**HEADLINES:**  WELCOME MIT CLASS OF 2014! | REG DAY for F’10 (9/7) | FIRST DAY of classes (9/8)

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**UPCOMING EVENTS**

**SEPTEMBER**

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1. Autism & Development Disorders: Nim Tottenham (UCLA), “The development of the neurobiology and behavior that support face expression processing”  
6:00 pm, 46-3002  
RSVP: lmavros@mit.edu

7. REGISTRATION DAY

8. FIRST DAY OF CLASSES

12:00 pm, 46-3310

4:00 pm, 46-3002

6:00 pm, 46-3002  
RSVP: lmavros@mit.edu

4:00 pm, 46-3002

23. MIT FALL CAREER FAIR  
11:00 am - 5:00 pm, Johnson Athletic Center

23. BCS Colloquium Series: Morgan Sheng (Genentech), TBA  
4:00 pm, 46-3002

28. CogLunch: Tyler Perrachione (Gabrieli)  
12:00 noon - 1:00 pm, 46-3310

30. BCS Colloquium Series: Sheila Blumstein (Brown), “Neural systems underlying resolution of competition in auditory word recognition and spoken word production: evidence from lesion and neuroimaging investigations”  
4:00 pm, 46-3002

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**FALL 2010 CLASSES IN COURSE 9**

- 9.01 Introduction to Neuroscience  
- 9.011 Systems Neuroscience  
- 9.015J Molecular and Cellular Neuroscience Core I (New)  
- 9.04 Neural Basis of Vision and Audition  
- 9.07 Statistics for Brain and Cognitive Science  
- 9.10 Cognitive Neuroscience  
- 9.12 Experimental Molecular Neurobiology  
- 9.20 Animal Behavior  
- 9.29J Introduction to Computational Neuroscience  
- 9.31 The Neurophysiology of Memory  
- 9.357 Special Topics in Vision Science  
- 9.364 Research in Cognitive Architectures  
- 9.41 Topics in Neuroscience and Cognitive Science  
- 9.422J Principles of Neuroengineering  
- 9.455J Neurotechnology Ventures  
- 9.48J Philosophical Issues in Brain Science  
- 9.50 Research in Brain and Cognitive Sciences  
- 9.56J Abnormal Language  
- 9.60J Language Acquisition I  
- 9.63 Laboratory in Visual Cognition  
- 9.75J Psychology of Gender and Race  
- 9.85 Infant and Early Childhood Cognition  
- 9.911 Spec Top: Brain & Cog Sci  
- 9.913 Spec Top: Brain & Cog Sci  
- 9.919 Teaching Brain and Cognitive Sciences  
- 9.921 Research in Brain and Cognitive Sciences  
- 9.941 Graduate Thesis Proposals  
- 9.9IV Visiting Student Research  
- 9.ThG Graduate Thesis  
- 9.UR Undergraduate Research  
- 9.URG Undergraduate Research  
- 9.48J Philosophical Issues in Brain Science  
- 9.50 Research in Brain and Cognitive Sciences  
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- 9.UR Undergraduate Research  
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**MORE INSIDE!**

**What’s Up With BCSS?**  
+ UROP Spotlight  

Subscribe to BCS-Talks and stay up-to-date on all BCS events!  
Send an email request to Judith Rauchwarger at jrauch@mit.edu.
A: I worked at the L.V. Prasad Eye Institute in Hyderabad, India. Hyderabad is a major metropolitan center in South India, and the L.V. Prasad Institute is a combined hospital and research center for eye care. I worked on a project investigating various ways to measure refractive error (or, why people need glasses) under Dr. Shrikant Bharadwaj, a Ph.D. from Berkeley. Turns out that I was able to apply psychophysics to a lot of what we were doing.

Q: How did you find out about your summer research?

A: I was always interested in taking a summer to go abroad, and I’ve always been interested in India, so MISTI India seemed like the perfect match. I chose an internship that I felt would relate to my interests, which are medicine and neuroscience.

