Blogs, Mind-Mapping and Presentations
163 – Metabolics Translated

Mary ET Boyle, Ph.D. -- Department of Cognitive Science -- UCSD
Individual Student responsibilities:

- **2x** Individual contribution to presentation
- **10x** Class participation
- **10x** Weekly Mind Maps
- **2x** Blogs

75% of course grade is individual work

COGS163 Grade Breakdown:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>2 Presentations (individual work)</td>
<td>12.5% each</td>
</tr>
<tr>
<td>Class</td>
<td>10%</td>
</tr>
<tr>
<td>Mind Maps</td>
<td>20%</td>
</tr>
<tr>
<td>2 Medium Blogs</td>
<td>10% each</td>
</tr>
<tr>
<td>2 presentations (group)</td>
<td>12.5% each</td>
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</tbody>
</table>
Upload weekly Mind Maps:

Mind map submission link:

https://goo.gl/forms/161YrgEdEQ0Hf4xg2

You will need to sign in with your UCSD email address.
STUDENTS: PLEASE READ THIS PAPER FOR CLASS THE "FOCUS" PAPER

THE LINK FOR THE PAPER IS HERE

Week 2 Presentations

Week 2 Papers
- The role of insulin receptor signaling in the brain-2005
- Autonomic regulation of islet hormone secretion-implications for health and disease-2000
- Interactions between the central nervous system and pancreatic islet secretions: a historical perspective-2013
- Ch15-Insulin Resistance, Metabolic Syndrome, and Therapy
- The Metabolic Syndrome - Endocrine Reviews 2008
- A Comprehensive Review on Metabolic Syndrome - Kaur 2014

Week 2 Topics
- Tuesday: Boyle - Insulin
  - Ahern paper - introduction
  - Focus on: Autonomic regulation of islet hormone secretion ± Implications for health and disease
- Thursday: Team Stress but Well Drained
  - Insulin Signaling Pathways
  - Focus on: The role of insulin receptor signaling in the brain
  - Team DOPEamine
  - Consequences of Glucose Disruption
  - Focus on: Insulin Resistance, Metabolic Syndrome, and Therapy

TEAMS WITH SHARED PRESENTATION DAYS - PLEASE COORDINATE CONTENT.
Week 4 Presentations

**REQUIRED FOCUS PAPERS**

**ADDITIONAL READING PAPERS**

These papers are for the presenting groups to provide background and additional insights.

**Week 4 Papers**
- Neonatal overnutrition causes early alterations in the central response to peripheral ghrelin-2014
- Ghrelin mediates stress-induced food-reward behavior in mice
- Ch29-Ghrelin, Lipid Metabolism and Metabolic Syndrome
- Intracellular signalling pathways activated by leptin
- A ghrelin–growth hormone axis drives stress-induced vulnerability to enhanced fear-2014

**Week 4 Topics**
- **Tuesday:** Team A Little Bit of Leptin - Topic: Grehlin & Circuit Formation
  - Colliden et al paper - research article
  - Focus on: Neonatal overnutrition causes early alterations in the central response to peripheral ghrelin.
- **Thursday:** Team Peptide Pods - Topic: Grehlin and Anxiety
  - Chuang et al paper - research article
  - Focus on: Ghrelin mediates stress-induced food-reward behavior in mice.
This is where the team presentations will be posted 😊

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Please send me a link or a pdf file of presentation BEFORE - so that I may post it for the class. 😊
Your IA/TAs for this class are: Kathryn, Lakshmi, Samantha and Janet

Each group will have one of the IA/TAs as their mentor and will meet with them weekly to assist the group with their presentation and any questions regarding the material. Section is an essential component of the class. During section, the IA/TAs will present important details relevant to the weekly topic; for example, the section for one week will focus on intracellular signaling pathways, and the following week will focus on aspects important to experimentation protocols.

Office hours and contact information for everyone will be posted on TritonED.

"You guys are so lucky you have amazing IA/TAs."

"Please coordinate to meet with them for ~50 min weekly."

"Section presentations are critical to understanding class material."
<table>
<thead>
<tr>
<th>Hormone Basics</th>
<th>insulin</th>
<th>leptin</th>
<th>ghrelin</th>
<th>NPY</th>
<th>xmtrs</th>
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</thead>
<tbody>
<tr>
<td>Circuit wiring</td>
<td>PNS</td>
<td>Hypothalamus</td>
<td>Glia</td>
<td>Early Dev</td>
<td>Higher Areas</td>
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<tr>
<td>Food &amp; Bug Stuff</td>
<td>Gut/Brain Axis</td>
<td>Microbiome</td>
<td>Fats</td>
<td>Sugars and more</td>
<td>Public Health</td>
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<td>Nature or Nurture?</td>
<td>Circadian Rhythm</td>
<td>Genes</td>
<td>Epigenetics</td>
<td>Destiny?</td>
<td>Excercise</td>
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<tr>
<td>Diseases and Disorders</td>
<td>Depression</td>
<td>Alzheimer’s Disease</td>
<td>Schizophrenia</td>
<td>Metabolic Syndrome</td>
<td>??</td>
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