

University of Florida

Academic Affairs

Academic Colleges

College of Veterinary Medicine

Veterinary Medical Sciences (PhD)

PhD Veterinary Medical Sciences

The mission of the Veterinary Medical Sciences PhD graduate program is to provide high-quality research training for graduate students in the biomedical sciences. This program is designed to cultivate problem-solving abilities, independent thought, oral and written communication skills, and other attitudes and skills essential for conducting research. This program is flexible and allows students to train in various areas including comparative anatomy and physiology, pharmacology, molecular biology, animal nutrition, comparative toxicology, immunology, pathology, vaccine development, parasitology, epidemiology, infectious diseases, and aquatic animal health.

This program aligns with the College of Veterinary Medicine mission statement, which is "The College of Veterinary Medicine advances animal, human, and environmental health through education, research, and patient care." It also aligns with the University's mission "to lead and serve the state of Florida, the nation and the world by pursuing and disseminating new knowledge while building upon the experiences of the past."

Responsible Roles: Executive Associate Dean (Vickroy, Thomas), Program Asst (O'Connell, Sally), Associate Dean, Research and Graduate Studies (Peck, Ammon)

Program: Veterinary Medical Sciences (PhD)

Progress: Ongoing

PG 1: Degree Completion

Increase the number of high-quality graduate students enrolled in our doctoral training programs.

Evaluation Method

Monitor the number of doctoral students enrolled in our graduate programs and the academic strength of incoming doctoral students based upon metrics of academic strengths, including average minimum metrics for undergraduate grade point averages (3.2) and average scores on standardized entrance examinations (3100n GRE).

Responsible Role: Executive Associate Dean (Vickroy, Thomas), Program Asst (O'Connell, Sally), Associate Dean, Research and Graduate Studies (Peck, Ammon)

Progress: Ongoing

PG 2: Employment

Students apply technical skills, knowledge and dispositions to obtain suitable employment.

Evaluation Method

Determination of current employment by survey of former Ph.D. degree students and/or their Ph.D. degree supervisorycommittee chairs will result in >90% of students appropriately employed in a position that makes use of their Ph.D. degree.

Responsible Role: Executive Associate Dean (Vickroy, Thomas), Program Asst (O'Connell, Sally), Associate Dean, Research and Graduate Studies (Peck, Ammon)

Progress: Ongoing

PG 3: Timely Completion of Qualifying Examination

Individuals entering a program with a bachelor's degree will be expected to take the qualifying exam at the end of the second year. Individuals who come into the Ph.D. program with a Master's or professional degree will be expected to take the qualifying exam at the end of their first year.

Evaluation Method

Track the time to qualifying exam.

Responsible Role: Executive Associate Dean (Vickroy, Thomas), Program Asst (O'Connell, Sally), Associate Dean, Research and Graduate Studies (Peck, Ammon)

Progress: Ongoing

SLO 1: Knowledge

Students identify, describe, explain and apply the literature, research, and practices relevant to their area of specialization.

SLO Area (select one): Knowledge (Grad)

Responsible Role: Executive Associate Dean (Vickroy, Thomas), Program Asst (O'Connell, Sally), Associate Dean, Research and Graduate Studies (Peck, Ammon)

Progress: Ongoing

Assessment Method

Students are assessed through satisfactory performance of their final defense of their dissertation.

SLO 2: Skills

Students analyze and critically evaluate new information and ideas contained in books and journal articles, as well as information and ideas presented at scientific meetings, seminars and/or informal discussions with other scientists.

SLO Area (select one): Skills (Grad)

Responsible Role: Executive Associate Dean (Vickroy, Thomas), Program Asst (O'Connell, Sally), Associate Dean, Research and Graduate Studies (Peck, Ammon)

Progress: Ongoing

Assessment Method

Students will successfully complete one or more "Journal Club" type courses that require reading, presentation and critical evaluation of scientific papers, including defense of their evaluation of the paper to the Journal Club group.

SLO 3: Skills

Students apply speaking skills needed to communicate orally in formal and informal settings.

SLO Area (select one): Skills (Grad)

Responsible Role: Executive Associate Dean (Vickroy, Thomas), Program Asst (O'Connell, Sally), Associate Dean, Research and Graduate Studies (Peck, Ammon)

Progress: Ongoing

Assessment Method

Students produce a proposal worthy of presentation at local, national and/or international scientific meetings and/or continuing education presentations. For those students who are TAs, oral communication skills is also assessed through satisfactory performance evaluations by the course coordinator concerning their ability to communicate with students in class.

SLO 4: Skills

Students write effectively in a manner appropriate to veterinary medical sciences.

SLO Area (select one): Skills (Grad)

Responsible Role: Executive Associate Dean (Vickroy, Thomas), Program Asst (O'Connell, Sally), Associate Dean, Research and Graduate Studies (Peck, Ammon)

Progress: Ongoing

Assessment Method

Students write a paper that is judged publishable by the faculty.

SLO 5: Professional Behavior

Students exhibit ethical and professional behavior throughout their studies and research.

SLO Area (select one): Professional Behavior (Grad)

Responsible Role: Executive Associate Dean (Vickroy, Thomas), Program Asst (O'Connell, Sally), Associate Dean, Research and Graduate Studies (Peck, Ammon)

Progress: Ongoing

Assessment Method

- 1.) Students successfully complete a formal course on the responsible and ethical conduct of research.
- 2.) Students' interpersonal behavior is consistent with professional expectations.
- 3.) Students produce writing that is free of plagiarism.

