COURSE NAME; NUMBER; SEMESTER; MEETING DAYS, TIMES, AND PLACE.
Neuroendocrinology
11:067:410:01, Fall 2018
Tues, 3:55 PM – 6:55 PM
Foran 138A

CONTACT INFORMATION:
Instructor(s): Dipak K. Sarkar
Office Location: Endocrine Research Building, Room 104
Phone: 848-932-1529
Email: Dipak.sarkar@rutgers.edu
Office Hours: 2-3 PM on Thursday

COURSE WEBSITE, RESOURCES AND MATERIALS:
• The course materials will be provided in the class (Neuroendocrinology text by D.K. Sarkar; Case Studies and Hot Topics).
• For additional reading material, it is recommended to use: An Introduction to Neuroendocrinology (2nd edition) by Michael Wilkinson and Richard E. Brown.

PREREQUISITES/Corequisites:
Pre- or corequisite: 11:067:300 or 01:146:356 or by special permission. Open to juniors and seniors.

COURSE DESCRIPTION:
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The course provides a comprehensive and up-to-date coverage of the inter-relationships between the central nervous system and the endocrine system in the mammal.

LEARNING GOALS:
1. Provides the student with basic concepts and experimental approaches in mammalian neuroendocrinology including cellular and molecular actions of hypothalamic and pituitary hormones and the role of these hormones in controlling reproductive functions, body metabolism (e.g. obesity and diabetes), stress, growth, biological rhythms, drug addiction and immunity.

2. It also provides the opportunity for the student to learn how to critically interpret information from the neuroendocrinology literature.

ASSIGNMENTS/RESPONSIBILITIES, GRADING & ASSESSMENT:
Each student will prepare and present one case study consisting of 20 points. Case presentation will be a 20-min seminar describing the case and then analyzing the problem.
One mid-term and one final take-home examinations consisting of 40 points each. Each take-home exam will be given on the topics discussed in the lectures. These exams will be formatted as short-essay and problem-solving questions.

ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES
Please follow the procedures outlined at https://ods.rutgers.edu/students/registration-form. Full policies and procedures are at https://ods.rutgers.edu/
ABSENCE POLICY
Students are expected to attend all classes; if you expect to miss one or two classes, please use the University absence reporting website https://sims.rutgers.edu/ssra/ to indicate the date and reason for your absence. An email is automatically sent to me.

COURSE SCHEDULE (Subject to change):

Sep 4  Lecture #1:  
_Class Objectives_  
*Principles of cellular neuroendocrinology* (didactic lecture)

Sep 18 Lecture #2:  
_Hypothalamus_ (didactic lecture)  
Model case study presentation  
Model research Presentation

Sep 25 Lecture #3:  
_Pituitary gland_ (didactic lecture)  
Case study presentations (cases 2 & 3)  
Hot topic presentation (topic 1)  
Research presentation 1 (J Neurosci 2001, 21:2546)

October 2 Lecture #4:  
_Sexual differentiation of the neuroendocrine brain_ (didactic lecture)  
Case study presentations (cases 4, 6)  
Hot topic presentation (topic 2)  
Research presentation 2 (Endocrinology 2012, 153:1936)

October 9 Lecture #5:  
_Neuroendocrine control of gonadotropin release_ (didactic lecture)  
Case study presentation (cases 7, 9)  
Hot topic presentation (topic 3)  
Research presentation 3 (Proc Natl Acad Sci 2014, 111:10335)

October 16 Lecture #6:  
_Neuroendocrine control of prolactin release_ (didactic lecture)  
Case study presentation (cases 10 & 11)  
Hot topic presentation 4 (topic 4)  
Research presentation (Stem Cells Dev 2012, 21:3245)

October 23 Lecture #7:  
_Neuroendocrine control of thyroid hormone release_ (didactic lecture)  
Case study presentation (cases 13 & 14)  
Hot topic presentation (topic 5)  
Research presentation 5 (Nature 2012, 491:66-71)

Midterm exam

October 30 Lecture #8:  
_Neuroendocrine control of growth hormone release_ (didactic lecture)  
Case study presentation (cases 15 & 16)  
Hot topic presentation (topic 6)  
Research Presentation 6 (PNAS 2006, 103:6031)

November 6 Lecture #9:  
_Hypothalamic control of food intake_ (didactic lecture)  
Case study presentation (cases 17 & 18)  
Hot topic presentation (topic 7)  

November 13 Lecture #10:  
_Neuroendocrine control of stress axis function_ (didactic lecture)  
Case study presentation (cases 20, 21)  
Hot topic presentation (topic 8)  
Research Presentation 9 (Neuropsychopharmacology 2000, 22:219)

November 20 Lecture #11:  
_Neuroendocrine-immune interaction_ (didactic lecture)  
Case study presentation (cases 22 & 24)
Hot topic presentation (topic 9, 14)
Research Presentation 10 (J Gene Med 2012, 14:44)

