Discipline **MCP5854**  
**Critical Analysis of Heart Failure Research**

**Subject Area:** 5131

**Created:** 08/01/2015

**Active since:** 08/01/2015

**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>
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<tr>
<td>8</td>
<td>20</td>
<td>2</td>
<td>1 week</td>
<td>30 hours</td>
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**Faculty Member Responsible:**

Edimar Alcides Bocchi

**Objectives:**

To train and improve human resources in research and teaching in heart failure, with emphasis in etiological aspects, classification, staging, pathophysiology and treatment. – Critical analysis of cardiac transplant research and other methods in the treatment of heart failure, their results, methodology and impact on refractory heart failure. – Critical analysis of clinical research on heart failure, its results, methodology, and search for funding. – To present the methodology of this institution in heart failure research in comparison with other institutions, based on the protocols under development to improve the critical and scientific skills of the students.

**Background:**

Although major advances have been made in recent years in the areas of heart failure, cardiac transplantation and other treatment methods, there is still a significant mortality and limited quality of life, which justifies the need for research in the area. The current lines of research are aimed at the understanding of the classification, staging, pathophysiology and therapeutic aspects, with the purpose of reducing the mortality rates. The role of heart transplantation and other treatment methods in heart failure will also be analyzed critically and scientifically, as well as the new perspectives of publications and research in these fields.

**Content:**

The course will be divided into 8 modules. Each block will have a coordinator, who will teach a theoretical lesson and will hold 2 to 4 seminars. Module 1: Risk Factors for Heart Failure Theoretical lesson: Critical analysis of studies addressing CHF prevention. Repercussion and opportunities for research studies Seminars: 1. From hypertension to heart failure. Research on ventricular remodeling. 2. From coronary artery disease to HF. Research on hibernated myocardium and post-AMI remodeling. 3. From positive serology to HF due to Chagas' disease. Discussion on research that addresses the etiopathogenesis of the disease. Module 2: Etiology of Heart Failure Theoretical Lesson: Status of Etiologic Investigation in Heart Failure. Repercussions and opportunities for research development. Seminars: 1. Invasive and non-invasive research. Pros and cons. Critical analysis of the investigations that analyze the influence of the inflammatory process on the etiopathogenesis of dilated cardiomyopathy. 2. Etiopathogenic mechanisms that determine evolution of CHF in Chagas cardiomyopathy. What has not yet been made clear. 3. Etiopathogenic mechanisms of other cardiomyopathies that determine progression to CHF. Points
Module 3: Pathophysiology of heart failure


Module 5: Clinical Therapy for Acute Heart Failure


Module 6: Surgical treatment of heart failure


Theoretical lesson: Indications of the Current Modes of Mechanical Ventricular Assist 1. Critical analysis of the influence of devices on the prognosis of patients with heart failure. 2. Risk factors for device use: critical analysis of records usage. 3. The right ventricle and mechanical ventricular assist. Space for new therapeutic investigations. 4. Ventricular Assist Devices, Heart Transplant, or Total Artificial Heart?

Assessment Method:

▲Performance in the preparation and presentation of seminar ▲Attendance

Observation:

Minimum number of students: 4 Maximum number of students: 30

Bibliography:


Guimaraes Gv, D'Avila VM, Silva MS, Ferreira SA, Ciocla EG, Carvalho VO, Bocchi EA. A cutoff point for peak oxygen consumption in the prognosis of heart failure patients with beta-blocker therapy.Int J Cardiol. 2009 May 22. [Epub ahead of print]


Mason JW. Viral latency: a link between myocarditis and dilated cardiomyopathy? J Mol Cell Cardiol 2002;34:695-698


Jorde U, Naka Y, Mancini DM, Goldberg IJ, Schulze PC.


