total Postdoctoral Associates: 17

P.I.'s Advisors:

Graduate: Professor Dennis A. Dougherty

Postdoctoral: Professor James P. Collman

CURRICULUM VITAE--PENNY JANE GILMER

ADDRESS: Department of Chemistry and Biochemistry 3235 Robinhood Rd.
 Florida State University, 214 DLC Tallahassee, FL 32312
 Tallahassee, FL 32306-4390
 (850) 644-4026 Land: (850) 385-5762
 FAX: (850) 644-8281 Cell: (850) 556-5320
 E-mail: gilmer@chem.fsu.edu

(i) PROFESSIONAL PREPARATION:

B. A. Chemistry, Douglass College, New Brunswick, NJ, 1965
M. A. Organic Chemistry, Bryn Mawr College, Bryn Mawr, PA, 1967
Ph.D. Biochemistry, University of California, Berkeley, CA, 1972
D. Sc.Ed. Science Education, Curtin University of Technology, 2004

(ii) APPOINTMENTS:

1996 - present Full Professor, Department of Chemistry and Biochemistry, Florida State University
1993- present Courtesy Appointment, Science Education, Florida State University
1984-1996 Associate Professor of Chemistry and Biochemistry, Florida State University
1977-1984 Assistant Professor of Chemistry and Biochemistry, Florida State University
1975-1977 U.S. Public Health Postdoctoral Fellow, Stanford University, Departments of Chemistry and Immunology
1973-1975 Gianinni Bank of American Postdoctoral Fellow, Stanford University, Departments of Chemistry and Physiology

(iii) SELECTED PUBLICATIONS (on-line at <http://www.chem.fsu.edu/~gilmer/>) (* indicates publications directly related to project):

1. *Kahveci, A., **Gilmer, P. J.**, & Southerland, S. A. (2008). From marginality to legitimate peripherality: Understanding the essential functions of a women's program. *Science Education*, 92(1), 38-64.
2. Kahveci, A., **Gilmer, P. J.**, Southerland, S. A. (2008). Understanding chemistry professors' use of educational technologies: An activity theoretical approach. *International Journal of Science Education*, 30(3), 1-27.
3. K. Calvin & **P. J. Gilmer** (Eds.) (2008). *Real science for the real world: Doing, learning, & TEACHING!* Chipley, FL: Panhandle Area Educational Consortium [Available at <http://www.chem.fsu.edu/~gilmer/>].
4. **Gilmer, P. J.** (2008). Collaborating with scientists and engineers for improved teaching and learning of science. *E-NARST News*, 51(2), 3-5 [Available at <http://www.narst.org/news/enarst.cfm>].
5. **Gilmer, P. J.**, Hahn, L. L., & Spaid, M.R. (2002). *Experiential learning for pre-service science and mathematics teachers: Applications to secondary classrooms*. Tallahassee, FL: SERVE.
6. **Gilmer, P. J.** (2004) *Transforming biochemistry teaching through action research: Utilizing collaborative learning and technology*. D.Sc.Ed. Dissertation, Curtin University of Technology, Perth, Western Australia.
7. ***Gilmer, P. J.** Going upwind in chemistry, In K. Scantlebury (Ed.), (in press). *Re-visioning science education from feminist perspectives: Challenges, choices and careers*. Sense Publishers.
8. Geelan, D., **Gilmer, P. J.**, & Martin, S. N. (2006). Forum: Dialogue about dialogue-cogeneration, research and science education. *Culture Studies in Science Education*, 1(4), 721-744.
9. **Gilmer, P. J.**, Granger, D. E., Butler, W. (2005). *Science graduate students in K-8 classrooms: Experiences and reflections* [Monograph]. Tallahassee, FL: SERVE.
10. Taylor, P. C., **Gilmer, P. J.**, & Tobin, K. (Eds.) (2002). *Transforming undergraduate science teaching: Social constructivist perspectives*, New York, NY: Peter Lang Publishers.

(iv) SYNERGISTIC ACTIVITIES (current activities in bold):

- 2008-2009, Director of the FSU subcontract for the *Science Collaboration: Immersion, Inquiry, Innovation* grant for 118 rural teachers grades 3-12, funded via the Florida Department of Education, through the US Department of Education. This program had 118 teachers working together in

collaborative, vertical teams to experience science first-hand. We published a monograph on the program.

- At FSU, I started the first chapter of the **Association for Women in Science** in Florida in 1986 and have been involved with this group in leadership positions ever since.
- I am also the faculty mentor for a student organization called **Graduate Women in Science**.
- I have worked with Nobel laureate Harold Kroto on a MediaSite-directed Web site called **Global Educational Outreach**, with educational lectures and programs on science and mathematics since 2004.
- 2008-present, **Treasurer, Tallahassee Scientific Society (TSS)**. I was a founding member in 1989, have served in various positions, including President. Currently, I chair the Lannutti Memorial Lecture Committee and serve as the Treasurer.
- 2008-2009, **Immediate Past President, National Association for Research in Science Teaching**
- 2006-2010, **Member at Large, Education Section Q, American Association for the Advancement of Science**
- 2007-present, **Editorial Board member, *Evolution: Education and Outreach* and *Science, Engineering & Ethics***
- Professional awards:
 - 2008-2011 **Nancy Marcus Professor of Chemistry and Biochemistry** at Florida State University
 - 2008 **Fellow, Association for Women in Science**, recognized for “outstanding commitment and dedication in support of women in science and engineering and AWIS”
 - 2006 1st Annual **NSF GK-12 Dissemination Award** to Florida State University for distinguished accomplishments in the dissemination of the GK-12 Program: *Experiences and Reflections*
 - 1994 **Fellow, American Association for the Advancement of Science**
- Teaching:
 - 2007 **John Shrum Award** from the Southeastern Association for Science Teacher Education, for excellence in the education of science teachers and contributions, which exemplify the highest standards of dedication and service;
 - 2006 **Outstanding Science Teacher Educator** (Level 2, >10 years), Association for Science Teacher Education;
 - 2004 **Special commendation from the Chancellor** of Curtin University of Technology on my doctoral thesis: *Transforming University Biochemistry Teaching Through Action Research: Utilizing Collaborative Learning and Technology*;
 - 1999 **Innovative Excellence in Teaching, Learning and Technology Award** from the 10th International Conference on College Teaching and Learning in Jacksonville, FL
 - 1994 **Teaching Incentive Award** from Florida State University

(v) COLLABORATORS & OTHER AFFILIATIONS:

(a) Collaborators. FSU: Profs. D. Ellen Granger and Sherry Southerland; Asst. Prof. Ajda Kahveci (Turkey), Prof. Kenneth Tobin (CUNY), Assoc. Prof. Peter Taylor (Curtin University of Technology), Prof. Rainer Glaser (U. Missouri-Columbia), Asst. Prof. Susan Schelble (Denver), Ms. Brenda Crouch (PAEC), Necati Aydin (FSU)

(b) Doctoral and Post-doctoral advisors:

Jack Kirsch, 1 st doctorate	Harden McConnell, Postdoctoral	Hugh McDevitt, Postdoctoral
Peter Ramwell, Postdoctoral	Peter Taylor, 2 nd doctorate	Kenneth Tobin, 2 nd doctorate

(c) Thesis Advisor and Postgraduate-Scholar Sponsor:

12 Ph. D. graduates: Dr. Steve Figard ('84); Dr. C. Deane Little ('88); Dr. Nancy Devino ('89); Dr. Aldrin Edward Sweeney ('97); Dr. Abdullah Abbas ('97); Dr. Jianqiang Xia ('97); Dr. Yvette Greenspan ('00); Dr. Terrie Kielborn ('01); Dr. Julie Lambert ('01); Dr. Lori Hahn ('04); Dr. Marcie Bosseler ('05); Dr. Ajda Kahveci ('05). 9 M.S. graduates: Rosa V. Flores ('82); Wayne Baker ('91); Chris Harrison ('91); Jianqiang Xia ('94); Elizabeth Mayo ('99); Sherri Hood ('03); Caren Prichard ('05); Helen Libby ('05); Linda Kitner ('06). Postdoctoral fellows: Dr. Kate Calvin (2008).

RUFINA G. ALAMO, alamo@eng.fsu.edu
Department of Chemical and Biomedical Engineering
2525 Pottsdamer St. Tallahassee, FL 32310

A. Current Positions:

Professor, Department of Chemical Engineering, FAMU/FSU College of Engineering, Tallahassee, FL 32310.

Courtesy appointment with the National High Magnetic Field Laboratory. Florida State University, Tallahassee, FL 32306-3015

Educational Experience:

1977 B.S. in Chemistry. University of Valladolid. Spain

1978 Degree in High Specialization in Rubber and Plastics. The Plastics and Rubber Institute of the Consejo Superior de Investigaciones Cientificas (C.S.I.C.) Madrid. Spain

1978 M.S. in Chemistry. University of Valladolid. Spain

"Properties of Poly(diethylene glycol terephthalate)"

1981 Ph.D. in Chemistry. Complutense University of Madrid. Spain

"Mechanisms of Polymerization and the Crystalline State of Poly(1,3 Dioxolane)"

Awards and Honors

Engineering Research Awards for outstanding contributions to graduate research, supervision and scholarship. FAMU/FSU College of Engineering, 2000, 2008.

Special Recognition Award for Exceptional Contribution to Research and Scholarship. FAMU school of graduate studies. 2001.

Editorial Advisory Board for Macromolecules, 2005-2007

Professional Experience:

1978-1979 Participated in the project "Configurational Analysis and Rheological Properties of Macromolecules" sponsored by the Comision Asesora de Investigacion Cientifica y Tecnica (CAICT) of the Spanish Research Council. Madrid (Spain).

1980-1982 Participated in the project "Mechanisms of Formation and the Solid State Properties of Polymers with Heteroatoms in the Main Chain" sponsored by CAICT of the Spanish Research Council. Madrid. (Spain).

1983-1985 Research Associate under a scholarship from the Joint Spanish-American Committee for the Scientific and Technologic Cooperation. Florida State University. Tallahassee, Florida.

1984-1985 Postdoctoral Research Assistant in the project "Thermodynamic and Morphological Properties of Linear and Branched Polyethylenes". Florida State University. Tallahassee. Florida.

1985-1987 Appointed as a Product Scientist by the Dow Chemical Co. in Europe. Tarragona. Spain.

1988-1995 Research Scholar/Scientist. Florida State University. Institute of Molecular Biophysics. Tallahassee, Florida. Research in the area of "Structure-Properties Relations in Semicrystalline Polymers".

Summer 1993. Visiting Research Advisor, National University of Costa Rica at Heredia. POLIUNA, Department of Chemistry.

1995-2003. Associate Professor, Department of Chemical Engineering. College of Engineering, Tallahassee, Florida.

2003-present. Professor, Department of Chemical and Biomedical Engineering. College of Engineering, Tallahassee, Florida.

B. Recent Publications

1. K. Jeon, Y.L. Chiari, R.G. Alamo “Maximum Rate of Crystallization and Morphology of Random Propylene Ethylene Copolymers as a Function of Concentration of Comonomer” *Macromolecules*, **41**, 95, 2008.
2. R. G. Alamo, K. Jeon, R.L. Smith, M.R. Bockstaller, E. Boz, K.B. Wagener, “Crystallization of Polyethylenes Containing Chlorines: Precise vs. random Placement” *Macromolecules* 2008 **41**, 7141-7151, 2008.
3. K. Jeon, L. Lumata, T. Tokumoto, J. Brooks, R.G. Alamo “Electrical Conductivity and Crystalline Morphology of Single-Walled Carbon Nanotubes-Linear Polyethylene Nanocomposites” *Polymer* **48**, 4751, 2007.
4. Boz, E., Wagener, K.B.Ghosal A., Fu, R. and Alamo, R.G., “Synthesis and Crystallization of Precision ADMET Polyolefins Containing Halogens” *Macromolecules* **39**, 4437, 2006
5. K. Jeon, H. Palza, R. Quijada, R.G. Alamo “Effect of Comonomer Type on the Crystallization Kinetics of Random Isotactic Propylene 1-Alkene Copolymers” *Polymer* **50**, 832, 2009
6. Alamo, R.G., J.A. Blanco, P. Agarwal, J.C. Randall, “Crystallization Rates of Matched Fractions of MgCl₂-Supported Ziegler Natta and Metallocene Isotactic Poly(propylenes). I. The Role of Chain Microstructure” *Macromolecules*, **36**, 1559, 2003
7. Hosier, I.L., R.G. Alamo, P. Estes, J.R. Isasi, L. Mandelkern “Formation of the Alpha and Gamma Polymorphs in Random Metallocene Copolymers. Effect of Concentration and Type of Comonomer”. *Macromolecules*, **36**, 5623, 2003
8. Alamo, R.G., D.L. VanderHart, M.R. Nyden, L. Mandelkern, “Morphological Partitioning of Ethylene Defects in Random Propylene-Ethylene Copolymers”. *Macromolecules* **33**, 6094, 2000.
9. Alamo, R.G., Ghosal, A. Chatterjee, J., Thomson, K.L. “Linear Growth Rates of Random Propylene Ethylene Copolymers. The Changeover from γ Dominated Growth to Mix ($\alpha+\gamma$) Polymorphic Growth” *Polymer*, **46**, 8774, 2005
10. Hosier, I.L., R.G. Alamo, J.S. Lin, “Lamellar Morphology of Metallocene Random Propylene Copolymers Studied by Atomic Force Microscopy”. *Polymer*, **45**, 3441, 2004

C. Collaborative Associations:

Raul Quijada. University of Santiago, Chile
K. Wagener, University of Florida
G.D. Wignall, Oak Ridge National Laboratory, Tennessee
D. Fiscus, G. Brown, A. Mehta, D. Lohse. ExxonMobil Chemical Co. Baytown. TX.
R.Fu, R. Liang, J. Brooks. Florida State University
J.A. Kornfield, Caltech University
G. Coates, Cornell University

D. Graduate and Postdoctoral Advisees:

MS and PhD students (graduated): C. Obrador, C. Chi, S. Putcha, L. Sripada, W. Huang, A. Simanke, J. A. Blanco-Saralegui, I. Carrilero-Borbujo, S. Kotha, W.T. Huang, Y. Chiari, A.K. Ghosal.

MS and PhD students (in progress): M. Vadlamudi, S.A. Abdullah

Postdoctoral: M.J. Galante, Jose R. Isasi, Man-Ho Kim, J. Chaterjee, I. Hosier, D. Mowery, K. Jeon, J.P. Fernandez-Blazquez, C. Ruiz-Orta.

Honor's in the Chemical Engineering Major: C.W. Harrell, A.L. Little, K. Allison, D. Laboy, Y. Chiari, K. Thompson, R. L. Smith, E. Pereira.

SIMONE PETERSON HRUDA

Associate Professor Mechanical Engineering
FAMU-FSU College of Engineering, Florida A & M University

PROFESSIONAL PREPARATION

<u>Institution</u>	<u>Major</u>	<u>Degree</u>	<u>Year</u>
Rensselaer Polytechnic Institute	Materials Engineering	B.S.	1984
Massachusetts Institute of Technology	Ceramics	S.M.	1987
Massachusetts Institute of Technology	Ceramics	Ph.D.	1992

POSITIONS

- 8/99 – current: Associate Professor of Mechanical Engineering, FAMU-FSU College of Engineering
- 8/99 – 5/02: Associate Chair/Coordinator of Undergraduate Program, Mechanical Engineering, FAMU-FSU College of Engineering
- 6/94 – 6/99: Assistant Professor of Mechanical Engineering, FAMU-FSU College of Engineering
- 5/92 – 5/94: Staff Engineer, Sinter Process Engineering, IBM-Microelectronics, Fishkill, NY
- 5/84 – 8/84: Summer Intern, Quality Procurement Engineering, IBM, Research Triangle, NC
- 9/82 – 5/83, 9/83 – 5/84: Polymer Technician, Secondary Finishing, GE-NORYL Products, Selkirk, NY
- 5/83 – 8/83: Summer Intern, Ceramics, Argonne National Laboratory, Argonne, IL
- 5/82 – 8/82: Summer Intern, Metallurgy, Corning Glass Works-Erwin Ceramics Plant, Corning, NY

SELECTED PUBLICATIONS:

1. K.M. Amm, P.V.P.S.S. Sastry, D.C. Knoll, S.C. Peterson, and J. Schwartz, "The Influence of Metallic Interfaces on the Properties of (Hg,Bi)Ba₂Ca₂Cu₃O_y Superconductors," *Superconductor Science and Technology*, 11 793-799 (1998).
2. K.M. Amm, P.V.P.S.S. Sastry, D.C. Knoll, S.C. Peterson and J. Schwartz, "Effects of a Au interface on (HgBi)Ba₂Ca₂Cu₃O_x superconductor," *Journal of Superconductivity*, 11 75-76 (1998).
3. M.F. Ng, S.C. Peterson, and M.J. Cima, "Recrystallization of Non-Vacuum Derived Ba₂YCu₃O_{7-d} Films," in *High Temperature Superconductors: Fundamental Properties and Novel Materials Processing*, edited by J. Narayan, C.W. Chu, L.F. Schneemeyer, and D.K. Christen, (Mater. Res. Soc. Symp. Proc. 169, Pittsburgh, PA, 1990).
4. M.J. Cima, J.S. Schneider, S.C. Peterson, and W. Coblenz, "Reaction of Ba₂YCu₃O_{6.9} Films with Ytria-Stabilized Zirconia Substrates," *Appl. Phys. Lett.*, 53 [8] 710-712 (1988).
5. S.C. Peterson and M.J. Cima, "Magnetic Inducement of Texture in Ba₂YCu₃O_{6.9} Particle Assemblies under Cryogenic Conditions," *J. Am. Ceram. Soc.*, 71 [11] C458-C459 (1988)

SYNERGISTIC ACTIVITIES

- Co-PI Florida A & M University – Carnegie Mellon Univeristy PREM.

ACTIVITIES, HONORS AND AWARDS

- Engineering Teaching Award, FAMU-FSU College of Engineering, 2007
- Teaching Incentive Program Award, FAMU, 1999
- Tau Beta Pi, Florida Eta Chapter Mechanical Engineering Teach of the Year 1996, 1997 & 1998.
- Rensselaer Alumni Association Alumni Key, 1995
- Rensselaer Alumni Association: Board of Trustees, Vice President 1998-1999, Member 1995-1998; Communications Committee, Member 1987-1995

COLLABORATORS AND OTHER AFFILIATIONS

Collaborators: Katayun Barmak – Carnegie Mellon University (CMU), Gregory Rohrer – CMU, Anthony D. Rollett – CMU.

Graduate advisors: M.J. Cima, MIT and G. Kalonji, MIT (currently University of California).

Thesis advisor: Delariah McNeal – Florida A & M University.

NGOZI H. UGOCHUKWU

Chair and Professor of Chemistry
Florida Agricultural and Mechanical University

PROFESSIONAL PREPARATION

<u>Institution</u>	<u>Major</u>	<u>Degree</u>	<u>Year</u>
University of Benin, Benin City, Nigeria	Biochemistry	B.Sc.	1983
University of Benin, Benin City, Nigeria	Biochemistry	Ph.D.	1999

POSITIONS

- 2008 – current: Chair and Professor of Chemistry, Florida A & M University
- 2004 – 2008: Associate Professor of Chemistry, Florida A & M University
- 1998 – 2004: Assistant Professor of Chemistry, Florida A & M University
- 1996 – 1998: Research Associate/Adjunct Faculty, Department of Chemistry, Florida A & M University
- 1991 – 1995: Visiting Lecturer, Department of Biochemistry, University of West Indies, Mona, Jamaica
- 1989 – 1991: Lecturer, Department of Biochemistry, University of Benin, Benin-City, Nigeria
- 1985 – 1989: Graduate Assistant, Department of Biochemistry, University of Benin, Benin-City, Nigeria

SELECTED PUBLICATIONS:

1. Ugochukwu, N.H. and Figgers C.L., “Attenuation of plasma dyslipidemia and oxidative damage by dietary caloric restriction in streptozotocin-induced diabetic rats,” *Chemico-Biological Interactions*, 169 32-41 (2007).
2. Mwegoha, W., Mbuya, O.S., Jain, A., Ugochukwu, N.H. and Abazinge, M.D. “Use of chicken manure extract for biostimulation and enhancement of perchlorate rhizodegradation in soil and water media,” *Bioremediation Journal*, 11 61-70 (2007).
3. Ugochukwu, N.H. and Figgers C.L., “Caloric restriction inhibits up-regulation of inflammatory cytokines and TNF- α , and activates IL-10 and haptoglobin in the plasma of streptozotocin-induced diabetic rats,” *Journal of Nutritional Biochemistry*, 18 120-126 (2007).
4. Ugochukwu, N.H. and Figgers C.L., “Dietary caloric restriction improves the redox status at the onset of diabetes in hepatocytes of streptozotocin-induced diabetic rats,” *Chemico-Biological Interactions*, 165 45-53 (2007).
5. Ugochukwu, N.H. and Figgers C.L., “Modulation of the flux patterns in carbohydrate metabolism in the livers of streptozotocin-induced diabetic rats by dietary caloric restriction,” *Pharmacological Research*, 54 172-180 (2006).
6. Ugochukwu, N. H., Mukes, J. D. and Figgers, C.L., “Ameliorative effects of dietary caloric restriction on oxidative stress and inflammation in the brain of streptozotocin-induced diabetic rats,” *Clinica Chimica Acta*, 370 165-173 (2006).

7. Ugochukwu, N.H. and Figgers C.L., “Dietary caloric restriction modifies inflammatory responses in the livers of streptozotocin-induced diabetic rats,” *Nutrition Research*, 26 221-226 (2006).
8. Ugochukwu, N. H., Bagayoko, N.D. and Antwi, M.E., “The Effects of Dietary Caloric Restriction on Antioxidant Status and lipid peroxidation in Mild and Severe Streptozotocin-induced diabetic rats,” *Clinica Chimica Acta*, 348 121 – 129 (2004).
9. Ugochukwu, N. H. and Cobourne, M. K., “Modification of renal oxidative stress and lipid peroxidation in streptozotocin-induced diabetic rats with extracts from *Gongronema latifolium* leaves,” *Clinica Chimica Acta*, 336 73 – 81 (2003).
10. Ugochukwu, N. H. and Babady, N.E., “Antihyperglycemic effect of aqueous and ethanolic extracts of *Gongronema latifolium* leaves on glucose and glycogen metabolism in livers of normal and streptozotocin-induced diabetic rats,” *Life Sciences*, 73 1925 – 1938 (2003).

SYNERGISTIC ACTIVITIES

- Mentored students in the Pfizer Summer Undergraduate Research Fellowship program on Diabetes, Dietary Caloric Restriction and Dementia
- Mentored students in the FAMU Ronald E. McNair Post-baccalaureate Achievement Program

ACTIVITIES, HONORS AND AWARDS

- Florida Education Fund William R. Jones Mentor Award, 2008
- Florida Education Fund William R. Jones Most Valuable Mentor Award, 2007
- FAMU Advanced Teacher of the Year Award, 2007
- FAMU School of Graduate Studies Exemplary Mentor Award, (College of Arts & Sciences) for contributions to graduate education at FAMU, 2006
- Ronald E. McNair Post-baccalaureate Achievement Program Certificate of Appreciation for training students under the program, 2006
- FAMU Teacher of the Year Award, 2005
- FAMU 5-year Service Award, 2004

COLLABORATORS AND OTHER AFFILIATIONS

Collaborators: Richard Lowrance – USDA-ARS, Tifton, Georgia; V. A. Nzungu – University of Georgia, Athens

Graduate advisors: E. N. Ugochukwu, University of Benin, Benin-City, Nigeria

Thesis advisor: Mary Antwi, Esther Babady, Makini Cobourne, Cynthia Figgers, Courtney Fredrick, Sandi Gasset, Danunetta Jones, Melissa McDole, Thomas White

BERRIN TANSEL, Ph.D., P.E., D. WRE, F. ASCE

PROFESSIONAL PREPARATION

Middle East Technical Univ.	Chemical Engineering	B.S.	1978
Univ. of Wisconsin-Madison	Civil and Environmental Engineering	M.S.	1979
Univ. of Wisconsin-Madison	Civil and Environmental Engineering (with Minor in Chemical Engineering)	Ph.D.	1985

APPOINTMENTS

2002-Present	Associate Director, Center for Diversity in Engineering, Florida International University
2001-1997	Director, Drinking Water Research Center, Florida International University
1996-Present	Associate Professor, Civil and Env. Eng. Dept., Florida International University
1990-1996	Assistant Professor, Civil and Env. Eng. Dept., Florida International University
1992-1993	Consultant, Metcalf & Eddy, Miami, Florida
1990-1991	Consultant, City of Pompano Beach, Florida
1990-1991	Consultant, ERM-South, Miami, Florida
1989-1990	Project Manager, Massachusetts Water Resources Authority, Boston, Massachusetts
1987-1989	Senior Project Engineer, PEER Consultants, P.C., Cambridge, Massachusetts
1986-1987	Environmental Research Engineer, Center for Environmental Management, Tufts University, Massachusetts
1984-1985	Consultant, SCS Engineers, Long Beach, California
1983-1985	Instructor, Univ. of Wisconsin-Madison, Dept. of Eng. Prof. Development

PUBLICATIONS

Most closely related to proposed research:

1. Ozturk, Z., Katsenovich, Y., Moos, L., Allen, M., Tansel, B., Laha, S., "TCE Sorption and Retardation Characteristics of Soils and Soil Amendments," *Soil and Sediment Contamination*, Vol. 18, pp. 1-13, 2009.
2. Laha, S., Tansel, B., Ussawarujikulchai, A., "Surfactant-Soil Interactions during Surfactant-Amended Remediation of Contaminated Soils by Hydrophobic Organic Compounds: A Review," *Journal of Environmental Management*, Vol. 90, pp. 95-100, 2009.
3. Reshma R., Daas, M., Srivastava, R., Tansel, B., "Resuspension of Non-Newtonian Slurries by Submerged Jet-Nozzles," *Experimental Thermal and Fluid Science*, Vol. 31, pp. 771-778, 2007.
4. Tansel, B., Sager, J., Garland, J., Xu, S., Levine, L., Bisbee, P., "Deposition of Extracellular Polymeric Substances (EPS) and Microtopographical Changes on Membrane Surfaces during Intermittent Filtration Conditions," *J. Membrane Science*, Vol. 285, pp. 225-231, 2006.
5. Tansel, B., Sager, J., Rector, T., Garland, J., Strayer, R.F., Levine, L., Roberts, M., Hummerick, M., Bauer, J., "Significance of Hydrated Radius and Hydration Shells on Permeability of Ions during Nanofiltration in Dead-end and Cross Flow Modes," *Separation and Purification Technology*, Vol. 51, Issue 1, pp. 40-47, 2006.

