Technology in Medicine: The Future of Medicine Elective

Course Director
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Course Coordinators
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Kate Serralde, Unit Coordinator, Methodology Lab

Description
The medical field is rapidly changing. The goal of this elective is to familiarize students with today's cutting-edge technology and with the prototypes of what we will be using in the future. We will be using lectures and hands-on activities to expose students to different innovations that span across a variety of specialties and stimulate a discussion about what these changes mean for healthcare. By collaborating with top medical technology companies and TTUHSC physicians and researchers, students will be introduced to the process of technology commercialization and how new technologies are implemented and utilized by physicians. We hope to promote interest in research and entrepreneurship as vectors to further advance the field.

Number of Students
Up to ~30 MSI/MSII students.

Goals and Objectives
1. Hands-on exposure to and developing proficiency with the technology of tomorrow.
2. Discussion of the changes in access, cost, and portability.
3. Bridge the gap between R+D and implementation of technology.
4. Develop physicians who are comfortable with both technology and changes in technology.

Course Format
There are 8 regular sessions that feature classroom lectures and focus sessions. The "Da Vinci Robot" sessions may require OR certification. At the current moment, OR certification is limited to MS2 students but may include MS1s depending on TTUHSC policy.

Grading
Grading is credit/no-credit. Each of the 8 regular sessions will count as a single credit each. Participating in the "Da Vinci Robot" session will count as 1 additional credit. There are 9 credits available total; to receive course credit, you must earn 5 of 9 possible credits. Additional opportunities for credit may be permitted by the course director once approved by the course coordinators.

Application
Complete the online form entitled "TiM: Technology in Medicine Elective" and follow the submission instructions in the form. This will be sent out by email to the class in the Fall.

Elective Curriculum

Session	Topic	Day/Time	Location	Session Leader
1	**Curing Death**	October 2024	TBD	Simon Williams, PhD
2	**3D Printing Introduction**	October 2024	TTUHSC Library	Kate Serralde, MFA kate.m.serralde@ttuhsc.edu
3	**SimCenter Tour**	November 2024	SimLife	Pedro Villa (Pedro.Villa@ttuhsc.edu)
4	**Advances in Telemedicine**	November 2024	ZOOM	Laura Lappe laura.lappe@ttuhsc.edu
5	**da Vinci Robot**	November - January 2024	UMC Operating Room	Tom Cammack, MD Tom.Cammack@ttuhsc.edu UROLOGY
6	**Innovation Hub Tour**	January 2025	Innovation Hub	Taysha Williams Taysha.Williams@ttu.edu

| 7 | **Patent Basics** | January 2025 | Amend to Innovation Hub Tour | Cameron P. Smith, MEng, JD, CLP **cameron.smith@ttu.edu** |
| 8 | **Bioprinting Tour** | February 2025 | Whitacre College of Engineering | Dr. Changxue Xu Department of Engineering changxue.xu@ttu.edu |