BIOL 693 Physiology seminar  
Instructors: Dr. Kristin O’Brien/ Kelly Drew  
Offices: 226/ 169 Arctic Health  
Office hours: upon request  
ffko@uaf.edu/ ffkld@uaf.edu

Course description: This course will provide students with the opportunity to review current research in physiology, neuroscience, cell biology and biochemistry. Students will make formal presentations of their graduate research or lead a discussion of a current journal article.

Course goals: Students will gain knowledge of physiology and neuroscience from the molecular to the organismal level, sharpen their critical thinking skills, and obtain practice giving formal presentations.

Instructional methods: This course will be taught through student, visiting researchers and faculty-led presentations.

Course calendar: The formal course schedule will be distributed on the first day of class (Jan. 20).

Policies: Students are expected to attend all seminars. A grade of passing will be based on attendance (minimum of 70% of seminars) and participation in making presentations as well as in discussions.

Grading: A passing grade will be based on active participation in the seminars. Students must make one formal presentation on their own graduate research, or lead a discussion of a current journal article. In addition, students must prepare written evaluations of two other student presentations.

Disabilities: The instructors will work with the Office of Disabilities Service (203 WHIT, 474-7043) to provide accommodations in both the classroom and laboratory to provide equal access to all materials in this course to all students.
Course outline:

This is an example of the seminars that were presented during the Fall of 2005. These seminars covered the topics of neurobiology, metabolism and oxidative stress. We anticipate covering the topics of thermal biology, neurobiology, and nitric oxide in the Spring of 2006.

Sept 9: **Nikoosh Carlos**, former UAF undergraduate, now a graduate student at UCSD. “Differences in the size of amygdale nuclei in non-human primates”

Sept. 16* **Lique Coolen** Assistant Professor, University of Cincinnati, “Neurobiology of sexual reward”. (www.lique.com)

Sept. 23 **Chelsea Paskvan**, UAF graduate student will present the results of her summer research project at the Morehouse School of Medicine. “Ischemic neuroprotection of the neuregulin-1 response cascade involves the ETS repressor factor”

Sept. 30 **Dana Greene** Neural pathways involved in obsessive compulsive behavior

Oct. 7 **Barb Taylor**

Oct. 14 **Mike Harris** “Why we breathe”

Oct. 21* **Dan Ewert**, Chair and Professor, Electrical and Computer Engineering College of Engineering and Architecture, North Dakota State University, Fargo, ND. “Cardiac Viscoelasticity and its role in Diagnosis, Therapy and Comparative Physiology”

Oct. 28 **Kelly Drew**, “Neuroprotection in Heteroethermic mammals”

Nov. 4* **Mark Roth**, Fred Hutchinson Cancer Research Center, Metabolic Flexibility and Suspended Animation, (http://myprofile.cos.com/mroth)

Nov. 11 No Seminar

Nov. 18 **O’Brien lab**

Nov. 25 Thanksgiving break

Dec. 2 **Sayali Kulkarni** (Kuhn lab) “Oxidative modulation of the actin cytoskeleton”

Dec. 9 **Njideka Chukwu** (Kuhn lab) “Oxidative proteome changes as a biomarker for arsenic exposure”