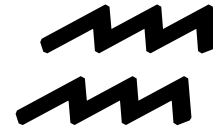


# *Psych*

# *NUWS*



## *The Newsletter of the Northeastern University Psychology Department Volume 11, Number 2 (January, 2005)*

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### **From the Chair**

Welcome back and Happy New Year!!!!

In last fall's column I wrote about the opportunities that are available to you as Psychology majors. In this column I would like to write about what these opportunities will mean to you if you take advantage of them. Perhaps you share the feelings of the parent of a prospective student that I spoke to at an orientation session recently. He wanted to know what kind of job his daughter could expect to get after she graduated. He pointed out that when he completed his degree in mechanical engineering, he knew exactly what he would be doing and was successful in getting a job. In contrast, he had a friend

whose daughter was a psychology major, and when she graduated, she could only find employment as a secretary.

Of course, if his daughter is interested in mechanical engineering, then she should major in mechanical engineering. But if she is interested in psychology and she takes advantage of what we have to offer, I assured the father that his daughter would not end up being a secretary (unless this is what she wants to do). And neither will you. What makes me so sure of this? Recently we surveyed our graduates from the past few years, and to see what the future holds for you, all we have to do is look at what they are doing now.

A large number of them have earned advanced degrees in psychology or related fields. They have earned Master's degrees in Mental Health Counseling, School Psychology, Education, Applied Psychology, Public Health,

Art Education/Therapy, Social Work, Experimental Biological Psychology, and Organizational Development. They have earned (or are earning) Ph.D.s in Clinical Psychology, Counseling Psychology, Marriage and Family Therapy, Cognitive Psychology, and Social Psychology. Most of these students did not go directly into graduate school. Instead they worked a year or two in a related field, as many of our most recent graduates are doing right now. For example, they are working in clinical settings as mental health counselors, case managers, and outreach workers, and in research settings as assistants in a pediatric psychopharmacology lab, a social psychology lab, and a smoking cessation lab. Other graduates are working as behavioral therapists, having taken the courses that we offer in this area and passed the certification exam. Some of our graduates sought teacher certification along with a degree in Psychology and are now working as teachers.

In addition to asking what they are doing now, we also asked our graduates how they felt their education prepared them for these activities. Many commented on co-op and on our curriculum. Here are two examples of comments on co-op: "The co-op program is GREAT and without that experience I would not have been able to work as a Case Manager (most other college graduates do not have a decent resume when they complete their degree.);" and "To be honest, my experience at Northeastern overall was very valuable. I learned an enormous amount through my co-op jobs and especially at McLean. I entered grad school and felt like I had so much more experience (work & clinical) than my classmates." Here are two comments on the curriculum: I have nothing but great things to say about my experience as a psychology major at Northeastern. I feel the psych labs were great in that they really taught one how to write in the APA format, as well as learn how to better understand research. Leaving the program I really felt that I had a solid general understanding of psychology. I was particularly impressed w/ Dr. Snyder's Seminar in Counseling/Clinical Psychology"; and "Two things about NU's Psych major that have been most beneficial to me were the statistics courses and the laboratory courses. In speaking to my fellow students and seeing the requirements at other schools, I can tell you that the level of statistics and research training I received at NU is drastically more than anyone else I've

spoken to. This has served me very well in both of my graduate programs where I've maintained a 4.0 GPA."

Our survey also revealed that a number of our graduates went into fields that are not directly related to psychology. Our graduates have or are earning degrees in law, dentistry, medicine and veterinary medicine. For example, one of our students graduated from the School of Medicine at SUNY Stony Brook. This year he is working in internal medicine at Salem Hospital, after which he will begin a four-year residency at Johns Hopkins. (By the way, he would be happy to exchange e-mails if you would like to talk about going to med school.) Several of our graduates have gone into nursing. For example, one of our students started out doing oncology research at NY Presbyterian Cornell Medical School. Then she decided to pursue a second bachelors in nursing. She received her nursing degree, passed her nursing boards, and is now working on a Master's. In less than 2 years, she will be a nurse practitioner of women's health and oncology. Another of our graduates is working as a registered nurse in the pediatric unit at Bridgeport Hospital. She intends to pursue pediatric psychiatric nursing, combining her B.S. in Psychology with the nursing experience she is now getting in Pediatrics. Her work will focus on autistic children, an interest that developed in the classes that she took here. Other graduates hold a variety of other jobs. For example, one of our graduates is a police officer in Manhattan. Others work as corporate recruiters or in sales.