5 other relevant publications:

1. Tansel, B., Sager, J., Rector, T., Garland, J., Strayer, Richard F., Levine, L., Roberts, M., Hummerick, M., Bauer, J., "Integrated Evaluation of Sequential Membrane Filtration for

Recovery of Bioreactor Effluent during Long Space Missions," J. Membrane Science, Vol. 255, Issues 1-2, pp. 117-124, 2005.

2. Tansel, B., Jayadev, R., Shalewitz, B., "Evaluation of Ultrafiltration Process Performance for Treatment of Petroleum Contaminated Waters," Journal of Water, Air & Soil Pollution, Vol. 126, Nos. 3-4 pp. 293-305, 2001.
3. Tansel, B., Bao, W.Y., Tansel, I.N., "Characterization of Fouling Kinetics of Ultrafiltration Systems by Resistances in Series Model," Journal of Desalination, Vol. 129, pp. 7-14, 2000.
4. Tansel, B., Regula, J., "Coagulation Enhanced Centrifugation for Treatment of Petroleum Hydrocarbon Contaminated Waters," Journal of Environmental Science and Health, Part A - Toxic and Hazardous Substances & Environment, Vol. 35, No. 9, pp. 1557-1575, 2000.
5. Tansel, B., Eifert, J.L., "Removal of Emulsified Petroleum Hydrocarbons in Brackish Water by Coagulation," American Society of Civil Engineers (ASCE), Journal of Environmental Engineering, Vol. 125, No. 12, pp. 1173-1176, 1999.

SYNERGISTIC ACTIVITIES

1. Editorial Boards of Journal of Environmental Management (Elsevier); Water, Air, Soil Pollution (Springer); Water Environment Research (WER)
2. Outreach Committee of the Disaster Mitigation Committee of the Council on Disaster Risk Management (CDRM), ASCE (Sep 2006-present)
3. Florida Infrastructure Report Card Team: ASCE-FL (2007-2008)
4. Environmental Effects Committee, American Society of Civil Eng. (ASCE) (2006-present)
5. Curriculum development in environmental engineering program.

COLLABORATORS & OTHER AFFILIATIONS

COLLABORATORS and CO-EDITORS

Marcus Anglin, MDCPS; Maribel Balbin, MDWASD; Jay Garland, Dynamak Corp.; Chu-Fei Humphrey Ho, City and County of San Francisco, CA; Peter Jelonek, MDWASD; Domènec Jolis, City and County of San Francisco, CA; Yelena Katsenavich, FIU; Lanfang Levine, Dynamak Corp.; Stewart Reed, USDA-ARS; Debra Reinhart, USF; Mike Roberts, Dynamak Corp.; Gus Roig, FIU; John Sager, KSC, NASA; Reza Savabi, USDA-ARS; Rick Strayer, Dynamak Corp.; Ivan Yaeger, Yaeger Foundation; Shauhua Xu, FIT.

DOCTORAL ADVISOR

Paul Mac Berthouex, University of Wisconsin-Madison

GRADUATE STUDENTS SUPERVISED

PhD (5): Tarla TaMia Toomer, Leonel Lagos, Zuhul Ozturk, Achara Ussawarujikulchai, Jiranoon Hempunsert.

MS (60): Vivek Kumar, Gayatry Bitracanti, Jacqueline Marichal, Edward Voronko, Marveis Bruce-Tagoe, Amer Awwad, Keon John, Richard Gallo, Namita Singhal.

JAROSLAVA MIKSOVSKA

PROFESSIONAL PREPARATION

Charles University at Prague, Czech Republic	B.S.	1992
Charles University at Prague, Czech Republic	M.S.	1994
University Paris XI, Orsay, France	PhD	1998
University of Hawaii at Manoa, Honolulu	(Post-Doc)	2000-2001
University of South Florida, Tampa	(Post-Doc)	2002-2004

APPOINTMENTS

August 2007-Present	Assistant Professor Department of Chemistry and Biochemistry Florida International University
August 2004 – July 2007	Assistant Professor Chemistry Department, Marshall University

PUBLICATIONS

Most closely related to proposed research:

1. "Conformational dynamics associated with photodissociation of CO from dehaloperoxidase studied using photoacoustic calorimetry." Belogortseva, N., Rubio, M., Terrell, W., and Miksovska, J., Day, J.H., Larsen, R.W. Biochemistry 2008, 47: 11510-11517.
 2. "The contribution of heme propionate groups to the conformational dynamics associated with CO photodissociation from horse heart myoglobin." Belogortseva, N., Rubio, M., Terrell, W., and Miksovska, J., Day, J.H., Larsen, R.W. J. Biol. Inorg. Chem. 2007, 101: 977-986.
 3. "Characterization of carbon monoxide photodissociation from Fe(II)LPO with photoacoustic calorimetry." Lockney D and Miksovska J., J Phys Chem B 2006, 110 (47):24165-70.
 4. "Spectroscopic and Photothermal Study of Myoglobin Conformational Changes in the Presence of Sodium Dodcecyl Sulfate" Miksovska, J., Yom, J., Dimond, B., and Larsen, R.W. Biomacromolecules 2006, 7 (2): 476-482.
 5. "Effects of Turn Stability on the Kinetics of Refolding of a Hairpin in beta sheet " Kuo, N. N.-W., Huang J. J.-T., Miksovska, J., Chen, R. P.-Y. Larsen R.W., Sunney I. Chan S.I. J. Am. Chem. Soc. 2005, 127(48):16945-54.
- 5 other relevant publications:
1. "Characterization of Conformational Changes Coupled to Ligand Photodissociation from the Heme Binding Domain of FixL." Miksovska, J., Suquet C, Satterlee, J. D., Larsen, R.W. Biochemistry 2005, 44(30):10028-36.
 2. "Thermodynamic profiles for CO photodissociation from heme model compounds: Effect of proximal ligand." Miksovska, J., Norstrom, J., and Larsen, R.W. Inorganic Chemistry 2005, 44,1006-1014.

3. "*Photothermal Studies of CO Photodissociation from Mixed Valence Escherichia coli Cytochrome bo₃*" Miksovská, J., Gennis R.B., and Larsen R.W. FEBS Lett. 2005, 579 (14), 3014-3018.
4. "*Structure-Function Relationships in Metalloproteins*" Miksovská, J., Larsen, R.W. in Methods in Enzymology: Biophotonics, Marriott, G. and Parker, I., Ed. 2003, 360, part A, 302-329.
5. "*Proton uptake of Rhodobacter capsulatus reaction center mutants modified in the primary quinone environment.*" Tandori, J., Miksovská, J., Valerio-Lepiniec, M., Schiffer, M., Maroti, P., Hanson, D.K., and Sebban, P. Photochem Photobiol. 2002 75(2): 126-33.

SYNERGISTIC ACTIVITIES

1. Developed of new experiments for the physical chemistry laboratory with the focus on biophysics (spring 2009) and development of the teaching material for the physical biochemistry class.
2. Supervised summer research project of three undergraduate students, including two minority students during summer 2008.
3. *Ad hoc* reviewer for 6 journals
4. Member of the review panel for American Heart Association (spring 2008)

COLLABORATORS & OTHER AFFILIATIONS

COLLABORATORS and CO-EDITORS

Dr. Gennis Robert B., Dept. of Biochemistry, University of Illinois at Urbana-Champaign, IL
 Dr. Stefan Franzen, Department of Chemistry, North Carolina State University
 Dr. Satterlee James D., Department of Chemistry, Washington State University, Pullman, WA

DOCTORAL ADVISOR

Dr. Pierre Sebban, University of Paris XI, Orsay, France,

POST DOCTORAL ADVISOR

Dr. Randy W. Larsen, University of South Florida, Tampa, FL,

GRADUATE STUDENTS SUPERVISED

Current Advisee: Graduate students (3): Gangadhar Dhulipala (PhD), Simona Horsa (Ms.) and Luisana Astudillo (Ms); Undergraduate students (4): Khoa Pham, Marlene Calix, Mimy Young and Kathryn Perez.

Previous: Undergraduate student (6): Ms. Kristen Grimstead, Ms. Marisa Rubio, Ms. Danielle Clarck, Mr. Christopher L. Hoover, and Ms Kaitlin M Bedekovich Mr. William Terrell;
 Graduate students: (2) Dustin Lockney and Michael McCumber,
 Postdoctoral fellow (1): Natalia Belogortseva

GUSTAVO ROIG

PROFESSIONAL PREPARATION

Univ. of Puerto Rico, Mayagüez, Puerto Rico	Electrical Engineering	BS	1966
Univ. of Florida, Gainesville, Florida	Electrical Engineering	ME	1967
Univ. of Florida, Gainesville, Florida	Electrical Engineering	Ph.D.	1970

APPOINTMENTS

2001 to Present - Professor, Department of Electrical and Computer Engineering, Florida International University

2001 to Present - Professor, Department of Electrical and Computer Engineering, Florida International University

1983 to 2001 – Associate Professor, Department of Electrical and Computer Engineering, Florida International University

2000 to Present – Director, Center for Diversity in Engineering and Computing, Florida International University

1991 to Present – Associate Dean, College of Engineering and Computing, Florida International University

PUBLICATIONS

1. Mohammed, O, Castro, J, and Roig G. “Hardware Implementation of a Real-Time Electromagnetic Field Analysis System for Engineering Education”, Proc. IEEE Southeastcon’2001, pp 254-285, Clemson, South Carolina, March 2001.
2. Mohammed, O, Meniv, D., Castro, J, and Roig G. “An Implementation of a Real-Time Experimental Analysis System for the Energy Conversion Laboratory,” Proceedings of the IEEE Southeastcom’2000, Nashville, TN, pp 165-169, April 2000.
3. Mohammed, O., Sebastien, R, and Roig G.. “Real-time Experimental/Analysis System for the Energy Conversion Laboratory,” Proceedings of IEEE Southeastcon’99, Lexington, KY, PP. 138-141, March 1999.
4. Yen K, Ghoshray S., Roig G. “A linear Regression Model Using Non-symmetric Triangular Fuzzy Number Coefficients” Int. J. on Fuzzy Set & Systems, Vol. 16, No. 2, Sept. 1999
5. Ghohray S., Yen K., Andrian J., Roig G., “Time Series by Formulating Proper Prediction in Chaotic Embedding Parameters”, Proceeding of the 18th IASTED, Int’l Conference On Modeling, Identification and Control, pp. 559-562, 1999.

5 other relevant publications:

1. Roig G., Goncharova A., Canino C., Puello-C. L., McCalla D., Nosti J., “Project VISION: A Model Program to Educate the Next Generation of Engineers, Scientists and Mathematicians” 36th Space Congress Proceedings, pp 245-251, 1999.

2. Roig G., "Project VISION: Educating and Motivating the Next Generation of Engineers and Scientists" JETS Report. Volume 18, No. 1 Fall 1998, pag.16.
3. Caballero A., Mitrani J., Roig G., Hill R., Perez N., "The Construction Alternative for High School "The Construction Alternative for High School Students". Journal of Construction Education. Vol. II, No 2 pp. 88-169, 1998.
4. Yen K., Zhou S., and Roig G., "Extreme Point Result for Robust Stability of Discrete Systems with Complex Coefficients in a diamond", accepted by Int'l J. of Control, Vol. 67, No. 4, pp529-538, 1997
5. Yen K., Ghoshray S., Roig G. "Path Planning by Octree Decomposition of Robot Workspace" Proceedings of the 3rd International Conf. on Automation, Robotics & Computer Vision, paper #WE4.7, 1994

SYNERGISTIC ACTIVITIES

1. STEM education and human potential development including Engaging Latino Communities for Education (ENLACE Miami / Children's Trust) Funded by the W.K. Kellogg Foundation and the Children's Trust and GEAR UP Empowerment Zone a partnership with Dade County Public Schools, ASPIRA of Florida, ENFAMILIA, Non-Violence Project, Mujer, The Yaeger Foundation.
2. Florida/Georgia Louis Stoke Alliance for Minority Participation in Science, Engineering and Mathematics (FG/LSAMP)
3. Committee on Equal Opportunities in Science and Engineering (CEOSE), National Science Foundation (NSF) (Oct 2000- Sept 2003)
4. Advisory Committee Member of the District's Comprehensive Plan for Mathematics and Science
5. Hispanic Association of Colleges and Universities, HACU-NSF National Study of Science, Technology, Engineering, and Math Education at Hispanic Serving Institutions, HSIs Task Force, 2003

COLLABORATORS & OTHER AFFILIATIONS

COLLABORATORS and CO-EDITORS.

Marcus Anglin, MDCPS; Vish Prasad, University of North Texas; Ivan Yaeger, Yaeger Foundation.

SUMMARY PROPOSAL BUDGET

YEAR 1

ORGANIZATION University of South Florida				FOR NSF USE ONLY			
				PROPOSAL NO.	DURATION (months)		
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR Karen Holbrook				AWARD NO.	Proposed	Granted	
				A. SENIOR PERSONNEL: PI/PD, Co-PI's, Faculty and Other Senior Associates (List each separately with title, A.7. show number in brackets)			
				CAL	ACAD	SUMR	
1.	Karen Holbrook - PI			0.12	0.00	0.00	\$ 3,000
2.	Kathryn M Borman - Co-PI			0.00	0.27	0.09	4,383
3.	Eva Fernandez - Senior Personnel			0.12	0.00	0.00	650
4.	Jennifer Lewis - Senior Personnel			0.00	0.09	0.00	836
5.	Sylvia W Thomas - Co-PI			0.00	0.09	0.03	1,122
6.	(1) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)			0.00	0.09	0.00	549
7.	(6) TOTAL SENIOR PERSONNEL (1 - 6)			0.24	0.54	0.12	10,540
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1.	(0) POST DOCTORAL SCHOLARS			0.00	0.00	0.00	0
2.	(1) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)			0.60	0.00	0.00	1,409
3.	(0) GRADUATE STUDENTS						0
4.	(0) UNDERGRADUATE STUDENTS						0
5.	(0) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)						0
6.	(0) OTHER						0
TOTAL SALARIES AND WAGES (A + B)							11,949
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)							3,216
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)							15,165
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.)							
TOTAL EQUIPMENT							0
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS)							15,483
2. FOREIGN							0
F. PARTICIPANT SUPPORT COSTS							
1.	STIPENDS	\$	0				
2.	TRAVEL		0				
3.	SUBSISTENCE		0				
4.	OTHER		17,472				
TOTAL NUMBER OF PARTICIPANTS (420)				TOTAL PARTICIPANT COSTS			17,472
G. OTHER DIRECT COSTS							
1.	MATERIALS AND SUPPLIES						2,000
2.	PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION						1,000
3.	CONSULTANT SERVICES						27,799
4.	COMPUTER SERVICES						0
5.	SUBAWARDS						0
6.	OTHER						0
TOTAL OTHER DIRECT COSTS							30,799
H. TOTAL DIRECT COSTS (A THROUGH G)							78,919
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE)							
MTDC (Rate: 26.0000, Base: 61447)							
TOTAL INDIRECT COSTS (F&A)							15,976
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)							94,895
K. RESIDUAL FUNDS							0
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)							\$ 94,895 \$
M. COST SHARING PROPOSED LEVEL \$ 30,000				AGREED LEVEL IF DIFFERENT \$			
PI/PD NAME Karen Holbrook				FOR NSF USE ONLY			
ORG. REP. NAME* Judy Erickson				INDIRECT COST RATE VERIFICATION			
		Date Checked	Date Of Rate Sheet	Initials - ORG			

1 *ELECTRONIC SIGNATURES REQUIRED FOR REVISED BUDGET

SUMMARY PROPOSAL BUDGET COMMENTS - Year 1

Other Senior Personnel

Name - Title

Tyson, William - Senior Peronnel

Cal	Acad	Sumr	Funds Requested
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0.00	0.09	0.00	549

SUMMARY PROPOSAL BUDGET

YEAR **2**

ORGANIZATION University of South Florida				FOR NSF USE ONLY			
				PROPOSAL NO.	DURATION (months)		
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR Karen Holbrook				AWARD NO.	Proposed	Granted	
A. SENIOR PERSONNEL: PI/PD, Co-PI's, Faculty and Other Senior Associates (List each separately with title, A.7. show number in brackets)				NSF Funded Person-months		Funds Requested By proposer	Funds granted by NSF (if different)
				CAL	ACAD	SUMR	
1.	Karen Holbrook - PI			0.12	0.00	0.00	\$ 3,090 \$
2.	Kathryn M Borman - Co-PI			0.00	0.27	0.09	4,514
3.	Eva Fernandez - Senior Personnel			0.12	0.00	0.00	669
4.	Jennifer Lewis - Senior Personnel			0.00	0.09	0.00	860
5.	Sylvia W Thomas - Co-PI			0.00	0.09	0.03	1,156
6.	(1) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)			0.00	0.09	0.00	565
7.	(6) TOTAL SENIOR PERSONNEL (1 - 6)			0.24	0.54	0.12	10,854
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1.	(0) POST DOCTORAL SCHOLARS			0.00	0.00	0.00	0
2.	(1) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)			0.60	0.00	0.00	1,452
3.	(0) GRADUATE STUDENTS						0
4.	(0) UNDERGRADUATE STUDENTS						0
5.	(0) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)						0
6.	(0) OTHER						0
TOTAL SALARIES AND WAGES (A + B)							12,306
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)							3,312
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)							15,618
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.)							
TOTAL EQUIPMENT							0
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS)							6,411
2. FOREIGN							0
F. PARTICIPANT SUPPORT COSTS							
1.	STIPENDS \$ _____						0
2.	TRAVEL _____						0
3.	SUBSISTENCE _____						2,700
4.	OTHER _____						0
TOTAL NUMBER OF PARTICIPANTS (20)							
TOTAL PARTICIPANT COSTS							2,700
G. OTHER DIRECT COSTS							
1.	MATERIALS AND SUPPLIES						2,000
2.	PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION						1,000
3.	CONSULTANT SERVICES						9,200
4.	COMPUTER SERVICES						0
5.	SUBAWARDS						0
6.	OTHER						0
TOTAL OTHER DIRECT COSTS							12,200
H. TOTAL DIRECT COSTS (A THROUGH G)							36,929
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE) MTDC (Rate: 26.0000, Base: 34229)							
TOTAL INDIRECT COSTS (F&A)							8,900
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)							45,829
K. RESIDUAL FUNDS							0
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)							\$ 45,829 \$
M. COST SHARING PROPOSED LEVEL \$ 30,000				AGREED LEVEL IF DIFFERENT \$			
PI/PD NAME Karen Holbrook				FOR NSF USE ONLY			
ORG. REP. NAME* Judy Erickson				INDIRECT COST RATE VERIFICATION			
		Date Checked		Date Of Rate Sheet		Initials - ORG	

2 *ELECTRONIC SIGNATURES REQUIRED FOR REVISED BUDGET

SUMMARY PROPOSAL BUDGET COMMENTS - Year 2

Other Senior Personnel

Name - Title

Tyson, William - Senior Peronnel

Cal	Acad	Sumr	Funds Requested
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0.00	0.09	0.00	565

SUMMARY PROPOSAL BUDGET

YEAR 3

ORGANIZATION University of South Florida				FOR NSF USE ONLY			
				PROPOSAL NO.	DURATION (months)		
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR Karen Holbrook				AWARD NO.	Proposed	Granted	
A. SENIOR PERSONNEL: PI/PD, Co-PI's, Faculty and Other Senior Associates (List each separately with title, A.7. show number in brackets)				NSF Funded Person-months		Funds Requested By proposer	Funds granted by NSF (if different)
				CAL	ACAD	SUMR	
1.	Karen Holbrook - PI			0.12	0.00	0.00	\$ 3,183 \$
2.	Kathryn M Borman - Co-PI			0.00	0.27	0.09	4,650
3.	Eva Fernandez - Senior Personnel			0.12	0.00	0.00	690
4.	Jennifer Lewis - Senior Personnel			0.00	0.09	0.00	886
5.	Sylvia W Thomas - Co-PI			0.00	0.09	0.03	1,190
6.	(0) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)			0.00	0.00	0.00	0
7.	(5) TOTAL SENIOR PERSONNEL (1 - 6)			0.24	0.45	0.12	10,599
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1.	(0) POST DOCTORAL SCHOLARS			0.00	0.00	0.00	0
2.	(1) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)			0.60	0.00	0.00	1,495
3.	(0) GRADUATE STUDENTS						0
4.	(0) UNDERGRADUATE STUDENTS						0
5.	(0) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)						0
6.	(0) OTHER						0
TOTAL SALARIES AND WAGES (A + B)							12,094
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)							3,248
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)							15,342
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.)							
TOTAL EQUIPMENT							0
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS)							11,625
2. FOREIGN							0
F. PARTICIPANT SUPPORT COSTS							
1.	STIPENDS	\$	0				
2.	TRAVEL		5,214				
3.	SUBSISTENCE		2,700				
4.	OTHER		0				
TOTAL NUMBER OF PARTICIPANTS (20)				TOTAL PARTICIPANT COSTS			7,914
G. OTHER DIRECT COSTS							
1. MATERIALS AND SUPPLIES							2,000
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION							6,000
3. CONSULTANT SERVICES							17,000
4. COMPUTER SERVICES							0
5. SUBAWARDS							0
6. OTHER							0
TOTAL OTHER DIRECT COSTS							25,000
H. TOTAL DIRECT COSTS (A THROUGH G)							59,881
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE)							
MTDC (Rate: 26.0000, Base: 51967)							
TOTAL INDIRECT COSTS (F&A)							13,511
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)							73,392
K. RESIDUAL FUNDS							0
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)							\$ 73,392 \$
M. COST SHARING PROPOSED LEVEL \$ 30,000				AGREED LEVEL IF DIFFERENT \$			
PI/PD NAME Karen Holbrook				FOR NSF USE ONLY			
ORG. REP. NAME* Judy Erickson				INDIRECT COST RATE VERIFICATION			
		Date Checked	Date Of Rate Sheet	Initials - ORG			

3 *ELECTRONIC SIGNATURES REQUIRED FOR REVISED BUDGET

SUMMARY PROPOSAL BUDGET Cumulative

ORGANIZATION University of South Florida				FOR NSF USE ONLY			
				PROPOSAL NO.	DURATION (months)		
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR Karen Holbrook				AWARD NO.	Proposed	Granted	
				A. SENIOR PERSONNEL: PI/PD, Co-PI's, Faculty and Other Senior Associates (List each separately with title, A.7. show number in brackets)			
				CAL	ACAD	SUMR	
1.	Karen Holbrook - PI			0.36	0.00	0.00	\$ 9,273
2.	Kathryn M Borman - Co-PI			0.00	0.81	0.27	13,547
3.	Eva Fernandez - Senior Personnel			0.36	0.00	0.00	2,009
4.	Jennifer Lewis - Senior Personnel			0.00	0.27	0.00	2,582
5.	Sylvia W Thomas - Co-PI			0.00	0.27	0.09	3,468
6.	(1) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)			0.00	0.18	0.00	1,114
7.	(6) TOTAL SENIOR PERSONNEL (1 - 6)			0.72	1.53	0.36	31,993
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1.	(0) POST DOCTORAL SCHOLARS			0.00	0.00	0.00	0
2.	(3) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)			1.80	0.00	0.00	4,356
3.	(0) GRADUATE STUDENTS						0
4.	(0) UNDERGRADUATE STUDENTS						0
5.	(0) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)						0
6.	(0) OTHER						0
TOTAL SALARIES AND WAGES (A + B)							36,349
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)							9,776
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)							46,125
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.)							
TOTAL EQUIPMENT							0
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS)							33,519
2. FOREIGN							0
F. PARTICIPANT SUPPORT COSTS							
1.	STIPENDS \$ _____						0
2.	TRAVEL _____						5,214
3.	SUBSISTENCE _____						5,400
4.	OTHER _____						17,472
TOTAL NUMBER OF PARTICIPANTS (460)							
TOTAL PARTICIPANT COSTS							28,086
G. OTHER DIRECT COSTS							
1.	MATERIALS AND SUPPLIES						6,000
2.	PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION						8,000
3.	CONSULTANT SERVICES						53,999
4.	COMPUTER SERVICES						0
5.	SUBAWARDS						0
6.	OTHER						0
TOTAL OTHER DIRECT COSTS							67,999
H. TOTAL DIRECT COSTS (A THROUGH G)							175,729
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE)							
TOTAL INDIRECT COSTS (F&A)							38,387
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)							214,116
K. RESIDUAL FUNDS							0
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)							\$ 214,116 \$
M. COST SHARING PROPOSED LEVEL \$ 90,000				AGREED LEVEL IF DIFFERENT \$			
PI/PD NAME Karen Holbrook				FOR NSF USE ONLY			
ORG. REP. NAME* Judy Erickson				INDIRECT COST RATE VERIFICATION			
		Date Checked		Date Of Rate Sheet		Initials - ORG	

C *ELECTRONIC SIGNATURES REQUIRED FOR REVISED BUDGET

**Alliance for the Advancement of Florida's Academic Women in Chemistry and Engineering
(AAFAWCE)**

BUDGET NARRATIVE

Sponsor Name: National Science Foundation (NSF- ADVANCE PAID)

Project Period: 08/01/2009-7/31/2012

Budget: \$202,146

A. Senior Personnel: Dr. Karen Holbrook, Vice President of Research, will serve as the principal investigator. Dr. Holbrook will devote one percent of her calendar time during the three years of the study. Co-principal investigator, Dr. Kathryn Borman, Professor of Anthropology, will devote three percent of her academic and summer time during the three years. Drs. Holbrook and Borman will oversee the project. Co-principal investigators, Dr. Sylvia Thomas, Professor of Engineering and Dr. Jennifer Lewis, Professor of Chemistry will commit one percent of academic and summer time, respectfully, in all three years to facilitate the award process. Dr. Will Tyson, will commit one percent of his academic time to conduct the social science research for the first two years of the project. Ms. Eva Fernandez, Director of Recruitment and Retention, College of Engineering, will commit one percent of her calendar time to facilitate the development of on campus recruitment workshops over the three years of the project.

