

Here, we present an interview with Dr. Sue Grigson (Etown psych alum, class of 1984) who currently works at the Hershey Medical Center as an associate professor of Neuroscience.

**Dr. Grigson, what led you to pursue a career in neuroscience research?**

I began college as a Psychology major but became hooked in Dr. Ellsworth's research methods class. During my time at Etown, Dr. Ellsworth opened doors that I did not know existed and, in so doing, had critically changed the course of my life. While in his course, I found that science was a living, breathing enterprise, sometimes battle, and I relished in asking what I thought might be the next question.

Along with my new understanding of research and the scientific method, came my 'discovery' of the brain. At that time, we did not have a psychobiology or neuroscience class in Psychology and, being new to the life of a student, I was afraid of the hard sciences. My understanding of the connection between brain and behavior, then, came when Dr. Len Eiserer, who taught Sensation and Perception and Animal Learning in the same semester. Suddenly I noticed that patterns (graphs/curves) studied in Sensation and Perception were showing up in the Animal Learning course. In fact, a question posed in my third year of college was the first that I began to investigate as a postdoctoral fellow 8 years later.

In addition to the course-work, two other experiences at Elizabethtown College directly contributed to my entry into graduate school and, ultimately, to the study of behavioral neuroscience. First, Dr. Paul Dennis arranged for me to have what was the first internship in independent research between the Department of Psychology and the Hershey Medical Center. This was a remarkable opportunity where I had few other responsibilities than to the laboratory. Dr. Ellsworth guided this foray into experimental research with weekly meetings and with the expectation that I develop a new idea to test in the laboratory. With this charge, I went to the library and read and wrote and thought for hours and returned to my mentor at Hershey with a new experiment and a testable hypothesis. I still recall this professor's surprise, near disbelief. "How did you come up with that idea", he said. "You must have read it somewhere." With my notes and the papers that I had gathered, he was convinced and we conducted the experiment.

Finally, Dr. Ellsworth took me and several other students to our first scientific meeting - the Eastern Psychological Association, Baltimore. Among other colloquia, I attended a talk by a student of a professor whose work I had read. At the end of the talk, I asked the student a question. With this, his professor spun about and asked me who I was, where I came from, and whether I would like to be a graduate student at Rutgers and a student in his laboratory. So began my research career.

**Were there experiences you wished you had had at Etown that would have better prepared you?**

Yes, I should have taken chemistry, organic chemistry, upper level biology courses, and maybe even physics. Indeed, the stronger and broader this base, the better. My thesis advisor thought that a C in chemistry was far better than no chemistry at all. I now agree. I greatly encourage students interested in neuropsychology, biopsychology, or neuroscience to take these courses. My favorite students have come from liberal arts colleges, like Elizabethtown, but they often have had to take additional course work for more than a year in order to apply to the Graduate Program in Neuroscience at Penn State.

**What led you to work with Etown students?** Over the years, we have had several students in the laboratory that came from Elizabethtown College. These students have been excellent as they interested, hard-working, students. Most of them also have had the biology and chemistry needed to go directly to graduate school in neuroscience if interested. Off the top of my head, I can think of at least three students that have now earned their Ph.D. in the field of neuroscience. Others have taken the experience to better hone their interests and to shape their future in other areas of study. This also is exciting.

**What projects are you working on presently?** In my laboratory, I am studying how animals compare natural rewards with drugs of abuse. Specifically, I am interested in how drugs of abuse come to devalue natural rewards. We use rodent models to address this question behaviorally. Who is most likely to avoid a natural reward in anticipation of the opportunity

to take cocaine? Who, then, self-administers the most drug? Which rats are more likely to relapse (i.e., demonstrate the most cocaine-seeking) following a period of abstinence or extinction? Can we protect these animals from this fate? We also are considering which areas of the brain are involved? How does stress and experience impact this system? These are the types of questions that we are addressing in the laboratory and students play an integral role. Indeed, without students, I would have no research program and I would have a great deal less fun.