Despite the fact that these graduates work in fields that are not directly related to their degree in psychology, they report that their experience here was of great benefit to them. For example, the student with the medical degree writes: "I was happy with my education at Northeastern. I took a lot of classes outside Psy, but I learned a lot about research and stats. The most useful classes for me were the upper level labs in which you wrote your own mini-paper. I still use those skills today. The abnormal, social, behavioral, cognitive classes have all been useful to me in medical school." He goes on to write: "The fact I was able to make some personal connection with the professors made all the difference for me. I always felt I could become involved in anything extra I wanted." One of the nursing students writes: "NU is a wonderful school. In comparison to my education at Ivy League

Columbia University, NU exceeds Columbia's standards in every dimension. Co-op is an incredible attribute--instilling the work ethic, responsibility and pride in young students." One of our graduates working in sales writes: "My degree in Psychology has been invaluable. Psychology and selling go hand in hand. Reading and understanding people's reactions, body movements and word choices are an important part of sales. Higher education in general has given me time management, deadline management and work ethic skills which make me successful in my job. Without my education I would not be equipped to succeed in a career where I choose my schedule, duties and activities." The police officer writes: "As a police officer it is important to be able to write effective, efficient reports, speak to the public and read and understand the law. I feel I have been well prepared in that regard. My studies have also prepared me for the many different personalities I have encountered."

So, the accomplishments of our graduates convince me that you will find that you will be already made each of these changes in the time since these students graduated, but there may be other improvements that you believe we could make. If so, we don't need to wait for you to graduate to hear about them. If you have a suggestion or a question for that matter, please don't hesitate to bring it up at a Psychology Club meeting, to mention it to your advisor, or to contact me directly at [s.harkins@neu.edu](mailto:s.harkins@neu.edu). We are very proud of our graduates, and we want to do all that we can to make sure that you have every opportunity to meet or exceed their accomplishments. The rest is up to you.

(And read the next three items for a more in-depth account from three recent grads.)

--Prof. Harkins

## NUws of Our Grads:

### Mary Ellis, '04

This past May I graduated with a B.A. in psychology from Northeastern University. I have just recently started a job as a research assistant for The Institute for Clinical Research and Health Policy Studies at Tufts New England Medical Center. My research

well prepared when you leave here. However, this expectation comes with a large caveat. These graduates took advantage of what we have to offer. They made good grades, they joined the Psychology Club, they used our advising system, they got to know their professors, they took directed studies and/or went on co-ops, internships, Study Abroad, etc. These graduates were active participants in their own education, as you must be to succeed as they have. If you make this effort, you can be confident that you will end up doing something that you really want to do, rather than settling for something less (like a job in mechanical engineering for example).

Of course, there is always room for us to improve, and several of the graduates made suggestions. For example, one of them proposed that we provide an introduction to co-op in Psychology. Another student suggested that we assign students interested in teaching certification and Psychology one advisor instead of requiring them to go to two different advisors. In fact, we had

experience as a directed study student during my senior year at Northeastern has made the transition from a full-time student to a full-time employee a lot easier. I was not able to participate in the co-op program at NU but I feel that my directed study participation has opened a lot of doors for opportunity, whether it be a career in research or law school.

Currently, the research project that I am working on at Tufts-NEMC looks at the relationship between the primary care physician and his/her patients. The patient's race, age, and gender are just some of the variables that our research group is analyzing. At first, the project was a little slow going. I spent most of my day collecting articles relative to the topic and compiling the databases that we are using for the research. However, more recently the work keeps piling up on my desk, I am always busy and multiple deadlines are on the horizon. Although my job can be stressful at times, I am excited to be working on such a project that allows me the opportunity to make quick decisions and apply all the skills I gained at my five years at Northeastern.