B. Other Personnel: A project assistant will devote five percent calendar time, over the three years of the project, to the organization and coordination of the grant among the partnering institutions.

Fringe Benefits: The University of South Florida provides a benefit package to attract and retain quality staff that includes annual, sick, and holiday leave, health insurance, a retirement plan, term life insurance, and statutory required benefits. Fringe benefit costs are calculated as 28 percent for academic months and/or calendar faculty and 18.33 percent for summer months. These percentages are the standard fringe benefit rates used by the University of South Florida for these types of appointments.

C. Equipment: NA.

D. Travel: The budget includes domestic travel to the COACH workshops in year one and three as well as to professional conferences to disseminate information about this project in all three years. Travel includes airfare, hotel, car rental and/or mileage for attending the symposium, parking at the airport and ground transportation are also included. Per diem rates for meals and mileage are calculated using the approved state rates (\$36 for per diem; mileage \$0.445). The total for all three years is \$29,019.

E. Participant Support Costs: A stipend of \$8400 is requested to compensate 420 faculty members who respond to the social science survey with a \$20 gift card. In year one and three, COACH workshops will be held to bring together the participating female faculty from the partnering institutions (University of South Florida, University of Florida, Florida International University, Florida State University, and Florida Agricultural and Mechanical University). Participant costs of \$9072 is requested to send faculty members to the COACH workshops and included hotel rooms, travel expenses, per diem, and other related costs of their participation. Subsistence of \$2700 is requested in year 2 and 3 to provide lunch for on-campus seminars on mentorship and recruitment practices.

F. Other Direct Costs:

Materials and supplies: As this project involves a lot of coordination and videoconferencing to facilitate collaboration among the five partnering institutions, we request funds to allow for long distance telephone calls and/or calling cards in excess of what is normally provided by the department to faculty members. These services will be for the use of this project for the entire project period.

Publication Costs: We request funds to reproduce brochures, reports, and presentation materials over the course of the award. These publication expenses will be for the exclusive use of this project for the entire project period.

Consultants: Dr. Kathryn Scantlebury, will serve as an external evaluator. Her fee including travel

is in \$6500 year 1, \$8200 in year 2 and \$7000 in year 3. Dr. Evelyn Posey will be conducting the mentorship workshop in year 1 and her fee including travel is \$1958. Facilitators from the University of Wisconsin-Madison will conduct the recruitment practices training workshop in year 1 and their fee including travel is \$10341. Honorarium for speakers for on campus events in year two and three on campus seminars are included at \$2000. The fee for the facilitators for the COACH workshops in the year 1 and 3 includes preparation for the workshop, travel expenses, and conducting the workshops \$3,500 each plus \$1000 for travel. There will be a total of two COACH workshops per year for years one and three.

H. Indirect Cost: The DHHS negotiated and approved off-campus instructional rate for our university of 26% was applied to Modified Total Direct Costs. We applied our overhead rate (home and branch) to the personnel costs, and expenses. The overhead rate is not applied to participant support costs.

M. Cost Sharing

As a partner in this proposal, the Office of the Provost and the Office of Research & Innovation at the University of South Florida will each provide \$15,000 per year for three years, or \$45,000 each, for a total of \$90,000 over the three-year project period, to support Alliance for Applied Research in Education and Anthropology (AAREA) interventions.

SUMMARY PROPOSAL BUDGET

YEAR 1

ORGANIZATION University of Florida				FOR NSF USE ONLY			
				PROPOSAL NO.	DURATION (months)		
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR Angel Kwolek-Folland				AWARD NO.	Proposed	Granted	
				A. SENIOR PERSONNEL: PI/PD, Co-PI's, Faculty and Other Senior Associates (List each separately with title, A.7. show number in brackets)			
	CAL	ACAD	SUMR				
1. Angel Kwolek-Folland - Assoc. Provost	0.02	0.00	0.00	\$	2,900	\$	
2. Cammy R Abernathy - Assoc. Dean	0.02	0.00	0.00		4,654		
3. Anne E Donnelly - Director	1.00	0.00	0.00		7,384		
4. Lisa McElwee-White - Professor	0.02	0.00	0.00		2,950		
5.							
6. (0) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)	0.00	0.00	0.00		0		
7. (4) TOTAL SENIOR PERSONNEL (1 - 6)	1.06	0.00	0.00		17,888		
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1. (0) POST DOCTORAL SCHOLARS	0.00	0.00	0.00		0		
2. (1) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)	1.00	0.00	0.00		4,333		
3. (0) GRADUATE STUDENTS					0		
4. (0) UNDERGRADUATE STUDENTS					0		
5. (0) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)					0		
6. (0) OTHER					0		
TOTAL SALARIES AND WAGES (A + B)					22,221		
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)					5,780		
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)					28,001		
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.)							
TOTAL EQUIPMENT					0		
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS)					1,000		
2. FOREIGN					0		
F. PARTICIPANT SUPPORT COSTS							
1. STIPENDS \$ _____					0		
2. TRAVEL _____					3,000		
3. SUBSISTENCE _____					1,000		
4. OTHER _____					0		
TOTAL NUMBER OF PARTICIPANTS (0)				TOTAL PARTICIPANT COSTS	4,000		
G. OTHER DIRECT COSTS							
1. MATERIALS AND SUPPLIES					500		
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION					500		
3. CONSULTANT SERVICES					0		
4. COMPUTER SERVICES					0		
5. SUBAWARDS					0		
6. OTHER					0		
TOTAL OTHER DIRECT COSTS					1,000		
H. TOTAL DIRECT COSTS (A THROUGH G)					34,001		
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE)							
MDC (Rate: 50.0000, Base: 29370)							
TOTAL INDIRECT COSTS (F&A)					14,685		
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)					48,686		
K. RESIDUAL FUNDS					0		
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)				\$	48,686	\$	
M. COST SHARING PROPOSED LEVEL \$ 0				AGREED LEVEL IF DIFFERENT \$			
PI/PD NAME Angel Kwolek-Folland				FOR NSF USE ONLY			
ORG. REP. NAME* Brian prindle				INDIRECT COST RATE VERIFICATION			
		Date Checked	Date Of Rate Sheet	Initials - ORG			

1 *ELECTRONIC SIGNATURES REQUIRED FOR REVISED BUDGET

SUMMARY PROPOSAL BUDGET

YEAR **2**

ORGANIZATION University of Florida				FOR NSF USE ONLY			
				PROPOSAL NO.	DURATION (months)		
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR Angel Kwolek-Folland				AWARD NO.	Proposed	Granted	
				A. SENIOR PERSONNEL: PI/PD, Co-PI's, Faculty and Other Senior Associates (List each separately with title, A.7. show number in brackets)			
	CAL	ACAD	SUMR				
1. Angel Kwolek-Folland - Assoc. Provost	0.02	0.00	0.00	\$	2,987	\$	
2. Cammy R Abernathy - Assoc. Dean	0.02	0.00	0.00		4,794		
3. Anne E Donnelly - Director	1.00	0.00	0.00		7,606		
4. Lisa McElwee-White - Professor	0.02	0.00	0.00		3,041		
5.							
6. (0) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)	0.00	0.00	0.00		0		
7. (4) TOTAL SENIOR PERSONNEL (1 - 6)	1.06	0.00	0.00		18,428		
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1. (0) POST DOCTORAL SCHOLARS	0.00	0.00	0.00		0		
2. (1) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)	1.00	0.00	0.00		4,463		
3. (0) GRADUATE STUDENTS					0		
4. (0) UNDERGRADUATE STUDENTS					0		
5. (0) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)					0		
6. (0) OTHER					0		
TOTAL SALARIES AND WAGES (A + B)					22,891		
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)					6,511		
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)					29,402		
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.)							
TOTAL EQUIPMENT					0		
E. TRAVEL					1,000		
1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS)					1,000		
2. FOREIGN					0		
F. PARTICIPANT SUPPORT COSTS							
1. STIPENDS	\$		0				
2. TRAVEL			1,000				
3. SUBSISTENCE			2,000				
4. OTHER			0				
TOTAL NUMBER OF PARTICIPANTS (0)				TOTAL PARTICIPANT COSTS		3,000	
G. OTHER DIRECT COSTS							
1. MATERIALS AND SUPPLIES					500		
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION					500		
3. CONSULTANT SERVICES					2,000		
4. COMPUTER SERVICES					0		
5. SUBAWARDS					0		
6. OTHER					0		
TOTAL OTHER DIRECT COSTS					3,000		
H. TOTAL DIRECT COSTS (A THROUGH G)					36,402		
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE)							
MDC (Rate: 50.0000, Base: 33071)							
TOTAL INDIRECT COSTS (F&A)					16,536		
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)					52,938		
K. RESIDUAL FUNDS					0		
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)					\$ 52,938	\$	
M. COST SHARING PROPOSED LEVEL \$ 0				AGREED LEVEL IF DIFFERENT \$			
PI/PD NAME Angel Kwolek-Folland				FOR NSF USE ONLY			
ORG. REP. NAME* Brian prindle				INDIRECT COST RATE VERIFICATION			
		Date Checked	Date Of Rate Sheet	Initials - ORG			

2 *ELECTRONIC SIGNATURES REQUIRED FOR REVISED BUDGET

SUMMARY PROPOSAL BUDGET

YEAR 3

ORGANIZATION University of Florida				FOR NSF USE ONLY			
				PROPOSAL NO.	DURATION (months)		
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR Angel Kwolek-Folland				AWARD NO.	Proposed	Granted	
				A. SENIOR PERSONNEL: PI/PD, Co-PI's, Faculty and Other Senior Associates (List each separately with title, A.7. show number in brackets)			
				CAL	ACAD	SUMR	
1. Angel Kwolek-Folland - Assoc. Provost				0.02	0.00	0.00	\$ 3,077
2. Cammy R Abernathy - Assoc. Dean				0.02	0.00	0.00	4,937
3. Anne E Donnelly - Director				1.00	0.00	0.00	7,834
4. Lisa McElwee-White - Professor				0.02	0.00	0.00	3,132
5.							
6. (0) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)				0.00	0.00	0.00	0
7. (4) TOTAL SENIOR PERSONNEL (1 - 6)				1.06	0.00	0.00	18,980
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1. (0) POST DOCTORAL SCHOLARS				0.00	0.00	0.00	0
2. (1) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)				1.00	0.00	0.00	4,597
3. (0) GRADUATE STUDENTS							0
4. (0) UNDERGRADUATE STUDENTS							0
5. (0) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)							0
6. (0) OTHER							0
TOTAL SALARIES AND WAGES (A + B)							23,577
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)							6,679
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)							30,256
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.)							
TOTAL EQUIPMENT							0
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS)							2,000
2. FOREIGN							0
F. PARTICIPANT SUPPORT COSTS							
1. STIPENDS \$ _____ 0							
2. TRAVEL _____ 1,500							
3. SUBSISTENCE _____ 2,000							
4. OTHER _____ 0							
TOTAL NUMBER OF PARTICIPANTS (0) TOTAL PARTICIPANT COSTS							3,500
G. OTHER DIRECT COSTS							
1. MATERIALS AND SUPPLIES							500
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION							500
3. CONSULTANT SERVICES							2,000
4. COMPUTER SERVICES							0
5. SUBAWARDS							0
6. OTHER							0
TOTAL OTHER DIRECT COSTS							3,000
H. TOTAL DIRECT COSTS (A THROUGH G)							38,756
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE)							
MDC (Rate: 50.0000, Base: 34943)							
TOTAL INDIRECT COSTS (F&A)							17,472
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)							56,228
K. RESIDUAL FUNDS							0
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)							\$ 56,228 \$
M. COST SHARING PROPOSED LEVEL \$ 0				AGREED LEVEL IF DIFFERENT \$			
PI/PD NAME Angel Kwolek-Folland				FOR NSF USE ONLY			
ORG. REP. NAME* Brian prindle				INDIRECT COST RATE VERIFICATION			
		Date Checked		Date Of Rate Sheet		Initials - ORG	

3 *ELECTRONIC SIGNATURES REQUIRED FOR REVISED BUDGET

SUMMARY PROPOSAL BUDGET Cumulative

ORGANIZATION University of Florida				FOR NSF USE ONLY		
				PROPOSAL NO.	DURATION (months)	
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR Angel Kwolek-Folland				AWARD NO.	Proposed	Granted
					NSF Funded Person-months	
A. SENIOR PERSONNEL: PI/PD, Co-PI's, Faculty and Other Senior Associates (List each separately with title, A.7. show number in brackets)				CAL	ACAD	SUMR
1. Angel Kwolek-Folland - Assoc. Provost				0.06	0.00	0.00
2. Cammy R Abernathy - Assoc. Dean				0.06	0.00	0.00
3. Anne E Donnelly - Director				3.00	0.00	0.00
4. Lisa McElwee-White - Professor				0.06	0.00	0.00
5.						
6. () OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)				0.00	0.00	0.00
7. (4) TOTAL SENIOR PERSONNEL (1 - 6)				3.18	0.00	0.00
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)						
1. (0) POST DOCTORAL SCHOLARS				0.00	0.00	0.00
2. (3) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)				3.00	0.00	0.00
3. (0) GRADUATE STUDENTS						
4. (0) UNDERGRADUATE STUDENTS						
5. (0) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)						
6. (0) OTHER						
TOTAL SALARIES AND WAGES (A + B)						
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)						
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)						
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.)						
TOTAL EQUIPMENT						
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS)						
2. FOREIGN						
F. PARTICIPANT SUPPORT COSTS						
1. STIPENDS \$ _____ 0						
2. TRAVEL _____ 5,500						
3. SUBSISTENCE _____ 5,000						
4. OTHER _____ 0						
TOTAL NUMBER OF PARTICIPANTS (0) TOTAL PARTICIPANT COSTS						
G. OTHER DIRECT COSTS						
1. MATERIALS AND SUPPLIES						
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION						
3. CONSULTANT SERVICES						
4. COMPUTER SERVICES						
5. SUBAWARDS						
6. OTHER						
TOTAL OTHER DIRECT COSTS						
H. TOTAL DIRECT COSTS (A THROUGH G)						
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE)						
TOTAL INDIRECT COSTS (F&A)						
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)						
K. RESIDUAL FUNDS						
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)						
M. COST SHARING PROPOSED LEVEL \$ 0 AGREED LEVEL IF DIFFERENT \$						
PI/PD NAME Angel Kwolek-Folland				FOR NSF USE ONLY		
ORG. REP. NAME* Brian prindle				INDIRECT COST RATE VERIFICATION		
				Date Checked	Date Of Rate Sheet	Initials - ORG

C *ELECTRONIC SIGNATURES REQUIRED FOR REVISED BUDGET

Yr 1 Budget Justification

	2% salary, fringe
Kwolek-Folland	\$2900, 672
Abernathy	\$4654,1079
McElwee-White	\$2950,683

Donnelly I month - \$7384/ 1711
Will provide program management and coordination of services
between the Provost's office and the STEM Departments

Computer/web page support 1 month – Salary \$4333/\$1004

Travel: For program administrators to travel to workshops and seminars and Alliance meetings

Participant Support Costs:

Travel for UF faculty to attend recruiting workshops, mentoring workshops, and COACH workshops

Subsistence: Funding for lunch for faculty committee workshops and planning sessions

Materials & Supplies-to support the goals of the program

Publication/Dissemination: To provide promotional materials to advertise the program on campus

IDC rate 50% of Modified Direct Costs

Yr 2 Budget Justification

	2% salary, fringe
Kwolek-Folland	\$2987, 806
Abernathy	\$4794,1294
McElwee-White	\$3041,821

Donnelly I month - \$7606/ 2054
Will provide coordination of services between the Provost's office
and the STEM Departments

Computer/web page support 1 month \$4463/1205

Travel: For program administrators to travel to workshops and seminars and Alliance meetings

Participant Support Costs:

Travel for UF faculty to attend recruiting workshops, mentoring workshops, and COACH workshops, and to bring workshop speakers to campus

Subsistence: Funding for lunch for faculty committee workshops and planning sessions, mentoring workshops and recruiting workshops

Materials & Supplies-to support the goals of the program

Publication/Dissemination: To provide promotional materials to advertise the program on campus

Honoraria for invited workshop speakers

IDC rate 50% of Modified Direct Costs

Yr 3 Budget Justification

	2% salary, fringe
Kwolek-Folland	3077, 831
Abernathy	4937,1333
McElwee-White	3132, 846

Donnelly 1 month - \$7834/ 2115
Will provide coordination of services between the Provost's office
and the STEM Departments

Computer/web page support 1 month \$4597/1241

Travel: For program administrators to travel to workshops and seminars and Alliance meetings

Participant Support Costs:

Travel for UF faculty to attend recruiting workshops, mentoring workshops, and COACH workshops , and to bring workshop speakers to campus

Subsistence: Funding for lunch for faculty committee workshops and planning sessions, mentoring workshops and recruiting workshops

Materials & Supplies-to support the goals of the program

Publication/Dissemination: To provide promotional materials to advertise the program on campus

Honoraria for invited workshop speakers

IDC rate 50% of Modified Direct Costs

Yr 2 Budget Justification

	2% salary, fringe 27%
Kwolek-Folland	\$2987, 806
Abernathy	\$4794,1294
McElwee-White	\$3041,821

Donnelly 1 month - \$7606/ 2054
Will provide program management and coordination of services
between the Provost's office and the STEM Departments

Computer/web page support 1 month \$4463/1205

Travel: For program administrators to travel to workshops and seminars and Alliance meetings

Participant Support Costs:

Travel for UF faculty to attend recruiting workshops, mentoring workshops, and COACH workshops, and to bring workshop speakers to campus

Subsistence: Funding for lunch for faculty committee workshops and planning sessions, mentoring workshops and recruiting workshops

Materials & Supplies-to support the goals of the program

Publication/Dissemination: To provide promotional materials to advertise the program on campus

Honoraria for invited workshop speakers

IDC rate 50% of Modified Direct Costs

Yr 3 Budget Justification

	2% salary, fringe 27%
Kwolek-Folland	3077, 831
Abernathy	4937,1333
McElwee-White	3132, 846

Donnelly I month - \$7834/ 2115
Will provide program management and coordination of services
between the Provost's office and the STEM Departments

Computer/web page support 1 month \$4597/1241

Travel: For program administrators to travel to workshops and seminars and Alliance meetings

Participant Support Costs:

Travel for UF faculty to attend recruiting workshops, mentoring workshops, and COACH workshops , and to bring workshop speakers to campus

Subsistence: Funding for lunch for faculty committee workshops and planning sessions, mentoring workshops and recruiting workshops

Materials & Supplies-to support the goals of the program

Publication/Dissemination: To provide promotional materials to advertise the program on campus

Honoraria for invited workshop speakers

IDC rate 50% of Modified Direct Costs

SUMMARY PROPOSAL BUDGET

YEAR 1

ORGANIZATION Florida State University				FOR NSF USE ONLY			
				PROPOSAL NO.	DURATION (months)		
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR Penny J Gilmer				AWARD NO.	Proposed	Granted	
				A. SENIOR PERSONNEL: PI/PI, Co-PI's, Faculty and Other Senior Associates (List each separately with title, A.7. show number in brackets)			
				CAL	ACAD	SUMR	
1. Penny J Gilmer - PI				0.00	0.18	0.18	\$ 1,925
2. Rufina Alamo - Co-PI				0.00	0.18	0.18	2,620
3.							
4.							
5.							
6. (0) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)				0.00	0.00	0.00	0
7. (2) TOTAL SENIOR PERSONNEL (1 - 6)				0.00	0.36	0.36	4,545
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1. (0) POST DOCTORAL SCHOLARS				0.00	0.00	0.00	0
2. (0) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)				0.00	0.00	0.00	0
3. (0) GRADUATE STUDENTS							0
4. (0) UNDERGRADUATE STUDENTS							0
5. (0) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)							0
6. (1) OTHER							12,608
TOTAL SALARIES AND WAGES (A + B)							17,153
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)							1,302
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)							18,455
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.)							
TOTAL EQUIPMENT							0
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS)							1,637
2. FOREIGN							0
F. PARTICIPANT SUPPORT COSTS							
1. STIPENDS \$ _____							0
2. TRAVEL _____							187
3. SUBSISTENCE _____							4,300
4. OTHER _____							700
TOTAL NUMBER OF PARTICIPANTS (50)							
TOTAL PARTICIPANT COSTS							5,187
G. OTHER DIRECT COSTS							
1. MATERIALS AND SUPPLIES							2,000
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION							1,000
3. CONSULTANT SERVICES							0
4. COMPUTER SERVICES							0
5. SUBAWARDS							0
6. OTHER							4,000
TOTAL OTHER DIRECT COSTS							7,000
H. TOTAL DIRECT COSTS (A THROUGH G)							32,279
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE) % MTDC (Rate: 47.0000, Base: 27092)							
TOTAL INDIRECT COSTS (F&A)							12,733
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)							45,012
K. RESIDUAL FUNDS							0
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)							\$ 45,012
M. COST SHARING PROPOSED LEVEL \$ 0				AGREED LEVEL IF DIFFERENT \$			
PI/PI NAME Penny J Gilmer				FOR NSF USE ONLY			
ORG. REP. NAME* Kirby KEMPER				INDIRECT COST RATE VERIFICATION			
		Date Checked	Date Of Rate Sheet	Initials - ORG			

