

# ENDOCRINOLOGY- REPRODUCTIVE PHYSIOLOGY, DOCTORAL MINOR

The Endocrinology and Reproductive Physiology (ERP) Program is a multidisciplinary degree-granting program designed to promote research in both endocrinology and reproductive biology, to provide training and experience for pre- and post-doctoral students interested in these fields, and to provide training in problems of endocrine physiology and reproductive physiology in animals and humans. The program trains master's and Ph.D. candidates for teaching and research careers in all aspects of the interrelated fields of endocrinology and reproductive physiology—basic, clinical and translational. Students have access to a full range of research facilities throughout campus.

The multidisciplinary research and the diverse interests of the faculty make possible many approaches to the study of both endocrinology and reproduction, providing the individual student with a wide selection of research training experiences. Research opportunities are available, but not limited to: endocrine molecular signaling, endocrine physiology in body function and dysfunction, stem-cell programming, gamete and embryo biology, pregnancy, lactation, neuroendocrinology and placenta development. Research models range from molecular and cellular all the way to whole animal including nonhuman primates and humans.

A doctoral minor in Endocrinology and Reproductive Physiology may augment the training for Ph.D. students in a variety of biological sciences research fields. Students may seek greater exposure to clinical and translation research, and the human health implications of their Ph.D. research; may want to learn more about pregnancy and development so as to consider the potential effects of an agent (e.g., a pharmaceutical or toxicological agent) on human development; may want to consider how changes to one system might affect another; etc. Due to its relevance across a wide range of research areas, as well as our unique courses (<http://erp.wisc.edu/current-students/course-offerings/>) on endocrinology, reproduction, pregnancy, and development, an ERP doctoral minor is one of the more popular doctoral minors relevant to biomedical sciences at UW-Madison.

For more information on ERP's doctoral minor, you can view our doctoral minor form ([https://erp.wiscweb.wisc.edu/wp-content/uploads/sites/407/2017/12/ERP-Minor\\_2017.doc](https://erp.wiscweb.wisc.edu/wp-content/uploads/sites/407/2017/12/ERP-Minor_2017.doc)) and contact the graduate coordinator (see Contact Information in sidebar).

If you are interested in obtaining a distributed minor (Option B), you can work with your major department to ensure that courses you take through the ERP program can count toward your doctoral minor.

## ADMISSIONS

Should you be curious whether an ERP doctoral minor would augment your graduate studies, please contact the program coordinator to discuss your research and career goals. Timing is important—remember that a doctoral minor must be completed before a student can advance to

candidacy. Graduate students in their first and second years of study are usually best positioned to add a doctoral minor to their degree plan.

To apply: With support from your advisor and proposed ERP doctoral minor advisor, submit the ERP minor form ([https://erp.wiscweb.wisc.edu/wp-content/uploads/sites/407/2017/12/ERP-Minor\\_2017.doc](https://erp.wiscweb.wisc.edu/wp-content/uploads/sites/407/2017/12/ERP-Minor_2017.doc)). The ERP program directors will determine whether an ERP minor is appropriate and feasible. There are no standard deadlines for submission for ERP doctoral minor applications.

## FUNDING

While most ERP M.S. and Ph.D. students are funded through graduate appointments and fellowships, we do not generally provide funding for students obtaining an ERP doctoral minor. If the project is relevant to NICHD, an ERP doctoral minor may apply for a funding through the Endocrinology and Reproductive Physiology program's T32 training grant (<http://erp.wisc.edu/current-students/nih-training-grant/>), if funding and space permits.

## REQUIREMENTS

### CREDIT REQUIREMENT

10+ credits

Code	Title	Credits
<b>Required Courses</b>		
OBS&GYN 710	Reproductive Endocrine Physiology	3
AN SCI/OBS&GYN/ ZOOLOGY 954	Seminar in Endocrinology- Reproductive Physiology (2 semesters, one presentation required)	1
<b>Select two courses from the following (2 credits each):</b>		<b>4</b>
OBS&GYN 711	Advanced Reproductive Endocrine Physiology	
OBS&GYN 712	Critical Thinking in Reproductive Endocrine Physiology	
MEDICINE 720	Endocrinology and Metabolism	
Additional coursework selected in consultation with minor advisor		

### ERP ANNUAL SYMPOSIUM

- Required to attend annually
- Required to submit an abstract for a poster / oral presentation each year until degree completion

## POLICIES

## PEOPLE

### Faculty:

Professors Ian Bird -director- (Obstetrics and Gynecology), David Abbott (Obstetrics and Gynecology), Elaine Alarid (Oncology), William Bosu (Medical Sciences/Veterinary Medicine), Ted Golos (Comparative Biosciences), Colin Jefcoate (Cell and Regenerative

Biology), Hasan Khatib (Dairy Sciences), Pam Kling (Pediatrics), Jon Levine (Neuroscience), Bo Liu (Surgery), Thomas Martin (Biochemistry), James Ntambi (Biochemistry/Nutritional Sciences), Jon Odorico (Surgery), Jon Parrish (Animal Sciences), Manish Patankar -associate director- (Obstetrics and Gynecology), Bret Payseur (Genetics), Francisco Pelegri (Genetics), Richard Peterson (Pharmacy), Linda Schuler (Comparative Biosciences/Veterinary Medicine), Dinesh Shah (Obstetrics and Gynecology), Ei Terasawa (Pediatrics), James Thomson (Cell and Regenerative Biology), Watters (Comparative Biosciences/Veterinary Medicine), Milo Wiltbank (Dairy Science), Wi Xu (Oncology), and Jing Zheng (Obstetrics and Gynecology)

Associate Professors Craig Atwood (Medicine), Anjon Audhya (Biomolecular Chemistry), Dawn Davis (Medicine), Theresa Duello (Obstetrics and Gynecology), Laura Hernandez (Dairy Science), Joan Jorgensen (Comparative Biosciences), Chad Vezina (Comparative Biosciences/Veterinary Medicine)

Assistant Professors Reid Alisch (Psychiatry), Lisa Arendt (Comparative Biosciences), Sebastian Arriola Apelo (Dairy Science), Barak Blum (Cell and Regenerative Biology), Derek Boeldt (Obstetrics and Gynecology), Michael Cahill (Comparative Biosciences/Veterinary Medicine), Ricki Colman (Cell and Regenerative Biology), Feyza Engin (Biomolecular Chemistry), Michelle Kimple (Medicine), Pam Kreeger (Biomedical Engineering), Matthew Merrins (Medicine), Bikash Pattnaik (Pediatrics), Aleks Stanic-Kostic (Obstetrics and Gynecology)