On a personal note, I hope to begin to prepare for the LSAT and take steps in applying for law school within the next couple of years. Although I am unsure about

what type of law I wish to study, I know when it comes time to applying to school my experience here at Tufts-NEMC will broaden my law school options. In closing, I highly recommend that you participate in the psychology directed study program whether you do or do not participate in a co-op. The experience I gained from my senior year directed study, combined with the psychology courses at NU, opened an enormous door of opportunity not only for a career but also for an extended education.

### **Jeffrey Bernath, '04**

I am doing pretty well here at Stony Brook University on Long Island. I have been working here in the Point of Woods Parenting Lab for the past couple of months under Susan O'Leary, working on a clinical parenting study.

I am learning all kinds of things about the boring end of the research process, like processing applications and hiring Research Assistants. I have about half a dozen undergrads working under me.

We are doing a pretty standard study, looking at a parenting program that teaches parents how to do things like execute a Time-Out properly, how to give commands properly, and stuff like that. The purpose of the study is to see how effective this program is for angry mothers when combined with an Anger Management program. So I get to work on cool things like recruiting and screening the mothers and watching their kids while they're in therapy.

I am working here full time, and they have me filling out my hours by helping to wrap up some older projects. I won't bore you with all the details, but I will toss an interesting piece of information your way. In a longitudinal study of new mothers of infants, the best predictor of child misbehavior problems at 2 years old was: Impulsiveness. We're still coding some stuff on that one so we'll see what else comes up.

I am applying to some grad schools (again) and hope to be back in a classroom soon. Compared to the daily grind here, I really miss school. I hope to see you out in the field soon.

### **Darci Fischer, '03**

While a Psychology major at NU, I did various co-ops with many populations of children. I worked in a residential treatment facility, an

after school program for at-risk teens, and an after school social skills group for children with special needs. I also took advantage of the ABA program offered at NU by the May Institute. Last June, I became a Board Certified Associate Behavior Analyst.

Since graduating I have been working at Hawthorne Country Day School. HCDS is a special education school located in Hawthorne, NY (about 30 min. from Manhattan). Last year I was a teaching assistant in the preschool. This year I am a research assistant. I am attending the ABA conference this May to present my research. Also, since I received my BCABA I am helping out with behavioral interventions and treatment plans. Currently I am in the process of applying to graduate school. I hope to receive my Ph.D in school psychology

## **Undergrad Research Brings Forth the Unwashed Truth**

Have you ever waited at Lane Health Center for over an hour to see a doctor? Part of the reason may be the rampant incidence of upper respiratory infections (URI) in college students. The most effective way of preventing the spread of transmittable disease is by handwashing after using the bathroom, according to the Centers for Disease Control and Prevention.

In our Social Psychology Lab here at Northeastern were interested to see how many people wash their hands after using the bathroom when they perceive they are alone (or not). The experimenters observed the handwashing behavior of 60 females in a bathroom on campus in three conditions. In condition 1, the subjects perceived they were alone in the bathroom because the experimenters were sitting on the toilet, not visible in any way. In condition 2, the experimenter was visible to the subjects because they gave the impression that they were in the stall using the facilities. In condition 3, experimenters were visible at the sink area, doing ordinary things such as fixing their appearance or talking on their

cell phones. Chi-square analyses were employed to examine the relation between conditions.

Results indicated that only 35% of subjects washed their hands when they perceived they were alone, while 80% of subjects washed when the experimenter was in the stall but not at the sink area, and 75% of subjects washed their hands when the experimenter was at the sink area. An analysis was done to examine whether it was the overall presence of the experimenter or their proximity to the subject that produced the difference. The analysis showed that it was the presence of the experimenter in the bathroom, in whatever capacity, which influenced the handwashing behavior as demonstrated by the fact that 78% of subjects washed their hands when the experimenter was either in the stall or at the sink. As long as the experimenters were in the bathroom, the women were much more likely to wash their hands. Imagine how nice it would be if you were able to see a doctor when you needed to instead of people taking up time to treat a cold.

