Discipline **MCP5874**  
**Diabetes, Inflammation and Atherosclerosis: Critical Analysis of Basic and Clinical Research**

**Concentration area:** 5131  
**Creation:** 13/12/2016  
**Activation:** 13/12/2016  
**Credits:** 2  
**Workload:**

<table>
<thead>
<tr>
<th>Theory (weekly)</th>
<th>Practice (weekly)</th>
<th>Study (weekly)</th>
<th>Duration</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>10</td>
<td>10</td>
<td>1 weeks</td>
<td>30 hours</td>
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</tbody>
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**Professors:**

Carlos Vicente Serrano Junior  
Eduardo Gomes Lima

**Objectives:**

1) To contribute to the understanding of pathophysiology of atherosclerosis related to diabetes and potential therapeutic targets, biomarkers and new drugs. 2) To promote conditions of developing of critical interpretation of main trials in this field, including basic research and clinical trials. 3) Through international collaboration, we sought to stimulate high quality research with appropriated scientific methodology designed to answer contemporary questions in this field.

**Rationale:**

Interaction between diabetes, inflammation and atherosclerosis has been field of several trials, including mechanistic and clinical ones. Once diabetes promotes accelerated atherosclerosis with higher rates of cardiovascular events among those with both conditions, understanding of pathophysiology and therapeutic options could impact in prognosis of this condition. Number of publications indexed in PUBMED in this set has increased since 10 years ago, with almost 800 in 2005 and more than 1,400 in 2015. Some anti-diabetic drugs acting in different metabolic pathways have been developed in the last 10 years and recently showed reduction of cardiovascular events. Otherwise, best treatment for CAD among diabetics is motive of debate and some trials were designed to study this specific condition.

**Content:**


**Type of Assessment:**
Notes/Remarks:

EVALUATION CRITERIA: Practical Presentation of seminars and discussion with professors and distinguished specialists in this field comprising main trials published in high impact journals. Development of a scientific project related to this field with rationale, appropriate methodology, and funding resources. Theoretical 1) Participation in discussions and assiduity in classes with presentations provided by professors and international collaborators. OBSERVATION: Invited Professors: Michael Farkouh (University of Toronto) and James de Lemos (UT Southwestern Medical Center) Minimum number of students: 9 Maximum number of students: 18

Bibliography:

17. Lima EG, Hueb W, Gersh BJ, et al. Impact of Chronic Kidney Disease on Long-Term Outcomes in Type 2 Diabetic Patients With Coronary Artery Disease on Surgical, Angioplasty,

Languages taught:
Portuguese