

News from the Department

The last year has been an eventful one: **Dr. Martha Flanders** returned from a two-year stint in Washington, DC, we have introduced two new undergraduate neuroscience courses, and a record number of students are graduating with a BS in Neuroscience.

Professor **Flanders** has returned from her position as Program Director and Neural Systems Cluster Leader in the Biology Directorate at the National Science Foundation (NSF). She has now resumed her duties as our Director of Undergraduate Studies, and has returned to NSci 3102W. Her experience at NSF inspired her to write new lectures on the somatosensory system, rat whisking behavior, and birdsong.

We now offer a 1000 level Neuroscience Course to all students interested in learning about the brain. The course is based on the book "The Brain that Changes Itself" and covers topics relating to neuronal plasticity, including brain-machine interfaces, learning and memory, organization of the cerebral cortex and chronic pain. The course was taught and organized by Drs. **Paul Mermelstein** and **Robert Meisel** and it attracted over 100 students. Dr. **Meisel** is new to the University of Minnesota. He was recently recruited away from Purdue University where he

had over 20 years of experience teaching undergraduates in the Department of Psychological Sciences. Dr. Meisel's research interests focus on understanding the similar mechanisms by which drugs of abuse and sexual experience affect brain function.

Dr. Steven McLoon has also introduced a new course "Development of the Nervous System" that is aimed primarily at neuroscience majors. Ultimately, it will become part of the core curriculum in neuroscience. He is an expert on neurodevelopment and has long taught a graduate level course on the topic.

Dr. Lorene Lanier will be taking over the direction of the first core course, Nsci 3101, and **Dr. Geoff Ghose** continues as director of Nsci 3102W. He has catered to the iPod generation by making all of the lectures available on iTunesU. And he welcomes back our former fearless leader, Dr. Martha Flanders! **Drs. Dale Branton** and **Janet Dubinsky** continue to teach the laboratory course. Dr. Dubinsky has added an emphasis on team work skills and has reorganized the grading scheme so that everyone contributes to the evaluations. As a result, this always exciting course has become more collegial, more interactive, and as always a terrific way to learn neuroanatomy!

NEW COURSE ANNOUNCEMENT

NEUROSCIENCE 1001: FUNDAMENTAL NEUROSCIENCE
UNDERSTANDING OURSELVES
(course catalog NSCI 1001)

Term: Spring 2010
Credits: 3
Lectures: Tu/Th 1:30-2:45
Prerequisites: None

Course Topics Include

- Brain-Machine Interfaces
- Learning and Memory
- Drug Addiction
- Neurodisease
- Adaptation
- Stroke
- Self-Perception
- Sexual Drive
- Individuality
- Psychotherapy

<http://www.neurosci.umn.edu/courses/1001/1001-home.html>

Congratulations, Class of 2010!

Desiree Abu-Odeh*	Rajas Kale
Annah Adanene	Marissa Koran*
Jensen Alvarez	Rebecca Kruc*
Jeffrey Ames*	Perry Krumenacher
Kristine Anderson*	Rachel Kylo*
Preetinder Bassi	Todd Lanis
Jessica Bedi	Amber Lockridge
Thomas Bedor	Damaris Maina
Tyler Blazey*	Yen Nguyen
Shannon Boyle	Janaki Paskaradevan*
Lee Braam	Mihir Pendurkar
Omar Cespedes Gomez	Bevan Phillips
Arman Cicic	Kacey Rajkovich
Sarah Condon	Brianna Sanderson
Ricky DeMello	Anna Schnurrer*
Amy Erickson*	Alexander Schreiner
Peter Fliss*	Alexandru Ulici
Linda Giang	Robert Wickham*
Megan Hall	David Wroblewski
Robert Heilig	Kevin Wyum*
Halya Ivashchuk*	Kirubel Zeleke
Armin Jewell*	Jennifer Zick

* - Honors

Jeff Ames is waiting to hear from the UM and Iowa medical Schools and has a summer internship designing and managing clinical trials.

Thomas Bedor plans to go to grad school in a year or so. This summer he will be working for the National Park Service as a biological aide.

Amy Erickson will be attending Medical School at Des Moines University.

Perry Krumenacher plans to apply to medical school next year and will be hiking the Appalachians this summer.

Rachel Kylo will be attending U Penn Medical School and she is getting married this June, going on an amazing honeymoon to Hawaii.

Janaki Paskaradevan will be entering Johns Hopkins Medical School in the fall.

Kacey Rajkovich will be enrolling in the neuroscience PhD program at the University of Texas-Southwestern in the fall. She'll also be traveling to Hawaii and British Columbia for fun.

Robert Wickham will be enrolling in the neuroscience PhD program at Yale.

Kevin Wyum will be attending U Minnesota Medical School in the fall.

Jenny Zick is working fulltime in the lab of Jonathan Slack on spinal cord regeneration in tadpoles and will be applying to MD/PhD programs in the fall.

Alumni News

Call them doctor!

Philip Barbosa '04 will be graduating from medical school in a couple weeks and going to Stanford for residency in urology.

James Slotto '04 went to Medical School at the Uniformed Services University, and graduated there 2008. He then moved to San Diego for his internship, and now lives in Yuma, AZ and works as a Navy Flight Surgeon for a AV-8B Harrier Squadron.

Maya Babu '05 is graduating in May from Harvard Medical School and Harvard Business School with MD and MBA degrees. She will begin neurosurgical residency at the Mayo Clinic in June. She is excited to be coming back to Minnesota after a five-year hiatus.