--Nora Healy, '05, and Jennifer Andrade, '05

## Do You Wonder What She Does at the Zoo?

Amanda Shyne, a 5<sup>th</sup> year graduate student, writes about her dissertation that is in progress under the supervision of Prof. Block:

Like humans, animals placed in unnatural situations or stressful conditions will often display some form of abnormal behaviors. One form of abnormality is stereotypic behavior. Common forms of stereotypes in zoo animals include, pacing, head rolling, excessive licking, hair or feather plucking, pattern swimming, etc.

Stereotypic behaviors are understood as indicators of poor welfare and are a persistent problem with zoo animals. In addition to stereotypes, restricted habitats tend to narrow the range of natural behavior patterns exhibited by zoo animals. Environmental enrichment is a commonly

used husbandry method that seeks to promote both of these goals: to eliminate or decrease captive animals' negative stereotypic behaviors and to increase behavioral diversity. Specific forms of enrichment are evaluated and compared with others in order to assess which types of enrichment are most effective.

Our research has tested the effects of various enrichment manipulations with a number of species living at the Franklin Park Zoo in Boston. Some of our more effective enrichment manipulations have included hiding food for African wild dogs and building a sandpit for Bactrian camels. African wild dogs are carnivores that often run many miles daily in search of prey in their natural habitat of southern Africa. These adaptations for hunting can make sedentary zoo life problematic. However by hiding the dogs daily diet throughout the animals' exhibit, we could encourage the dogs to run around their habitat in search of food. This manipulation created a positive outlet for the dogs' physical needs while simultaneously reducing their typical stereotypic pacing behavior by 45%.

Another enrichment condition involved Bactrian camels (identified by the presence of two humps on their backs, unlike the single hump of the dromedary camel). These camels evolved in desert environments with sand and scrub vegetation as part of their natural habitat. The captive camels at Franklin Park live in a grassy enclosure devoid of a sandy place for the camels to roll and rest--a natural behavior pattern observed in the "wild". We provided the camels with a sandpit, which stimulated the animals to participate in species typical behaviors, such as rolling.

These two manipulations, food hiding and a sandpit, improved the animals' welfare as shown by a decrease in stereotypic behavior and increase in species typical behaviors. By improving the captive environment we not only improve the animals' welfare but we also enhance the zoo public's learning experience by exhibiting animals that accurately represent their wild conspecifics' behavior.

These projects are ongoing and we welcome you to contact us if you have an interest in conducting this kind of research. (The

Animal Behavior Research "Lab", PSY U608, is an excellent preparation.)

--Amanda Shyne

## What's New in Co-op

As many of you may or may not know, Cynthia Crespin had her baby (Claudia) this November and will be out until the end of May 2005. We are very lucky to have Tina Mello from Career Services covering for Cynthia. Tina will be splitting her time between here and Career Services. If you need to meet with Tina, you can contact her at [t.mello@neu.edu](mailto:t.mello@neu.edu) or 617-373-3456.

For those of you who are planning on co-op for Summer2/Fall 2005 the mandatory meetings will take place on: Friday, January 14, 2005 3:00-4:30pm 180 NI; Wednesday, January 19, 2005 12:00-1:00pm 274 NI; Thursday, January 20, 2005 3:00-4:00pm 274 NI.

You must attend one of these meetings in order to participate in co-op for Summer.

For those of you returning from co-op, please sign up for one of the mandatory meeting times on my door.

Look forward to seeing you in the New Year.

