

## Cellular and Molecular Neuroscience

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**Lecture:** MWF 11:45 am 12:45 pm (YES, you can bring your lunch)

**Office Hours:** immediately following lecture or arrange via phone/email

**Textbooks:** either one of the three text books will be adequate for the course

From Molecules to Networks: An Introduction to Cellular and Molecular Neuroscience (3rd Edition, 2014); Academic Press **ISBN-13:** 978-0123971791 or **ISBN-10:** 0123971799  
John H. Byrne, Ruth Heidelberger, M. Neal Waxham;

From Neuron to Brain (5th Edition); Sinauer Associates  
John G. Nicholls et al, **ISBN-13:** 978-0878936090 or **ISBN-10:** 0878936092

Neuroscience (5th Edition); Sinauer Associates  
Dale Purves et al., **ISBN-13:** 978-0878936953 or **ISBN-10:** 0878936955

**Additional Reading:** scientific research articles and review articles (PDT5PDT5PDBrtilacadrd)0 1 162.02 368.45

- To understand membrane potential and excitability
- To understand neuronal action potentials
- To understand synaptic transmission
- To understand structure/function aspects of voltage and ligand-gated ion channels
- To understand G protein signaling
- To understand early brain development (gastrulation, neurulation)



**Ethical Considerations:**

*advisor will be notified of this failing grade and*

**Plagiarism Policy:**

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