# GMS PM 820 Neuropsychopharmacology
## Fall 2010
### Instructors: Cottone, Sabino, Kumaresan, et al.

Fridays, 3:00-4:50 pm, Pharmacology Department Conference Room, R-622

**Course Description:** This course will examine the interaction between behavior and classes of drugs that affect the central nervous system. Emphasis will be given to how behavioral studies can assist in our understanding of various mental disorders, including addictions, pain syndromes, and dementia. Each class will consist of faculty overview of a topic, followed by student discussion of an assigned research paper.

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Faculty/Student Discussion Leader</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sept. 10</td>
<td>Development of psychopharmacology</td>
<td>Conan Kornetsky</td>
</tr>
<tr>
<td>Sept. 17</td>
<td>Conditioning techniques in psychopharmacological research</td>
<td>Pietro Cottone</td>
</tr>
<tr>
<td>Sept. 24</td>
<td>Discussion of Reading 2</td>
<td>Joon Boon</td>
</tr>
<tr>
<td></td>
<td>Design and statistical analysis in psychopharmacology</td>
<td>Pietro Cottone</td>
</tr>
<tr>
<td></td>
<td><strong>Reading 3:</strong></td>
<td></td>
</tr>
<tr>
<td>Oct. 1</td>
<td>Discussion of Reading 3</td>
<td>Tara Vanderweyde</td>
</tr>
<tr>
<td></td>
<td>Animal models of substance abuse-1</td>
<td>Valentina Sabino</td>
</tr>
<tr>
<td>Oct. 8</td>
<td>Discussion of Reading 4</td>
<td>Carolyn Brown</td>
</tr>
<tr>
<td></td>
<td>Animal models of substance abuse-2</td>
<td>Vidhya Kumaresan</td>
</tr>
</tbody>
</table>
Reading 5:

*OR*


*OR*


Oct. 15 Discussion of Reading 5  
Animal models of learning and memory  
Jon Freedman  
Vidhya Kumaresan

Reading 6:  

Oct. 22 Discussion of Reading 6  
Animal models of pain  
Rob Freilich  
Clifford Knapp

Reading 7:  

Oct. 29 Discussion of Reading 7  
Animal models of anxiety and depression  
Natasha Khatri  
Valentina Sabino

Reading 8:  

&  
Supplemental Material

Nov. 5 Discussion of Reading 8  
Animal models of eating disorders and obesity  
Liz Kieras  
Pietro Cottone

Reading 9:  
Supplemental Material

Nov. 12  Discussion of Reading 9  Joy Miyashiro
Animal models of Parkinson’s disease  J-F Chen

Reading 10:  
McNaught KSP and Olanow CW. Proteasome Inhibitor—
Induced Model of Parkinson’s Disease.  Ann Neurol. 2006;  
60:243-247.

Nov. 19  Animal models of dementia  Tsuneya Ikezu

Reading 11: Hiramata et al. miRNA malfunction causes 
spinal motorneuron disease.  Proc Natl Acad Sci U S A.  
2010 Jun 29. [Epub ahead of print] & Supplemental Material

Nov. 26  No class - Thanksgiving

Dec. 3  Discussion of Reading 11  Lissa Riley
Animal models of schizophrenia  Vidhya Kumaresan

Reading 12

Dec. 10  Discussion of Reading 12  Melissa Thompson
Discussion of Reading 10  Melanie Shackett

Dec. 17  Final Exam