### **Graduate Program Requirements**

# Requirements for the Degree of Master of Science (M.S.) in Endocrinology and Animal Biosciences

Thirty (30) credits of graduate work must be completed for the M.S. degree, including at least 6 credits of graduate research (16:067:701,702) culminating in an M.S. research thesis. A final research seminar that is open to the Rutgers community is given prior to the thesis defense, which is conducted by the student's committee.

## Requirements for the Degree of Doctor of Philosophy (Ph.D.) in Endocrinology and Animal Biosciences

Seventy-two (72) credits of graduate work must be completed for the Ph.D. degree, including a minimum of 24 credits of graduate course work.

Satisfactory attainment of proficiency in each of the four areas will ultimately be determined in the Advancement to Candidacy examination (i.e. comprehensive exam). The written portion of this exam consists of a one week take-home exam composed of four essay questions designed to test the core competency areas. For the second part of the qualifying exam, the student is required to write a research proposal that will form the basis of their dissertation work, present a seminar outlining their project to the graduate program, and defend their proposal before their thesis committee. Once all degree requirements, including a written dissertation, have been completed, a final research seminar that is open to the Rutgers community is given prior to the thesis defense, which is conducted by the student's committee.

#### Curriculum

Our graduate program does not have specific course requirements. Instead, we require that each student be able to demonstrate proficiency in four core areas:

- Endocrinology
- Physiology
- Molecular Biology and Biochemistry
- Statistics and Experimental Design

To establish proficiency in each area, students can select <u>courses offered by the Graduate</u> <u>Program in Endocrinology and Animal Biosciences</u> and other programs at Rutgers or UMDNJ. Students should consult with their advisor prior to selecting courses each semester. Twelve undergraduate credits at the 300 and 400 levels may be taken and applied toward the degree. Students must maintain a grade point average of B or better. A maximum of two courses with grades of C will be counted toward the degree.

Satisfactory attainment of proficiency in these four core areas will ultimately be determined by the student's advising committee (e.g., at the M.S. thesis defense committee meeting or in the written and oral qualifying examinations Ph.D. students must take).

See the <u>graduate catalog</u> and <u>undergraduate catalog</u> for brief course descriptions. Consult the current <u>University Schedule</u> of <u>Classes</u> for course availability.

#### **Thesis Committee**

Each graduate student will select the members of their committee in consultation with their graduate advisor and approval by the graduate program director.

#### Ph.D. Dissertation Committee

- Minimum of 4 members composed of:
  - 1. Thesis advisor (serves as chair of the committee)
  - 2. At least two other members of the Endo & Animal Biosciences Graduate Faculty
  - 3. One committee member from outside the program

#### M.S. Thesis Committee

- Minimum of 3 members of the Endo & Animal Biosciences Graduate Faculty
  - 1. Thesis advisor (serves as chair of the committee)
  - 2. At least two other member s of the Endo & Animal Biosciences Graduate Faculty
  - 3. One non-program member is permitted with the approval of the Graduate Program Director but is not required.

### **Seminar in Endocrinology and Animal Biosciences**

All members of the graduate program – including faculty, graduate students, postdocs, and research staff – attend and participate in weekly research seminars sponsored by the graduate program (currently on Fridays, period 1, in Foran 138A). **Graduate students are required to attend these seminars.**