## M.S. Animal Molecular and Cellular Biology Academic Assessment Plan 2012-2013

College of Agricultural and Life Sciences Dr. Peter J. Hansen pjhansen@ufl.edu Office of the Provost

University of Florida

Institutional Assessment

Continuous Quality
Enhancement

### **Table of Contents**

2012-	2013 Academic Assessment Plan for M.S. in Animal Molecular and Cellular Biology	. 3
A.	Mission	. 3
B.	Student Learning Outcomes and Assessment Measures	. 3
C.	Research	. 5
D.	Assessment Timeline	. 5
E.	Assessment Cycle	. 5
F.	Measurement Tools	. 6
G.	Assessment Oversight	. 7

# 2012-2013 Academic Assessment Plan for M.S. in Animal Molecular and Cellular Biology

College of Agricultural and Life Sciences

#### A. Mission

The mission of the Animal Molecular and Cellular Biology Graduate Program is to educate graduate students with an understanding of the principles of molecular and cell biology and the application of this knowledge to contemporary problems of animal and veterinary sciences. Completion of this mission will contribute to the educational mission of the college and university and provide society with well-educated scientists having the skills to conduct cutting-edge research to solve problems of animal agriculture and veterinary medicine. Research that results from each student's program will contribute to the college and university's research mission. The extension mission of the college and university will be contributed to through student participation in extension programs and by development of solutions to stakeholder problems.

#### **B. Student Learning Outcomes and Assessment Measures**

SLO Type	Student Learning Outcome	Assessment Method	Degree Delivery
Knowledge	Identify, recall, appraise, and interpret the principles of molecular and cellular biology and their application to comparative biology.	Evaluation of the student's program of study by the supervisory committee using a rubric designed by faculty. Evaluation by the supervisory committee of grades received in courses in the program of study. Evaluation by the supervisory committee during the thesis defense using a rubric designed by faculty of ability to describe and critique principles of molecular and cellular biology, apply them to contemporary research problems, and formulate new or modified principles based on analysis of the literature and data acquired during experimentation. An additional assessment tool will be evaluation by supervisory committee of	Campus

		completed graduate student evaluation form with special attention to student proficiency in classroom academics, and awareness of current literature.	
Skills	Design, conduct and draw sound conclusions on scientific experiments.	Evaluation of the student's program of study by the supervisory committee using a rubric designed by faculty. Evaluation by the supervisory committee during the thesis defense using a rubric designed by faculty. An additional assessment tool will be evaluation by supervisory committee of completed graduate student evaluation form with special attention to proficiency in conducting research, accomplishing research in a scientific and innovative manner, and completing other research responsibilities.	Campus
Professional Behavior	Interact with peers and instructors with honesty, cultural sensitivity and effective communication.	Adherence to the UF Honor Code during the graduate program. Observation by the faculty of professional behavior during class activities, seminars, research work, thesis defense, and participation in professional societies. These observations will be shared with the supervisory committee and evaluated based on a faculty developed rubric. An additional assessment tool will be evaluation by supervisory committee of completed graduate student evaluation form with special attention to complying with work schedule, and display of professional conduct.	Campus

#### C. Research

All MS students are expected to choose committee members with their major adviser, develop a program of study with committee members, be conversant with the literature in their area of specialization, execute their research on schedule with integrity and diligence, statistically analyze data, interpret and synthesize findings to provide new knowledge, present their research at professional conferences, and publish results in peer-reviewed journals. In addition, students are expected to maintain a GPA of 3.0 or greater and to graduate in two years.

To achieve these goals, students will be expected to multi-task, display excellent interpersonal and time management skills, network with colleagues, professors and other scientists, and join appropriate professional organizations.

#### **D.** Assessment Timeline

M.S. in Animal Molecular and Cellular Biology

College of Agricultural and Life Sciences

Assessment	Program of Study Review	Thesis Defense	Observations
SLOs			
Knowledge			
#1	X	X	
Skills			
#2	X	X	
<b>Professional Behavior</b>			
#3			X

#### E. Assessment Cycle

Assessment Cycle for:

M.S. in Animal Molecular and Cellular Biology College Agricultural and Life Sciences

Analysis and Interpretation: June, 2012

Program Modifications: Completed by January 28, 2013
Dissemination: Completed by January 31, 2013

Year SLOs	12-13	13-14	14-15	15-16
Content Knowledge				
#1	X	X	X	X
Skills				
#2	X	X	X	X
<b>Professional Behavior</b>				
#3	X	X	X	X

#### F. Measurement Tools

#### Thesis defense

Students' success rate at passing this examination will be determined once a year by the Graduate Programs Office.

#### Program of study

Each student's supervisory committee will approve a set of courses for the student to complete, monitor the progress towards completing the courses, assess the quality and acceptability of the student's research proposal, and monitor their progress towards completing the research. Progress is documented on the Annual Evaluation Form.

#### ANS 6971 Research for Master's Thesis (or other designation for faculty in other departments)

Students' success rate in this course will be determined once a year by the Graduate Programs Office by evaluating grades. Progress is documented on the Annual Evaluation Form.

#### ANS 6936 Graduate Seminar in Animal Molecular and Cellular Biology

Each student's success in this course will be evaluated by the instructor based on the depth of analysis and skill at presentation of the seminar. Overall student success rates will be determined once a year by the Graduate Programs Office by evaluating grades.

#### Annual evaluation of performance

The annual evaluation instrument (see attached) uses students' progress and proficiency in research and classroom academics, literature awareness, adherence to UF rules and regulations, compliance with established work schedules to derive an overall work performance score ranging from 1 (highest) to 5 (lowest). Included in this is direct assessment of SLO#3, Professional Behavior. These scores will be used to monitor student work performance by the Graduate Programs Office. As part of the evaluation, students will submit information about oral and poster presentations at professional conferences, journal club involvement, journal articles published, extension articles published as part of their annual evaluation. The Graduate Programs Office will use these data to estimate the percentage achievement of the relevant learning outcome from these metrics.

The information gathered on each of the above topics will be disseminated once a year to the faculty.

## G. Assessment Oversight

Name	Department Affiliation	Email Address	Phone Number
Peter J Hansen,	Animal Sciences	pjhansen@ufl.edu	352-392-5590
Director			
Adegbola Adesogan,	Animal Sciences	adesogan@ufl.edu	352-392-7527
Graduate Coordinator			
To be named	Co-Director		