Michelle Israel  
Cooperative Education Coordinator  
Psychology and Behavioral Neurosciences  
Phone: (617) 373-3464  
Fax: (617) 373-8140

## What's Happening in Auditory Attention

Have you ever 'strained your ears' to understand what was said, to pick up a faint sound? Professors Reeves and Scharf, along with a recent graduate from the Psychology program, John Suci, and a current PhD student, Zhenlan Yin, are trying to find out

whether this really helps. We run students in a mind-numbingly boring experiment in which they pick out weak tones in a background of static noise -- and do this for an entire hour. The results have been quite surprising. First, your sensitivity to a sound you are listening for (an expected tone) is about 4 times greater than your sensitivity to an unexpected tone of a different pitch. So attention -- focused listening -- really does help. Second, tones close in pitch to the one you are listening for are also easier to hear, but only if they are close enough to be in the same 'critical band'. The critical band is an audiometric term for neighboring frequencies that are likely to stimulate the same hair cell on the basilar membrane -- the organ of hearing inside the inner ear. The responses of the hair cells travel to the brain via the auditory nerve and give rise to auditory sensation. So the decision to listen for a particular tone seems to affect processing not just in brain, but in the ear itself! We think this is because attention makes the brain send neural signals back to the ear, via a tract of nerves called the olivio-cochlear bundle; these signals make the basilar membrane less responsive to unwanted tones. We have other experiments including data from patients with lesions of the olivio-cochlear bundle to confirm this remarkable example of 'mind over matter'.

--Prof. Reeves

## The Master's Degree: A Great Stepping Stone to the Ph.D.

Many students want to go for a PhD but they are not sure what area they want to concentrate in. Others find that their credentials are a bit shaky at the time of graduation. And others are not sure they want a PhD, but want to explore the waters to find out. All of these students should investigate getting a research-based master's degree. This enables you to prove yourself in a graduate school curriculum and to explore research areas in more detail. Many students have excellent success in moving on to a PhD program.

Locally, both Boston University and Brandeis have general psychology master's programs. There are also programs with more of a focus. Below are some names of master's programs that offer a social psychology focus, that were highly recommended in a recent on-line survey of social psychologists:

College of William and Mary  
Wake Forrest University  
Villanova University  
Cal State Northridge  
Cal State Fullerton  
Cal State Long Beach

Other such programs that were also favorably mentioned were:

Cal State San Marcos  
Northern Iowa University  
Towson University  
University of Alabama, Huntsville  
Augusta State University  
Ball State University  
University of Chicago  
Claremont College  
Georgia Southern University  
Illinois State University  
Loyola University of Chicago  
University of Nebraska, Omaha  
University of Oregon  
University of Tennessee, Chattanooga  
Western Illinois University  
Western Michigan University

--Prof. Hall

## And Speaking of Master's Programs...

This is hot off the press! There is a Master's Program at Connecticut College with a February 15th deadline, so you still have time to apply! The Connecticut College M.A. program is aimed at students who plan to enter a doctoral program in the near future. Research is the major focus of the program, and most of the students do subsequently go on to doctoral programs. Students are expected to complete an empirical thesis and to participate in one or more faculty-student research groups. There is usually a fairly small incoming class, which ensures that students will get ample attention from

faculty. Also, since there is no doctoral program, the Master's students are on the highest "rung" of the student ladder. The majority of the graduate students have presented papers or posters at scientific meetings during their time in the program, and many have also had the opportunity to co-author articles or chapters with faculty.

More information about the department, including faculty research interests, can be found here:

<http://www.conncoll.edu/academics/departments/psychology/>

<http://www.psychologicalscience.org/observer/0201/profile.html>

Contact Nancy McLeod, Departmental Assistant, at [nmmac@conncoll.edu](mailto:nmmac@conncoll.edu) or 860-439-2330. She can provide interested students with additional information and application materials.

## Research Update: How Children Think about Nature

Those of us in the Categorization and Reasoning Laboratory are currently working on research that involves concepts in developmental psychology applied to people's common sense understanding of biology (aka 'folk biology'). We would like to know how people of different ages and backgrounds think and reason about plants and animals. We especially want to know how they tend to group these things together and categorize them. Our current project is focused on really young people: children aged six through ten years. The children that we are studying also come from different locales: some are from the city, and so tend to have a more urban background, while some are from small towns, and seem to have a more rural background. Before we test the children we ask them (and later on their parents) all about their experiences with animals, plants and nature in order to

get a clearer picture of what their background really is. So our research looks at three different elements of development – age, population density, and experience— and their effects upon categorization and reasoning about folk biology.

