Introduction to Translational Science

Tuesday 3-5PM, Rm AL & TC 2.213 Instructor: Philip T. LoVerde, Ph.D. Office: Rm 436.5D, Phone: 567-3737 e-mail: loverde@uthscsa.edu

Introduction to Translational Science Competencies

- 1. Define and explain basic principles, processes, and outcomes of translational research across its entire spectrum.
- 2. Define and identify the resources needed to conduct T1, T2, T3 and T4 research.
- 3. Display knowledge of T1, T2, T3 and T4; how they interact with each other to improve human health.

Class Assignments and Grades

There will be assigned readings, mostly review articles. Each student will be expected to actively participate in class primarily through discussion. Students will be paired for a final project. Each pair will choose an example of Translational Research and explain how the chosen example meets the requirements of T1, T2, T3 and T4 research. Each pair will have 20 minutes (10 minutes for each partner) and 10 minutes of active discussion from the rest of the class. The presentations will be on the last days of class and be worth 50% of the grade. The other 50% will be based on class participation throughout the semester. The course will be pass/fail. Each student will be allowed one unexcused absence. More than one unexcused absence will result in a grade of incomplete. There will be a mandatory sign-in sheet for each class.

Computer Requirements:

Students are required to have a laptop computer that can connect to and operate over a wireless network.

Software required:

 Microsoft Office Suite (A personal copy of the latest version can be purchased at The UTHSCSA bookstore at student pricing with a student ID)

All laptops will connect to The UTHSCSA network via the HSCwave broadcast wireless connection. Authentication for wireless use is based on The UTHSCSA domain username and password.

Assistance is available thru the IMS Service Desk

- Telephone:(567-7777
- E-mail (ims-servicedesk@uthscsa.edu)

Reading Assignments

Reading assignments will consist of original and review articles that pertain to the topic of the next class.

A pdf file of the slides for the next lecture will be provided online.

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/generalacademicpolic ies/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/

E-mail questions, concerns, topics at anytime to loverde@uthscsa.edu. At the same time, students are expected to check their university email inboxes on a regular basis so that any announcements, instructions, or information regarding this course will be received in a timely manner. Missed communications due to inadequate monitoring of incoming emails on the University's email server is not a valid excuse. **Recording devices** of all types are allowed. **Cell phones** must be on vibrate or mute during class. Computers and electronic tablets are allowed only for participating in classroom activities (*e.g.*, viewing slides presented in lecture or conference materials). No texting, tweeting, emailing, web-surfing, gaming, or any use of electronic devices that is not directly connected with classroom activities is permitted.

Please note that the first class is on August 30, the second class is on September 13 and the third class is September 20.

August 30	Translational	Science	(TS),	an	Evolving
Rm AL & TC 2.213	Discipline				_
Lecturer-Philip LoVerde,	Class objective	S:			
Ph.D.	Learn about:				
	$T1 \leftrightarrow T2 \leftrightarrow T3$	↔ T4			
	The need for Te	eam Scienc	e		
	Funding Res	ources fo	or TS:	NIF	I, WHO,
	Foundations,				
	Industry; CTSA	infrastructu	ure		

	Reading Assignments: What is Translational Science? Overview of Responsible Conduct of Research in TS Class objectives: Learn about Responsible conduct of research Research Misconduct Readings: ORI Introduction to the Responsible Conduct of Research Nicholas H. Steneck This 2007 edition has been modified on 1-2011 by PT LoVerde for MEDI 6001
September 13 Rm AL & TC 2.213 Lecturer-Philip LoVerde, Ph.D.	Overview of Responsible Conduct of Research in TS Continued Class objectives: Human Research Animal Research Conflict of Interest Readings: ORI Introduction to the Responsible Conduct of Research Nicholas H. Steneck Cervical Cancer and Human Papilloma Virus (HPV) Class Objectives: Learn about cervical Cancer Learn about cervical Cancer Learn about the aetiology of cervical cancer Readings: Papillomavirus-Like Particle Vaccines John T. Schiller, Douglas R. Lowy Persistence of human papillomavirus infection: keys to malignant progression Jason Bodily and Laimonis A. Laimins Epithelial Cell Responses to Infection with Human Papillomavirus

