BIOL 5234 Bioinnovation Seminar (1.5 credits)

Fall 2017

Instructors:
Eva Surmacz, Ph.D., Marcella Macaluso, Ph.D.

Instructor’s office hours:
BioLife Sciences Bldg. Rm. 425A, by appointment; Phone: 215-204-0306, e-mail: surmacz@temple.edu
BioLife Sciences Bldg. Rm. 429A, by appointment; Phone: 215-204-9523, e-mail: macaluso@temple.edu

Course location:
In-class sessions: Rm 423, Biol. Life Sciences Bldg. 1900 N 12th Street, Main Campus.
Events: various event-specific locations.

Time: Fridays 5:00-6:30 pm (2-3 in-class sessions per semester) plus different times depending on specific event to be attended.

Grading:
1) Seminar/event participation and attendance: 50%;
2) Weekly written reports and reviews of seminars and events: 20%;
3) Final project: 30%.
A student is allowed to miss 1 in-class meeting per semester without grade reduction provided that missed content and assignments will be made up.

Course description:

Students are required to attend and actively participate in seminars, special lectures, and workshops that are related to the bioinnovation discipline, including new discoveries in biomedicine and biotechnology, technology evaluation and transfer, regulatory affairs in biomedicine, ethics in biomedicine, new biotech and biomedicine venture creation and financing. Examples of such gatherings include: CST Biology Department seminars, Temple’s Technology Transfer and Commercialization Office special seminars, CST Sbarro Institute special seminars as well as Fox Innovation and Entrepreneurship Institute’s TechConnect workshops, Fire Chats, BYOBB competitions, mentoring sessions, and special seminars. Relevant events outside of Temple (including online workshops) are allowed and encouraged.

Students might select the events according to their scientific interests and career goals, and in accordance with their own schedule. A total of 20 h of attendance in such events is required and participation must be documented by a short (1 pg. maximum) report addressing event goals and critical review of its content. The reports will be presented and discussed during in class meetings (2-3 times/semester). A final project will be an assay and a 10 min oral presentation on a selected subject covered by attended events.

Academic ethics: Students are expected to abide by the Temple University policy regarding academic honesty. Suspected violations will be reported to the Academic Disciplinary Committee and proven serious violations will results in an F grade.

Special needs: Any student who needs accommodation due to a disability should contact the instructors privately to discuss specific situations and consult with Disability Resources and Services at 215-204-1280.
**Academic freedom**: Freedom to teach and freedom to learn are inseparable facets of academic freedom. The University has a policy on Student and Faculty and Academic Rights and Responsibilities (Policy #03.70.02). Follow the link http://policies.temple.edu/getdoc.asp?policyno=03.70.02.

**Instructors:**

**Eva Surmacz, PhD** is a member of Professional Science Master’s Program in Bioinnovation Steering Committee and serves as its Academic Director. She is also Director of Obesity and Cancer Program at SHRO and Professor in Biology (Adjunct) at CST. Dr. Surmacz research focuses on pathogenesis of obesity and diabetes and molecular links between these diseases and cancer development. She is a co-inventor of several patented compounds designated for the treatment of cancer and different metabolic diseases. Dr. Surmacz’s work has been supported by the NIH, Department of Defense, Pennsylvania Department of Health, pharmaceutical industry, and private organizations. Dr. Surmacz is the author of over 95 peer-reviewed publications and several book chapters, serves as a member of editorial boards of 4 professional journals and has worked as a free-lance journalist for a popular science magazines and journals. She is also a frequent grant reviewer for federal, state and multiple international funding agencies. Dr. Surmacz has mentored 30 full-time graduate students and post-doctoral fellows, including several international researchers. Current and previous teaching assignments of Dr. Surmacz at Temple University include courses covering topics in novel bioconcepts and biomodels, principles of drug development, clinical trials and pharmacovigilance, and scientific communication (BIO5227, BIO5226, BIO5234, BIO 2235, BIO5233). In addition, Dr. Surmacz co-founded and served as VP Research in 2 start-up biotech companies and serves on Scientific Advisory Boards of Biotech companies developing metabolic drugs.

**Marcella Macaluso, PhD** is a member of Professional Science Master’s Program in Bioinnovation Steering Committee and serves as its Professional Development Director. She is also Associate Professor in Biology and Director of Epigenetic and Genetic Program at S.H.R.O. Dr. Macaluso’s research focuses on understanding the molecular mechanisms underlying epigenetic and genetic alterations in human cells leading to cancer formation and progression. Dr. Macaluso has extensive experience in the following areas: epigenetics and genetics, gene expression and regulation, cancer biology, cancer biomarkers, molecular biology, computational biology, cellular signaling, virology, proteomics, drug discovery and validation. Dr. Macaluso’s research has been supported by the Department of Defense, National Institute of Health, several private international foundations and organizations, including SHRO. She is the author of over 50 peer-reviewed publications and book chapters, serves as a member of editorial boards of professional journals, and is a frequent grant reviewer for federal and international funding agencies. Dr. Macaluso has mentored national and international graduate students and post-doctoral fellows. Current and previous teaching assignments of Dr. Macaluso at Temple University include courses covering topics in novel bioconcepts and biomodels, pharmacoepigenetics and pharmacoepigenomics, application of genetics and epigenetics in drug design and drug response, bioscreening and health disparity (BIO5226, BIO 5228, BIO 5236, BIO 5234).