

## **Simina Popa, Class of 2004**

### **Getting Started**

There I was, surrounded by 47 students who, like me, survived at least five “weed-out” classes. I was very excited to start the long awaited neurobiology courses but I also thought to myself “this is going to be hard-core”. Just as I was starting to get nervous, Dr. Moody told us that we were all very smart and we would all be better off if we put the competitive mindset behind us, made friends and studied in groups. And boy am I happy we took his advice.

This new atmosphere opened the door for us to ask questions ranging from “Can you please repeat that? I don’t get it.” to “Has anyone tried this experiment?” We received responses from our professors ranging from “I don’t know.” to “Wow. You could start a new pharmaceutical company with that idea!” I was so drawn into class discussions that if by some strange reason I actually noticed the time, I couldn’t believe how quickly it had passed!

Then came the labs. I stared at amplifiers among many other apparatuses and at an array of cables that had to be stuck into the right inputs and outputs. I, who didn’t consider myself too technologically oriented (and to a smaller extent, still don’t) was overwhelmed. But at the same time I felt spoiled to be working with \$ 20,000 equipment at my station and to share the attention of three to four instructors with only eleven other students. Phew. The challenge paid off when my lab partner and I finally impaled a snail neuron with an intracellular recording electrode. We saw REAL ACTION POTENTIALS! We recorded our data and interpreted it later with concepts we studied in class.

### **The Classroom and Beyond**

Now that I have completed the Neurobiology major at the University of Washington, I am ready to pursue a scientific career in neurobiology. In my classes, I’ve become aware of the different levels and approaches applied to the study of this field. I understand basic concepts about individual neurons, systems of neurons and the behavior of an animal that results from those circuits. I’ve learned about pharmacological methods that could be used in research as well as in therapeutic drug discovery. I have learned to combine scientific concepts with a clinical approach when studying neurological diseases. I’ve given oral presentations on laboratory data obtained by my lab partners and I. Finally, I’ve had many opportunities to work in groups. Although, these experiences will help me pursue science, they will also help many of my peers pursue clinical or teaching careers.

Outside of the classroom many other opportunities arose. Undergraduate neurobiology majors have a great reputation with many research faculty at UW as well as with instructors who are looking for undergraduate teaching assistants. It was easy for me to join a great research laboratory because other neurobiology students had been there before. They made a good impression and also passed the information along about which

labs are great for undergraduates. It was also easier for me to TA biology 100 because other neurobiology students had done it well in the past.

Last, but by no means least, I have met some of my closest friends from my major. We spent so many hours together studying concepts like the C-escape response of fish, that when we went out dancing after finals, we did the C-escape dance. I feel that they will be some of my life-long friends and colleagues.

I feel that choosing to major in neurobiology was one of the best decisions I made as an undergraduate. The material is fascinating and there is still much to be discovered. The curriculum is well-designed and the instructors are knowledgeable, engaging and fun. The friends are for life.

### **Jennifer Lee, Class of 2005**

After a freshman year of research labs and introductory biology courses, I longed for exciting new opportunities and found them in the neurobiology major. I heard about the program from my brother, who regaled me with stories of goats in Tennessee that faint when a train passes. The aspects of the program that attracted me were the small class size and the chance to learn about the sensory systems that define my perception of the world. I applied to the major just before my sophomore year began, and regard it as one of the best choices I have made as an undergraduate.

The weekly labs were a major highlight for me; I especially enjoyed recording neural activity in fly eyes exposed to light. In a three-week experiment, I learned the surgical and neurophysiological techniques to isolate and record from the nerves innervating crayfish muscles. The major provides access to superior laboratory equipment and encourages students to design innovative experiments. To take advantage of this opportunity, my lab partner and I measured the decreased visual spatial acuity observed in regions further from the center of the visual field. During the final lab session, we benefited from the chance to hone our presentation skills while explaining the project in a formal setting.

The labs are exciting because the professors that teach in this program are even more impressive. The faculty includes talented teachers and researchers from both the University of Washington and the School of Medicine. These professors avoid simplification and teach us the real stories behind neurobiology. Their guidance leads us through complicated concepts such as memory, language acquisition, and electric fish. Expertise and student aid are readily available from both professors and teaching assistants, who have helped me significantly outside of class.

The exceptional faculty is well matched by my neurobiology peers, who are among the brightest biology students in the region. In my experience, the program's competitive admission yields a unique group of students eager to contribute intelligent interpretations and explore challenging and captivating material together. Canoe and barbecue outings for the entire major demonstrate the friendly atmosphere that extends beyond the classroom.

This neurobiology program offers unparalleled undergraduate opportunities. As a further example, the program director helped to place me in a research lab studying the neural basis of circadian rhythms. Just look for the neurobiology t-shirts parading across

campus; they feature the fainting goats and botox injections that make this major so fun and educationally enjoyable.