1 *ELECTRONIC SIGNATURES REQUIRED FOR REVISED BUDGET

SUMMARY PROPOSAL BUDGET

YEAR **2**

ORGANIZATION Florida State University				FOR NSF USE ONLY			
				PROPOSAL NO.	DURATION (months)		
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR Penny J Gilmer				AWARD NO.	Proposed	Granted	
A. SENIOR PERSONNEL: PI/PI, Co-PI's, Faculty and Other Senior Associates (List each separately with title, A.7. show number in brackets)				NSF Funded Person-months		Funds Requested By proposer	Funds granted by NSF (if different)
				CAL	ACAD	SUMR	
1.	Penny J Gilmer - PI			0.00	0.18	0.18	\$ 1,982
2.	Rufina Alamo - Co-PI			0.00	0.18	0.18	\$ 2,699
3.							
4.							
5.							
6.	(0) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)			0.00	0.00	0.00	0
7.	(2) TOTAL SENIOR PERSONNEL (1 - 6)			0.00	0.36	0.36	4,681
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1.	(0) POST DOCTORAL SCHOLARS			0.00	0.00	0.00	0
2.	(0) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)			0.00	0.00	0.00	0
3.	(0) GRADUATE STUDENTS						0
4.	(0) UNDERGRADUATE STUDENTS						0
5.	(0) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)						0
6.	(1) OTHER						5,194
TOTAL SALARIES AND WAGES (A + B)							9,875
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)							643
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)							10,518
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.)							
TOTAL EQUIPMENT							0
E. TRAVEL							1,637
1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS)							1,637
2. FOREIGN							0
F. PARTICIPANT SUPPORT COSTS							
1.	STIPENDS \$ _____						0
2.	TRAVEL _____						0
3.	SUBSISTENCE _____						4,860
4.	OTHER _____						0
TOTAL NUMBER OF PARTICIPANTS (12)							
TOTAL PARTICIPANT COSTS							4,860
G. OTHER DIRECT COSTS							
1.	MATERIALS AND SUPPLIES						2,000
2.	PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION						1,000
3.	CONSULTANT SERVICES						0
4.	COMPUTER SERVICES						0
5.	SUBAWARDS						0
6.	OTHER						4,000
TOTAL OTHER DIRECT COSTS							7,000
H. TOTAL DIRECT COSTS (A THROUGH G)							24,015
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE)							
% MTDC (Rate: 47.0000, Base: 19155)							
TOTAL INDIRECT COSTS (F&A)							9,003
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)							33,018
K. RESIDUAL FUNDS							0
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)							\$ 33,018 \$
M. COST SHARING PROPOSED LEVEL \$ 0				AGREED LEVEL IF DIFFERENT \$			
PI/PI NAME Penny J Gilmer				FOR NSF USE ONLY			
ORG. REP. NAME* Kirby KEMPER				INDIRECT COST RATE VERIFICATION			
		Date Checked		Date Of Rate Sheet		Initials - ORG	

2 *ELECTRONIC SIGNATURES REQUIRED FOR REVISED BUDGET

SUMMARY PROPOSAL BUDGET

YEAR 3

ORGANIZATION Florida State University				FOR NSF USE ONLY			
				PROPOSAL NO.	DURATION (months)		
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR Penny J Gilmer				AWARD NO.	Proposed	Granted	
				A. SENIOR PERSONNEL: PI/PD, Co-PI's, Faculty and Other Senior Associates (List each separately with title, A.7. show number in brackets)			
	CAL	ACAD	SUMR				
1. Penny J Gilmer - PI	0.00	0.18	0.18	\$	2,041	\$	
2. Rufina Alamo - Co-PI	0.00	0.18	0.18		2,816		
3.							
4.							
5.							
6. (0) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)	0.00	0.00	0.00		0		
7. (2) TOTAL SENIOR PERSONNEL (1 - 6)	0.00	0.36	0.36		4,857		
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1. (0) POST DOCTORAL SCHOLARS	0.00	0.00	0.00		0		
2. (0) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)	0.00	0.00	0.00		0		
3. (0) GRADUATE STUDENTS					0		
4. (0) UNDERGRADUATE STUDENTS					0		
5. (0) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)					0		
6. (1) OTHER					13,375		
TOTAL SALARIES AND WAGES (A + B)					18,232		
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)					804		
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)					19,036		
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.)							
TOTAL EQUIPMENT					0		
E. TRAVEL					1,637		
1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS)					1,637		
2. FOREIGN					0		
F. PARTICIPANT SUPPORT COSTS							
1. STIPENDS	\$		0				
2. TRAVEL			134				
3. SUBSISTENCE			2,360				
4. OTHER			0				
TOTAL NUMBER OF PARTICIPANTS (50)							
TOTAL PARTICIPANT COSTS					2,494		
G. OTHER DIRECT COSTS							
1. MATERIALS AND SUPPLIES					2,000		
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION					2,500		
3. CONSULTANT SERVICES					0		
4. COMPUTER SERVICES					0		
5. SUBAWARDS					0		
6. OTHER					4,000		
TOTAL OTHER DIRECT COSTS					8,500		
H. TOTAL DIRECT COSTS (A THROUGH G)					31,667		
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE)							
% MTDC (Rate: 47.0000, Base: 29173)							
TOTAL INDIRECT COSTS (F&A)					13,711		
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)					45,378		
K. RESIDUAL FUNDS					0		
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)				\$	45,378	\$	
M. COST SHARING PROPOSED LEVEL \$				0	AGREED LEVEL IF DIFFERENT \$		
PI/PD NAME Penny J Gilmer				FOR NSF USE ONLY			
ORG. REP. NAME* Kirby KEMPER				INDIRECT COST RATE VERIFICATION			
		Date Checked	Date Of Rate Sheet	Initials - ORG			

3 *ELECTRONIC SIGNATURES REQUIRED FOR REVISED BUDGET

SUMMARY PROPOSAL BUDGET Cumulative

ORGANIZATION Florida State University				FOR NSF USE ONLY			
				PROPOSAL NO.	DURATION (months)		
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR Penny J Gilmer				AWARD NO.	Proposed	Granted	
				A. SENIOR PERSONNEL: PI/PP, Co-PI's, Faculty and Other Senior Associates (List each separately with title, A.7. show number in brackets)			
	CAL	ACAD	SUMR				
1. Penny J Gilmer - PI	0.00	0.54	0.54	\$	5,948	\$	
2. Rufina Alamo - Co-PI	0.00	0.54	0.54		8,135		
3.							
4.							
5.							
6. () OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)	0.00	0.00	0.00		0		
7. (2) TOTAL SENIOR PERSONNEL (1 - 6)	0.00	1.08	1.08		14,083		
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1. (0) POST DOCTORAL SCHOLARS	0.00	0.00	0.00		0		
2. (0) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)	0.00	0.00	0.00		0		
3. (0) GRADUATE STUDENTS					0		
4. (0) UNDERGRADUATE STUDENTS					0		
5. (0) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)					0		
6. (3) OTHER					31,177		
TOTAL SALARIES AND WAGES (A + B)					45,260		
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)					2,749		
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)					48,009		
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.)							
TOTAL EQUIPMENT					0		
E. TRAVEL					4,911		
1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS)							
2. FOREIGN					0		
F. PARTICIPANT SUPPORT COSTS							
1. STIPENDS	\$				0		
2. TRAVEL					321		
3. SUBSISTENCE					11,520		
4. OTHER					700		
TOTAL NUMBER OF PARTICIPANTS (112)				TOTAL PARTICIPANT COSTS	12,541		
G. OTHER DIRECT COSTS							
1. MATERIALS AND SUPPLIES					6,000		
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION					4,500		
3. CONSULTANT SERVICES					0		
4. COMPUTER SERVICES					0		
5. SUBAWARDS					0		
6. OTHER					12,000		
TOTAL OTHER DIRECT COSTS					22,500		
H. TOTAL DIRECT COSTS (A THROUGH G)					87,961		
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE)							
TOTAL INDIRECT COSTS (F&A)					35,447		
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)					123,408		
K. RESIDUAL FUNDS					0		
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)				\$	123,408	\$	
M. COST SHARING PROPOSED LEVEL \$ 0				AGREED LEVEL IF DIFFERENT \$			
PI/PP NAME Penny J Gilmer				FOR NSF USE ONLY			
ORG. REP. NAME* Kirby KEMPER				INDIRECT COST RATE VERIFICATION			
		Date Checked	Date Of Rate Sheet	Initials - ORG			

C *ELECTRONIC SIGNATURES REQUIRED FOR REVISED BUDGET

Budget justification

FSU ADVANCE PAID grant to NSF with USF as lead institution

Penny J. Gilmer (PI) and Rufina Alamo (co-PI) each paid 2.0% for both academic year and summer. Gilmer is part of active faculty through 7/2010, and then retires, but plans to stay active in grant. In the first year of the grant, her fringe is calculated at the DROP rate, plus health for family. Starting in 8/2010, she would be paid as OPS (1.75% fringe rate) with no health benefits. Alamo and her husband both work for state of FL, so no health care costs. Total salary over three years: \$14,083 plus \$2,204 in fringe.

Other personnel includes an administrative assistant, who will work with us on the train the trainer workshop in F09, the COACH workshop for all participants in Sp09, arrange meetings with department chairs, search committee chairs, monthly mentoring meetings (or seminars), and GEO dissemination. In the third year, the extra duty is to design, layout and final editing of the ADVANCE monograph. Fringe rate for non-student: 1.75%. This person would work 50% in first and third years and 20% in second year. Total salary of \$31,177, plus \$546 of fringe, over three years.

On the domestic travel, we have either the PI or co-PI on FSU campus would travel to one conference per year to present on ADVANCE PAID at professional conferences. Cost: \$4,911. Also travel in third year for visits of PI to monograph authors to facilitate the publication of the monograph. This might occupy the PI one week's visit by automobile to various institutions in the collaborative grant to meet with the monograph authors, with estimate of costs of \$1,430.

Materials and supplies at \$2,000 per year plus the cost of documentation of study, producing and assembling reports, monograph, mail out and dissemination (brochures and monographs for participants, conferences, poster for presentation), totaling \$4,500 over three years. Total \$6,500 over three years.

Global Educational Outreach (GEO) for dissemination: \$4,000 per year or \$12,000 total over three years, for resources to maintain the Web site, record and upload videostreaming.

Direct costs include all but participant costs, and indirect cost rate is 47%.

Participant costs added without indirect costs: FSU is responsible for the train the trainer workshop on mentoring for our team leaders of five universities; include catered meals for all participants plus car travel for FSU participants; included babysitting for any participants with children; also include lunches for FSU academic faculty on monthly basis in 2nd and 3rd years for mentoring. Also include car travel for FSU participants for workshops (train the trainer in recruitment in 1st year and COACH in 3rd year) at FAMU. Total participant cost is \$5,187 in first year, \$4,860 in the second year, and \$2,494 in third year, for total \$12,540.

Penny J. Gilmer
23 February 2009

Total direct costs for FSU budget over three years is \$75,420, indirect costs are \$35,447, participant support is \$12,540. The grand total is \$123,408.

SUMMARY PROPOSAL BUDGET

YEAR 1

ORGANIZATION Florida Agricultural and Mechanical University				FOR NSF USE ONLY			
				PROPOSAL NO.	DURATION (months)		
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR Simone P Hruda				AWARD NO.	Proposed	Granted	
A. SENIOR PERSONNEL: PI/PD, Co-PI's, Faculty and Other Senior Associates (List each separately with title, A.7. show number in brackets)				NSF Funded Person-months		Funds Requested By proposer	Funds granted by NSF (if different)
				CAL	ACAD	SUMR	
1.	Simone P Hruda - Assoc Prof Mechanical Engineer			0.00	0.00	0.30	\$ 2,667
2.	Ngozi H Ugochukwu - Professor and Chair Chemistry			0.00	0.00	0.30	2,544
3.							
4.							
5.							
6.	(0) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)			0.00	0.00	0.00	0
7.	(2) TOTAL SENIOR PERSONNEL (1 - 6)			0.00	0.00	0.60	5,211
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1.	(0) POST DOCTORAL SCHOLARS			0.00	0.00	0.00	0
2.	(0) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)			0.00	0.00	0.00	0
3.	(0) GRADUATE STUDENTS						0
4.	(0) UNDERGRADUATE STUDENTS						0
5.	(1) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)						1,430
6.	(0) OTHER						0
TOTAL SALARIES AND WAGES (A + B)							6,641
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)							1,629
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)							8,270
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.)							
TOTAL EQUIPMENT							0
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS)							80
2. FOREIGN							0
F. PARTICIPANT SUPPORT COSTS							
1.	STIPENDS	\$	600				
2.	TRAVEL		268				
3.	SUBSISTENCE		2,400				
4.	OTHER		0				
TOTAL NUMBER OF PARTICIPANTS (72)				TOTAL PARTICIPANT COSTS			3,268
G. OTHER DIRECT COSTS							
1.	MATERIALS AND SUPPLIES						2,000
2.	PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION						0
3.	CONSULTANT SERVICES						0
4.	COMPUTER SERVICES						0
5.	SUBAWARDS						0
6.	OTHER						0
TOTAL OTHER DIRECT COSTS							2,000
H. TOTAL DIRECT COSTS (A THROUGH G)							13,618
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE)							
Domestic Travel (Rate: 45.0000, Base: 80) (Cont. on Comments Page)							
TOTAL INDIRECT COSTS (F&A)							4,658
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)							18,276
K. RESIDUAL FUNDS							0
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)							\$ 18,276 \$
M. COST SHARING PROPOSED LEVEL \$ 0				AGREED LEVEL IF DIFFERENT \$			
PI/PD NAME Simone P Hruda				FOR NSF USE ONLY			
ORG. REP. NAME* Garlen Wesson				INDIRECT COST RATE VERIFICATION			
		Date Checked	Date Of Rate Sheet	Initials - ORG			

1 *ELECTRONIC SIGNATURES REQUIRED FOR REVISED BUDGET

SUMMARY PROPOSAL BUDGET COMMENTS - Year 1

**** I- Indirect Costs**

Materials and Supplies (Rate: 45.0000, Base 2000)

Salaries and Fringe (Rate: 45.0000, Base 8270)

SUMMARY PROPOSAL BUDGET

YEAR **2**

ORGANIZATION Florida Agricultural and Mechanical University				FOR NSF USE ONLY			
				PROPOSAL NO.	DURATION (months)		
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR Simone P Hruda				AWARD NO.	Proposed	Granted	
A. SENIOR PERSONNEL: PI/PD, Co-PI's, Faculty and Other Senior Associates (List each separately with title, A.7. show number in brackets)				NSF Funded Person-months		Funds Requested By proposer	Funds granted by NSF (if different)
				CAL	ACAD	SUMR	
1.	Simone P Hruda - Assoc Prof Mechanical Engineer			0.00	0.00	0.30	\$ 2,746 \$
2.	Ngozi H Ugochukwu - Professor and Chair Chemistry			0.00	0.00	0.30	2,621
3.							
4.							
5.							
6.	(0) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)			0.00	0.00	0.00	0
7.	(2) TOTAL SENIOR PERSONNEL (1 - 6)			0.00	0.00	0.60	5,367
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1.	(0) POST DOCTORAL SCHOLARS			0.00	0.00	0.00	0
2.	(0) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)			0.00	0.00	0.00	0
3.	(0) GRADUATE STUDENTS						0
4.	(0) UNDERGRADUATE STUDENTS						0
5.	(1) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)						1,473
6.	(0) OTHER						0
TOTAL SALARIES AND WAGES (A + B)							6,840
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)							1,678
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)							8,518
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.)							
TOTAL EQUIPMENT							0
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS)							0
2. FOREIGN							0
F. PARTICIPANT SUPPORT COSTS							
1.	STIPENDS	\$	0				
2.	TRAVEL		0				
3.	SUBSISTENCE		3,060				
4.	OTHER		0				
TOTAL NUMBER OF PARTICIPANTS (204)				TOTAL PARTICIPANT COSTS			3,060
G. OTHER DIRECT COSTS							
1.	MATERIALS AND SUPPLIES						2,000
2.	PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION						0
3.	CONSULTANT SERVICES						0
4.	COMPUTER SERVICES						0
5.	SUBAWARDS						0
6.	OTHER						0
TOTAL OTHER DIRECT COSTS							2,000
H. TOTAL DIRECT COSTS (A THROUGH G)							13,578
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE)							
Domestic Travel (Rate: 45.0000, Base: 0) (Cont. on Comments Page)							
TOTAL INDIRECT COSTS (F&A)							4,733
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)							18,311
K. RESIDUAL FUNDS							0
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)							\$ 18,311 \$
M. COST SHARING PROPOSED LEVEL \$ 0				AGREED LEVEL IF DIFFERENT \$			
PI/PD NAME Simone P Hruda				FOR NSF USE ONLY			
ORG. REP. NAME* Garlen Wesson				INDIRECT COST RATE VERIFICATION			
		Date Checked	Date Of Rate Sheet	Initials - ORG			

2 *ELECTRONIC SIGNATURES REQUIRED FOR REVISED BUDGET

SUMMARY PROPOSAL BUDGET COMMENTS - Year 2

**** I- Indirect Costs**

Materials and Supplies (Rate: 45.0000, Base 2000)

Salaries and Fringe (Rate: 45.0000, Base 8518)

SUMMARY PROPOSAL BUDGET

YEAR 3

ORGANIZATION Florida Agricultural and Mechanical University				FOR NSF USE ONLY			
				PROPOSAL NO.	DURATION (months)		
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR Simone P Hruda				AWARD NO.	Proposed	Granted	
A. SENIOR PERSONNEL: PI/PD, Co-PI's, Faculty and Other Senior Associates (List each separately with title, A.7. show number in brackets)				NSF Funded Person-months		Funds Requested By proposer	Funds granted by NSF (if different)
				CAL	ACAD	SUMR	
1.	Simone P Hruda - Assoc Prof Mechanical Engineer			0.00	0.00	0.30	\$ 2,829
2.	Ngozi H Ugochukwu - Professor and Chair Chemistry			0.00	0.00	0.30	\$ 2,699
3.							
4.							
5.							
6.	(0) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)			0.00	0.00	0.00	0
7.	(2) TOTAL SENIOR PERSONNEL (1 - 6)			0.00	0.00	0.60	5,528
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1.	(0) POST DOCTORAL SCHOLARS			0.00	0.00	0.00	0
2.	(0) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)			0.00	0.00	0.00	0
3.	(0) GRADUATE STUDENTS						0
4.	(0) UNDERGRADUATE STUDENTS						0
5.	(1) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)						1,517
6.	(0) OTHER						0
TOTAL SALARIES AND WAGES (A + B)							7,045
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)							1,728
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)							8,773
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.)							
TOTAL EQUIPMENT							0
E. TRAVEL							27
1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS)							27
2. FOREIGN							0
F. PARTICIPANT SUPPORT COSTS							
1.	STIPENDS	\$	0				
2.	TRAVEL		134				
3.	SUBSISTENCE		6,060				
4.	OTHER		0				
TOTAL NUMBER OF PARTICIPANTS (254)							
TOTAL PARTICIPANT COSTS							6,194
G. OTHER DIRECT COSTS							
1.	MATERIALS AND SUPPLIES						2,000
2.	PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION						0
3.	CONSULTANT SERVICES						0
4.	COMPUTER SERVICES						0
5.	SUBAWARDS						0
6.	OTHER						0
TOTAL OTHER DIRECT COSTS							2,000
H. TOTAL DIRECT COSTS (A THROUGH G)							16,994
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE)							
Domestic Travel (Rate: 45.0000, Base: 27) (Cont. on Comments Page)							
TOTAL INDIRECT COSTS (F&A)							4,860
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)							21,854
K. RESIDUAL FUNDS							0
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)							\$ 21,854 \$
M. COST SHARING PROPOSED LEVEL \$ 0				AGREED LEVEL IF DIFFERENT \$			
PI/PD NAME Simone P Hruda				FOR NSF USE ONLY			
ORG. REP. NAME* Garlen Wesson				INDIRECT COST RATE VERIFICATION			
		Date Checked	Date Of Rate Sheet	Initials - ORG			

3 *ELECTRONIC SIGNATURES REQUIRED FOR REVISED BUDGET

SUMMARY PROPOSAL BUDGET COMMENTS - Year 3

**** I- Indirect Costs**

Materials and Supplies (Rate: 45.0000, Base 2000)

Salaries and Fringe (Rate: 45.0000, Base 8774)

SUMMARY PROPOSAL BUDGET Cumulative

ORGANIZATION Florida Agricultural and Mechanical University				FOR NSF USE ONLY			
				PROPOSAL NO.	DURATION (months)		
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR Simone P Hruda				AWARD NO.	Proposed	Granted	
A. SENIOR PERSONNEL: PI/PD, Co-PI's, Faculty and Other Senior Associates (List each separately with title, A.7. show number in brackets)				NSF Funded Person-months		Funds Requested By proposer	Funds granted by NSF (if different)
	CAL	ACAD	SUMR				
1. Simone P Hruda - Assoc Prof Mechanical Engineer	0.00	0.00	0.90	\$	8,242	\$	
2. Ngozi H Ugochukwu - Professor and Chair Chemistry	0.00	0.00	0.90		7,864		
3.							
4.							
5.							
6. () OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)	0.00	0.00	0.00		0		
7. (2) TOTAL SENIOR PERSONNEL (1 - 6)	0.00	0.00	1.80		16,106		
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1. (0) POST DOCTORAL SCHOLARS	0.00	0.00	0.00		0		
2. (0) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)	0.00	0.00	0.00		0		
3. (0) GRADUATE STUDENTS					0		
4. (0) UNDERGRADUATE STUDENTS					0		
5. (3) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)					4,420		
6. (0) OTHER					0		
TOTAL SALARIES AND WAGES (A + B)					20,526		
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)					5,035		
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)					25,561		
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.)							
TOTAL EQUIPMENT					0		
E. TRAVEL					107		
1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS)							
2. FOREIGN					0		
F. PARTICIPANT SUPPORT COSTS							
1. STIPENDS \$ _____					600		
2. TRAVEL _____					402		
3. SUBSISTENCE _____					11,520		
4. OTHER _____					0		
TOTAL NUMBER OF PARTICIPANTS (530)				TOTAL PARTICIPANT COSTS	12,522		
G. OTHER DIRECT COSTS							
1. MATERIALS AND SUPPLIES					6,000		
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION					0		
3. CONSULTANT SERVICES					0		
4. COMPUTER SERVICES					0		
5. SUBAWARDS					0		
6. OTHER					0		
TOTAL OTHER DIRECT COSTS					6,000		
H. TOTAL DIRECT COSTS (A THROUGH G)					44,190		
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE)							
TOTAL INDIRECT COSTS (F&A)					14,251		
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)					58,441		
K. RESIDUAL FUNDS					0		
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)					\$ 58,441	\$	
M. COST SHARING PROPOSED LEVEL \$ 0				AGREED LEVEL IF DIFFERENT \$			
PI/PD NAME Simone P Hruda				FOR NSF USE ONLY			
ORG. REP. NAME* Garlen Wesson				INDIRECT COST RATE VERIFICATION			
		Date Checked	Date Of Rate Sheet	Initials - ORG			

C *ELECTRONIC SIGNATURES REQUIRED FOR REVISED BUDGET

Budget justification

FAMU - Alliance for the Advancement of Florida's Academic Women in Chemistry and Engineering (AAFAWCE) grant to NSF with USF as lead institution

Simone Peterson Hruda (PI) and Ngozi Ugochukwu (co-PI) each paid 10% for summer. The fringe is calculated at the faculty rate of 29%.

Total salary over three years: \$16,106 plus \$4,671 in fringe.

Other personnel includes an administrative assistant, who will work with us on the Train the Trainer Mentoring workshop in Fall 2009, the COACH workshop for all participants in Spring 2012, arrange meetings with department chairs, search committee chairs, monthly mentoring workshops, and bi-monthly recruitment workshops. Fringe rate for non-student: 8.25%. This person would work 2 hours per week (5%) each year of the program.

Total salary of \$4,420 plus \$365 of fringe, over three years.

On the domestic travel, the PI and co-PI on FAMU campus will travel to COACH and training workshops (4 workshops). First year cost is \$80. Third year cost is \$27.

Total domestic travel cost is \$107 over three years.

Materials and supplies at \$2,000 per year for documentation of study, producing and assembling reports, mail out and dissemination (brochures and monographs for participants).

Total materials and supplies cost is \$6,000 over three years.

Direct costs include all but participant costs, and indirect cost rate is 45%.

Participant costs added without indirect costs:

FAMU is responsible for the Train the Trainer Mentoring workshop for our team leaders (and select senior personnel; total 20 participants) of five universities; includes facility rental and equipment, plus car travel for FAMU participants.

FAMU is responsible for the final COACH workshop for 50 participants from the five universities in the third year; includes facility rental and equipment, plus car travel for FAMU participants.