Other news:

Matthew Dufek '02 says "it is hard to believe that 8 years has already passed since I graduated from the U. I am just finishing up my graduate training at UNC-Chapel Hill in the School of Pharmacy (Pharmaceutics) and I am hoping to be done by December. Then I plan on finding a position in industry working in DMPK and in vivo pharmaceuticals. Other than school my wife and I had our daughter who just turned 2 years about a month ago. So yeah, my time in graduate school has been extremely busy both at work and at home. We have not made it back to Minneapolis much lately since my research has been so hectic, but hopefully we will be back next fall for a visit."

Paul Johnson '06: "I guess I have a little bit of news on my end. I am currently entering my fourth year in the PhD program at The Scripps Research Institute in Jupiter Florida, where I have been focusing on the role of brain reward systems in the development of obesity.

Recently, my PI (Dr. Paul Kenny) and I published work showing that when rats are permitted unrestricted access to a palatable/energy-dense diet (composed of things humans eat, such as cheesecake and bacon), they not only become obese, but they exhibit hallmark symptoms of compulsive drug-taking. We further showed that reductions in a particular subunit of the dopamine receptor (D2DR), which has commonly been associated with extremely high BMIs and compulsive drug use and which seems to be a predisposing genetic factor to these illnesses, appears to confer a susceptibility to high-magnitude

reinforcers (palatable food or drugs) by reducing the threshold of exposure to the substance required to induce these “addiction-like” changes in the brain. Below is probably the least sensationalized description put out by NIDA:

<http://www.drugabuse.gov/newsroom/10/NR3-28.html>

However, the article will be coming out in the next issue of Nature Neuroscience and has a commentary that discusses our results in the appropriate context.”

[Editor's note – congratulations Paul. As far as I know, you're the first alum to get a paper into Nature Neuroscience!]

Shivan Patel '06 finished his masters in physiology & biophysics last summer at Georgetown. Currently, he's a 1st year medical student at Touro University College of Osteopathic Medicine - California. He'll be in Tanzania this summer on a medical/service project through the Global Physician Corps, then going on safari & climbing Mt. Kilimanjaro.

Jo Barta '07 is starting her 4th year in medical school here at the UMN. This year she will be applying to a residency in Plastic and Reconstructive Surgery. Over the past 2 years she has done several research projects with faculty in the plastic/recon dept here at the U and at Regions Hospital. She will be presenting one of her projects next month at the Minnesota Surgical Society annual meeting and hopefully in October at the American Plastic Surgery Association.

Callie Cox '07 reports “I'm just finishing my 3rd year of medical school at Des Moines University-College of Osteopathic Medicine. I am hoping to go into OBGYN with the Air Force. I'm getting married this summer in June and looking forward to one more year of medical school.”

Kelly Sovell '07 is finishing up her first year in the Masters of Public Health program in Epidemiology here at the U.

Carmen Avendano '08 was accepted at St. George's Medical School in Grenada West Indies. She started classes last January.

Nils Westfall (Wubbels) '08 is finishing his second year here at the U of MN medical school. His primary interest is ophthalmology.

Matthew Lewis '09 reports “I am currently a 1st year Ph.D. Student at Cornell in the department of Neurobiology and Behavior. I am in my second rotation (each a semester long) working

with Ron Harris-Warrick. My first rotation was with Christiane Linster looking at olfactory physiology and behavior in the rat. I will be returning to the Linster lab at the end of the semester.”

Josiah Severin '09 has good news: “It was very tough at first entering the world with bills and serious responsibility but that all ended in December when I took a job at Medtronic as a Clinical Studies Specialist in their CRDM (Cardiac Rhythm Disease Management) department. I have also been in the process of interviewing to move up in title, responsibility, and pay...which doesn't hurt seeing my school loan payments are out of control.

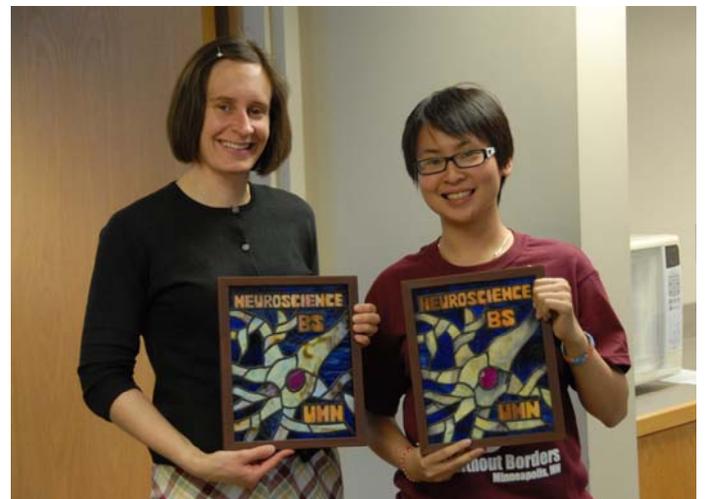
When I graduated I spent some time vacationing in Costa Rica to unwind and treat myself to a little reward. I plan on going to grad school in the next year or so.”

Keep us posted! Send your news to:

John Soechting: soech001@umn.edu

Katherine Himes '99: hime0005@umn.edu

or post them on Facebook: **University of Minnesota Neuroscience Undergraduate Alumni**



Reception, May 2009: Katherine Himes '99 and Anh Tran '09, recipients of the Alumni Recognition Award. Katherine is a member of the first graduating class, received her PhD in neuroscience and is now in university administration. Anh received more awards than there is space to mention, including a Fulbright fellowship.

Alert: We are planning an alumni reunion the last week of December 2010, most likely at a pub around campus. Details to follow!