S. No.	Chief Investigator	Conducting Department	Brief Abstract	Grant & Time line	Status	Details regarding result being published
1.	Dr. Anita S. Malhotra	Department of Physiology	**Title of the project**: Evaluation of Endothelial dysfunction for prediction of Pre-eclampsia and other Hypertensive disorder of Pregnancy: A Prospective study **Abstract:** Pregnancy induced hypertension is the most common medical disorder encountered during pregnancy.It complicates 5% to 7% of all Pregnancies. Preeclampsia and PIH causes maternal &fetal morbidity and mortality. It is not limited to gestational period but is supposed to be awarning sign for the impending chronic cardiovascular disorders in future Preeclampsia has several possible risk factors, including null parity, age, multiple gestation, and obesity. Preeclampsia is a multifactorial disease like placental hypoxia , oxidative stress, immune mediated etc but widespread maternal endothelial dysfunction, manifesting as increased endothelial activation, high vascular resistance and vascular tone is a common feature in preeclampsia. Endothelial dysfunction also precedes the clinical features of preeclampsia. So, we planned to assess endothelial function serially during the different trimester of pregnancy and observe if there is any change in this parameter in Preeclamptic females as compared to normal pregnancy.Flow mediated dilatation is an established biomarker for endothelial function ,so we are assessing FMD in primigravid pregnant females. Methodology: For determination of FMD the method devised by Celermajer is being followed. . FMD is assessed using high resolution ultrasound system equipped with vascular software for two-dimensional (2D) imaging, and a high-frequency vascular transducer. The brachial artery is imaged above the antecubital fossa in the longitudinal plane. A sphygmomanometric cuff is placed below the ante-cubital fossa and a baseline rest image is acquired. Reactive hyperaemia is created by arterial occlusion with cuff inflation to suprasystolic pressure(50mmHg above baseline systolic) for 5 mins. The longitudinal image of the artery is recorded continuously from 30 s before to 2 min after cuff deflation. Percent flow-mediated dilation (%FMD) of the brachial artery is defined as the maximal brachial artery diameter after 60 seconds of reactive hyperaemia compared to the baseline vessel diameter.	ICMR funded Rs. 22,55,000 Started on 02.03. 2012 Duration :3 yr.	Ongoing	Abstract published in the supplemental issue of the official Journal of APPI-IJPPA2 57(5) (2013).

2.	Dr. Anita S. Malhotra	Department of Physiology	**Title of the project:** Effect of postprandial hyperglycemia and acute exercise on the endothelial function of healthy subjects **Abstract:** Cardiovascular diseases (CVD) are known to be the leading cause of morbidity and mortality in the world and atherosclerosis underlies the pathophysiology of these disorders. Diabetes is now-a-days also considered as CVD. Arterial endothelial dysfunction is considered as one of the early events in atherogenesis. For preceding structural atherosclerotic changes endothelial dysfunction is supposed to be an important link between postprandial dysmetabolism to CVD. Post-prandial hyperglycemia is a consistent finding in diabetes mellitus and metabolic syndrome and its deleterious effect on the cardiovascular system is well established. But post-prandial hyperglycemia has also its influence on cardiovascular system and endothelial function even in healthy individuals. Therefore we aim our study to determine whether postprandial hyperglycemia, induced by oral glucose loading, attenuates endothelial function in healthy subjects and whether exercise could prevent these postprandial changes. Methods: Present study is cross sectional Intervention Study. 84 healthy subjects between the age group of 18 to 30 years, without any systemic or local disorder will be enrolled. After informed consent, endothelial function will be assessed by flow mediated dilatation of brachial artery during reactive hyperemia, at fasting, and after first and second hour of glucose load (75g) on first day, with simultaneous blood glucose level estimation. To see the effect of exercise on endothelial function, the subjects will be asked to perform aerobic exercise for 15 min at the 70% of their maximum heart rate attained (predicted VO2max), between 1.30 min to 1.45 min of glucose load, by cycle ergometer, next day. Rest of the measurements will be same as done on the first day.	DST (Chandigarh Administration) Funded, Rs. 50,000 Started on 09.09.2013 Duration :1 yr.	Ongoing	Nothing has been published
3.	Dr Anumeha Bhagat	Department of Physiology	**Title:** Estimating prevalence of metabolic syndrome in college going students of Chandigarh **Abstract:** Metabolic syndrome (MS) includes central obesity, glucose intolerance, hyperinsulinemia, low lipoprotein (HDL), high triglycerides & blood pressure. Prevalence of MS is increasing in lower middle income group countries of south East Asian region. Studies regarding prevalence of MS in adults and	Rs. 50.000/- Starting on: 21.11.11 Duration: 1 year	Completed	Results submitted and still under consideration for publication

			children in Asia have been published, but there is no data on prevalence of MS in college going students in the age group of 18-25 years. 616 healthy students participated in the study. Waist circumference, height, weight & blood pressure were measured. Venous blood samples were analyzed for fasting blood glucose, HDL & triglycerides. Prevalence of MS was determined using IDF consensus definition for Indian subjects using ethnic specific cut offs for waist circumference. For the first time prevalence of MS (18.3%) in college going students of an urban territory of India using ethnic specific cut offs has been reported. Elevated triglycerides were most strongly related with increased risk of MS.			
4.	Dr Anumeha Bhagat	Department of Physiology	Title: One year follow up of risk factors associated with metabolic syndrome in college going students of Chandigarh Abstract: Introduction: Data suggest that obesity and metabolic syndrome are immediate precursors of type 2 diabetes mellitus and cardiovascular disease. Patients with the metabolic syndrome are at increased risk for developing type 2 diabetes mellitus. The predominant underlying risk factors for the syndrome appear to be abdominal obesity and insulin resistance; other associated conditions can be physical inactivity, aging and hormonal imbalance (18). Aim of the study: To estimate the change in risk factors related to metabolic syndrome after one year, in a previously identified cohort of college going students. Material and method: The participants in our previous study who had at least one risk factor for metabolic syndrome postitve will be chosen for this study. Waist circumference, height, weight & blood pressure will be measured. Venous blood samples will be analyzed for fasting blood glucose, HDL & triglycerides. Results: From the data collected the risk factor profile of the participants at the end of one year of initial assessment will be determined.	Rs. 33,000/- Starting on: 09.09.13 Duration: 1 year	Ongoing	Results yet to be compiled