The subjects in our study undergo three different tasks. In one task we show them different cards with pairs of animals. For each card, they are told that the pair of animals they see share either an internal substance or a disease, and they are asked to come up with other things that they believe may also have this substance or disease. This is called an open-ended induction task because the subject is free to choose any animal, plant, or thing that he or she can think of that might share the property with the pair. In another task subjects are shown different cards with three items, either plants or animals. They are told that one of the items has either an internal substance or a disease and asked to choose one of the other two items they think is more likely to share the substance or disease with the target. Both of the items are related to the first: one belongs to the same taxonomic category, and the other shares an ecological relationship. So in this forced choice task, subjects are made to choose which type of relationship they believe is most likely to lead to the shared property. In a third task, subjects are presented with nine picture cards. There are three types of plants, insects and birds, which fall across three distinct habitats. The subject is presented with the cards in random order and asked to sort according to which ones “go together”. Then they are asked to explain why they made the groups that they did. Each subject does this twice.

The types of projections that are made in the first two tasks are important. For example, we expect that children that are told the animals share a substance will tend to project to or choose other animals that look similar or belong to the same category, whereas those that are told about a disease will tend to make more causal connections between animals such as an interaction or a shared habitat. Similarly, in the sorting task, we care about the types of groups the subject makes and why they made them. Also, based on previous research done in our lab, we expect that children from rural backgrounds and those with more experience with nature should be more likely

to make ecological or causal connections and projections. Alternately, those from urban backgrounds and with less experience with nature should tend to make more taxonomic and category based connections and projections.

We’re still working on coding and analyzing our data, but the results of the forced choice triad task seem to support these hypotheses. Children who were told about a disease tended to make more ecological choices, and Children who were told about an internal substance tended to make more taxonomic choices. Overall, older children and children from rural backgrounds tended to make more ecological choices, showing that age, experience, and physical environment all have an impact on how children understand and reason about nature.

--Claire Seaton (Co-op Research Coordinator) & John Coley (Professor) Categorization & Reasoning Laboratory

## Forensic Psychology: What is It?

Forensic psychology is often mentioned by students who are interested in a clinical career. But what is this specialty? A recent article in the *American Psychologist* called “The practice of forensic psychology: A look toward the future in light of the past,” by Otto and Heilbrun, answers many questions.

“Forensic” refers to juvenile justice programs, correctional institutions, and noncorrectional settings in which therapy services are provided to populations such as abuse and crime victims. A forensic psychologist provides services within such settings. A forensic psychologist may also engage in “forensic psychological assessment,” which is the psychological assessment of persons for the purpose of assisting the legal fact finder—for example, deciding whether a defendant is fit to stand trial. It is estimated that over 60,000 criminal defendants are evaluated each year for competence to stand trial, and this is seen as the tip of the iceberg because many such evaluations are conducted for other purposes (such as in the therapy context).

This is a quickly growing field, as judged by the number of professional organizations, books, and articles on the topic. The intersection of law and psychology is evident in journals such as *Law and Human Behavior*, *Journal of Forensic Psychology Practice*, and *Behavioral Sciences and the Law*. Practice guidelines by the APA and other organizations have also come into existence.

There is a move for the states to introduce credentialing, such as a certification program for mental health professionals who assess criminal defendants. Nine states require certification of some type.

Currently, most of the specialty training in forensic psychology occurs following completion of the doctorate in clinical or counseling psychology. However, as the specialty becomes more developed (with practice guidelines, APA accreditation, etc.), there may be programs introduced at the predoctoral level.

--Summarized by Prof. Hall from  
*American Psychologist*, January 2002

## OPPORTUNITIES ☺ ☒ ☺ ☒

The Speech Perception Lab needs you if American English is your native language, you have no speech or hearing disorders, and you are between 18 and 45 years of age. We pay \$10/hr for one or two hour experiments, scheduled at your convenience. Call 373-4462 for details.

**Psych NUws** is a joint effort of the faculty, graduate and undergraduate students, and staff of the Northeastern University Psychology Department. Direct all inquiries and contributions to the Editor, Prof. Judith Hall. We especially welcome contributions from undergraduates!