

FINAL - August 7, 2009

CVMD ADVANCED TOPICS in CARDIOVASCULAR and METABOLIC DISEASES 2009 - (CVMD # 650/850)

An advanced course focusing on the physiology and pathophysiology of the cardiovascular and metabolic systems. This course will provide a multidisciplinary view of the processes leading to cardiovascular and metabolic diseases through lectures focused on current concepts of the genetic, molecular and cellular biology bases of cardiovascular and metabolic function, dysfunction and responsiveness to therapeutic interventions. The course explores the complex interrelationship between cardiovascular and metabolic diseases covering current research topics in metabolic diseases and endocrine dysfunction such as diabetes, obesity and metabolic syndrome in addition to current research topics in cardiovascular diseases such as hypertension, heart failure and atherosclerosis.

Semester: Fall

Eligibility: Students who have satisfactorily completed the Core Curriculum are qualified for this course.

Credit hours: 3 credits

Course Director: Bina Joe, Ph.D. (x 4415)

Class Room: 339 HS Building

	Date	Hour	Subject	Lecturer
1	Aug 25	1.00-3.00pm	Introduction	Joe
2	Aug 27	1.00-3.00pm	Insulin action and metabolism: secretion and clearance	Najjar
3	Sept 1	1.00-3.00pm	Lipid and glucose metabolism: Regulation by glucocorticoid signaling	Sanchez
4	Sept 3	1.00-3.00pm	Inflammation and obesity	Stepkowski
5	Sept 8	1.00-3.00pm	Role of Endothelial dysfunction and inflammation in Atherosclerosis	Vazquez
6	Sept 10	1.00-3.00pm	Dyslipidemia, inflammation and oxidative stress: Implications in non-alcoholic steatohepatitis	Najjar
7	Sept 15	1.00-3.00pm	Insulin and Hypoglycemic control of diabetes	Beavis
8	Sept 17	1.00-3.00pm	Adipogenesis and Nutritional basis of obesity	Smas
9	Sept 22	1.00-3.00pm	Molecular Nutrition	Smas
10	Sept 24	1.00-3.00pm	Sleep disorders in obesity and type 2 diabetes	Bourey
11	Sept 29	1.00-3.00pm	Gut Hormones and Insulin Action	Mensah-Osman
12	Oct 1	1.00-3.00pm	Cardiac Metabolism in Health and Disease-I	Morgan
13	Oct 6	1.00-3.00pm	Bone metabolism in diabetes	Lecka-Czernik
14	Oct 8	1.00-3.00pm	Exercise in the prevention and treatment of diabetes	Lee
15	Oct 13	1.00-3.00pm	Renal Pathophysiology and Hypertension	Shapiro
16	Oct 15	1.00-3.00pm	Genetic basis of hypertension	Cicila
17	Oct 20	1.00-3.00pm	Cardiac Metabolism in Health and Disease-II	Morgan
18	Oct 22	1.00-3.00pm	Reactive oxygen species in cardiac ischemia-reperfusion injury and in mechanisms of protection	Pierre
19	Oct 27	1.00-3.00pm	Protein misfolding in cardiovascular and metabolic diseases	Wang
20	Oct 29	1.00-3.00pm	The Na/K-ATPase as a target for developing new cardiovascular therapeutics	Xie
21	Nov 3	1.00-3.00pm	Molecular targets and drug development-I	Chin
22	Nov 5	1.00-3.00pm	Molecular targets and drug development-II	Chin
23	Nov 10	1.00-3.00pm	Vascular Medicine-Clinical cases	Khoury

- Evaluations will be in the form of take home assignments wherein each faculty will assign a published article to be interpreted in the context of current research efforts in the field.