**MOLECULAR MECHANISMS OF CARDIOVASCULAR DISEASE – GMS BI 778-A1**

**Fall semester, 2013; Tuesdays 9:00 – 11:00 am – R123 (McNarry Learning Center)**


The course includes lectures 1¼ hours long and student presentations on a topic relevant to the course lectures. Lecturers in the course are BU faculty who are experts in their field and several distinguished invited speakers. Invited speakers will also give seminars either in CVI or in Biochemistry. Students present a research paper and write and present a review on a specific topic (term paper). Each student will provide 1 question for his/her presentation and the term paper. Questions will be distributed to the class; answers will be returned the next session.

*Note that the term papers must be written by October 30 and presented on November 1 or December 6.* Grade will be based 30% on the research paper, 40% on the term paper and 30% on the assigned questions.

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<thead>
<tr>
<th>Date</th>
<th>Lecturer</th>
<th>Topic</th>
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<tbody>
<tr>
<td>9/3</td>
<td>Vassilis Zannis</td>
<td><em>Biochemistry &amp; genetics of lipoproteins: The apolipoproteins, enzymes, lipid transfer proteins &amp; lipoprotein receptors implicated in lipid and bile acid transporters and their contribution to lipid homeostasis and atherogenesis: Other genes implicated in atherogenesis</em></td>
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<tr>
<td>9/10*</td>
<td>Vassilis Zannis</td>
<td><em>HDL and its biological functions: Role of apoA-I and apoE in lipid homeostasis the biogenesis of HDL. New findings using transient adenovirus-mediated gene transfer in mouse models.</em></td>
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<td>9/17</td>
<td>Ira Tabas</td>
<td><em>Initiation &amp; Progression of Atherosclerosis</em></td>
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<td></td>
<td>Presentation of research paper: K. Walsh: Spann et al., Cell 2012, 151, 138-152</td>
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<td>9/24</td>
<td>Edward Fisher</td>
<td><em>Role of macrophages in atherosclerotic plaque regression</em></td>
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<td>Presentation of research paper: Coughlan K. : Rong et al., Journal of the American Heart Association; originally published online November 8, 2012; 2013;33:4-12, doi: 10.1161/ATVBAHA.112.252056</td>
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<td>10/1</td>
<td>Kenneth Walsh</td>
<td><em>Molecular Control of Cardiac growth and angiogenesis</em></td>
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<td>10/15</td>
<td>Richard Cohen</td>
<td>Boston University</td>
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<td>10/22</td>
<td>Ronglih Liao</td>
<td>Brigham &amp;Women's</td>
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<td>10/29</td>
<td>Steve Farmer</td>
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<td>11/5</td>
<td>Paul Pilch</td>
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<td>11/12</td>
<td>Roger Hajjar</td>
<td>Mount Sinai School of Medicine</td>
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<td>11/19</td>
<td>Joyce Repa</td>
<td>UT Southwestern Medical Center</td>
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<td>11/26</td>
<td>Wilson Colucci</td>
<td>Myocardial Remodeling</td>
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<td>12/3</td>
<td>Vassilis Zannis</td>
<td>Presentation of term papers by students: Group Discussion and Analysis</td>
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