FAMU will be conducting monthly on-campus mentoring workshops for 12 participants in the second and third years; includes facility rental and equipment.

FAMU will be conducting bimonthly on-campus recruitment workshops for 10 participants in the second and third years; includes facility rental and equipment.

FAMU will be sending 2 participants to the FSU Train the Trainer Recruitment Practices workshop in the first year; includes car travel and stipend for FAMU participants.

FAMU will be sending 10 participants to the FSU COACH Recruitment Practices workshop in the first year; includes car travel and stipend for FAMU participants.

Total participant cost is \$3,268 in first year, \$3,060 in the second year, and \$6,194 in third year.

Total participant cost over 3 years: \$12,522.

Total direct costs for FAMU budget over three years are \$31,669, indirect costs are \$14,251, participant support is \$12,522. The grand total is \$58,441.

SUMMARY PROPOSAL BUDGET

YEAR 1

ORGANIZATION Florida International University				FOR NSF USE ONLY			
				PROPOSAL NO.	DURATION (months)		
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR Berrin Tansel				AWARD NO.	Proposed	Granted	
				A. SENIOR PERSONNEL: PI/PP, Co-PI's, Faculty and Other Senior Associates (List each separately with title, A.7. show number in brackets)			
				CAL	ACAD	SUMR	
1.	Berrin Tansel - Assoc Prof			0.00	0.00	0.20	\$ 614
2.	Jaroslava Miksovska - Assist Prof			0.00	0.00	0.10	212
3.	Gustavo A Roig - Professor			0.00	0.00	0.00	0
4.							
5.							
6.	(0) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)			0.00	0.00	0.00	0
7.	(3) TOTAL SENIOR PERSONNEL (1 - 6)			0.00	0.00	0.30	826
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1.	(0) POST DOCTORAL SCHOLARS			0.00	0.00	0.00	0
2.	(0) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)			0.00	0.00	0.00	0
3.	(0) GRADUATE STUDENTS						0
4.	(0) UNDERGRADUATE STUDENTS						0
5.	(0) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)						0
6.	(0) OTHER						0
TOTAL SALARIES AND WAGES (A + B)							826
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)							246
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)							1,072
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.)							
TOTAL EQUIPMENT							0
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS)							6,100
2. FOREIGN							0
F. PARTICIPANT SUPPORT COSTS							
1.	STIPENDS \$ _____						0
2.	TRAVEL _____						0
3.	SUBSISTENCE _____						0
4.	OTHER _____						0
TOTAL NUMBER OF PARTICIPANTS (0) TOTAL PARTICIPANT COSTS							0
G. OTHER DIRECT COSTS							
1.	MATERIALS AND SUPPLIES						2,100
2.	PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION						500
3.	CONSULTANT SERVICES						0
4.	COMPUTER SERVICES						0
5.	SUBAWARDS						0
6.	OTHER						500
TOTAL OTHER DIRECT COSTS							3,100
H. TOTAL DIRECT COSTS (A THROUGH G)							10,272
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE)							
MTDC (07/01/08-06/30/09) (Rate: 42.0000, Base: 1712) (Cont. on Comments Page)							
TOTAL INDIRECT COSTS (F&A)							4,485
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)							14,757
K. RESIDUAL FUNDS							0
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)							\$ 14,757
M. COST SHARING PROPOSED LEVEL \$ 0				AGREED LEVEL IF DIFFERENT \$			
PI/PP NAME Berrin Tansel				FOR NSF USE ONLY			
ORG. REP. NAME* Roberto gutierrez				INDIRECT COST RATE VERIFICATION			
		Date Checked	Date Of Rate Sheet	Initials - ORG			

1 *ELECTRONIC SIGNATURES REQUIRED FOR REVISED BUDGET

SUMMARY PROPOSAL BUDGET COMMENTS - Year 1

**** I- Indirect Costs**
MTDC (07/01/09-06/30/10) (Rate: 44.0000, Base 8560)

SUMMARY PROPOSAL BUDGET

YEAR 2

ORGANIZATION Florida International University				FOR NSF USE ONLY			
				PROPOSAL NO.	DURATION (months)		
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR Berrin Tansel				AWARD NO.	Proposed	Granted	
A. SENIOR PERSONNEL: PI/PD, Co-PI's, Faculty and Other Senior Associates (List each separately with title, A.7. show number in brackets)				NSF Funded Person-months		Funds Requested By proposer	Funds granted by NSF (if different)
				CAL	ACAD	SUMR	
1.	Berrin Tansel - Assoc Prof			0.00	0.00	0.20	\$ 632
2.	Jaroslava Miksovska - Assist Prof			0.00	0.00	0.10	219
3.	Gustavo A Roig - Professor			0.00	0.00	0.10	532
4.							
5.							
6.	(0) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)			0.00	0.00	0.00	0
7.	(3) TOTAL SENIOR PERSONNEL (1 - 6)			0.00	0.00	0.40	1,383
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1.	(0) POST DOCTORAL SCHOLARS			0.00	0.00	0.00	0
2.	(0) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)			0.00	0.00	0.00	0
3.	(0) GRADUATE STUDENTS						0
4.	(0) UNDERGRADUATE STUDENTS						0
5.	(0) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)						0
6.	(0) OTHER						0
TOTAL SALARIES AND WAGES (A + B)							1,383
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)							411
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)							1,794
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.)							
TOTAL EQUIPMENT							0
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS)							6,200
2. FOREIGN							0
F. PARTICIPANT SUPPORT COSTS							
1.	STIPENDS	\$	0				
2.	TRAVEL		0				
3.	SUBSISTENCE		0				
4.	OTHER		0				
TOTAL NUMBER OF PARTICIPANTS (0) TOTAL PARTICIPANT COSTS							0
G. OTHER DIRECT COSTS							
1.	MATERIALS AND SUPPLIES						3,000
2.	PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION						800
3.	CONSULTANT SERVICES						0
4.	COMPUTER SERVICES						0
5.	SUBAWARDS						0
6.	OTHER						500
TOTAL OTHER DIRECT COSTS							4,300
H. TOTAL DIRECT COSTS (A THROUGH G)							12,294
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE)							
MTDC (07/01/09-06/30/10) (Rate: 44.0000, Base: 2049) (Cont. on Comments Page)							
TOTAL INDIRECT COSTS (F&A)							5,512
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)							17,806
K. RESIDUAL FUNDS							0
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)							\$ 17,806
M. COST SHARING PROPOSED LEVEL \$ 0				AGREED LEVEL IF DIFFERENT \$			
PI/PD NAME Berrin Tansel				FOR NSF USE ONLY			
ORG. REP. NAME* Roberto gutierrez				INDIRECT COST RATE VERIFICATION			
		Date Checked	Date Of Rate Sheet	Initials - ORG			

2 *ELECTRONIC SIGNATURES REQUIRED FOR REVISED BUDGET

SUMMARY PROPOSAL BUDGET COMMENTS - Year 2

**** I- Indirect Costs**

MTDC (07/01/10-until amended) (Rate: 45.0000, Base 10245)

SUMMARY PROPOSAL BUDGET

YEAR 3

ORGANIZATION Florida International University				FOR NSF USE ONLY			
				PROPOSAL NO.	DURATION (months)		
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR Berrin Tansel				AWARD NO.	Proposed	Granted	
A. SENIOR PERSONNEL: PI/PD, Co-PI's, Faculty and Other Senior Associates (List each separately with title, A.7. show number in brackets)				NSF Funded Person-months		Funds Requested By proposer	Funds granted by NSF (if different)
		CAL	ACAD	SUMR			
1.	Berrin Tansel - Assoc Prof	0.00	0.00	0.20	\$ 651	\$	
2.	Jaroslava Miksovska - Assist Prof	0.00	0.00	0.10	225		
3.	Gustavo A Roig - Professor	0.00	0.00	0.10	548		
4.							
5.							
6.	(0) OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)	0.00	0.00	0.00	0		
7.	(3) TOTAL SENIOR PERSONNEL (1 - 6)	0.00	0.00	0.40	1,424		
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1.	(0) POST DOCTORAL SCHOLARS	0.00	0.00	0.00	0		
2.	(0) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)	0.00	0.00	0.00	0		
3.	(0) GRADUATE STUDENTS				0		
4.	(0) UNDERGRADUATE STUDENTS				0		
5.	(0) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)				0		
6.	(0) OTHER				0		
TOTAL SALARIES AND WAGES (A + B)					1,424		
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)					424		
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)					1,848		
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.)							
TOTAL EQUIPMENT					0		
E. TRAVEL 1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS)					6,500		
2. FOREIGN					0		
F. PARTICIPANT SUPPORT COSTS							
1.	STIPENDS \$ _____	0					
2.	TRAVEL _____	0					
3.	SUBSISTENCE _____	0					
4.	OTHER _____	0					
TOTAL NUMBER OF PARTICIPANTS (0) TOTAL PARTICIPANT COSTS					0		
G. OTHER DIRECT COSTS							
1. MATERIALS AND SUPPLIES					3,000		
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION					500		
3. CONSULTANT SERVICES					0		
4. COMPUTER SERVICES					0		
5. SUBAWARDS					0		
6. OTHER					600		
TOTAL OTHER DIRECT COSTS					4,100		
H. TOTAL DIRECT COSTS (A THROUGH G)					12,448		
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE) MTDC (07/01/10-until amended) (Rate: 45.0000, Base: 12448)							
TOTAL INDIRECT COSTS (F&A)					5,602		
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)					18,050		
K. RESIDUAL FUNDS					0		
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)					\$ 18,050	\$	
M. COST SHARING PROPOSED LEVEL \$ 0				AGREED LEVEL IF DIFFERENT \$			
PI/PD NAME Berrin Tansel				FOR NSF USE ONLY			
ORG. REP. NAME* Roberto gutierrez				INDIRECT COST RATE VERIFICATION			
		Date Checked	Date Of Rate Sheet	Initials - ORG			

3 *ELECTRONIC SIGNATURES REQUIRED FOR REVISED BUDGET

SUMMARY PROPOSAL BUDGET Cumulative

ORGANIZATION Florida International University				FOR NSF USE ONLY			
				PROPOSAL NO.	DURATION (months)		
PRINCIPAL INVESTIGATOR / PROJECT DIRECTOR Berrin Tansel				AWARD NO.	Proposed	Granted	
A. SENIOR PERSONNEL: PI/PD, Co-PI's, Faculty and Other Senior Associates (List each separately with title, A.7. show number in brackets)				NSF Funded Person-months		Funds Requested By proposer	Funds granted by NSF (if different)
	CAL	ACAD	SUMR				
1. Berrin Tansel - Assoc Prof	0.00	0.00	0.60	\$	1,897	\$	
2. Jaroslava Miksovska - Assist Prof	0.00	0.00	0.30		656		
3. Gustavo A Roig - Professor	0.00	0.00	0.20		1,080		
4.							
5.							
6. () OTHERS (LIST INDIVIDUALLY ON BUDGET JUSTIFICATION PAGE)	0.00	0.00	0.00		0		
7. (3) TOTAL SENIOR PERSONNEL (1 - 6)	0.00	0.00	1.10		3,633		
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)							
1. (0) POST DOCTORAL SCHOLARS	0.00	0.00	0.00		0		
2. (0) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)	0.00	0.00	0.00		0		
3. (0) GRADUATE STUDENTS					0		
4. (0) UNDERGRADUATE STUDENTS					0		
5. (0) SECRETARIAL - CLERICAL (IF CHARGED DIRECTLY)					0		
6. (0) OTHER					0		
TOTAL SALARIES AND WAGES (A + B)					3,633		
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS)					1,081		
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)					4,714		
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM EXCEEDING \$5,000.)							
TOTAL EQUIPMENT					0		
E. TRAVEL					18,800		
1. DOMESTIC (INCL. CANADA, MEXICO AND U.S. POSSESSIONS)							
2. FOREIGN					0		
F. PARTICIPANT SUPPORT COSTS							
1. STIPENDS	\$		0				
2. TRAVEL			0				
3. SUBSISTENCE			0				
4. OTHER			0				
TOTAL NUMBER OF PARTICIPANTS (0)				TOTAL PARTICIPANT COSTS	0		
G. OTHER DIRECT COSTS							
1. MATERIALS AND SUPPLIES					8,100		
2. PUBLICATION COSTS/DOCUMENTATION/DISSEMINATION					1,800		
3. CONSULTANT SERVICES					0		
4. COMPUTER SERVICES					0		
5. SUBAWARDS					0		
6. OTHER					1,600		
TOTAL OTHER DIRECT COSTS					11,500		
H. TOTAL DIRECT COSTS (A THROUGH G)					35,014		
I. INDIRECT COSTS (F&A)(SPECIFY RATE AND BASE)							
TOTAL INDIRECT COSTS (F&A)					15,599		
J. TOTAL DIRECT AND INDIRECT COSTS (H + I)					50,613		
K. RESIDUAL FUNDS					0		
L. AMOUNT OF THIS REQUEST (J) OR (J MINUS K)					\$ 50,613	\$	
M. COST SHARING PROPOSED LEVEL \$ 0				AGREED LEVEL IF DIFFERENT \$			
PI/PD NAME Berrin Tansel				FOR NSF USE ONLY			
ORG. REP. NAME* Roberto gutierrez				INDIRECT COST RATE VERIFICATION			
		Date Checked	Date Of Rate Sheet	Initials - ORG			

C *ELECTRONIC SIGNATURES REQUIRED FOR REVISED BUDGET

Budget Explanations:

SALARIES AND WAGES:

Dr. Tansel, Dr. Roig and Dr. Miksovska will be responsible for the day-to-day progress and coordination of the activities to be performed during this project. 2% salary for Dr. Tansel for years 1, 2 and 3, 1% for Dr. Roig for years 2 and 3, and 1 % for Dr. Miksovska for years 1, 2 and 3 will be provided by the grant. A salary increase of 3 % is used for each subsequent year.

FRINGE BENEFITS

The estimated fringe benefits are 29.72% for nine month faculty during the academic year, 18% for nine month faculty during summer and 7.65% of the salaries for graduate students at Florida International University.

EXPENDABLE SUPPLIES

Materials and supplies will include data storage/processing materials. Educational supplies will include supplies for student training (i.e., books, reference materials), preparation of displays set ups for technical presentations, and dissemination activities related with the project. Publications costs will include copying, program activity announcements, publication booklets for new course materials and curriculum implementation of the research materials.

EDUCATIONAL SUPPLIES

Educational supplies include the costs of holding regular workshops (2 per year) throughout the academic year during years 2 and 3 and monthly seminars.

FOOD

Food allocation includes coffee, water, soft drinks and snacks for the workshops (2 per year) and coffee and water for the monthly seminars.

TRAVEL

Travel funds will be used for participation of 2 faculty and 4 graduate students for the leadership conferences to be conducted as part of the activities of the grant. In addition 2 trips per year are allocated for one person to participate in the coordination meetings. Two trips are allocated for 6 persons to participate in professional advancement seminar.

The COACH workshops, recruitment training and mentorship workshops will all be held in Tallahassee at FSU and FAMU. The mentorship workshop lasts 2 days and COACH and recruitment training workshops last 1 day. The cost include for 2 faculty and administrators to travel to Tallahassee for the day before the recruitment training and mentorship workshops and depart the morning after the workshop.

Six faculty members will travel to Tallahassee for the COACH workshops in years one and three. Food will be provided at the workshops. Per diem for dinner for that night and breakfast the morning after are included.

INDIRECT COSTS

Indirect Costs at Florida International University are calculated at 42% for the period of 07/01/08--06/30/09; 44% for the period of 07/01/09--06/30/10 and 45% for the period of 07/01/10 until amended, using a modified total direct cost base which excludes equipment, capital expenditures, charges for patient care, tuition remission, rental costs of off-site facilities, scholarships and fellowships and the portion of each subcontract and/or subgrant in excess of \$25,000 regardless of the period covered. Equipment means an article of nonexpendable tangible personal property having a useful life of more than one year, and an acquisition cost of \$1000 or more per unit.

Current and Pending Support

(See GPG Section II.C.2.h for guidance on information to include on this form.)

The following information should be provided for each investigator and other senior personnel. Failure to provide this information may delay consideration of this proposal.	
Investigator: Karen Holbrook	Other agencies (including NSF) to which this proposal has been/will be submitted.
<p>Support: <input type="checkbox"/> Current <input checked="" type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support</p> <p>Project/Proposal Title: Alliance for the Advancement of Florida's Academic Women in Chemistry and Engineering (AAFAWCE)</p> <p>Source of Support: NSF</p> <p>Total Award Amount: \$ 0 Total Award Period Covered: 08/01/09 - 07/31/12</p> <p>Location of Project: University of South Florida</p> <p>Person-Months Per Year Committed to the Project. Cal:0.00 Acad: 0.09 Sumr: 0.03</p>	
<p>Support: <input type="checkbox"/> Current <input checked="" type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support</p> <p>Project/Proposal Title: Collaborative Research: Alliance for the Advancement of Florida's Academic Women in Chemistry and Engineering (AAFAWCE)</p> <p>Source of Support: National Science Foundation</p> <p>Total Award Amount: \$ 214,116 Total Award Period Covered: 08/01/09 - 07/31/12</p> <p>Location of Project:</p> <p>Person-Months Per Year Committed to the Project. Cal:0.12 Acad: 0.00 Sumr: 0.00</p>	
<p>Support: <input type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support</p> <p>Project/Proposal Title:</p> <p>Source of Support:</p> <p>Total Award Amount: \$ Total Award Period Covered:</p> <p>Location of Project:</p> <p>Person-Months Per Year Committed to the Project. Cal: Acad: Sumr:</p>	
<p>Support: <input type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support</p> <p>Project/Proposal Title:</p> <p>Source of Support:</p> <p>Total Award Amount: \$ Total Award Period Covered:</p> <p>Location of Project:</p> <p>Person-Months Per Year Committed to the Project. Cal: Acad: Sumr:</p>	
<p>Support: <input type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support</p> <p>Project/Proposal Title:</p> <p>Source of Support:</p> <p>Total Award Amount: \$ Total Award Period Covered:</p> <p>Location of Project:</p> <p>Person-Months Per Year Committed to the Project. Cal: Acad: Summ:</p>	

*If this project has previously been funded by another agency, please list and furnish information for immediately preceding funding period.

Current and Pending Support

(See GPG Section II.C.2.h for guidance on information to include on this form.)

The following information should be provided for each investigator and other senior personnel. Failure to provide this information may delay consideration of this proposal.	
Investigator: Kathryn Borman	Other agencies (including NSF) to which this proposal has been/will be submitted.
<p>Support: <input type="checkbox"/> Current <input checked="" type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support</p> <p>Project/Proposal Title: Alliance for the Advancement of Florida's Academic Women in Chemistry and Engineering (AAFAWCE)</p> <p>Source of Support: NSF</p> <p>Total Award Amount: \$ 0 Total Award Period Covered: 08/01/09 - 07/31/12</p> <p>Location of Project: University of South Florida</p> <p>Person-Months Per Year Committed to the Project. Cal:0.00 Acad: 0.27 Sumr: 0.09</p>	
<p>Support: <input checked="" type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support</p> <p>Project/Proposal Title: Replication and Outcomes of the Teaching SMART program in Elementary Science Classrooms</p> <p>Source of Support: US DOE (IES) Teacher Quality Research</p> <p>Total Award Amount: \$ 2,288,099 Total Award Period Covered: 08/01/05 - 07/31/09</p> <p>Location of Project: University of South Florida</p> <p>Person-Months Per Year Committed to the Project. Cal:0.00 Acad: 1.62 Sumr: 0.54</p>	
<p>Support: <input checked="" type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support</p> <p>Project/Proposal Title: Effects of College Degree Program Culture on Female and Minority Student STEM Participation</p> <p>Source of Support: NSF</p> <p>Total Award Amount: \$ 1,328,311 Total Award Period Covered: 10/01/05 - 09/30/09</p> <p>Location of Project: University of South Florida</p> <p>Person-Months Per Year Committed to the Project. Cal:0.00 Acad: 0.18 Sumr: 0.06</p>	
<p>Support: <input checked="" type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support</p> <p>Project/Proposal Title: On-Track STEM Careers: Access to Rigorous and Relevant STEM Courses in Florida's High Schools</p> <p>Source of Support: NSF REESE</p> <p>Total Award Amount: \$ 996,966 Total Award Period Covered: 08/01/08 - 07/31/11</p> <p>Location of Project: University of South Florida</p> <p>Person-Months Per Year Committed to the Project. Cal:0.00 Acad: 1.35 Sumr: 0.45</p>	
<p>Support: <input checked="" type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support</p> <p>Project/Proposal Title: Florida Voluntary Public School Choice Evaluation</p> <p>Source of Support: US DOE</p> <p>Total Award Amount: \$ 750,000 Total Award Period Covered: 02/11/08 - 09/30/12</p> <p>Location of Project: University of South Florida</p> <p>Person-Months Per Year Committed to the Project. Cal:0.00 Acad: 0.90 Summ: 0.30</p>	
*If this project has previously been funded by another agency, please list and furnish information for immediately preceding funding period.	

Current and Pending Support

(See GPG Section II.C.2.h for guidance on information to include on this form.)

The following information should be provided for each investigator and other senior personnel. Failure to provide this information may delay consideration of this proposal.	
Investigator: Sylvia Thomas	Other agencies (including NSF) to which this proposal has been/will be submitted.
Support: <input checked="" type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support Project/Proposal Title: Advanced Nano Materials for Bio and Device Engineering Source of Support: NSF Total Award Amount: \$ 299,712 Total Award Period Covered: 03/01/06 - 02/27/09 Location of Project: University of South Florida Person-Months Per Year Committed to the Project. Cal:0.00 Acad: 0.00 Sumr: 0.50	
Support: <input checked="" type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support Project/Proposal Title: Engineering and Computer Science Scholars Targeted for Academic, Retention and Success (STARS) at the University of South Florida (CO-PI) Source of Support: NSF Total Award Amount: \$ 598,298 Total Award Period Covered: 08/01/08 - 05/31/11 Location of Project: University of South Florida Person-Months Per Year Committed to the Project. Cal:0.00 Acad: 0.10 Sumr: 0.00	
Support: <input type="checkbox"/> Current <input checked="" type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support Project/Proposal Title: Research Experience for Students and Teachers (REST) Source of Support: NSF Total Award Amount: \$ 495,514 Total Award Period Covered: 05/01/09 - 08/31/11 Location of Project: University of South Florida Person-Months Per Year Committed to the Project. Cal:0.00 Acad: 0.00 Sumr: 0.50	
Support: <input type="checkbox"/> Current <input checked="" type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support Project/Proposal Title: REU Site: Sustainable Energy Alternatives and the Advanced Materials (SEAM) Source of Support: NSF Total Award Amount: \$ 358,372 Total Award Period Covered: 05/01/09 - 08/31/11 Location of Project: University of South Florida Person-Months Per Year Committed to the Project. Cal:0.00 Acad: 0.00 Sumr: 0.50	
Support: <input type="checkbox"/> Current <input checked="" type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support Project/Proposal Title: REU Site: Tampa Interdisciplinary Environmental Research (TIER) Source of Support: NSF Total Award Amount: \$ 426,404 Total Award Period Covered: 05/01/09 - 08/31/11 Location of Project: University of South Florida Person-Months Per Year Committed to the Project. Cal:0.00 Acad: 0.00 Summ: 0.50	
*If this project has previously been funded by another agency, please list and furnish information for immediately preceding funding period.	

Current and Pending Support

(See GPG Section II.C.2.h for guidance on information to include on this form.)

The following information should be provided for each investigator and other senior personnel. Failure to provide this information may delay consideration of this proposal.	
Investigator: Sylvia Thomas	Other agencies (including NSF) to which this proposal has been/will be submitted.
Support: <input type="checkbox"/> Current <input checked="" type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support Project/Proposal Title: Alliance for the Advancement of Florida's Academic Women in Chemistry and Engineering (AAFAWCE)	
Source of Support: NSF Total Award Amount: \$ 0 Total Award Period Covered: 08/01/09 - 07/31/12 Location of Project: University of South Florida Person-Months Per Year Committed to the Project. Cal:0.00 Acad: 0.09 Sumr: 0.03	
Support: <input type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support Project/Proposal Title:	
Source of Support: Total Award Amount: \$ Total Award Period Covered: Location of Project: Person-Months Per Year Committed to the Project. Cal: Acad: Sumr:	
Support: <input type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support Project/Proposal Title:	
Source of Support: Total Award Amount: \$ Total Award Period Covered: Location of Project: Person-Months Per Year Committed to the Project. Cal: Acad: Sumr:	
Support: <input type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support Project/Proposal Title:	
Source of Support: Total Award Amount: \$ Total Award Period Covered: Location of Project: Person-Months Per Year Committed to the Project. Cal: Acad: Sumr:	
Support: <input type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support Project/Proposal Title:	
Source of Support: Total Award Amount: \$ Total Award Period Covered: Location of Project: Person-Months Per Year Committed to the Project. Cal: Acad: Summ:	

*If this project has previously been funded by another agency, please list and furnish information for immediately preceding funding period.

