Instructors
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Course Objectives
This seminar course will provide varied perspectives of the challenging but rewarding process of translating basic biomedical science to new therapeutics, with a focus on small molecule drugs. Planned topics include approaches to the discovery of active compounds, such as high throughput screening, natural products, and molecular design; what makes a compound a "good drug"; drug metabolism; and the discovery of CNS and anticancer drugs in the university setting.

Course Format
Course topics will be covered by a combination of assigned readings, discussion in class and lecture/seminar. Attendance, participation in class discussions and final homework assignment will be the basis for credit.

Course Schedule
The discussion sessions will be held on Mondays from 12:30-2:30 PM in CMME 2047, except for Monday Holidays and Tim Tully Seminar (2/7/12), in which case class will be held on the previous Friday, at the same time and location. Seminars are on Tuesdays at 12 noon in Leichtag 107.

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Location</th>
<th>Speaker</th>
<th>Topic</th>
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</thead>
<tbody>
<tr>
<td>Mon, Jan. 9</td>
<td>12:30-2:30 PM</td>
<td>CMME 2047, Discussion</td>
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<tr>
<td>Tues, Jan. 10</td>
<td>12:00 PM</td>
<td>Leichtag 107, Seminar</td>
<td>Deepak Dalvie, Pfizer</td>
<td>Drug Metabolism and Its Role in Discovering Drugs</td>
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<tr>
<td>Fri, Jan. 13</td>
<td>12:30-2:30 PM</td>
<td>CMME 2047, Discussion</td>
<td>Daria Mochly-Rosen, Stanford</td>
<td>Molecular Mechanisms of Cell Protection: from Basic Science to the Discovery of Allosteric Agonist as Potential Drugs</td>
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<td>Mon, Jan. 23</td>
<td>12:30-2:30 PM</td>
<td>CMME 2047, Discussion</td>
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<tr>
<td>Tues, Jan. 24</td>
<td>12:00 PM</td>
<td>Leichtag 107, Seminar</td>
<td>Adah Almutairi, UCSD</td>
<td>The Art of Falling Apart: Exploiting Nanomaterial Disassembly for Pharmacy and Medicine</td>
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<td>Mon, Jan. 30</td>
<td>12:30-2:30 PM</td>
<td>CMME 2047, Discussion</td>
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<td>Tues, Jan. 31</td>
<td>12:00 PM</td>
<td>Leichtag 107, Seminar</td>
<td>John Lazo, University of Virginia</td>
<td>Dual Specificity Phosphatases as Disease Drivers</td>
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<td>Fri, Feb. 3</td>
<td>12:30-2:30 PM</td>
<td>CMME 2047, Discussion</td>
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<tr>
<td>Tues, Feb. 7</td>
<td>12:00 PM</td>
<td>Leichtag 107, Seminar</td>
<td>Tim Tully, Dart Pharmaceuticals</td>
<td>Memory Enhancers</td>
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<tr>
<td>Mon, Feb. 13</td>
<td>12:30-2:30 PM</td>
<td>CMME 2047, Discussion</td>
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<td>Tues, Feb. 14</td>
<td>12:00 PM</td>
<td>Leichtag 107, Seminar</td>
<td>Robert Abraham, Pfizer</td>
<td>Drugging the PI3K-mTOR Pathway: Bridging Preclinical Biology to Clinical Efficacy in Cancer Patients</td>
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<td>Fri, Feb. 17</td>
<td>12:30-2:30 PM</td>
<td>CMME 2047, Discussion</td>
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<td>Tues, Feb. 21</td>
<td>12:00 PM</td>
<td>Leichtag 107, Seminar</td>
<td>Jeff Conn, Vanderbilt</td>
<td>Allosteric Modulators of GPCRs as a Novel Approach for Treatment of CNS Disorders</td>
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<td>Mon, Feb. 27</td>
<td>12:30 PM-2:30 PM</td>
<td>CMME 2047, Discussion</td>
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<td>Tues, Feb. 28</td>
<td>12:00 PM</td>
<td>Leichtag 107, Seminar</td>
<td>Martha Head, GlaxoSmithKline</td>
<td>Does My Raise Depend on This? Quantifying Expertise in Computational Chemistry</td>
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<td>Mon, Mar. 5</td>
<td>12:30-2:30 PM</td>
<td>CMME 2047, Discussion</td>
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<td>Tues, Mar. 6</td>
<td>12:00 PM</td>
<td>Leichtag 107, Seminar</td>
<td>Raymond Anderson, University of British Columbia</td>
<td>Discovery of Bioactive Marine Natural Products - In Search of Drug Leads and Cell Biology Tools</td>
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<td>Mon, Mar. 12</td>
<td>Papers Due?</td>
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