UNIT REPORT

Veterinary Medical Sciences (PhD) -Reviewer's Report - Academic Data Generated: 6/5/19, 10:59 AM

Veterinary Medical Sciences (PhD)

PhD Veterinary Medical Sciences

Mission:

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." **Start:** 07/01/2017

End: 06/30/2018

PG 1 High Quality Graduate Students

Goal: 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 (310 on GRE).

Results:

Nine new Ph.D. students were admitted to the program in 2017. The average GRE score of the 2017 class was 307, with one student coming in with a Master's degree already and not needing to provide a GRE score. The average GPA of the 2017 class was 3.32. Three of the nine students were international students and did not provide a GPA. The average GRE is slightly below the criterion of 310 but the GPA is slightly above the criterion of 3.2.

Attached Files

XOn Campus: true XProgram CIP: 51.2501 XOnline: false XOther Site: false XIf Other Site:

PG 2 Employment

Goal: 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 supervisory committee chairs will result

in >90% of students appropriately employed in a position that makes use of their Ph.D. degree.

Results:

Six graduates out of a total of 6 graduates of the Ph.D. program in this reporting cycle are employed in a position that makes use of their Ph.D.

Attached Files

XOn Campus: true

XProgram CIP: 51.2501

XOnline: false

XOther Site: false

XIf Other Site:

PG 3 Timely Completion of Qualifying Examination

Goal:

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.

Results:

There were no students who entered the Ph.D. program in this reporting cycle with only a bachelor's degree.

Eight students were admitted to the Ph.D. program with either a master's degree or professional degree in this reporting cycle. None of the 8 students in this cycle took the qualifying exam by the end of their first year, for a percentage of 0%. This does not meet our criterion for success.

Attached Files

XOn Campus: true XProgram CIP: 51.2501 XOnline: false XOther Site: false XIf Other Site:

SLO 1 Knowledge

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

SLO Area (select one): Knowledge (Grad)

Assessment Method:

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

SLO Not Assessed This Year:

Results:

Given that the number of students who met our expectations exceeded our threshold of acceptability, we determined that our students met our criterion.

Attached Files

Start: 07/01/2017 End: 06/30/2018 Threshold of Acceptability: 90 How many students did you assess for this outcome?: 6 How many students met the outcome?: 6 What percentage of students met the outcome?: 100 Does this meet your threshold of acceptability?: Yes

SLO 2 Skills

Outcome:

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)

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 Not Assessed This Year:

Results:

Given that the number of students who met our expectations was below our threshold of acceptability, we determined that our students did not meet our criterion for success.

Attached Files

Start: 07/01/2017

End: 06/30/2018

Threshold of Acceptability: 90

How many students did you assess for this outcome?: 32

How many students met the outcome?: 26

What percentage of students met the outcome?: 81

Does this meet your threshold of acceptability?: No

SLO 3 Skills

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

SLO Area (select one): Skills (Grad)

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 Not Assessed This Year:

Results:

Given that the number of students who met our expectations exceeded our threshold of acceptability, we determined that our students met our criterion.

Attached Files

Start: 07/01/2017 End: 06/30/2018 Threshold of Acceptability: 90 How many students did you assess for this outcome?: 24 How many students met the outcome?: 24 What percentage of students met the outcome?: 100 Does this meet your threshold of acceptability?: Yes

SLO 4 Skills

Outcome: Students write effectively in a manner appropriate to veterinary medical sciences. SLO Area (select one): Skills (Grad) Assessment Method:

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

SLO Not Assessed This Year:

Results:

Given that the number of students who met our expectations exceeded our threshold of acceptability, we determined that our students met our criterion.

Attached Files

Start: 07/01/2017 End: 06/30/2018 Threshold of Acceptability: 90 How many students did you assess for this outcome?: 6 How many students met the outcome?: 6 What percentage of students met the outcome?: 100

Does this meet your threshold of acceptability?: Yes

SLO 5 Professional Behavior

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

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

Assessment Method:

1.) Students successfully pass 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.

SLO Not Assessed This Year:

Results:

Given that the number of students who met our expectations exceeded our threshold of acceptability, we determined that our students met our criterion.

Attached Files

Start: 07/01/2017 End: 06/30/2018 Threshold of Acceptability: 90 How many students did you assess for this outcome?: 14 How many students met the outcome?: 14 What percentage of students met the outcome?: 100 Does this meet your threshold of acceptability?: No

New Programmatic Use of Results Item

Program: Veterinary Medical Sciences (PhD)

Programmatic Use of Results:

Drs. Vickroy, Hernandez, Pascual and Stefanou reviewed the data on the academic strength of incoming Ph.D. students, employment of graduating students, timely completion of qualifying examinations, and SLOs related to knowledge, skills and professional behavior. We decided to continue to monitor the qualifications of the applicants to the Ph.D. program as one mechanism of ensuring that we are admitting those who are highly qualified for advanced study in veterinary medical sciences. We will also continue to monitor employment of graduates. Our review of the progress our students make in meeting expectations with regard to completing qualifying exams suggests that we need to enhance channels of communication with department graduate coordinators, mentors, and students on this aspect of students' degree progress. We decided to raise our criterion for SLOs 1, 3, 4 to 95% from 90%. Our review of SLO 2 and metric #1 for SLO 5 showed us that we failed to meet our criterion. The observed number (n=26) of students who completed at least one journal club or seminar course was lower than the expected number (>90% or 29 or more from a total of 32). Seminar credit requirements vary between Departments. We decided to address this issue by standardizing the number of required seminar credits across Departments. In addition, the observed number (>90% or 29 or more from a total of 32). To correct this situation, we decided to coordinate with the Graduate Studies Committee and request that the course on responsible and ethical conduct of research be a required course in the curriculum.

Program Results Not Reported This Year:

PhD Veterinary Medical Sciences AAP Detail

End: 06/30/2018

Start: 07/01/2017

Providing Department: Veterinary Medical Sciences (PhD)

Assessment Cycle (All AAPs):

Analysis and Interpretation:	From May - June
Improvement Actions:	Completed by August 31
Dissemination:	Completed by September

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

SLO Assessment Rubric (All AAPs):

See attached.

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

30

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.

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 Timeline (Graduate and Professional AAPs only):**