November 27 Lecture #12: Neuroendocrine control of biological rhythms (didactic lecture)
Hot topic presentation (topic 10, 11)
Research Presentation 11 (J Immunol 2012, 188:2583)

December 4 Lecture #13: Obesity, hypothalamus and bone (didactic lecture)
Hot topic presentation (topic 12 & 13)
Research Presentation 12 (Mol Cell Biol. 2004 24:258-69)
Research Presentation 13 (Clin Interv Aging. 2013;811-8)

FINAL EXAM/PAPER DATE AND TIME
DECEMBER 11 TAKE HOME FINAL

ACADEMIC INTEGRITY
The university's policy on Academic Integrity is available at http://academicintegrity.rutgers.edu/academic-integrity-policy. The principles of academic integrity require that a student:

- properly acknowledge and cite all use of the ideas, results, or words of others.
- properly acknowledge all contributors to a given piece of work.
- make sure that all work submitted as his or her own in a course or other academic activity is produced without the aid of impermissible materials or impermissible collaboration.
- obtain all data or results by ethical means and report them accurately without suppressing any results inconsistent with his or her interpretation or conclusions.
- treat all other students in an ethical manner, respecting their integrity and right to pursue their educational goals without interference. This requires that a student neither facilitate academic dishonesty by others nor obstruct their academic progress.
- uphold the canons of the ethical or professional code of the profession for which he or she is preparing.

Adherence to these principles is necessary in order to ensure that:

- everyone is given proper credit for his or her ideas, words, results, and other scholarly accomplishments.
- all student work is fairly evaluated and no student has an inappropriate advantage over others.
- the academic and ethical development of all students is fostered.
- the reputation of the University for integrity in its teaching, research, and scholarship is maintained and enhanced.

Failure to uphold these principles of academic integrity threatens both the reputation of the University and the value of the degrees awarded to its students. Every member of the University community therefore bears a responsibility for ensuring that the highest standards of academic integrity are upheld.

Enter optional text or delete. Copy and paste elsewhere if you wish to edit. Here is an example from a syllabus (spring 2010 Andy Egan 01:730: 252 Eating Right: Cheating on tests or plagiarizing materials in your papers deprives you of the educational benefits of preparing these materials appropriately. It is personally dishonest to cheat on a test or to hand in a paper based on unacknowledged words or ideas that someone else originated. It is also unfair, since it gives you an undeserved advantage over your fellow students who are graded on the basis of their own work. In this class we will take cheating very seriously. All suspected cases of cheating and plagiarism will be automatically referred to the Office of Judicial Affairs, and we will recommend penalties appropriate to the gravity of the infraction. To help protect you, and future students, from plagiarism, we require all papers to be submitted through Turnitin.com.

STUDENT WELLNESS SERVICES
The Rutgers University Student Assembly urges that this information be included at the end of every syllabus. Edit or delete as you wish:
Just In Case Web App  http://codu.co/cee05e
Access helpful mental health information and resources for yourself or a friend in a mental health crisis on your smartphone or tablet and easily contact CAPS or RUPD.

Counseling, ADAP & Psychiatric Services (CAPS)
(848) 932-7884 / 17 Senior Street, New Brunswick, NJ 08901/ www.rhscaps.rutgers.edu/
CAPS is a University mental health support service that includes counseling, alcohol and other drug assistance, and psychiatric services staffed by a team of professional within Rutgers Health services to support students’ efforts to succeed at Rutgers University. CAPS offers a variety of services that include: individual therapy, group therapy and workshops, crisis intervention, referral to specialists in the community and consultation and collaboration with campus partners.

Violence Prevention & Victim Assistance (VPVA)
(848) 932-1181 / 3 Bartlett Street, New Brunswick, NJ 08901 / www.vpva.rutgers.edu/
The Office for Violence Prevention and Victim Assistance provides confidential crisis intervention, counseling and advocacy for victims of sexual and relationship violence and stalking to students, staff and faculty. To reach staff during office hours when the university is open or to reach an advocate after hours, call 848-932-1181.

Disability Services
(848) 445-6800 / Lucy Stone Hall, Suite A145, Livingston Campus, 54 Joyce Kilmer Avenue, Piscataway, NJ 08854 / https://ods.rutgers.edu/
Rutgers University welcomes students with disabilities into all of the University's educational programs. In order to receive consideration for reasonable accommodations, a student with a disability must contact the appropriate disability services office at the campus where you are officially enrolled, participate in an intake interview, and provide documentation: https://ods.rutgers.edu/students/documentation-guidelines. If the documentation supports your request for reasonable accommodations, your campus’s disability services office will provide you with a Letter of Accommodations. Please share this letter with your instructors and discuss the accommodations with them as early in your courses as possible. To begin this process, please complete the Registration form on the ODS web site at: https://ods.rutgers.edu/students/registration-form.

Scarlet Listeners
(732) 247-5555 / https://rutgers.campuslabs.com/engage/organization/scarletlisteners
Free and confidential peer counseling and referral hotline, providing a comforting and supportive safe space.