Hello Psychology Students!

PsychNews is the newsletter for the undergraduate program in Psychology at UWM. Through this newsletter we aim to inform you about opportunities in the program, tips on making your way through the major, and many of the exciting opportunities in the Psychology program.

SONA – EXTRA CREDIT
If you are in a psychology course for which you can earn extra credit for research participation, don’t forget that the deadline for participation is Friday, May 9 at 5pm. More information about Sona and research participation for extra credit can be found on the department webpage.

New and notable in the Psychology Department

Hello Psychology students! As always, there are lots of exciting things happening in the Psychology department. The most important development is the new requirements for the major and the minor. Please review the new requirements on p. 2 and p. 3 of this newsletter. More information is also available on the department website.

You should also be aware of changes to the prerequisites for Psych 210 and 325. See p. 10.

New faculty member. We would also like to introduce you to our newest faculty member, Adam Greenberg, who joined us in Fall 2013. Dr. Greenberg directs the Sensory Neuroscience, Perception, and Attention (SNAP) Lab. He uses neuroimaging, behavioral, and other methods to understand how attention and auditory and visual perception work to guide our behavior. Dr. Greenberg also currently teaches Psychology 503, Perception.

New advising tools for undergraduates.

With the new changes to the major and minor we have also developed a new Undergraduate Program Handbook as well as new checklists of the requirements for the major and the minor. As part of these new advising tools we created a brief online quiz for all students declaring the major to ensure that they are aware of the program requirements, how to choose an advisor, and options after graduation. This can be found on the Declaring your Major and Minor page of the website.

None of these tools replaces an actual meeting with your advisor. Meet with your L&S advisor and your faculty advisor regularly. Need to find a Psychology faculty advisor? Here's how. Already declared your major but, can’t remember who your faculty advisor is? See our new advisor lookup tool. Lastly, L&S Advisor Dorrie van Kerkvoorde offers some extremely useful tips for students – see p. 4.
The New Requirements for the Psychology Major
Effective Summer Session 2014

All students entering UWM (or any UW system school) beginning summer semester 2014 will follow the new requirements for the major. Current students may choose EITHER the new curriculum, or the old. Most will find the new curriculum easier to fulfill.

### New Requirements for the Major

- 101, Introduction to Psychology
- 210, Psychological Statistics
- 325, Research Methods
- 254, Physiological Psychology
- ONE from: 205, 214, 230, or 260
- EITHER:
  - Three Systems and Foundations courses AND two Advanced Lab courses
  - Four Systems and Foundations courses AND one Advanced Laboratory course

### Summary of Changes to the Major

You can now choose either a BA or a BS in Psychology

Be aware that the general education and other requirements are slightly different for the BA and the BS. BS students will need to complete 30 credits in L&S advanced natural science courses. These can come from any department in L&S. Psychology offers many advanced natural science courses, especially in neuroscience. Please consult the [L&S requirements](#) for the BA or BS.

You may declare your major after passing Psych 101

Once you have passed (D- or higher) Psych 101 and completed 15 university credits you may declare your major.

The upper-level course requirements have changed

You are now required to take a EITHER:

- Three Foundations and Systems courses AND two Advanced Lab courses
- Four Foundations and Systems courses AND one Advanced Lab course

This means you now need five 300-level or higher courses (plus Psych 325) instead of four. However, you may now satisfy the requirements with only one advanced lab course.
The New Requirements for the Psychology Minor

Effective Summer Session 2014

All students entering UWM (or any UW system school) beginning summer semester 2014 will follow the new requirements for the minor. Current students may choose EITHER the new curriculum, or the old.

New Requirements for the Minor

- 101, Introduction to Psychology
- One from: 205, 210, 214, 230, 254, or 260
- Four additional Psychology courses, at least three of which must be upper level (300-level or higher)

Summary of Changes to the Minor

The new curriculum requires 18 credits, not 20

The previous requirements included six courses for 20 credits. The new requirements include six courses for 18 credits.

The new curriculum does NOT require Psychology 210 (Psychological Statistics) or Psychology 325 (Research Methods)

You may still elect to take these courses for the minor — they are just no longer required. However, if you are considering majoring in Psychology we highly recommend that you take these courses as they are required for the major and not taking them could slow down completion of the major.
How long have you been an advisor in L&S at UWM?
It will be 3 years in September. Prior to that I was an advisor at Edgewood College in Madison, and in the Psychology Department at UW-LaCrosse while in graduate school.

What can a student expect their L&S advisors to help them with?
The L&S advisors are best suited to help with planning for completing your degree, choosing a major, general education requirements, and the requirements for the major. When you come in we’ll review your summary sheet and the checklist for the major requirements. The topics we cover when we meet are usually driven by the student, so have an agenda in mind. It’s very useful to review your academic advising plan and other planning tools on PAWS beforehand and to think ahead about courses you may want to take. I get delightfully excited when a student tells me, “I planned my next three semesters in my planner,” or “I looked into courses for next semester and I put them in my shopping cart.” Planning ahead helps us get more done in the meeting.

