Discipline MCP5841
Methods of Research in Coronary Disease: from Basic Science to Clinical Studies

Subject Area: 5131
Created: 03/07/2014
Active since: 03/07/2014
Number of credits: 2

Hours:

<table>
<thead>
<tr>
<th>Theoretical (per week)</th>
<th>Practical (per week)</th>
<th>Self-study (per week)</th>
<th>Duration</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>10</td>
<td>14</td>
<td>1 week</td>
<td>30 hours</td>
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</tbody>
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Faculty Members Responsible:

Luiz Antonio Machado Cesar
José Carlos Nicolau

Objectives:

To enable students to raise adequate hypotheses for the proposition of clinical or experimental research models focusing on Coronary Artery Disease (CAD). To improve critical analysis concerning publications in this area, by discussing details of the clinical application of methods or of the conclusions of clinical and experimental studies.

Background:

Cardiovascular Diseases are the leading cause of death in adults across the Western world, accounting for huge direct and indirect costs to society. CAD is, in turn, the most prevalent among Cardiovascular Diseases. It is the area, within medicine, that demands the greatest resources for research in the following items: pathophysiology, pathological anatomy, cost-effectiveness of strategies for early diagnosis and treatment, epidemiology, drug treatment through catheter and surgery. Knowledge about this disease does not yet clarify fundamental points related to etiology, pathophysiology and treatment, which makes continuous research in this field necessary.

Content:

Ideally, students should be familiar with the pathophysiology, diagnosis and treatment of CAD, which will make it easier for them to keep up with the syllabus content, summarized as follows: 1- Critical analysis of the transposition of results from Basic Science to Clinical application; 2 - Proposition of new models of study in Basic Science from the questions arisen in clinical practice, with a critical analysis of the current models; 3- Critical analysis of current atherosclerosis research methods, such as the analysis of endothelial function,
atherosclerotic plaque anatomy as viewed by both current and under investigation diagnostic methods, and the evaluation of the presence of ischemia and its prognostic value in coronary disease; 4. Elaboration of long-term strategies to study aspects of coronary disease; 5. Critical analysis of current therapeutic strategies applied to CAD in its chronic and acute forms of presentation.

**Assessment Method:**

The course will be assessed on the basis of the student’s interest and performance in seminars.

**Observation:**

Minimum number of students: 6 Maximum number of students: 20

**Bibliography:**


**Idiomas ministrados:**

Português