PhD Veterinary Medical Sciences AAP Detail**Start:** 7/1/2016**End:** 6/30/2017**Progress:** Ongoing**Providing Department:** Veterinary Medical Sciences (PhD)**Responsible Roles:** Executive Associate Dean (Vickroy, Thomas), Program Asst (O'Connell, Sally), Associate Dean, Research and Graduate Studies (Peck, Ammon)**Research (Graduate and Professional AAPs only)**

The primary objective of the Veterinary Medical Sciences graduate training program is to cultivate problem-solving abilities, independent thought, oral and written communication skills and other attitudes and skills essential for conducting research. The goal is to produce graduates who are capable of functioning successfully as independent investigators in academic, governmental or industrial research positions. Areas of concentration are administered by departmental programs in

Physiological Sciences, Infectious Diseases and Pathology, Large Animal Clinical Sciences, and Small Animal Clinical Sciences. Within these departmental programs, training includes appropriate course work and research in areas such as Comparative Anatomy and Physiology, Pharmacology, Biochemistry/Molecular Biology, Animal Nutrition, Comparative Toxicology, Immunology, Pathology, Vaccine Development, Parasitology, Epidemiology, and Infectious Diseases. Each departmental program has established its own graduate degree guidelines and core course requirements.

Graduate students in our programs identify research mentors based on their interests as evidenced in their initial statement of purpose. Prior to the qualifying exam, the students are required to take specific "core" courses, designated in the individual department's guidelines and tracks. These "core" courses provide students the basic methods and tools used to conduct quality research. During this time each graduate student also focuses on identifying a unique research project with the assistance of their Major Professor (research advisor) and a Supervisory Committee comprised of at least 4 members. The Major Professor and Supervisory Committee advise the student throughout the Ph.D. graduate program. Individualized investigations and independent study courses are often used to teach a student a particular technique in the laboratory or a new contemporary technology. Each student is constantly exposed to different laboratory and clinical facilities located within the UF Veterinary Hospital, the J. Hillis Miller Health Sciences Center, the Interdisciplinary Center for Biotechnology Research, Emerging Pathogens Institute, Center for Environmental and Human Toxicology, and the Veterinary Academic Research Building. Laboratories are equipped for research in cellular and molecular biology, immunology, toxicology, physiology and membrane biochemistry. An infectious disease isolation facility for large domestic animals is located at the Progress Center. In addition, the new Veterinary Academic Research Building includes two Biosafety Level 3 laboratories.

The U.F. Interdisciplinary Center for Biotechnology Research operates several core facilities to support biotechnology research, provides technical training, and sponsors workshops and seminars to enhance the research environment and experience. After completing the core course requirements and any didactic courses required by the Supervisory Committee, the student registers for advanced research. Each student attends seminars and journal clubs and is trained to write a scientific paper. The student is required to take and pass a Qualifying exam before the end of their second year. After

passing the Qualifying Exam the student is admitted to Ph.D. Candidacy and registers for dissertation research.

Towards the end of the graduate program students are encouraged to attend scientific meetings to present and defend their original research. This approach enables the graduate to be part of a community of scholars by promoting the University's mission of teaching, research, service and informing the general public.

Assessment Timeline (Graduate and Professional AAPs only)

Assessment SLOs	Dissertation Defense	Proposal for presentation at professional conference	IRA Skills	Scientific Writing Sample	Journal Club	Responsible and Ethical Conduct of Research Course	Evaluation of Professional Behavior	Plagiarism-free writing
Knowledge								
#1	X							
Skills								
#2					X			
#3		X	X					
#4				X				
Professional Behavior								
#5						X	X	X

Curriculum Map (UG AAPs only)**Assessment Cycle (All AAPs)**

Analysis and Interpretation:
 Improvement Actions:
 Dissemination:

From May - June
 Completed by August 31
 Completed by September 30

SLOs	Year	15-16	16-17	17-18	18-19	19-20
Content Knowledge						
#1		X	X	X	X	X
Skills						
#2		X	X	X	X	X
#3		X	X	X	X	X
#4		X	X	X	X	X
Professional Behavior						
#5		X	X	X	X	X

Methods and Procedures (UG and Certificate AAPs)

SLO Assessment Rubric (All AAPs)

See attached.

Measurement Tools (Graduate and Professional AAPs Only)

SLOs are measured by successful completion of course and attendance at Journal Club and scientific seminars, successful completion of the dissertation, proposals judged to be worthy of presentation at local, national or international meetings, scientific writing that is judged to be of publishable quality, a successful Qualifying Exam, maturation of interpersonal skills and professional behaviors, and post-graduation employment.

Assessment Oversight (All AAPs)

Name	Department Affiliation	Email Address	Phone Number
Paul Cooke, PhD	Physiological Sciences	paulscooke@ufl.edu	294-4008
John Dame, DVM PhD	Infectious Diseases & Pathology	damej@ufl.edu	294-4118
Rowan Milner, BVSc	Small Animal Sciences	milnerr@ufl.edu	294-4490
Carlos Risco, DVM	Large Animal Sciences	riscoc@ufl.edu	294-4320
Ammon B. Peck, PhD	Associate Dean for Research and Graduate Studies; Infectious Diseases & Pathology	peck@ufl.edu	294-4211

Academic Assessment Plan Entry Complete: