

CSBL 5023 Development Spring 2017

Time: Monday, Wednesday, and Friday, 8:30 - 10:00. **CLASSROOM:** ALTC 2.215

Course faculty: Pei Wang, Ph.D. wangp3@uthscsa.edu
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Course description and objectives

Developmental biology is the study on how a single cell develops to an organism. It is one of the most exciting fields in biology, creating a framework that integrates molecular biology, physiology, cell biology, anatomy, cancer research, neurobiology, immunology, ecology, and evolutionary biology. The study of development has become essential for understanding any other area of biology. The course mainly focuses on development of several animal models including mouse, Drosophila and C.elegans.

Course organization

Each session will consist of a didactic lecture (40-50 min), followed by discussion of developmental biology papers. It also depends on each faculty's own style.

Grading policies and examination procedures

There will be three components to your grade:

- Design a pamphlet, such as you might find in a clinic or physician's office, which describes a reproductive disorder, developmental disorder, or birth defect. This pamphlet should be designed with patients and their families in mind. (30%)
- Each class session that involves discussion of papers will require completion of a short (3 questions) "before class" exercise. You can print your answers out and turn them in to instructors on the day of the class, or return your answers electronically before class starts to the instructors. Attendance counts. (40%)
- Take home Exam: on April 6, you will be given a scenario, you will make a hypothesis and propose the three experiments to test the hypothesis. Turn in on April 11 11pm. Limit one page, single spaced, 12 point size font, 1 inch edge. (30%)

Three questions:

(Limit one page, single spaced, 12-point font size, 1 inch page margins.)

1. **What is the main method used in this paper? Why did they choose it?**
2. **What is the main conclusion they answered using the method?**
3. **Are there any questions they did not answer in the paper?**

REQUESTS FOR ACCOMODATIONS FOR DISABILITIES

In accordance with policy 4.2.3, Request for Accommodation Under the ADA and the ADA Amendments Act of 2008 (ADAAA), any student requesting accommodation must submit the appropriate request for accommodation under the American with Disabilities Act (ADA, form 100). to his/her appropriate Associate Dean of their School and a copy to the ADA Coordinator. Additional information may be obtained at <http://uthscsa.edu/eoo/request.asp>.

ACADEMIC INTEGRITY AND PROFESSIONALISM

Any student who commits an act of academic dishonesty is subject to discipline as prescribed by the UT System Rules and Regulations of the Board of Regents. Academic dishonesty includes, but is not limited to, cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an exam for another person, signing attendance sheets for another student, and any act designed to give unfair advantage to a student or the attempt to commit such an act. Additional information may be obtained at <http://catalog.uthscsa.edu/generalinformation/generalacademicpolicies/academicdishonestypolicy/>

TITLE IX AT UTHSCSA

Title IX Defined: Title of the Education Amendments of 1972 is a federal law that prohibits sex discrimination in education. It reads “no person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance.”

University of Texas Health Science Center San Antonio’s Commitment: University of Texas Health Science Center San Antonio (UTHSCSA) is committed to maintaining a learning environment that is free from discriminatory conduct based on gender. As required by Title IX, UTHSCSA does not discriminate on the basis of sex in its education programs and activities, and it encourages any student, faculty, or staff member who thinks that he or she has been subjected to sex discrimination, sexual harassment (including sexual violence) or sexual misconduct to immediately report the incident to the Title IX Director.

In an emergency, victims of sexual abuse should call 911. For non-emergencies, they may contact UPD at 210-567-2800. Additional information may be obtained at <http://students.uthscsa.edu/titleix/>

EMAIL POLICY

As a matter of University Policy, official communications between students and faculty occur using the student’s university assigned “livemail” email address. Students are expected to check their university email on a daily basis. Missed communication due to inadequate monitoring of university email is not a valid excuse for failing to perform expected activities. Students are welcome to email the instructors at any time. USE OF RECORDING DEVICES Course policy allows the use of recording devices, if given permission by the presenter.

ELECTRONIC DEVICES

Cell phones shall not be used during class (unless requested to do so by the instructors). Use of social media or email via any devices is not allowed during class.

Development

3/22/2017	Wed	Methods for studying development	Pei Wang	8:30-10am
3/24/2017	Fri	gastrulation, establishment and fates of germ layers	Pei Wang	8:30-10am
3/27/2017	Mon	Organogenesis	Pei Wang	8:30-10am
3/29/2017	Wed	CNS induction and neurulation	Erzsi Kokovay	8:30-10am
3/31/2017	Fri	cortical development, migration and axonal pathfinding	Erzsi Kokovay	8:30-10am
4/3/2017	Mon	Mesoderm: limb development, bone and cartilage differentiation	Kris Vogel	8:30-10am
4/5/2017	Wed	Germline Development	Brian Herman	8:30-10am
4/7/2017	Fri	Development of C.elegans	Pam Larsen	8:30-10am
4/10/2017	Mon	Embryonic patterning and Hox gene clustering	Ben Eaton	8:30-10am
4/12/2017	Wed	literature discussion	Ben Eaton	8:30-10am
4/14/2017	Fri	hands on mouse embryogenesis	Pei Wang	8:30-10am
4/17/2017	Mon	Exam	Pei Wang	8:30-10am