Current and Pending Support

(See GPG Section II.C.2.h for guidance on information to include on this form.)

The following information should be provided for each investigator and other senior personnel. Failure to provide this information may delay consideration of this proposal.	
Investigator: Eva Fernandez	Other agencies (including NSF) to which this proposal has been/will be submitted.
Support: <input type="checkbox"/> Current <input checked="" type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support Project/Proposal Title: Alliance for the Advancement of Florida's Academic Women in Chemistry and Engineering (AAFAWCE)	
Source of Support: NSF Total Award Amount: \$ 0 Total Award Period Covered: 08/01/09 - 07/31/12 Location of Project: University of South Florida Person-Months Per Year Committed to the Project. Cal:0.12 Acad: 0.00 Sumr: 0.00	
Support: <input checked="" type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support Project/Proposal Title: Florida Georgia Louis Stokes Alliance for Minority Participation	
Source of Support: NSF Total Award Amount: \$ 83,000 Total Award Period Covered: 01/31/05 - 06/30/09 Location of Project: University of South Florida Person-Months Per Year Committed to the Project. Cal:0.00 Acad: 1.00 Sumr: 0.25	
Support: <input checked="" type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support Project/Proposal Title: Florida Georgia Louis Stokes Alliance for Minority Participation	
Source of Support: State of Florida Total Award Amount: \$ 133,178 Total Award Period Covered: 03/01/04 - 06/03/09 Location of Project: University of South Florida Person-Months Per Year Committed to the Project. Cal:0.00 Acad: 0.20 Sumr: 0.20	
Support: <input type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support Project/Proposal Title:	
Source of Support: Total Award Amount: \$ Total Award Period Covered: Location of Project: Person-Months Per Year Committed to the Project. Cal: Acad: Sumr:	
Support: <input type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support Project/Proposal Title:	
Source of Support: Total Award Amount: \$ Total Award Period Covered: Location of Project: Person-Months Per Year Committed to the Project. Cal: Acad: Summ:	

*If this project has previously been funded by another agency, please list and furnish information for immediately preceding funding period.

Current and Pending Support

(See GPG Section II.C.2.h for guidance on information to include on this form.)

The following information should be provided for each investigator and other senior personnel. Failure to provide this information may delay consideration of this proposal.	
Investigator: Jennifer Lewis	Other agencies (including NSF) to which this proposal has been/will be submitted.
Support: <input type="checkbox"/> Current <input checked="" type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support Project/Proposal Title: Alliance for the Advancement of Florida's Academic Women in Chemistry and Engineering (AAFAWCE)	
Source of Support: NSF Total Award Amount: \$ 0 Total Award Period Covered: 08/01/09 - 07/31/12 Location of Project: University of South Florida Person-Months Per Year Committed to the Project. Cal:0.00 Acad:0.09 Sumr: 0.00	
Support: <input type="checkbox"/> Current <input checked="" type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support Project/Proposal Title: A CCLI Proposal Preparation Workshop for Two-Year College Chemistry Faculty	
Source of Support: NSF CCLI Total Award Amount: \$ 49,681 Total Award Period Covered: 03/17/09 - 05/16/10 Location of Project: University of South Florida Person-Months Per Year Committed to the Project. Cal:0.00 Acad:0.00 Sumr: 0.50	
Support: <input type="checkbox"/> Current <input checked="" type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support Project/Proposal Title: Advancing Chemistry by Enhancing Learning in the Laboratory	
Source of Support: NSF-CCLI Total Award Amount: \$ 63,807 Total Award Period Covered: 07/01/09 - 09/30/11 Location of Project: University of South Florida Person-Months Per Year Committed to the Project. Cal:0.00 Acad:0.00 Sumr: 0.57	
Support: <input checked="" type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support Project/Proposal Title: The POGIL Project	
Source of Support: NSF-CCLI Total Award Amount: \$ 200,846 Total Award Period Covered: 10/01/06 - 09/30/10 Location of Project: University of South Florida Person-Months Per Year Committed to the Project. Cal:0.00 Acad:0.00 Sumr: 1.00	
Support: <input type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support Project/Proposal Title:	
Source of Support: Total Award Amount: \$ Total Award Period Covered: Location of Project: Person-Months Per Year Committed to the Project. Cal: Acad: Summ:	
*If this project has previously been funded by another agency, please list and furnish information for immediately preceding funding period.	

Current and Pending Support

(See GPG Section II.C.2.h for guidance on information to include on this form.)

The following information should be provided for each investigator and other senior personnel. Failure to provide this information may delay consideration of this proposal.	
Investigator: William Tyson	Other agencies (including NSF) to which this proposal has been/will be submitted.
<p>Support: <input type="checkbox"/> Current <input checked="" type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support</p> <p>Project/Proposal Title: Alliance for the Advancement of Florida's Academic Women in Chemistry and Engineering (AAFAWCE)</p> <p>Source of Support: NSF</p> <p>Total Award Amount: \$ 0 Total Award Period Covered: 08/01/09 - 07/31/12</p> <p>Location of Project: University of South Florida</p> <p>Person-Months Per Year Committed to the Project. Cal:0.00 Acad: 0.09 Sumr: 0.00</p>	
<p>Support: <input checked="" type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support</p> <p>Project/Proposal Title: On-Track STEM Careers: Access to Rigorous and Relevant STEM Courses in Florida's High Schools</p> <p>Source of Support: NSF</p> <p>Total Award Amount: \$ 996,966 Total Award Period Covered: 08/01/08 - 07/31/11</p> <p>Location of Project: University of South Florida</p> <p>Person-Months Per Year Committed to the Project. Cal:0.00 Acad: 0.00 Sumr: 1.50</p>	
<p>Support: <input checked="" type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support</p> <p>Project/Proposal Title: Studies: Expanding Opportunities for Innovative and Technology-Rich STEM Experience through Florida's High School Career Academies</p> <p>Source of Support: NSF</p> <p>Total Award Amount: \$ 1,449,911 Total Award Period Covered: 10/01/08 - 09/30/11</p> <p>Location of Project: University of South Florida</p> <p>Person-Months Per Year Committed to the Project. Cal:0.00 Acad: 0.00 Sumr: 1.50</p>	
<p>Support: <input type="checkbox"/> Current <input checked="" type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support</p> <p>Project/Proposal Title: CAREER: Roots of STEM: High School and Community College Pathways to University STEM Major Coursetaking</p> <p>Source of Support: NSF ROLE</p> <p>Total Award Amount: \$ 604,189 Total Award Period Covered: 05/01/08 - 05/01/13</p> <p>Location of Project: University of South Florida</p> <p>Person-Months Per Year Committed to the Project. Cal:0.00 Acad: 4.50 Sumr: 1.50</p>	
<p>Support: <input type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support</p> <p>Project/Proposal Title:</p> <p>Source of Support:</p> <p>Total Award Amount: \$ Total Award Period Covered:</p> <p>Location of Project:</p> <p>Person-Months Per Year Committed to the Project. Cal: Acad: Summ:</p>	
*If this project has previously been funded by another agency, please list and furnish information for immediately preceding funding period.	

Current and Pending Support

(See GPG Section II.C.2.h for guidance on information to include on this form.)

The following information should be provided for each investigator and other senior personnel. Failure to provide this information may delay consideration of this proposal.	
Investigator: Angel Kwolek-Folland	Other agencies (including NSF) to which this proposal has been/will be submitted.
Support: <input checked="" type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support Project/Proposal Title: None	
Source of Support: Total Award Amount: \$ 0 Total Award Period Covered: 01/01/00 - 01/01/00 Location of Project: Person-Months Per Year Committed to the Project. Cal:0.00 Acad: 0.00 Sumr: 0.00	
Support: <input type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support Project/Proposal Title:	
Source of Support: Total Award Amount: \$ Total Award Period Covered: Location of Project: Person-Months Per Year Committed to the Project. Cal: Acad: Sumr:	
Support: <input type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support Project/Proposal Title:	
Source of Support: Total Award Amount: \$ Total Award Period Covered: Location of Project: Person-Months Per Year Committed to the Project. Cal: Acad: Sumr:	
Support: <input type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support Project/Proposal Title:	
Source of Support: Total Award Amount: \$ Total Award Period Covered: Location of Project: Person-Months Per Year Committed to the Project. Cal: Acad: Sumr:	
Support: <input type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support Project/Proposal Title:	
Source of Support: Total Award Amount: \$ Total Award Period Covered: Location of Project: Person-Months Per Year Committed to the Project. Cal: Acad: Summ:	

*If this project has previously been funded by another agency, please list and furnish information for immediately preceding funding period.

Current and Pending Support

(See GPG Section II.D.8 for guidance on information to include on this form.)

The following information should be provided for each investigator and other senior personnel. Failure to provide this information may delay consideration of this proposal.

Investigator: Cammy Abernathy	Other agencies (including NSF) to which this proposal has been/will be submitted.
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Support: Current Pending Submission Planned in Near Future *Transfer of Support
 Project/Proposal A 21st Century Approach to Electronic Device Reliability

Source of Support: AFOSR-MURI

Total Award Amount: \$756,853

Total Award Period Covered: 05/15/08-05/14/11

Location of Project: University of Florida

Person-Months Per Year Committed to the Project.

Cal: 1.00

Acad:

Sumr:

Support: Current Pending Submission Planned in Near Future *Transfer of Support
 Project/Proposal Title: : 20 GHZ GAN Wide Band Receiver

Source of Support: ONR

Total Award Amount: \$120,000

Total Award Period Covered: 12/11/06 – 06/30/09

Location of Project: University of Florida

Person-Months Per Year Committed to the Project.

Cal: 0.50

Acad:

Sumr:

Support: Current Pending Submission Planned in Near Future *Transfer of Support
 Project/Proposal Title:

Source of Support:

Total Award Amount: \$

Total Award Period Covered:

Location of Project: University of Florida

Person-Months Per Year Committed to the Project.

Cal:

Acad:

Sumr:

Support: Current Pending Submission Planned in Near Future *Transfer of Support
 Project/Proposal Title:

Source of Support:

Total Award Amount: \$

Total Award Period Covered:

Location of Project: University of Florida

Person-Months Per Year Committed to the Project.

Cal:

Acad:

Sumr:

Support: Current Pending Submission Planned in Near Future *Transfer of Support
 Project/Proposal Title:

Source of Support:

Total Award Amount: \$

Total Award Period Covered:

Location of Project:

Person-Months Per Year Committed to the Project.

Cal:

Acad:

Sumr:

*If this project has previously been funded by another agency, please list and furnish information for immediately preceding funding period.



Current and Pending Support

(See GPG Section II.D.8 for guidance on information to include on this form.)

The following information should be provided for each investigator and other senior personnel. Failure to provide this information may delay consideration of this proposal.				
Investigator: Anne E. Donnelly	Other agencies (including NSF) to which this proposal has been/will be submitted.			
Support: <input checked="" type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support Project/Proposal Title: The South East Alliance for Graduate Education and the Professoriate (SEAGEP)				
Source of Support: NSF Total Award Amount: \$6,879,599 Total Award Period Covered: 03/01/05 – 02/28/10 Location of Project: University of Florida Person-Months Per Year Committed to the Project. Cal: 10 Acad: Sumr:				
Support: <input type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support Project/Proposal Title:				
Source of Support: Total Award Amount: Total Award Period Covered: Location of Project: University of Florida Person-Months Per Year Committed to the Project. Cal: . Acad: Sumr:				
Support: <input type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support Project/Proposal Title				
Source of Support: Total Award Amount: Total Award Period Covered: Location of Project: Person-Months Per Year Committed to the Project. Cal: Acad: Sumr:				
Support: <input type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support Project/Proposal Title :				
Source of Support: Total Award Amount: Total Award Period Covered: Location of Project: Person-Months Per Year Committed to the Project. N/A Cal: . Acad: Sumr:				
*If this project has previously been funded by another agency, please list and furnish information for immediately preceding funding period.				

Current and Pending Support

(See GPG Section II.D.8 for guidance on information to include on this form.)

The following information should be provided for each investigator and other senior personnel. Failure to provide this information may delay consideration of this proposal.			
Investigator: Lisa McElwee-White	Other agencies (including NSF) to which this proposal has		
Support: <input checked="" type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support			
Project/Proposal Title: Alternative Chemistries for Barrier Materials in Cu Metallization (PI: Lisa McElwee-White – only LMW share shown below)			
Source of Support: NSF-CRC			
Total Award Amount: 932,962		Total Award Period Covered: 9/01/03 - 8/31/09 (on no-cost extension)	
Location of Project: University of Florida			
Person-Months Per Year Committed to the		Cal: .	Acad: Sumr: 1.5
Support: <input checked="" type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support			
Project/Proposal Title: University of Florida Beckman Scholars Program (PI: Randolph S. Duran, LMW is co-PI)			
Source of Support: Arnold and Mabel Beckman Foundation			
Total Award Amount: 115,800		Total Award Period Covered: 7/1/07 - 6/30/10	
Location of Project: University of Florida			
Person-Months Per Year Committed to the		Cal: .	Acad: Sumr: 0.5
Support: <input checked="" type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support			
Project/Proposal Title: HHMI Distinguished Mentor Award (via UF Science for Life Program)			
Source of Support: Howard Hughes Medical Institute			
Total Award Amount: 10,000		Total Award Period Covered: 1/1/07 – 12/31/09	
Location of Project:			
Person-Months Per Year Committed to the		Cal: .	Acad: Sumr:
Support: <input checked="" type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support			
Project/Proposal Title: Metal-Free Oxidative Carbonylation Reactions			
Source of Support: Green Chemistry Institute – Petroleum Research Fund			
Total Award Amount: 60,000		Total Award Period Covered: 2/1/08 – 1/31/10	
Location of Project: University of Florida			
Person-Months Per Year Committed to the		Cal:	Acad: Sumr: 0.5
Support: <input checked="" type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support			
Project/Proposal Title : Synthesis and Characterization of Size and Site Selected Metal Nanocatalysts (PI: Jason Weaver, LMW is co-PI – only LMW share shown below)			
Source of Support: UF Opportunity Incentive Seed Fund			
Total Award Amount: 15,000		Total Award Period Covered: 5/01/08 – 4/30/09	
Location of Project: University of Florida			
Person-Months Per Year Committed to the		Cal:	Acad: Sumr: 0.2
*If this project has previously been funded by another agency, please list and furnish information for immediately preceding funding period.			

Current and Pending Support

(See GPG Section II.D.8 for guidance on information to include on this form.)

The following information should be provided for each investigator and other senior personnel. Failure to provide this information may delay consideration of this proposal.			
Investigator: Lisa McElwee-White	Other agencies (including NSF) to which this proposal has		
Support: <input checked="" type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support			
Project/Proposal Title: MRI: Acquisition of a Dual Source X-Ray Diffraction Instrument (PI: Daniel R. Talham, LMW is co-PI)			
Source of Support: NSF-MRI			
Total Award Amount: : 261,619		Total Award Period Covered: 7/1/08 – 6/30/11	
Location of Project: University of Florida			
Person-Months Per Year Committed to the		Cal: .	Acad:
Sumr:			
Support: <input checked="" type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support			
Project/Proposal Title: Catalytic Enantioselective Synthesis of Anti-Cancer Natural Products (PI: Sukwon Hong, LMW is mentor/co-PI – only LMW share shown below)			
Source of Support: Florida Dept. of Health – James & Esther King Biomedical Research Program			
Total Award Amount: 3,395		Total Award Period Covered: 7/1/08 – 6/30/09	
Location of Project: University of Florida			
Person-Months Per Year Committed to the		Cal: .	Acad:
Sumr: 0.3			
Support: <input type="checkbox"/> Current <input checked="" type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support			
Project/Proposal Title: Mechanism-Based Approaches for CVD/ALD of Cu Barriers (PI: Lisa McElwee-White)			
Source of Support: NSF			
Total Award Amount: 1,098,737		Total Award Period Covered: 4/1/09-8/31/12	
Location of Project: University of Florida			
Person-Months Per Year Committed to the		Cal: .	Acad:
Sumr: 1.0			
Support: <input type="checkbox"/> Current <input checked="" type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support			
Project/Proposal Title: EFRC: Electron-Photon-Ion Interface Center (PI: Eric Wachsman, LMW is co-PI – LMW share shown below)			
Source of Support: DOE			
Total Award Amount: 1,708,885		Total Award Period Covered: 7/1/2009-06/30/14	
Location of Project: University of Florida			
Person-Months Per Year Committed to the		Cal:	Acad:
Sumr: 3.0			
Support: <input type="checkbox"/> Current <input checked="" type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support			
Project/Proposal Title : CCI I: Center for Electronic Materials for Tomorrow: Chemical Design for Moore's Law and Beyond (PI: Lisa McElwee-White – total center costs shown below)			
Source of Support: NSF			
Total Award Amount: 1,500,000		Total Award Period Covered: 9/1/09 – 8/31/12	
Location of Project:			
Person-Months Per Year Committed to the		Cal:	Acad:
Sumr: 1.0			
*If this project has previously been funded by another agency, please list and furnish information for immediately preceding funding period.			

Current and Pending Support

(See GPG Section II.D.8 for guidance on information to include on this form.)

The following information should be provided for each investigator and other senior personnel. Failure to provide this information may delay consideration of this proposal.			
Investigator: Lisa McElwee-White	Other agencies (including NSF) to which this proposal has		
Support: <input type="checkbox"/> Current <input checked="" type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support Project/Proposal Title: Studies on Spirastrellolide A to Probe the Significance of PP2A in Tumorigenesis (PI: Aaron Aponick, LMW is mentor/co-PI – only LMW share shown below)			
Source of Support: Florida Dept. of Health – James & Esther King Biomedical Research Program Total Award Amount: : 3,635 Total Award Period Covered: 7/1/09 – 6/30/10 Location of Project: University of Florida Person-Months Per Year Committed to the Cal: . Acad: Sumr: 0.3			
Support: <input type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support Project/Proposal Title:			
Source of Support: Total Award Amount: Total Award Period Covered: Location of Project: Person-Months Per Year Committed to the Cal: . Acad: Sumr:			
Support: <input type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support Project/Proposal Title:			
Source of Support: Total Award Amount: Total Award Period Covered: Location of Project: Person-Months Per Year Committed to the Cal: . Acad: Sumr:			
Support: <input type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support Project/Proposal Title:			
Source of Support: Total Award Amount: Total Award Period Covered: Location of Project: Person-Months Per Year Committed to the Cal: Acad: Sumr:			
Support: <input type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support Project/Proposal Title :			
Source of Support: Total Award Amount: Total Award Period Covered: Location of Project: Person-Months Per Year Committed to the Cal: Acad: Sumr:			

*If this project has previously been funded by another agency, please list and furnish information for immediately preceding funding period.

Current and Pending Support

(See GPG Section II.C.2.h for guidance on information to include on this form.)

The following information should be provided for each investigator and other senior personnel. Failure to provide this information may delay consideration of this proposal.	
Investigator: Rufina Alamo	Other agencies (including NSF) to which this proposal has been/will be submitted.
Support: <input checked="" type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support Project/Proposal Title: Characterization of the Branching Microstructure of a New Ethylene 1-Hexene Copolymer and Impact on Film Properties Source of Support: ExxonMobil Co. Total Award Amount: \$ 85,000 Total Award Period Covered: 09/01/06 - 06/30/09 Location of Project: Florida State University Person-Months Per Year Committed to the Project. Cal:0.00 Acad: 0.50 Sumr: 0.50	
Support: <input checked="" type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support Project/Proposal Title: Partnership for Research and Education in Materials Between FAMU and Carnegie Mellon University (PI: P. Kalu, three additional Co-PIs) Source of Support: NSF (DMR, Office of Special Programs) Total Award Amount: \$ 2,700,000 Total Award Period Covered: 03/01/04 - 02/28/09 Location of Project: Florida Agricultural and Mechanical University Person-Months Per Year Committed to the Project. Cal:0.00 Acad: 0.50 Sumr: 0.50	
Support: <input checked="" type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support Project/Proposal Title: FRG:GOALI: Collaborative Research: The Role of Polymer Molecular Architecture in Controlling Morphology in Quiescent and Flow-Induced Crystallization Source of Support: NSF-DMR Total Award Amount: \$ 360,000 Total Award Period Covered: 07/15/07 - 05/01/11 Location of Project: FAMU-FSU College of Engineering Person-Months Per Year Committed to the Project. Cal:0.00 Acad: 1.50 Sumr: 1.00	
Support: <input checked="" type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support Project/Proposal Title: NUE: NanoCORE (Nanotechnology Concepts, Opportunities, Research and Education) at the FAMU-FSU College of Engineering (PI: O. Englander, three additional Co-PIs) Source of Support: NSF. Directorate of Education in Engineering Total Award Amount: \$ 199,874 Total Award Period Covered: 01/01/09 - 12/31/10 Location of Project: Florida State University Person-Months Per Year Committed to the Project. Cal:0.00 Acad: 0.20 Sumr: 0.00	
Support: <input checked="" type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support Project/Proposal Title: Crystallization Behavior and Structural Properties of Model Semicrystalline Polyolefins Source of Support: NSF -DMR (Polymers Program) Total Award Amount: \$ 312,000 Total Award Period Covered: 09/01/05 - 08/31/09 Location of Project: Florida Agricultural and Mechanical University Person-Months Per Year Committed to the Project. Cal:0.00 Acad: 1.00 Summ: 1.00	
*If this project has previously been funded by another agency, please list and furnish information for immediately preceding funding period.	

Current and Pending Support

(See GPG Section II.C.2.h for guidance on information to include on this form.)

The following information should be provided for each investigator and other senior personnel. Failure to provide this information may delay consideration of this proposal.	
Investigator: Rufina Alamo	Other agencies (including NSF) to which this proposal has been/will be submitted.
Support: <input type="checkbox"/> Current <input checked="" type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support Project/Proposal Title: Collaborative Research: Alliance for Advancement of Florida's Academic Women in Chemistry and Engineering (AAFAWCE) Source of Support: NSF Total Award Amount: \$ 123,408 Total Award Period Covered: 08/01/09 - 07/31/12 Location of Project: Florida State University Person-Months Per Year Committed to the Project. Cal:0.00 Acad: 0.18 Sumr: 0.18	
Support: <input type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support Project/Proposal Title: Source of Support: Total Award Amount: \$ Total Award Period Covered: Location of Project: Person-Months Per Year Committed to the Project. Cal: Acad: Sumr:	
Support: <input type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support Project/Proposal Title: Source of Support: Total Award Amount: \$ Total Award Period Covered: Location of Project: Person-Months Per Year Committed to the Project. Cal: Acad: Sumr:	
Support: <input type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support Project/Proposal Title: Source of Support: Total Award Amount: \$ Total Award Period Covered: Location of Project: Person-Months Per Year Committed to the Project. Cal: Acad: Sumr:	
Support: <input type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support Project/Proposal Title: Source of Support: Total Award Amount: \$ Total Award Period Covered: Location of Project: Person-Months Per Year Committed to the Project. Cal: Acad: Summ:	

*If this project has previously been funded by another agency, please list and furnish information for immediately preceding funding period.

Current and Pending Support

(See GPG Section II.C.2.h for guidance on information to include on this form.)

The following information should be provided for each investigator and other senior personnel. Failure to provide this information may delay consideration of this proposal.	
Investigator: Simone Hruda	Other agencies (including NSF) to which this proposal has been/will be submitted.
Support: <input type="checkbox"/> Current <input checked="" type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support Project/Proposal Title: Alliance for the Advancement of Florida's Academic Women in Chemistry and Engineering (AAFAWCE)	
Source of Support: National Science Foundation Total Award Amount: \$ 58,441 Total Award Period Covered: 08/01/09 - 07/31/12 Location of Project: Florida Agricultural and Mechanical University Person-Months Per Year Committed to the Project. Cal:0.00 Acad:0.02 Sumr: 0.30	
Support: <input checked="" type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support Project/Proposal Title: Partnership for Research and Education in Materials Between FAMU and CMU	
Source of Support: National Science Foundation Total Award Amount: \$ 2,668,843 Total Award Period Covered: 03/01/04 - 09/30/09 Location of Project: Florida Agricultural and Mechanical University Person-Months Per Year Committed to the Project. Cal:0.00 Acad:0.05 Sumr: 0.50	
Support: <input type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support Project/Proposal Title:	
Source of Support: Total Award Amount: \$ Total Award Period Covered: Location of Project: Person-Months Per Year Committed to the Project. Cal: Acad: Sumr:	
Support: <input type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support Project/Proposal Title:	
Source of Support: Total Award Amount: \$ Total Award Period Covered: Location of Project: Person-Months Per Year Committed to the Project. Cal: Acad: Sumr:	
Support: <input type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support Project/Proposal Title:	
Source of Support: Total Award Amount: \$ Total Award Period Covered: Location of Project: Person-Months Per Year Committed to the Project. Cal: Acad: Summ:	

*If this project has previously been funded by another agency, please list and furnish information for immediately preceding funding period.

