

Spring Semester 2006

BIMS 854: Special Topics in Cardiovascular Research; MRI, Communication, and Phenotypes

The Cardiovascular Training Grant through the Cardiovascular Research Center is sponsoring a unique course designed to survey areas of interest and excellence in cardiovascular research, and to offer an opportunity for younger investigators to share their passions and expertise in an area of science. The class offers the opportunity to both learn and to teach, and as such should be a wonderful opportunity for all participants. A unique feature of this class is that it will be organized and taught by upper level graduate students, post-docs, or junior faculty members who have an interest in a particular focused area of research, as well as an interest in improving their teaching skills.

Summary and Objectives: This course is for any individual interested in specialized topics relating to cardiovascular research. Upon completion of the course, one should have acquired 1) an enhanced understanding of each of the three topical areas, 2) the reasons why each topic was important, and 3) how these topics relate to cardiovascular disease 4) a knowledge base in current research strategies addressing issues in the field. How your own research might relate should also be considered in each case.

Schedule: This course will be held once a week, for one hour. We will meet Wednesdays in room 2102 of the MR4 building from 12 pm-1pm.

Course Structure: The course will have three sections, each a separate topical block. Blocks will consist of 4 classes, the first 3 classes of which will be 1 hour lectures meant to give you a basic understanding of the field, and bring everyone “up-to-date” on current research being done in the field. The last class is a discussion-based format dealing with a specific issue in the field that is at the lecturer’s discretion. Based on the success of this pilot class we anticipate that the class will be offered on a rotating basis throughout the year.

BIMS 854, Spring 2006,

DATE	TOPIC	LECTURER
01/25	Basic MRI techniques to probe tissue structure and function, Part 1	Patrick Helm
02/01	Basic MRI techniques to probe tissue structure and function, Part 2	Patrick Helm
02/08	Basic MRI techniques to probe tissue structure and function, Part 3	Patrick Helm
02/15	Discussion—TBA	Patrick Helm
02/22	Connexins in Heterocellular Communication, Part 1	Brant Isakson
03/01	Connexins in Heterocellular Communication, Part 2	Brant Isakson
03/22	Connexins in Heterocellular Communication, Part 3	Brant Isakson
03/29	Discussion—TBA	Brant Isakson
04/05	Combinatorial Control of Smooth Muscle Cell Phenotypic Switching, Part 1	Demetra Perlegas
04/12	Combinatorial Control of Smooth Muscle Cell Phenotypic Switching, Part 2	Demetra Perlegas
04/19	Combinatorial Control of Smooth Muscle Cell Phenotypic Switching, Part 3	Demetra Perlegas
04/26	Discussion—TBA	Demetra Perlegas

Grading: This course is Pass or Fail. Your grade will be determined by 1) attendance at each lecture, 2) participation, especially in regards to the “discussion” portion of the lecture blocks, and 3) a critical and thoughtful evaluation of each lecturer in charge of a topical block is required. The course is for 1 credit hour.

Lecture Material: The syllabus, a list of reading assignments, and lecture notes for each topical block will be available online (<http://www.ihavenoclue>) or in class.

Contacts: This course is organized and run by current and former members of the Cardiovascular Training Grant, through the Cardiovascular Research Center, at the University of Virginia. The current organizational members include: Dr. Andra Stevenson, Demetra Perlegas, Melissa, Kim, and Dr. Brant Isakson.

Registration for the class is under “BIMS 854 - Modern Lit Cardiovascular Research.” The professor of record is Dr. Brian R. Duling (4-9040), and the class organizer is Dr. Brant Isakson (bei6n@virginia.edu, 4-9039).

If you are interested in teaching a topical block in Fall 2006, please contact Dr. Brant Isakson.