NEW COURSE OFFERED SUMMER 2013:

BMS#793 TRANSLATIONAL CARDIOVASCULAR SCIENCES (53104)

CLASSES START: MAY 21ST

10:00—11:30 AM

ROOM 3155-HEALTH SCIENCES NORTH

TARGETED AUDIENCE: GRADUATE STUDENTS (MASTER’S AND DOCTORAL LEVEL) IN ALL ACADEMIC DISCIPLINES

FOR ADDITIONAL INFORMATION PLEASE EMAIL DR. JEFF FRISBEE (JEFRISBEE@HSC.WVU.EDU)
Week 1:
May 21: Introduction to the Course, Homeostasis, Basic CV Structure/Function (Frisbee)
May 23: Characteristics of Cardiac Cells, the Heart Pump, the Electrocardiogram (Yu)

Week 2:
May 28: Clinical Applications – Arrhythmia, Sudden Cardiac Death (Hull)
May 30: Clinical Applications – CHF, Cardiomyopathy (Warden/Gharib)

Week 3:
June 4: Vascular Control, Venous Return/Cardiac Output (Frisbee)
June 6: Regulation of Arterial Pressure; Responses to Physiological Stress (Brock)

Week 4:
June 11: Clinical Applications – Coronary Artery Disease (d’Audiffret)
June 13: Clinical Applications – Peripheral Vascular Disease (d’Audiffret)

Week 5:
June 18: Imaging the Cardiovascular System – Theory/Approaches (Raylman)
June 20: Imaging the Cardiovascular System – Approaches/Applications (Raylman)

Week 6:
June 25: Special Circulations – Cerebral and Introduction to Stroke (Simpkins)
June 25: Clinical Applications – Stroke (Pergami) 2:00-3:30 PM
June 27: Special Circulations – Coronary and Renal (Dick)

Week 7:
July 2: Class moved to June 25th at 2:00 PM
July 4: Holiday recess – no classes

Week 8:
July 9: Systemic Responses to Acute and Chronic Stress (Larkin)
July 11: Clinical Applications – Cardiovascular Responses to Chronic Stress (Finkel) Moved to 3:00 PM

Week 9:
July 16: Epigenetic Concepts in Cardiovascular Science (Knox)
July 18: Epigenetic Concepts in Cardiovascular Science (Knox)

Week 10:
July 23: Socio-economic Determinants of CVD (S. Frisbee)
July 25: Health Policy and CVD (Bias)

Week 11:
July 30: Biostatistical Approaches/Considerations for CVD Research (Gurka)
August 1: Epidemiological Concepts in CVD (Conway)

Week 12:
August 6: Epidemiological Concepts in CVD (Conway)
August 8: Introduction to Meta-Analysis for CV Science (Ramirez)
Course Description:
This course will be an interdisciplinary presentation of cardiovascular science and is targeted toward graduate students (Master’s and Doctoral level) in all academic disciplines. **While an extensive background in cardiovascular science is not required for this course, the content will require a basic familiarity with cardiovascular physiology as a starting point. Supplemental material is recommended prior to the course initiation for students requiring additional preparation.** The course content will initially focus on basic cardiovascular science and structure/function relationships within the cardiovascular system as a foundation. It will rapidly move into applications of this material into the clinical setting where cardiovascular dysfunction/disease states will be highlighted and discussed. The final section of the course will focus on topics of relevance to public health and population science related to cardiovascular health and disease. At the conclusion of this course, students will possess a solid introductory level understanding of key concepts underlying the study of cardiovascular science, health and disease from a translational perspective, spanning basic, clinical and population science. All classes are to be held in BMRC #101 (Erma Byrd Bldg. on the HSC Campus) from 10:00AM-11:30AM.

Supplemental Material: “Cardiovascular Physiology” (7th Edition); by David Mohrman and Lois Heller; Lange Physiology Series (2010).

Social Justice Statement:
West Virginia University is committed to social justice. The faculty joins with our colleagues throughout this campus to promote learning in a positive environment. We support open inquiry and communication between faculty and students in every aspect of our course. Discrimination of any kind violates the principles of mutual fairness and respect that are necessary to maintain a positive learning environment. We welcome suggestions on ways to improve, enhance or protect the rights of our students and faculty.

Course Instructors:
Thomas Bias, Ph.D. (Health Policy, Management and Leadership); tBias@hsc.wvu.edu
Robert Brock, Ph.D. (Physiology and Pharmacology); rbrock@hsc.wvu.edu
Baqiyyah Conway, Ph.D. (Epidemiology); bnconway@hsc.wvu.edu
Alexandre d’Audiffret, MD (Vascular and Endovascular Surgery); adaudiffret@hsc.wvu.edu
Greg Dick, Ph.D. (Exercise Physiology); gDick@hsc.wvu.edu
Mitch Finkel, MD (Cardiology); mFinkel@hsc.wvu.edu
Jefferson Frisbee, Ph.D. (Physiology and Pharmacology); jefrisbee@hsc.wvu.edu **(Course Director)**
Stephanie Frisbee, Ph.D. (Health Policy, Management and Leadership); sfrisbee@hsc.wvu.edu
Wissam Gharib, MD (Cardiology); gharibw@wvuhealthcare.com
Matthew Gurka, Ph.D. (Biostatistics); mgurka@hsc.wvu.edu
Laurie Gutmann, MD (Neurology); lagutmann@hsc.wvu.edu
Sarah Knox, Ph.D. (Epidemiology); sknox@hsc.wvu.edu
Kevin Larkin, Ph.D. (Psychology); kevin.larkin@mail.wvu.edu
Sam Mukdadi, Ph.D. (Mechanical and Aerospace Engineering); sam.mukdadi@mail.wvu.edu
Gilbert Ramirez, Ph.D. (Health Policy, Management and Leadership); gRamirez@hsc.wvu.edu
James Simpkins, Ph.D. (Physiology and Pharmacology); jwsimpkins@hsc.wvu.edu
Brad Warden, MD (Cardiology); wardenbr@wvuhealthcare.com
Han-Gang Yu, Ph.D. (Physiology and Pharmacology); hyu@hsc.wvu.edu