Current and Pending Support

(See GPG Section II.C.2.h for guidance on information to include on this form.)

The following information should be provided for each investigator and other senior personnel. Failure to provide this information may delay consideration of this proposal.	
Investigator: Ngozi Ugochukwu	Other agencies (including NSF) to which this proposal has been/will be submitted.
Support: <input type="checkbox"/> Current <input checked="" type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support Project/Proposal Title: Alliance for the Advancement of Florida's Academic Women in Chemistry and Engineering (AAFAWCE)	
Source of Support: National Science Foundation Total Award Amount: \$ 58,441 Total Award Period Covered: 08/01/09 - 07/31/12 Location of Project: Florida Agricultural and Mechanical University Person-Months Per Year Committed to the Project. Cal:0.00 Acad:0.02 Sumr: 0.30	
Support: <input type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support Project/Proposal Title:	
Source of Support: Total Award Amount: \$ Total Award Period Covered: Location of Project: Person-Months Per Year Committed to the Project. Cal: Acad: Sumr:	
Support: <input type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support Project/Proposal Title:	
Source of Support: Total Award Amount: \$ Total Award Period Covered: Location of Project: Person-Months Per Year Committed to the Project. Cal: Acad: Sumr:	
Support: <input type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support Project/Proposal Title:	
Source of Support: Total Award Amount: \$ Total Award Period Covered: Location of Project: Person-Months Per Year Committed to the Project. Cal: Acad: Sumr:	
Support: <input type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support Project/Proposal Title:	
Source of Support: Total Award Amount: \$ Total Award Period Covered: Location of Project: Person-Months Per Year Committed to the Project. Cal: Acad: Summ:	

*If this project has previously been funded by another agency, please list and furnish information for immediately preceding funding period.

Current and Pending Support

The following information should be provided for each investigator and other senior personnel. Failure to provide this information may delay consideration of this proposal.

Investigator: Berrin Tansel	Other agencies (including NSF) to which this proposal has been/will be submitted. This proposal is being submitted only to NSF
Support: <input checked="" type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support	
Project/Proposal Title: Degradation of Signal Qual. of Str. Health Mon. with Time	
Source of Support: General Dyn. Info. Tech.	
Total Award Amount: \$ 115,000 Total Award Period Covered: 08/01/08-08/01/11	
Location of Project: Miami, FL	
Person-Months Per Year Committed to the Project. Cal: 0.0 Acad: 0 Sumr: 0.05	
Support: <input type="checkbox"/> Current <input checked="" type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support	
Project/Proposal Title: Capacity Building in Biotech and Natural Res Conserv.	
Source of Support: USDA	
Total Award Amount: \$ 238,180 Total Award Period Covered: 5/1/09-4/30/11	
Location of Project: Miami, FL	
Person-Months Per Year Committed to the Project. Cal: 0.0 Acad: 0 Sumr: 0.8	
Support: <input checked="" type="checkbox"/> Current <input type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support	
Project/Proposal Title: Operational Performance Testing at MDWASD Wastewater Trmt Fac.	
Source of Support: MDWASD	
Total Award Amount: \$ 20,000 Total Award Period Covered: 10/15/09-10/15/10	
Location of Project: Miami, FL	
Person-Months Per Year Committed to the Project. Cal: 0 Acad: 0 Sumr: 0	
Support: <input type="checkbox"/> Current <input checked="" type="checkbox"/> Pending <input type="checkbox"/> Submission Planned in Near Future <input type="checkbox"/> *Transfer of Support	
Project/Proposal Title: ADVANCE PAID	
Source of Support: NSF	
Total Award Amount: \$ 50,613 Total Award Period Covered: 08/01/09-07/31/12	
Location of Project: Miami, FL	
Person-Months Per Year Committed to the Project. Cal: 0 Acad: 0 Sumr: 0.4	

Current and Pending Support

The following information should be provided for each investigator and other senior personnel. Failure to provide this information may delay consideration of this proposal.

Investigator: Jaroslava Miksovska	Other agencies (including NSF) to which this proposal has been/will be submitted.
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Support: Current Pending Submission Planned in Near Future *Transfer of Support
 Project/Proposal Title: **Thermodynamic Profiles for Calcium Signaling**

Source of Support: **American Heart Association**
 Total Award Amount: **\$121,000** Total Award Period Covered: **07/01/06 - 06/30/09**
 Location of Project: **Florida International University**
 Person-Months Per Year Committed to the Cal: Acad: **2.00** Sumr: **2.00**

Support: Current Pending Submission Planned in Near Future *Transfer of Support
 Project/Proposal Title: **ADVANCE PAID**

Source of Support **National Science Foundation**
 Total Award Amount: **\$50,612** Total Award Period Covered: **08/01/09-07/31/13**
 Location of Project: **Florida International University**
 Person-Months Per Year Committed to the Cal: Acad: Sumr: **0.4**

Support: Current Pending Submission Planned in Near Future *Transfer of Support
 Project/Proposal Title:

Source of Support:
 Total Award Amount: Total Award Period Covered:
 Location of Project:
 Person-Months Per Year Committed to the Cal: **0** Acad: Sumr:

Support: Current Pending Submission Planned in Near Future *Transfer of Support
 Project/Proposal Title:

Source of Support:
 Total Award Amount: \$ Total Award Period Covered:
 Location of Project:
 Person-Months Per Year Committed to the Cal: Acad: Sumr:

Support: Current Pending Submission Planned in Near Future *Transfer of Support
 Project/Proposal Title:

Source of Support:
 Total Award Amount: \$ Total Award Period Covered:
 Location of Project:
 Person-Months Per Year Committed to the Cal: Acad: Sumr:

*If this project has previously been funded by another agency, please list and furnish information for immediately preceding funding period.

Current and Pending Support

The following information should be provided for each investigator and other senior personnel. Failure to provide this information may delay consideration of this proposal.

Investigator: Gustavo Roig	Other agencies (including NSF) to which this proposal has been/will be submitted.
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Support: Current Pending Submission Planned in Near Future *Transfer of Support
 Project/Proposal Title: **JETS Unite**

Source of Support: **JETS/US Army**
 Total Award Amount: \$30,000 Total Award Period Covered: **05/01/08 - 05/15/09**
 Location of Project: **Florida International University**
 Person-Months Per Year Committed to the Cal: Acad: 0.02 Sumr: 2.00

Support: Current Pending Submission Planned in Near Future *Transfer of Support
 Project/Proposal Title: **FLAME**

Source of Support: **MDCPS**
 Total Award Amount: \$66,000 Total Award Period Covered: **08/01/08 - 07/31/09**
 Location of Project: **Florida International University**
 Person-Months Per Year Committed to the Cal: 0.02 Acad: Sumr:

Support: Current Pending Submission Planned in Near Future *Transfer of Support
 Project/Proposal Title: **ADVANCE PAID**

Source of Support: **National Science Foundation**
 Total Award Amount: \$50,613 Total Award Period Covered: **08/01/08-07/31/12**
 Location of Project: **Florida International University**
 Person-Months Per Year Committed to the Cal: 0 Acad: Sumr: 0.2

Support: Current Pending Submission Planned in Near Future *Transfer of Support
 Project/Proposal Title: **FGSAMP/NSF**

Source of Support: **NSF/FAMU**
 Total Award Amount: \$46,000 Total Award Period Covered: **08/31/08-10/31/09**
 Location of Project: **Florida International University**
 Person-Months Per Year Committed to the Cal: Acad: 1 Sumr:

Support: Current Pending Submission Planned in Near Future *Transfer of Support
 Project/Proposal Title: **GEAR UP EZ**

Source of Support: **DOE**
 Total Award Amount: \$1,177,598 Total Award Period Covered: **09/01/08-08/31/09**
 Location of Project:
 Person-Months Per Year Committed to the Cal: Acad: 2 Sumr:

*If this project has previously been funded by another agency, please list and furnish information for immediately preceding funding period.

Current and Pending Support

The following information should be provided for each investigator and other senior personnel. Failure to provide this information may delay consideration of this proposal.

Investigator: Gustavo Roig	Other agencies (including NSF) to which this proposal has been/will be submitted.
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Support: Current Pending Submission Planned in Near Future *Transfer of Support
 Project/Proposal Title: **Hardware-Software Integration for Design**

Source of Support: **NSF**
 Total Award Amount: \$1,000,000 Total Award Period Covered: **05/01/08 - 05/15/09**
 Location of Project: **Florida International University**
 Person-Months Per Year Committed to the Cal: Acad: **1** Sumr: **0**

Support: Current Pending Submission Planned in Near Future *Transfer of Support
 Project/Proposal Title: **ENLACE MIAMI**

Source of Support: **The Children Trust**
 Total Award Amount: \$170,000 Total Award Period Covered: **08/01/08 - 07/31/09**
 Location of Project: **Florida International University**
 Person-Months Per Year Committed to the Cal: **0.02** Acad: Sumr:

Support: Current Pending Submission Planned in Near Future *Transfer of Support
 Project/Proposal Title: **SEAGEP**

Source of Support: **National Science Foundation**
 Total Award Amount: \$67,067 Total Award Period Covered:
 Location of Project: **Florida International University**
 Person-Months Per Year Committed to the Cal: **0** Acad: Sumr: **0.**

Support: Current Pending Submission Planned in Near Future *Transfer of Support
 Project/Proposal Title:

Source of Support:
 Total Award Amount: \$ Total Award Period Covered:
 Location of Project:
 Person-Months Per Year Committed to the Cal: Acad: **0** Sumr:

Support: Current Pending Submission Planned in Near Future *Transfer of Support
 Project/Proposal Title:

Source of Support: **DOR**
 Total Award Amount: \$ Total Award Period Covered: **09/01/08-08/31/09**
 Location of Project:
 Person-Months Per Year Committed to the Cal: Acad: Sumr:

*If this project has previously been funded by another agency, please list and furnish information for immediately preceding funding period.

FACILITIES, EQUIPMENT & OTHER RESOURCES

Office:

Alliance for Applied Research in Education and Anthropology (AAREA) is housed in a suite of 13 offices with a conference room and photocopy room. AAREA was formed by Dr. Kathryn Borman in 2005 and is a part of the Department of Anthropology in the College of Arts and Sciences at the University of South Florida.

Major Equipment:

Alliance for Applied Research in Education and Anthropology (AAREA): The following equipment is available for use in the proposed project:

1. Computers: Thirteen networked Intel Pentium processor personal computers and six laptop computers.
2. Additional Office Equipment: One copier, two fax machines, two laser printers (one with color), a scanner, at&t digital telephone service, teleconferencing capabilities, and working facilities for a minimum of thirteen research members.

Other Resources:

Alliance for Applied Research in Education and Anthropology (AAREA) has other resources available for use in the proposed project:

1. A full-time support staff consisting of an administrative assistants, senior secretary and office manager.
2. Computer/technology support is available for installation and repair of computers and other office equipment.
3. A conference room with projector and teleconferencing capabilities.

FACILITIES, EQUIPMENT & OTHER RESOURCES

FACILITIES: Identify the facilities to be used at each performance site listed and, as appropriate, indicate their capacities, pertinent capabilities, relative proximity, and extent of availability to the project. Use "Other" to describe the facilities at any other performance sites listed and at sites for field studies. USE additional pages as necessary.

Laboratory:

Clinical:

Animal:

Computer: The project will include a web presence and part time support will ensure this vital means of communicating program opportunities for faculty will be available.

Office: This project will be housed in the Associate Provost's Office for Faculty Development. Full office support for the management of the project will be provided.

Other:

MAJOR EQUIPMENT: List the most important items available for this project and, as appropriate identifying the location and pertinent capabilities of each.

OTHER RESOURCES: Provide any information describing the other resources available for the project. Identify support services such as consultant, secretarial, machine shop, and electronics shop, and the extent to which they will be available for the project. Include an explanation of any consortium/contractual arrangements with other organizations.

FACILITIES, EQUIPMENT & OTHER RESOURCES

FACILITIES: Identify the facilities to be used at each performance site listed and, as appropriate, indicate their capacities, pertinent capabilities, relative proximity, and extent of availability to the project. Use "Other" to describe the facilities at any other performance sites listed and at sites for field studies. USE additional pages as necessary.

Laboratory:

Clinical:

Animal:

Computer: We have modern computer facilities for PI, co-PI, and administrative assistant.

Office: Gilmer's office and library are in 214 DLC (Dittmer Laboratory of Chemistry) and 213 DLC, respectively. Desk for the administrative assistant is in 210 DLC. Alamo's office is in A 170 CEB (FAMU/FSU College of Engineering).

Other: At FSU, we have access to meeting rooms for the ADVANCE workshops and monthly mentoring meeting and lectures in the Student Life Building. For smaller groups up to 15 individuals we can use a conference room in 120 DLC.
Three conference rooms are available at the FAMU-FSU College of

MAJOR EQUIPMENT: List the most important items available for this project and, as appropriate identifying the location and pertinent capabilities of each.

When needed if not provided in the meeting rooms, Gilmer has her own high-quality LCD projector and portable computer.

OTHER RESOURCES: Provide any information describing the other resources available for the project. Identify support services such as consultant, secretarial, machine shop, and electronics shop, and the extent to which they will be available for the project. Include an explanation of any consortium/contractual arrangements with other organizations.

The Chemistry and Biochemistry Department has secretarial support and a machine shop and an electronics shop available.

We are working with Nobel laureate and Professor Harold Kroto to utilize his Global Educational Outreach (GEO) Web site (found at <http://geoset.group.shef.ac.uk/>) for uploading videostreaming for dissemination of workshops on Mentoring Faculty, Recruiting Women

FACILITIES, EQUIPMENT & OTHER RESOURCES

Continuation Page:

OFFICE FACILITIES (continued):

OTHER FACILITIES (continued):

engineering. One meeting room has Vcon facilities for fast web-teleconferencing to facilitate an interactive environment within participant units.

OTHER RESOURCES (continued):

Academics, and Transformational Leadership. Other lectures at Florida A&M University and FSU can be videostreamed as well. We have a superb studio as well as portable camera equipment for this purpose.

FACILITIES, EQUIPMENT & OTHER RESOURCES

FACILITIES: Identify the facilities to be used at each performance site listed and, as appropriate, indicate their capacities, pertinent capabilities, relative proximity, and extent of availability to the project. Use "Other" to describe the facilities at any other performance sites listed and at sites for field studies. USE additional pages as necessary.

Laboratory:

Clinical:

Animal:

Computer: University faculty have computers for communication, data analysis, and document preparation.

Office:

Other: FAMU has meeting rooms with AV equipment and computers for workshops and seminars.

MAJOR EQUIPMENT: List the most important items available for this project and, as appropriate identifying the location and pertinent capabilities of each.

OTHER RESOURCES: Provide any information describing the other resources available for the project. Identify support services such as consultant, secretarial, machine shop, and electronics shop, and the extent to which they will be available for the project. Include an explanation of any consortium/contractual arrangements with other organizations.

Facilities, Equipment, and Other Resources Available

A description of the facilities and equipment available for use during this project is provided below.

A. Analytical Capabilities and Laboratory Facilities

I. Florida International University

Committed to both quality and access, FIU has the research facilities and equipment necessary to conduct the research activities to be undertaken. The research facilities located in the College of Engineering and Computing and the College of Arts and Sciences are equipped and fully operational with the necessary instruments, equipment, support staff and training programs to conduct the research proposed. A description of the specialized research centers are provided below.

Research Centers and Institutes

The College of Engineering and Computing is home to innovative funded research. Research efforts span from single discipline to multidisciplinary research. Thus, the College, through its research centers and institutes, has established collaborative and cooperative partnerships with other units in the university as well as with local industry. The research units involved in these efforts include:

- Advanced Materials Engineering Research Institute (AMERI)
- Biomedical Engineering Institute (BEI)
- Cardiovascular Engineering Center (CVEC)
- Center for Advanced Technology and Education (CATE)
- Center for Diversity in Engineering (CDE)
- Center for the Study of Matter at Extreme Conditions (CeSMEC)
- Future Aerospace Science and Technology Center (FAST)
- Applied Research Center (ARC)
- Lehman Center for Transportation Research (LCTR)
- Manufacturing Research Center (MRC)
- Telecommunications and Information Technology Institute (IT2).

Advanced Materials Engineering Research Institute (AMERI)

The Advanced Materials and Engineering Research Institute provides an open access equipment infrastructure to support materials research and engineering over a broad range of technology and capabilities. The Institute provides analytical instrumentation, materials characterization, and process development laboratories to support faculty and industry in the development and characterization of new materials over the continuum from the nanoscale to bulk materials. The analytical Instrumentation Laboratory contains a field emission scanning electron microscope (FESEM), a 200 keV Transmission Electron Microscope (TEM), Atomic Force Microscope (AFM), X-ray diffraction, thermal (DSC, TGA, DMA, dilatometer flush diffusion, and mechanical testing (uniaxial/biaxial Instron, creep). Process Development laboratories for ceramic processing (sol-gel, tape casting, milling), polymer processing, metal processing, and arc melting, thermal processing (air, vacuum, hydrogen, controlled atmosphere furnaces) are

available to support faculty and student researchers. The Institute contains the Center for Nanofabrication and Devices, which is supported by a class 100 clean room and nanofabrication capabilities including e-beam lithography and optical photolithography. Fabrication of nano/micro electromechanical systems (N/MEMS) can be accomplished by a combination of nanolithography, reactive ion etching, and thin film deposition by a variety of techniques (e-beam, sputtering, filament evaporation, cvd). In addition to supporting research within the graduate program in materials science within the Department of Mechanical and Materials Engineering, the Institute supports faculty across all departments (physics, chemistry, geology, biology) in materials based research.

Applied Research in Industrial and Systems Engineering (ARISE)

The ARISE Center provides a state-of-the-art environment where industrial engineering students, and students from related disciplines, engage in the design and modeling of operational, organizational, and logistics processes for the service and manufacturing industries. ARISE is involved in the research leading to the formulation of mathematical and computational models needed in the design and deployment of effective and efficient systems. Students also work on projects for local industry, enabling the transfer of technology and providing a feedback channel from industry to academia. The creative and research work of ARISE associates have contributed to a better understanding of the operational issues in health care systems, intelligent modeling of traffic systems, improved techniques for discrete simulation, integration of information systems and wireless technologies in space shuttle processing, logistics, space shuttle launch operations, and the integration of mathematical models and simulation.

Cardiovascular Engineering Center (CVEC)

The Cardiovascular Engineering Center (CVEC) unifies the efforts of the academic, industrial and clinical sectors in advancing cardiovascular engineering science and technology. It is specifically planned with and designed to support the biomedical industry in South Florida and the \$3.1 trillion world market for cardiovascular devices and instrumentation. In addition to its research efforts and collaboration with industry and clinical partners, *CVEC* serves as the research arm of the *Biomedical Engineering Institute (BMEI)*—an interdisciplinary unit within the College of Engineering and Computing that supports the Biomedical Engineering program and the subsequent research activity. *The Cardiovascular Engineering Center* aims to accelerate the transfer of research to practical applications. It concentrates on design, development and enhanced implementation of diagnostic, interventional, therapeutic and replacement systems and devices associated with the cardiovascular and blood systems. Faculty from the College of Engineering and Computing, the College of Health Sciences, and the Department of Biological Sciences collaborate on research efforts in the Center. Scientists, physicians, and biomedical engineers from industry join FIU faculty in research projects. *The Cardiovascular Engineering Center* has the distinct role of educating biomedical engineering professionals and preparing a workforce for the biomedical industry by contributing research opportunities for the students in the academic program. At *CVEC* students have the opportunity to participate in research assignments within a multidisciplinary environment with faculty, industry engineers, scientists, and clinicians. *The Cardiovascular Engineering Center* supports applied research interests of industry and clinical sectors and operates in an industry environment. The students enrolled in the biomedical engineering program are exposed to this environment and are better equipped to succeed as professionals. The *CVEC* conducts research in biofluid and biosolid mechanics; experimental, mathematical and computational modeling; biomaterials; artificial heart valves;

vascular grafts; stents; cardiovascular devices and instrumentation; bioimaging, signal processing and diagnostic imaging.

The Center for Advanced Technology and Education (CATE)

The vision of the NSF-CATE center at FIU is to foster a cross-disciplinary research and educational program as a catalyst for our undergraduates and graduates alike to train and develop their creative thinking by bringing in synergy the fields of applied information (signal and image) processing, human/brain-computer interfaces, and neuroscience. The CATE center focuses on the development of new methodologies and scientific discovery that (1) will develop new algorithms in signal and image processing to enhance analysis and interpretation of signals and images in real-world applications; (2) will meet the impending needs in neuroscience as we elicit both the functional mapping of the brain, and the causality of key brain disorders; and (3) will design Human-Computer Interface (HCI) prototypes that address effectively the issue of *Universal Accessibility*, focusing on visual impairment and motor disability. Experimental results, as observed through clinical means or through system design evaluations and feasibility studies serve as means to redefine or re-evaluate our theoretical premises. The strong collaboration we have secured with our industry partners entails student internships, clinical rotations, joint faculty appointments, shared use of modern equipment and infrastructure, all serving in an integrated environment apt to secure the success of our students' educational and research careers all the way to the Ph.D. level. Research Areas include:

- Image and Signal Processing and Computer Vision
- Real-Time Assistive Systems and Human-Computer Interfaces
- Neuroscience: - EEG Brain Research – Functional Brain Mapping and Neurorehabilitation
- Biomedical Applications in Flow Cytometry and Confocal Microscopy
- Robotics for Motion Planning and Automated Guidance
- Parallel and Distributed Processing

Center for Diversity in Engineering

South Florida's distinction as a multicultural, multi-lingual region has long been a diverse source of talent for FIU, particularly in the College of Engineering and Computing. In response to the challenge of attracting this diverse community to science and engineering, the College of Engineering and Computing has created a special center for Diversity in Engineering. By building sound foundations in sciences and mathematics, the Center helps to prepare young students to deal with the rigors of higher-level education, and Engineering in particular. Currently the Center has several on-going programs targeting Elementary, Middle, and High School level students. These programs are offered throughout the school year and during the summer. GEAR UP! (Gaining Early Awareness and Readiness for Undergraduate Programs), ENLACE MIAMI (Engaging Latino Communities for Education), FLAME (Florida Action for Minorities in Engineering), Proyecto Access/Miami PREP (Prefreshman Engineering Program), and Tele-MAESTRO (Mathematics, Arts, Engineering, Science, and Technology Reach Out) are all efforts to encourage higher education in our community and provide opportunities to students in Miami Dade County Public Schools, from elementary to high school level. The Center also provides job and scholarship opportunities for FIU students. FGLSAMP (Florida-Georgia Louis Stokes' Alliance for Minority Participation) and SHPE Honores (Society for Hispanic Professional Engineers) provide many students with financial assistance. FGLSAMP and SHPE Honores scholarship recipients are assisted in acquiring internships. Many are offered Summer Research

Internships at NASA Centers around the country. The purpose of the Center is to recruit, retain, and graduate ethnically diverse student body that will increase the representation of traditionally underrepresented ethnic and gender groups in the field of engineering and will enrich the College of Engineering and Computing and the university as a whole.

Center for the Study of Matters at Extreme Conditions (CeSMEC)

The mission of CeSMEC is to study the behavior of materials at high pressures and temperatures. The range of activities includes study of the cores of planets and study of matter at extremes of industrial conditions. CeSMEC is one of few facilities in the country where pressures are created to many million atmospheres and temperatures to several thousand degrees; the material is studied under such condition with x-ray and spectroscopic techniques. All materials are subject to three fundamental variables – the variables of temperatures, chemical composition, and pressure. Modern science has vigorously used only the first two variables in exploring nature and creating several amenities of modern civilization. Pressure, the third fundamental variable altering all states of matter, has been for years a relatively minor esoteric sub-field. The creating of this center is providing FIU's graduate students and faculty the opportunity to perform fundamental and applied research in high-pressure physics, high-pressure chemistry, and materials science. The center is raising the infrastructure at FIU to the level required to initiate world-class research in an emerging area of science and engineering.

