Research Rotation Program in Physiology

In fall 2008, the Graduate committee of the Department of Physiology introduced a new research rotation policy for first-year students. Students receive course credit for Introduction to Research PHLY 7740. The purpose of the lab rotations is to get experience in specific laboratories that will eventually lead to the choice of a thesis/dissertation laboratory. Such experience goes far beyond learning techniques; it is an opportunity for the student to determine whether he/she is compatible with the lab and the mentor. Rotations also provide the student with the opportunity to explore areas in which she/he may have interest but no direct research experience. It is recommended that at least one rotation be utilized to explore a field of research that the student may not have previously considered as a future research direction. Students are required to do a minimum of four different lab rotations, and a student can do additional rotations if necessary to find a compatible lab for thesis research. The minimum period for a rotation is 8 weeks; students often spend a few weeks longer, depending on the term in which the rotation is done. A rotation can be also done in the summer before the beginning of the first year.

Goals of the rotation experience

1. To help first-year students make informed decisions regarding research advisor selection;
2. To encourage these students to learn more about research in the physiology department at ECU;
3. To give students a first-hand experience in the research culture and mentoring styles of different laboratories;
4. To give students the short-term opportunity to closely consider research in an area of physiology different from their first choice at the time they entered;
5. To encourage upper-level graduate students and postdoctoral researchers in the various laboratories to discuss their research with new graduate students;
6. To encourage development of collaborations between two or more laboratories, with the possibility of students working with two research advisors.

Structure of the rotation experience

1. From late August through mid-September, students will meet with individually with the graduate faculty. All members of the graduate faculty should meet with the student and sign and date the form. These meetings should be completed by mid-September.

2. After further one-on-one meetings with potential faculty mentors for the research rotation experience, students can select a schedule of research rotations with two or three faculty. Students submit their choices of rotation to the
Graduate Program director advisor by September 16, 2008. The following calendar is recommended for 2008-2009:

<table>
<thead>
<tr>
<th>4-rotation schedule</th>
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<tbody>
<tr>
<td>First Rotation</td>
<td>Sept. 22 - Nov 7, 2008</td>
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<tr>
<td>Second Rotation</td>
<td>Nov. 10 - Jan 16, 2009</td>
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<tr>
<td>Third Rotation</td>
<td>Jan 19 – March 13, 2009</td>
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<tr>
<td>Forth Rotation</td>
<td>March 16- April 28, 2009</td>
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3. A student may change their choice of the second, third or forth rotation advisor during an earlier rotation period. The order of the rotations is arranged by the graduate committee. Priority is given to scheduling students as evenly as possible across all of the rotation periods, except if a faculty member arranges in advance not to schedule rotations during one of the periods due to teaching, extensive travel, etc.

4. Students will submit their first and second choice of summer rotation to graduate committee on May 1, 2009. Summer rotation is a full time research in the lab, which expected to result in an abstract submission to the local, regional; or national conference.

**Activities of the rotation experience**

1. Faculty is permitted considerable flexibility in assigning rotation activities, and should keep in mind those students who elect to take three (instead of two) courses in the fall semester will have less time available for the rotation experience. Faculty expectations should be discussed with students during the one-on-one meetings prior to selection of rotation advisors.

**Laboratory Rotations**

Research rotations consist of miniprojects carried out in the laboratory of and under the supervision of a faculty member. Students must complete at least four laboratory rotations during the first year. Most students elect to complete an additional full-time rotation during the summer. The rotations involve individual projects related to the general research interests of the students and the faculty mentors chosen. In recognition of the fact that a student's scientific interests often evolve considerably during the first few months of graduate study, students may choose to continue rotations into the second year. This gives students sufficient opportunities to explore all the options for laboratories in which thesis research might be pursued.

A rotation in a particular laboratory does not constitute a commitment on the part of the student or research adviser regarding the ultimate choice of thesis/dissertation laboratory. Following their rotations, students select and join the
thesis/dissertation laboratories where they will pursue research projects for their degree requirements. It is expected that this selection process will be complete by the second semester of the second year.