	Margaret A. Stanley	
September 20 Rm AL & TC 2.213 Lecturer-Philip LoVerde, Ph.D.	Bench to Bedside (T1 → T2) Class objectives: Demonstrate Causal relationship between HPV and Cervical Cancer; Steps to Development a vaccine FDA Class objectives: Learn about the FDA, its mission and what it does Readings: Prevention of cervical cancer: journey to develop the first human papillomavirus virus-like particle vaccine and the next generation vaccine. Janine T Bryan https://en.wikipedia.org/wiki/Food_and_Drug_Administration	
October 4 Rm AL & TC 2.213 Lecturer-Phil LoVerde, Ph.D.	Clinical Trials (T2) Course objectives: Learn about Clinical trials: Phase I (T2), Phase II (T2), Phase III (T2), Phase IV (T3) Review HPV Clinical Trials Readings: An update of prophylactic human papillomavirus L1 virus-like particle vaccine clinical trial results. John T. Schiller a,*, Xavier Castellsaguéb, Luisa L. Villa c, Allan Hildesheim Update on the new 9-valent vaccine for human papillomavirus prevention David Yi Yang, Keyna Bracken HPV and Men - CDC Fact Sheet	
October 18 Rm AL & TC 2.213	T3: Implementation Research Health Services Research	
Lecturer-Phil LoVerde, Ph.D.	Practice-based Research Networks (PBRN) Community-based participatory research Readings: STARNet <u>https://iims.uthscsa.edu/STARNet/about</u>	

November 1 Rm AL & TC 2.213 Lecturer-Phil LoVerde, Ph.D.	Coordinating Centers and Multi–Practice-based Research Network (PBRN) Research James W. Mold, MD, MPH, Paula Darby Lipman, PhD, and Stephen J. Durako, BA Focus Group Discussions in Community-Based Participatory Research to Inform the Development of a Human Papillomavirus (HPV) Educational Intervention for Latinas in San Diego Jessica L. Barnack-Tavlaris, Luz Garcini, Olga Sanchez, Irma Hernandez, Ana M. Navarro HPV Post Licensure, Barriers to Vaccination Class objectives: Post licensure follow up Why are not more adolescents being vaccinated? What are the barriers to vaccination and how do we address them? Readings Impact and Effectiveness of the Quadrivalent Human Papillomavirus Vaccine: A Systematic Review of 10 Years of Real- world Experience. Suzanne M. Garland et al. Ten years of HPV vaccines: State of art and controversies. Roberto Angioli et al. Barriers to Human Papillomavirus (HPV) Vaccination Among Adolescents in the United States. CDC Pros, cons, and ethics of HPV vaccine in teens—Why such controversy? Mark Donald White Parental acceptance and uptake of the HPV vaccine among African- Americans and Latinos in the United States: A literature review Kayoll V. Galbraith et al.
November 15 Rm AL & TC 2.213 Lecturer- Leonid Bunegin	Industry and Business Class objectives: Industry vs. Academia Conflict of Interest (COI) Patents Class objective: What are patents and how are they obtained. Marketing and Bias Class objectives

	HPV Vaccine Use & role of Marketing Reading: Flogging Gardasil: Nature Biotechnology Marketing HPV Vaccine Implications for Adolescent Health and Medical Professionalism Sheila M. Rothman, David Rothman
November 29 Rm AL & TC 2.213 Lecturer and moderator- Phil LoVerde, Ph.D.; Student presentations	T4: Policy, Politics and Society Class objective: HPV Vaccine / Politics and Society Readings: HPV Vaccination as a Public Health Priority student presentations
December 13 Phil LoVerde, Ph.D. moderator; Student presentations	Student presentations