What topics should students seek advising about elsewhere?
For information about grad school, careers, internships, and research opportunities it is best to talk with a faculty member in Psychology. It could be your designated Psych advisor, but doesn’t have to be.

How often should students meet with their L&S advisor?
A minimum of once per semester. The advisors are really busy around registration time in November and April. A good time to meet is just before registration, say in October or March. We will have more time for you. Other good times to meet with an advisor are during the first 10 days of class if you are still debating your schedule, or if you are struggling in a course, right before the drop deadline.

What common mistakes or misunderstandings do you see students make?
The main things I see students do that interfere with their success are (1) picking classes randomly without a plan in mind, or understanding the requirements they fulfill, (2) not starting the Psych 210, 325, advanced lab sequence soon enough, (3) not studying enough, and (4) not completing the math requirement as soon as they arrive on campus. Time and again I see that people do better in 210 if they’ve taken Math 105, and especially if they did well in Math 105. Don’t avoid the math requirement! As for studying, the standard recommendation is that you study — outside of class time — at least two hours for every hour of class. If you take twelve credits, that is twelve hours of class, plus 24 hours of studying — the equivalent of a full-time job.

The most misunderstood requirement is the foreign language requirement. Definitely consult with your advisor to make sure you understand what is required for your particular situation.
When did you realize your interest in the field of psychopharmacology research, and what research experience did you have along the way that influenced your decision?

My original plan was to go into electronics engineering. Unfortunately, I was not accepted into the program that I really wanted to be in so I took the backdoor-route, which was to get a science degree with the hope of transferring to the engineering program after a year or two. At that point I discovered neuroscience from the psychology courses I was taking and I realized that as much as it is interesting to engineer new products with electronics, it is far more fascinating to reverse engineer the human brain because it is much more complex than most of the available technology. I had been exposed to the world of drug addiction through a specialized seminar course and I ended up working for an investigator at a university in Canada who was very interested in motivation. As an undergraduate I got very involved in looking at wheel running in animals. I was working in the lab for probably 6 to 8 hours per day and after that I ended up with a summer fellowship which allowed me to stay in the lab and work on a thesis project. I was so involved that I was then accepted into graduate school and accepted into the lab that I always wanted to get into, which was Jane Stuart’s lab. She is now retired but was a pioneer in conditioning and drug learning which brought learning and memory into the study of drug use. The previous research had focused a lot on drug states, but Jane Stuart recognized that drug effects could be conditioned and associated with environments. She also built the reinstatement model, which is the primary model being used to study relapse, and as a student in her lab I developed a secondary reinstatement model which is also being widely used at this point.

How do those reinstatement models differ?

The original model uses a self-administration paradigm where animals have limited access to the drug paired with stimuli including a tone and lights. They would then be put through extinction where the animal is allowed to push the lever originally associated with the drug administration, but now without drug access. Over time you find that their behavior decreases and they reduce lever pressing almost to zero. Then you can do a number of things. What Jane Stuart found is that you can stress the animals using a mild foot shock and the animals will reinstate drug seeking behavior, despite the fact that the drug is no longer available. This is essentially a model of relapse. So using different methods, Jane Stuart found that three variables can cause relapse which include reinstatement of the drug, application of a stressor, or cues from the drug-taking context. These three variables are essentially the same in humans.

The model that I developed for reinstatement used a conditioned place preference paradigm where you pair the drug effects with a specific environment and a vehicle with another environment. When the rats are given the choice to run free, they will spend more time in the drug-paired environment.

What experimental models does your lab mainly utilize?

We have two behavioral paradigms that we use, the self-administration paradigm and the conditioned place preference paradigm, but our secondary approach is electrophysiology. Electrophysiology uses patch clamp physiology which is taking a slice of an animal brain and keeping it alive in a dish for a period of time so that you can actually record from individual neurons and look at the effects of drug exposure on the physiology of that neuron. We also do in-vivo recordings which uses awake, behaving animals to record from multiple neurons in a specific brain area and ask questions like whether a cue associated with the drug evokes a neural response.

How do you feel the results from rat brains translate to human brains?

There are similarities as well as
differences between animal and human models. The rat brain is very homologous to the human brain in terms of the systems, networks, and structures. The challenge, of course, is that humans are far more cognitive. One of the first things you need to appreciate is the fact that most human addicts rationalize drug taking, however, even in low-level animals you see a similar pattern in drug using as compared to humans. They will make choices very similar to humans which involve sacrificing many other reinforcers in order to focus solely on drug access.