Engineering Information Center (EIC)

EIC helps faculty, scientists, researchers, and students to conduct cutting edge research and work on system designs, networking, scientific visualization, 3D Modeling, simulations, virtual reality, computer animation, and other computer and software applications. The Center manages an array of Novell, Windows, and UNIX network servers that provide faculty, staff and students with the capacity to share valuable resources; therefore, fostering an atmosphere where collaboration and instruction grow with a synergy that is unique. Beyond the college community, EIC participates in sponsoring special outreach programs for the Miami-Dade County Public Schools by exposing young minds to latest technologies. EIC is also home to The Graphic Simulation Laboratory with focus on Scientific Visualization, 3D Computer Modeling, and Virtual Reality, which have helped researchers to develop a wide array of technologies, strategies, and information designs. GSL has collaborated with NASA, The Center for Super Computing Applications, National Science Foundation, Computational Science Institute, Shodor Organization, Macromedia, and Kellogg Foundation, just to mention a few. From hardware to software support to 3D modeling of a heart valve, EIC delivers exceptional services with a personal touch.

Future Aerospace Science and Technology Center for Space Cryoelectronics (FAST)

FAST-SC is one of six centers created by the Air Force as part of its minority university enhancement program, providing research experience opportunities for undergraduate and graduate students. The FAST Center evaluates novel applications of space-based cryoelectronics, initially studying new systems for reduction in losses of feed and phase shift networks in phased array transmitter systems. This involves development of low-loss active integrated low-noise phased array or post-processed phased array downconverter receiving systems, high gain low loss, low noise micro and millimeter wave circuits and systems for space based applications. Of particular interest is the ability to design and fabricate integrated systems which could be used as "steerable" phased array antennas with, frequency agility. Current research is focused on issues relating to: Superconducting Micro- Electro-Mechanically switched filters and phase shifters.

Lehman Center for Transportation Research (LCTR)

The Lehman Center for Transportation Research (LCTR) at Florida International University was established in 1993 in honor of Congressman Bill Lehman and his tireless efforts to make South Florida a better place for all of us. The center's vision is to become a strong 'state-of-the-art' transportation research and training facility. LCTR is committed to serve and benefit our society by conducting research to improve mobility, hence the quality of life issues, develop partnerships in the transportation industry, and educate a multidisciplinary workforce to plan, manage and implement transportation systems. Faculty, staff and students at LCTR are involved in research related to the design and operation of transportation systems, public policy, air pollution, and the application of geographic information systems and other advanced technologies such as artificial neural networks and scientific visualization in transportation. Future plans include networking with the public and private industry to collaborate on transportation related research. In addition, applied research will be conducted on, but not limited to intelligent vehicle and highway systems.

Manufacturing Research Center (MRC)

The objective of the Manufacturing Research Center (MRC) is to prepare manufacturing engineers for an era where enterprises will be mostly information-based and international in nature. Its resources and equipment are available to any company in need of knowledge and/or expertise in its specialty areas, primarily rapid product design/development and manufacturing. It is divided into major labs and built to provide a seamless integration of computerized engineering tools for design (CAD), manufacturing (CAM), inspection and rapid prototyping (RP) for mechanical and electronic product design and fabrication. Its two main laboratories include:

1. *Rapid Product Realization Laboratory*, consisting of a design front end, an RP center for mechanical/electrical components, and computer driven manufacturing and inspection systems.
2. The *Process Characterization Laboratory* includes process development furnaces, electron microscopes, X-ray diffractometers, thermal analysis, mechanical testing, and sample preparation and inspection capabilities.

Telecommunications and Information Technology Institute

Florida International University (FIU) recognizes the need to nurture highly trained personnel for the nation's industry and business, develop research to support the rapidly expanding high-tech industry and become proactive in technology transfer. Thus, ensuring continued economic growth and prosperity in the region. In order to fully meet today's technological demands, FIU has established the Telecommunications and Information Technology Institute (IT²). IT² promotes advanced multidisciplinary education and research focused on telecommunications and information technologies. IT²'s mission is to:

- Deliver high quality telecommunications and information technology education and training.
- Conduct and promote research to enhance Florida's role as a leader in telecommunications and information technology.
- Offer training that is needed to foster business development and workforce preparedness.
- Promote technology transfer to enhance the enabling technologies of the telecommunication and information technology industries.

In fulfilling its mission, IT² promotes multidisciplinary collaboration and serves as the catalyst to promote intellectual cross-fertilization among disciplines. This effort results in the synergistic enhancement of teaching and research, so critical in the telecommunications and information technology fields, where disciplinary barriers are falling and lines are blurred. An objective of the Institute is to infuse telecommunications and information technology content into the curriculum at all appropriate levels. Of particular importance to the institute's research efforts is the emerging global wireless, optical and personal communications infrastructure and the ability to represent, store and access information to perform a variety of information related tasks. To provide an effective forum for original research results and to foster communication among researchers, industry leaders can collaborate on education, training, and re-engineering the telecommunications workforce of the future.

In addition, the University has research centers which provide research support for the entire university community. Two research centers which are directly involved with the research activities, student support and training in the College of Engineering and Computing are:

1. Applied Research Center (ARC), and
2. International Hurricane Center (IHC)

Brief information about these two centers are provided below:

International Hurricane Center (IHC)

The International Hurricane Center is an interdisciplinary research center focusing on the mitigation of hurricane damage to people, the natural environment, the economy, the infrastructure and built environment. Through multidisciplinary and collaborative programs of basic and applied research and programs of education and outreach, the International Hurricane Center (IHC) helps people and communities to better understand the hurricane risk, our relative vulnerability to the impact of such events, and the preparedness and mitigation options that may be available for reducing the potential for damage from hurricane impact. Caribbean islands and many Latin American countries are vulnerable to the yearly impact of hurricanes. The IHC promotes a research agenda within the larger context of disasters and emergency management to address this vulnerability. Researchers from numerous disciplines, including architecture, business, economics, engineering, finance, geosciences, insurance, sociology, and urban planning, are involved in the IHC long-term, integrated research program to assist Florida, the nation and its regional neighbors to mitigate the potential for hurricane damage.

In order to continue to pursue and develop its multidisciplinary and wide ranging research agenda, and to support its mission, the IHC is pursuing the strategy of creating research laboratories to focus on specific areas. Four such laboratories are already active within the IHC include:

- (a) Laboratory for Coastal Research
- (b) Laboratory for Social and Behavioral Research
- (c) Laboratory for Economic and Insurance Research
- (d) Laboratory for Structural Mitigation

Applied Research Center (ARC)

Applied Research Center (ARC) is an applied research and technology development center at Florida International University. ARC's multidisciplinary, industry-experienced team of scientists and engineers develop and are involved in developing the next-generation, integrated solutions to environmental, energy, and information challenges --delivering the quality and value of a top-ranked research university to clients in government, business, and industry. Since ARC's beginnings, innovation has been the constant element in our development and growth. As we accept and conquer each emerging challenge, we build upon our performance. It is this dynamic environment of research capability, knowledge, and experience upon which our sponsors and teaming partners have come to depend.

B. Other Resources

Libraries at FIU

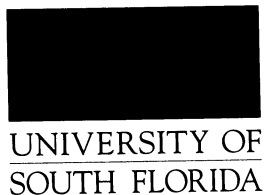
Florida International University has a main library with all the necessary books, journals and periodicals in the areas of interest for this project. The library subscribes to a number of scientific e-journals for easy and quick access to the most recent research developments. Also, FIU's library is a government depository with all documents available in hard copy or on microfilm and/or microfiche. The interlibrary loan system currently offered at the FIU library is very effective in expeditiously locating and bringing publications from other libraries in Florida.

Computational Facilities at FIU

Florida International University has state-of-the-art computers available for students to do computational studies and data analysis. Numerical work can be accomplished either at the terminals of the University Technology Services or Computer Aided Engineering Center through the terminals networked throughout the campus. The campus has wireless services in all research facilities.

University Technology Services (UTS) Computing Labs

UTS provides instructional and "open" computer labs to the FIU community. These labs are equipped with Dell and Macintosh workstations, providing access to current operating systems such as Windows XP, Mac OS X, and Unix. Lab users have access to such applications as Microsoft Office XP 2003, Visual Studio.NET 2003, and other programming, statistical and engineering packages, as well as an assortment of other computer-based applications. There are a total of 10 instructional and "open" computer laboratories at the University Park Campus, and 3 instructional and "open" computer laboratories at the Biscayne Bay Campus. The facilities are available to FIU Faculty and staff. Some of the labs function as both instructional and "open" laboratories.



February 23, 2009

Jessie DeAro, Ph.D
Program Director
ADVANCE: Increasing the Participation and
Advancement of Women in Academic Science and
Engineering Careers (ADVANCE)
Division of Human Resource Development (EHR/HRD)
National Science Foundation
4201 Wilson Boulevard, Room 815 N
Arlington, VA 22230

Dear Dr. DeAro:

The University of South Florida (USF) is pleased to partner with Chemistry Departments and Colleges of Engineering of Florida State University (FSU), Florida Agricultural and Mechanical University (FAMU), Florida International University (FIU), and the University of Florida (UF) to submit the proposal titled, "Fostering Careers through Connections (FCC): Alliance for the Advancement of Florida's Academic Women in Chemistry and Engineering (AAFAWCE), a proposed ADVANCE PAID Project" to the National Science Foundation's ADVANCE Partnerships for Adaptation, Implementation, and Dissemination (PAID) program.

We recognize that the low numbers of female faculty in chemistry and engineering in the academic ranks and leadership positions at universities is an area of national and regional concern. The interventions, including the Research and Career Development Symposia with COACH workshops, proposed by Fostering Careers through Connections (FCC) in the ADVANCE PAID proposal are designed to provide female faculty with tangible support and opportunities to further their research, advance their academic careers and network with other female chemistry and engineering faculty members in the Florida State University System (FSUS).

As a partner in this proposal, the Office of the Provost and the Office of Research & Innovation at the University of South Florida will provide \$90,000 over the three-year project period, to support the Alliance's interventions, particularly attendance at leadership workshops and the release time for FCC faculty to participate in these activities. Our institution will also encourage female candidates for chemistry and engineering positions to meet with Alliance participants during their on-campus visits and at new faculty orientations.

OFFICE OF RESEARCH & INNOVATION

University of South Florida • 3702 Spectrum Blvd., Suite 175 • Tampa, FL 33612-9444
Phone (813) 974-5570 • Fax (813) 974-3348 • <http://www.research.usf.edu>

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Jessie DeAro, Ph.D
February 23, 2009
Page 2

The University of South Florida is committed to effecting institutional change to strengthen the career advancement of female chemistry and engineering faculty as well as increasing the number of female faculty in these disciplines. NSF's support through the ADVANCE PAID award will enhance our institution's ability to fulfill its commitment to both hiring women in STEM fields and supporting the mentoring and training for leadership positions that this project will support.

Sincerely,

A handwritten signature in black ink, appearing to read "Priscilla C. Pope". The signature is fluid and cursive, with a large initial "P" and "C".

Priscilla C. Pope
Associate Vice President for Sponsored Research



DEPARTMENT OF CHEMISTRY
AND BIOCHEMISTRY

University of Delaware
Newark, Delaware 19716

Dr. Kathryn Scantlebury
Ph: 302/831-4546
FAX: 302/831-6335
INTERNET: kscantle@udel.edu

February 24, 2009

Dr. Karen A. Holbrook
Vice President for
Research & Innovation
USF Office of Research
3702 Spectrum Boulevard, Suite 175
Tampa, FL 33612-9444

Dear Dr. Holbrook,

Thank you for the invitation to act as the external evaluator for *Alliance for the Advancement of Florida's Academic Women in Chemistry and Engineering (AAFAWCE)*. This is an exciting proposal aimed at improving the networking opportunities for female chemistry and engineering faculty through a consortium of Floridian universities. I look forward to working with the project leaders and the faculty involved with the project. If you have any questions, please contact me at kscantle@udel.edu.

Sincerely,

A handwritten signature in cursive script that reads "Kathryn Scantlebury".

Kathryn Scantlebury, Ph.D.
University of Delaware
Professor of Chemistry & Biochemistry
Secondary Science Education Coordinator



February 24, 2009

Jessie A. DeAro, Ph.D.
Program Director
Increasing the Participation and Advancement of Women in Academic Science
and Engineering Careers (ADVANCE)
National Science Foundation,
4201 Wilson Boulevard,
Arlington, Virginia 22230, USA

Dear Dr. DeAro and NSF Reviewers:

The University of South Florida's College of Engineering (USF COE) is pleased to offer support and resources to the success of our National Science Foundation *ADVANCE PAID* grant, submitted by Vice President Holbrook, entitled, "**Alliance for the Advancement of Florida's Academic Women in Chemistry and Engineering (AAFAWCE)**". We are pleased to join with other Florida Institutional Alliance Members in promoting the advancement of women faculty in engineering and chemistry.

USF COE is building on an environment of professional development, cutting-edge research, world-class engineering resources, and the finest faculty. We know the ADVANCE PAID grant will assist in cultivating our administration and faculty to more effectively and efficiently recruit, retain, and develop our female faculty and students.

Implicit in the goals of the Alliance is the efforts made to remove artificial and real internal barriers to increase satisfaction, productivity and success for our female faculty. Therefore, it is with pride that we can elevate our existing/new collaborations between the Alliance Members to a higher level to positively influence the success of women faculty and students. In support of the Alliance, the College offers the following commitment to complement this NSF Project:

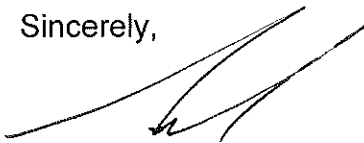
- The College will provide release time for faculty to attend the "Train-the-Trainer", recruiting, and mentoring workshops. Initial grant faculty members include Sylvia W. Thomas (Co-PI, Trainer, Assistant Professor), Delcie Durham (Mentor/Trainer, Full Professor), Norma Alcantar (Trainer, Assistant Professor), Eva Fernandez (Recruitment), and Rafael Perez (Mentor, Associate Dean, Full Professor).

- The College will provide collaborations to secure speakers (2) and support for lodging, travel, and honorarium not to exceed \$2500 per speaker.
- The College will offer support and encouragement to new female faculty/administrators for participation in the Alliance training, mentoring, COACHing and workshops.
- The College will provide access to its state-of-the-art facilities to connect Alliance faculty and other female faculty and administrators with the Dean and upper University Administrators.
- The College will collaborate with our NSF partners to create workshops and video conferences to support the needs of the Alliance faculty, and specifically target upper level administrators to participate in workshops/conferences on best practices.

USF College of Engineering is vested in the advancement of our diverse women faculty. We recognize the importance of fully engaging ALL of our faculty to promote engineering and science innovation, and we look forward to sustaining an environment where our female faculty are successful and thrive.

Thank you for your time, attention, and favourable support of the USF ADVANCE PAID "Alliance" grant.

Sincerely,



Dr. Thomas M. Weller
Associate Dean for Research

Office of the Provost
and Senior Vice President

235 Tigert Hall
PO Box 113175
Gainesville, FL 32611-3175
352-392-2404 Tel
352-392-8735 Fax

February 24, 2009

Dr. Jessie DeAro, Program Director
ADVANCE Program
National Science Foundation
4201 Wilson Boulevard
Arlington, D.C. 22230

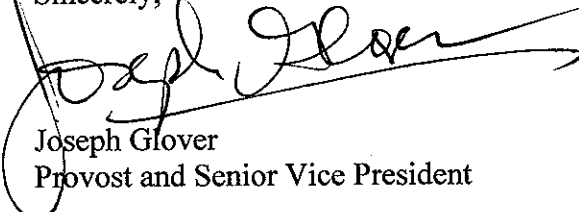
Dear Dr. DeAro:

The University of Florida is committed to providing opportunities for the advancement of women in STEM fields. We therefore welcome the opportunity to be part of the ADVANCE PAID proposal that will impact female engineering and chemistry faculty not only on our campus, but across the state. UF supports both goals of this project, to increase recruitment of women into academic appointments in chemistry and engineering and to strengthen mentoring of women in academia, particularly those at the assistant professor level who are not yet tenured.

UF will be pleased to encourage faculty to take advantage of the activities hosted by FSU, as well as to host campus-based workshop in subsequent years. Additionally we will support mentoring efforts that will increase retention and advancement of our junior faculty.

We look forward to being part of this statewide effort to address an area of critical need to actively encourage the full participation of STEM women in the academic enterprise.

Sincerely,



Joseph Glover
Provost and Senior Vice President

JG/akf



Professor Penny J. Gilmer, Ph.D., D. Sc.Ed.
Florida State University
Francis I. Marcus Professor of Chemistry and Biochemistry
Department of Chemistry and Biochemistry
Tallahassee, FL 32306-4390, USA

(850) 644-4026 (office); (850) 644-8281 (Fax)

E-mail: gilmer@chem.fsu.edu

Web site: <http://garnet.acns.fsu.edu/~pgilmer/index.htm>

National Science Foundation
Directorate for Education & Human Resources
Division of Human Resource Development

February 17, 2009

Dear Sir:

Professors Penny J. Gilmer (Chemistry and Biochemistry) and Rufina Alamo (Chemical and Biomedical Engineering) are submitting an ADVANCED PAID (Increasing the Participation and Advancement of Women in Academic Science and Engineering Careers: Partnerships for Adaptation, Implementation, and Dissemination) proposal to the National Science Foundation to participate in a collaborative effort with five public universities in the state of Florida.

The program's focus is recruiting, mentoring and retaining women faculty in academics at five of Florida's major state universities, including Florida State University, University of South Florida (lead institution), University of Florida, Florida International University, and Florida A&M University. Special attention is given to female faculty in Colleges of Engineering and Departments of Chemistry.

I have read the proposed effort and strongly support these activities, including annual workshops on recruitment, mentoring and advising female faculty and monthly campus meetings for mentoring the women academics. I will encourage my faculty and administrators to participate in this important program as mentors, mentees, and search committee members.

Sincerely,

Joseph Schlenoff, Chair
Department of Chemistry and Biochemistry

Joseph Travis, Dean
College of Arts & Sciences



Excellence With Caring

Florida A&M University - Florida State University

COLLEGE OF ENGINEERING

Ching-Jen Chen, Dean

2525 Pottsdamer Street, Tallahassee FL 32310-6046

(850) 410-6439 FAX (850) 410-6546

E-mail: CJCHEN@ENG.FSU.EDU

<http://www.eng.fsu.edu/~cjchen/index.htm>



February 18, 2009

National Science Foundation
Directorate for Education & Human Resources
Division of Human Resource Development
4201 Wilson Boulevard
Arlington, Virginia 22230

To Whom It May Concern:

As the Dean of the Florida A&M University-Florida State University (FAMU-FSU) College of Engineering, I am pleased to support the proposal to the National Science Foundation by Professors Rufina Alamo and Simone Peterson Hruda, *ADVANCED PAID (Increasing the Participation and Advancement of Women in Academic Science and Engineering Careers: Partnerships for Adaptation, Implementation, and Dissemination)*. This project proposal is a collaborative effort between five public universities of the State of Florida. The program's focus is on recruiting, mentoring and retaining women faculty in academics at five of Florida's major state universities, including Florida State University and Florida Agricultural and Mechanical University. As you will find in the proposal, special attention is given to female faculty at Colleges of Engineering and Departments of Chemistry.

I have read the proposed effort and strongly support these activities, including annual workshops on recruitment, mentoring and advising female faculty. I will encourage faculty and administrators to participate in this most worthy program.

Sincerely,

Ching-Jen Chen
Dean of Engineering



Excellence With Caring

Florida A&M University - Florida State University

COLLEGE OF ENGINEERING

Ching-Jen Chen, Dean

2525 Pottsdamer Street, Tallahassee FL 32310-6046

(850) 410-6439 FAX (850) 410-6546

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February 18, 2009

National Science Foundation
Directorate for Education & Human Resources
Division of Human Resource Development
4201 Wilson Boulevard
Arlington, Virginia 22230

To Whom It May Concern:

As the Dean of the Florida A&M University-Florida State University (FAMU-FSU) College of Engineering, I am pleased to support the proposal to the National Science Foundation by Professors Rufina Alamo and Simone Peterson Hruda, *ADVANCED PAID (Increasing the Participation and Advancement of Women in Academic Science and Engineering Careers: Partnerships for Adaptation, Implementation, and Dissemination)*. This project proposal is a collaborative effort between five public universities of the State of Florida. The program's focus is on recruiting, mentoring and retaining women faculty in academics at five of Florida's major state universities, including Florida State University and Florida Agricultural and Mechanical University. As you will find in the proposal, special attention is given to female faculty at Colleges of Engineering and Departments of Chemistry.

I have read the proposed effort and strongly support these activities, including annual workshops on recruitment, mentoring and advising female faculty. I will encourage faculty and administrators to participate in this most worthy program.

Sincerely,

Ching-Jen Chen
Dean of Engineering



Florida Agricultural and Mechanical University

TALLAHASSEE, FLORIDA 32307-4800

TELEPHONE: (850) 499-3430
FAX: (850) 561-2200

COLLEGE OF ARTS AND SCIENCES
OFFICE OF THE DEAN

February 19, 2009

National Science Foundation
Directorate for Education & Human Resources
Division of Human Resource Development
4201 Wilson Boulevard
Arlington, Virginia 22230

To Whom It May Concern:

I strongly support the proposal submitted to the National Science Foundation by Dr. Ngozi Ugochukwu and Dr. Simone Peterson Huda for the Advancement of Florida's Academic Women in Chemistry and Engineering. This proposal is a collaborative effort among five public universities of the State of Florida. It is a well-integrated approach to recruiting and mentoring women to pursue majors in chemistry and engineering. The involvement of an alliance of five universities provides synergism to this effort which could not occur with only one institution.

I will encourage all faculty members in chemistry to work cooperatively in this proposal to carry out the stated goals and objectives at the highest level of dedication.

Sincerely,

Ralph W. Turner, Ph.D
Dean of the College of Arts and Sciences
3M Distinguished Professor of Chemistry



Excellence With Caring

Florida Agricultural and Mechanical University

TALLAHASSEE, FLORIDA 32307-3200

TELEPHONE: (850) 599-3276
FAX: (850) 561-2551

OFFICE OF THE PROVOST AND
VICE PRESIDENT FOR ACADEMIC AFFAIRS

February 20, 2009

National Science Foundation
Directorate for Education & Human Resources
Division of Human Resource Development
4201 Wilson Blvd.
Arlington, VA 22230

Dear Sir:

I enthusiastically support the proposal by Professors Simone Peterson Hrudá and Ngozi Ugochukwu to the National Science Foundation ADVANCED PAID (Increasing the Participation and Advancement of Women in Academic Science and Engineering Careers: Partnerships for Adaptation, Implementation, and Dissemination) program. This collaborative effort between University of South Florida, Florida Agricultural and Mechanical University, Florida International University, Florida State University, and the University of Florida will address many of the areas of special need for female faculty in the Colleges of Engineering and Chemistry Departments. The proposed workshops, seminars, and luncheons will have broader impacts across our campus as we address the needs of our female faculty in the Science, Math, Engineering and Technology disciplines.

As Provost and Vice President for Academic Affairs at Florida Agricultural and Mechanical University, I will encourage faculty and administrators to participate in the ADVANCE-PAID activities and implement these programs.

Sincerely,

Cynthia Hughes Harris, Ph.D.
Provost and Vice President for Academic Affairs

CHH/sph/mb



February 23, 2009

National Science Foundation
Directorate for Education and Human Resources
Division of Human Resources Department
4201 Wilson Boulevard
Arlington, Virginia 22230

Re: ADVANCE PAID (Increasing the Participation and Advancement of Women in
Academic Science and Engineering Careers: Partnerships for Adaptation,
Implementation, and Dissemination)

To Whom It May Concern:

Florida International University (FIU) is an urban, multi-campus, research university serving South Florida, the state, the nation, and the international community. The University emphasizes research as a major component of its mission and has attained Carnegie Research 1 status within its short history. The College of Engineering and Computing is South Florida's premiere engineering education resource. Our primary mission is to educate a high-quality, diverse student body with curricula responsive to the needs of the society locally, nationally and internationally. Nurturing and retaining faculty is also a top priority for the College of Engineering and Computing.

To show our commitment for this collaborative proposal, I am pleased to support the proposal to the National Science Foundation by Drs. Tansel, Roig, and Miksovska. This project is a collaborative effort between five public universities in Florida including Florida International University.

I hope that you will support our endeavors in implementing this important program at FIU. Through the opportunities provided by the sponsored research programs, we can continue to maintain quality faculty from underrepresented groups and provide them with quality education and research environment.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Amir Mirmiran', is written over a light blue circular stamp.

Amir Mirmiran, PhD, PE, FASCE, FACI
Professor and Dean

OFFICE OF THE EXECUTIVE DEAN
College of Engineering and Computing
10555 W. Flagler Street, EC2430 • Miami, FL 33174 • Tel: (305) 348-2522 • Fax: (305) 348-6353 • www.eng.fiu.edu

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