

Advances in Personalized Medicine

MMED 5001

SPRING 2020

CLASS DAYS and TIME: Fridays, 9:00 AM – 11:00 AM, starting on January 10 – June 13, 2020

CLASSROOM: STRF 300.3

COURSE FACULTY: Course Director: Michael Wargovich, Ph.D.

OFFICE LOCATION and HOURS: MCD 5.542 – 10:00 AM – 4:00 PM (By Appointment)

EMAIL: wargovich@uthsca.edu

TELEPHONE: 210-567-8230

READ THIS DOCUMENT CAREFULLY - YOU ARE RESPONSIBLE FOR ITS CONTENTS.

COURSE DESCRIPTION AND OBJECTIVES

This course is designed to integrate the fundamental principles of cell and molecular biology with modern practices in personalized medicine. The topics will include understanding the molecular mechanisms of human disease, strategies for patient therapy and drug design, and translational strategies for personalized patient care. The course will combine presentations from nationally and internationally renowned speakers in Personalized Molecular Medicine as well as team-based learning approaches to design the next steps in research to advance studies in specific areas of personalized medicine.

Pre-requisites – None

Semester credit hours – 2.0

By the end of this course, each student should be able to:

- Explain current topics in Personalized Molecular Medicine.
- Interpret the current literature pertaining to current topics in Personalized Molecular Medicine.
- Propose hypotheses and specific aims to advance research in specific areas of Personalized Molecular Medicine.

COURSE ORGANIZATION

The main teaching modalities used in this course include:

- 1) Didactic seminars and lectures on specific topics with the purpose of conveying important concepts.
- 2) Team based learning with students researching topics, reading the scientific literature, and presenting their hypotheses and specific aims.

Materials – Laptop for viewing the lecture notes and for reading scientific papers.

Reading Assignments – Course materials will be posted to Canvas prior to class periods and may at times be distributed to students via e-mail as well.

ATTENDANCE

Attendance and participation are mandatory. One large component of the grading is class participation so if a student misses a class due to sickness, the student needs to inform the instructors and course directors as soon as possible since this may result in an incomplete for the student. Any scheduled absences must be approved by the course director prior to the absence.

TEXTBOOKS

No required textbooks.

GRADING POLICIES AND EXAMINATION PROCEDURES

Grades will be based on attendance, class participation, and presentations.

Grading System

Letter grade:

90-100% = A, 80-89% = B, 70-79% = C, 60-69% = D, <60% = F

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/eeo/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

Course information and instructions will be e-mailed to students. Additionally, students should communicate with the course director via e-mail.

USE OF RECORDING DEVICES

Recording devices during the lectures are allowed with the permission of each instructor.

ELECTRONIC DEVICES

Electronic devices such as cell phones, computers, tablets, etc. are permitted in class, but we ask that you silence your cell phones during class.

TENTATIVE CLASS SCHEDULE
MMED5001
Advances in Personalized Medicine
Spring 2020

WEEK	DATE	TOPIC	Assignment	Instructor and Modality
Week 1		Introduction to the Course		Wargovich & Kurmasheva
1/10/20				
Week 2		Genomic Testing for the Individual		Leach
1/17/20				
Week 3		PRISM Seminar or GCCRI Seminar		
1/24/20				
Week 4		Seminar Discussion		Students
1/30/20				
Week 5		Cancer DNA in Circulation		Kirma
2/7/20				
Week 6		PRISM Seminar or GCCRI Seminar		
2/14/20				
Week 7		Seminar Discussion		Students
2/21/20				
Week 8		Techniques in Personalized Medicine		Morris
2/28/20				
Week 9		MID-TERM		
3/6/20				
Week 10		Developing PDX Mouse Models for Cancer Therapy		Kurmasheva
3/13/20				
Week 11		PRISM or GCCRI Seminar		
3/20/20				
Week 12		Seminar Discussion		Students
3/27/20				
Week 13		Big Data In Personalized Medicine		Jin
4/3/20				
Week 14		PRISM or GCCRI Seminar		
4/10/20				
Week 15		Seminar Discussion		Students
4/24/20				
Week 16		Biomarkers in Personalized Medicine		Kumar
5/1/20				
Week 17		FINAL		Wargovich