Introduction to Translational Science
Fall 2022
Wednesday 3:00-5:00PM
ALTC 2.210
Instructor: Bertha E. Flores, Ph.D.
Office: NSG 2.648, Phone: 567 7101
e-mail: floresb2@uthscsa.edu

Introduction to Translational Science Competencies

COURSE OBJECTIVES

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.

CRITERIA FOR EVALUATION / GRADES

Class Assignments and Grades

This course is web-enhanced. There will be assigned readings and CANVAS modules to be completed as scheduled. Each student will be expected to actively participate in class and through CANVAS 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 group will have 30 minutes (10 minutes for each partner) and 5-10 minutes of active discussion from the rest of the class. The presentations will be on the last 2 days of class and be worth 50% of the grade. The other 50% will be based on class and CANVAS participation throughout the semester. Each student will be allowed one unexcused absence. More than one unexcused absence will result in a grade of unsatisfactory. There will be a mandatory sign-in sheet for each class.
<table>
<thead>
<tr>
<th>Class/ CANVAS participation</th>
<th>50%</th>
<th>Weekly as scheduled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Final Project</td>
<td>50%</td>
<td>November 30</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

**Reading Assignments**

Reading assignments will consist of original and review articles that pertain to the topic of the next class. CANVAS course modules include the slides for the next lecture.

**CLASS SCHEDULE**

Please refer to Course Calendar for dates and content outline

**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)

**REQUESTS FOR ACCOMMODATIONS 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.

**Other Resources, Tech Support**

Technical Support: UT Health Canvas Support Hotline (Students): 844-470-5729

CANVAS guides: https://community.canvaslms.com/community/answers/guides
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/

E-mail questions, concerns, topics at anytime to floresb2@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.

Please note that the first class is on August 31st.
Please see schedule as some classes are a week apart.

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
</tr>
</thead>
</table>
| August 31st   | **Course Orientation**  
                 **Translational Science (TS), an Evolving Discipline**  
                 T1 ↔ T2 ↔ T3 ↔ T4  
                 **Team Science**  
                 Funding Resources for TS: NIH, WHO, Foundations, Industry; CTSA infrastructure |
| Lecturer-Bertha Flores | August 14               |
| September 14  | **Overview of Responsible Conduct of Research in TS**  
                 Animals  
                 Humans  
                 Conflict of Interest  
                 **Cervical Cancer and Human Papilloma Virus (HPV)** |
| Lecturer-Bertha Flores | September 28            |
| September 28  | **Bench to Bedside (T1 → T2)**  
                 Causal relationship between HPV and Cervical Cancer; Development of a vaccine |
<table>
<thead>
<tr>
<th>Date</th>
<th>Lecturer-Bertha Flores</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>October 5</td>
<td>Clinical Trials (T2)</td>
<td>Phase I (T2), Phase II (T2), Phase III (T2), Phase IV (T3)</td>
</tr>
<tr>
<td></td>
<td>HPV Clinical Trials</td>
<td></td>
</tr>
<tr>
<td>October 12</td>
<td>Regulations and Agencies</td>
<td>What led to the use of research regulations and phase trials, e.g., polio, stent, HIV, HPV?</td>
</tr>
</tbody>
</table>
| October 26   | T3: Implementation Research | Health Services Research  
|              |                        | Practice-based Research Networks (PBRN)  
|              |                        | Community-based participatory research                              |
|              | HPV Vaccine / Industry / Clinical Trials |                                                    |
| November 2   | Industry and Business  | Industry vs. Academia  
|              |                        | Industry ↔ Science                                                  |
|              | Patents                |                                                                      |
| November 16  | T4: Policy, Politics and Society | HPV Vaccine Use / Marketing HPV Vaccine /  
| Students     |                        | Politics and Society                                                |
| November 30  | Student presentations  | Student presentations (30 minutes per group)                        |
| Students     |                        |                                                                      |