Q: So was your summer research a “UROP”? Did you get credit or paid? Or did you have to pay for everything?

A: Technically my project in India is not considered a UROP, but it functioned just like a UROP would – I met with my research team a few times a week to discuss what our next steps would be, I gathered data, I wrote MATLAB code, the works. Fortunately, MISTI India was able to pay for everything, which was fantastic. But I didn’t earn a salary from L.V. Prasad.

Q: How did your summer research fit in with other research you’ve done here at MIT?

A: Part of what I worked on in India was developing a unique form of a clinical procedure called a retinoscopy. A retinoscopy is when an optometrist or ophthalmologist uses a scope which projects a beam of light into your eye and lets the doctor see the light that reflects back out of your pupil. Depending upon the type of reflection, or reflex, the doctor can make a judgment of your refractive error. Using the exact same kinds of psychophysical techniques I use for experiments here in the DiCarlo lab, we turned a clinical procedure into a signal detection task. Once we did this, we could compare a normally subjective clinical procedure to other objective ways of measuring refractive error. We also tested out a refractive-error measuring device developed right here at MIT, by the Media Lab’s Camera Culture group.

Q: Why did you work over the summer instead of vacationing or relaxing?

A: Going to India was certainly an exciting way to spend my summer, so that was a big reason I was fine doing “work.” I had plenty of time to explore Hyderabad and elsewhere in South and Southeast Asia, so it certainly wasn’t all work and no play. Plus, the kind of research I was doing directly related to my current research here at MIT and my future plans to go into clinical research. It was well worth it.

Q: Did you do anything else over the summer besides research?

A: Definitely. Every weekend in India (which, at the hospital, was only Sunday), the other MIT interns and I toured around our city, tried the local cuisine, and pretty much did everything good tourists should do. We also took off some time to see other cities in India, including Bangalore and Mysore. I even took off a couple of days near the end of my trip to travel to Malaysia, Singapore, and Indonesia.

Q: How was your summer research different from a regular, during-the-year UROP?

A: Doing research at MIT is great, but only during the summer do I get the opportunity to do something very different. Doing research in India, though related to the kind of stuff I do at home, is a very unique experience. A lot of things about Indian culture surprised me, and a lot of it took a little getting used to. Plus, the fact that I worked in an eye hospital meant I also got to see the clinical side of things – and how research can directly translate to patient care. That kind of experience is a little harder to get if you’re working solely at MIT.

Want to talk about your UROP? Contact Ken Haggerty ’11, our Newsletter Coordinator, at bcss-news@mit.edu!

WHAT’S UP WITH BCSS?

Hello everyone!

We all here at BCSS hope you had a restful and fun summer break. Nevertheless, we are excited to back at MIT and are looking forward to another great semester here at BCS.

For the freshmen: welcome and congratulations! We’re glad to have you here and hope to see you around. There are plenty of opportunities to get involved in brain and cognitive sciences: UROPs, 9.00 (Introduction to Psychology, offered in the spring), and of course, BCSS.

(but what is BCSS?)

Good question! BCSS is the Brain + Cognitive Sciences Society, an undergraduate student group dedicated towards building community within MIT BCS and making the most of your undergraduate experience. We hold study breaks, panels, events, meet, give you pizza after 9.00 and 9.01 exams, and distribute this monthly newsletter to keep you informed on the going-ons in BCS.

What’s that?.....you want to JOIN BCSS? Well then you should email bcss@mit.edu and we’ll let you know how you can get involved. You can also email us with questions, comments, or just to chat.

All the best,

MIT Undergraduate Brain + Cognitive Sciences Society

Aatman Shah ’11 (President)
Eugenia Gisin ’11 (Vice-President)
Avril Kenney ’11 (Secretary)
Ethan Solomon ’12 (Treasurer)
Cecily Koppuza ’12 (Publicity Chair)
Stephanie Tong ’12 (Activities Coordinator)
Ken Haggerty ’11 (Newsletter Coordinator)
Ivana Wongwajarachot ’12 (Webmaster)