How does one become an expert in any field of study? How does one assess whether a scientific study is valid and/or important? This course will provide students with the tools to obtain and analyze the current primary literature, with the goal of promoting critical thinking about topical areas in biomedical engineering. This course will also expose students to the level of analysis required for passing the Ph.D. oral qualifier exam.

Course info: The class meets at 4-6 pm on Mondays in PSY B47. Students are expected to attend seminars when indicated.

Instructor: Prof. Joe Tien
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Textbooks: None. We will discuss selections from the primary literature.

Grading: Each week, we will discuss a recent publication, with students leading the discussion. Grades will be based on quantity and quality of contribution to the classroom discussion:

A = You could lead a journal club
B = You mostly understand the articles
C = You get the basic idea of the articles
D = You show up, but contribute nothing
F = ...
<table>
<thead>
<tr>
<th>Dates</th>
<th>Topics</th>
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<tbody>
<tr>
<td>Jan 23</td>
<td>Introduction</td>
</tr>
<tr>
<td>20</td>
<td><strong>NO CLASS</strong></td>
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<tr>
<td>21</td>
<td>Recent seminar speakers: Cynthia Reinhart-King, Dan Huh, Matti Hämäläinen</td>
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<td>Mar 5</td>
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<tr>
<td>12</td>
<td>&quot;Hot&quot; fields: Biomaterials, Optogenetics</td>
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<td>26</td>
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<td>Apr 2</td>
<td>Nano, Synthetic biology</td>
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<td>16</td>
<td><strong>NO CLASS</strong></td>
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<tr>
<td>18</td>
<td>Class pick #1</td>
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<tr>
<td>23</td>
<td>Class pick #2</td>
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<tr>
<td>30</td>
<td>Oral qualifier and wrap-up</td>
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