What work is currently being investigated in your lab?
We essentially have three lines of research that are related. We use the conditioned place preference model in two different ways. One way looks at extinction learning and is combined with electrophysiological techniques. The second looks at the retrieval of cocaine-associated memories using conditioned place preference. In this method we use a lot of localized approaches such as specific micro infusions into localized brain regions. The third experiment looks at extinction mechanisms in a self-administration paradigm, which is much more complex because you have levers associated with the drug infusions, you have a delay of drug effect onset, you have context, and also habitual learning. So extinction is prolonged and difficult, but this method is much more accepted in terms of relating findings to humans.

Can you describe student involvement in your research?
At the moment the lab has three graduate students that essentially run the show. The emphasis in my lab is on good science, and so they have to very quickly learn to design their own research projects. I have set goals for them to each publish a minimum of five papers in which at least three of them are first-author papers. For the most part it is just the first paper that I have to have a heavy hand in writing and overtime they become better writers and I become more of an editor rather than the primary author, in terms of generating the manuscripts.

Each graduate student works very closely with undergraduate research assistants. We typically have four undergraduate RAs at any given time. Usually the first semester is training and by the second semester they are already becoming integrated into running the experiments. One of our undergraduate students is already a published co-author, one student will be a first author on a paper that we are currently writing, and another student is co-author on a paper that is currently under review. So the students in my lab do get recognition for their work.

What do you look for in graduate students in terms of previous research experience? Is it important that they have participated in a lab geared towards your specific research?
In my experience the background does not determine the student’s success in terms of what “type” of research experience they have. So someone entering an addiction lab may have experience working in a lab studying feeding motivation. I think the important thing is that they worked with somebody who gave them a chance to actually integrate into the lab rather than just be a shadow.

What do you look for specifically in undergraduate students?
First I meet with the undergraduate student individually and look at things like GPA. I am not looking for any specific research background but I do look that they have some kind of course in neuroscience and they are aware of what types of things they would be involved in. Typically a student will enter the lab on a Psych 690 undergraduate research experience which allows them to work in the lab for credit for a single semester, which gives them the chance to make it or break it. Most of our undergraduate RAs are then offered SURF awards which allows them to do research for a small salary. I should also note that our undergraduate RAs are not the typical undergraduate RAs. We train them for a semester and then at that point they are treated more like an incoming master’s student. Another important part of our program are the weekly lab meetings which require that our students are heavily involved. These meetings serve as the lab’s “think-tank”, and so it is a place where people can discuss ideas about research as well as new data generated by the lab. Our lab also incorporates a journal article as a part of the lab meeting. A person is the designated presenter and they are required to write a weekly paper describing the results of a paper and how the findings relate to the lab, and perhaps a new experiment they are able to generate. The main purpose is to train the students to write good science. These short papers are heavily edited and discussed by the entire group, and ultimately, all of my students benefit immensely from this experience.

I think the biggest thing that undergraduates should consider is to try to take a look at what research is ongoing within the university and try to get a sense of it early. It is important to make connections early because the sooner you become involved in research, the better your research experience will be and the more likely you are to have the opportunity to have your name published on a paper or report findings at a conference. A lot of undergraduates don’t decide to get research experience for graduate school until their senior year and unfortunately, there are few labs that are willing to take on a senior student. So really, freshman and sophomores should start to see what is out there are start to ask questions and show interest.
Profile of Dr. Mueller’s lab: the grad student perspective

An interview with Madalyn Hafenbreidel, a graduate student in Dr. Mueller’s lab

Interviewed by Faviola Valadez (’15)

What is your current study on?
We are looking at mirror neuron receptor deficit (MNRD) receptors and how they affect learning in a drug self-administration paradigm. We have rats, we implant a catheter into their jugular veins so they are able to lever press for infusions of cocaine. They get tone and light cues, they associate those with administration of a drug, so they choose to take the drug basically. We train them and then get them off the drug. So we do extinction training. They go back into the box and they get all the cues as before but there is no administration of drug so they learn that these cues no longer are giving drugs. We are trying to figure out how that memory works.

How does this study pertain to humans?
So we also looked at an agonist for MNRD receptors and that facilitated learning. They learned extinction faster than the saline controls. So, that is an idea that you could administer, like say, exposure therapy and the people would learn. The problem with exposure therapy with addition is that they give up because it’s too hard. If you learn this faster than it might help (extinction).

What is your daily work load as a grad student?
Here at UWM you usually take two classes at a time, sometimes three depending if you’re teaching or not. So, you have classes, teach a class, then do research in lab and whatever your project is and what ever time that involves. I’ll come in in the morning, work on grades or I’ll work on a paper.

Then there is component in grad school that no one ever thinks about where you have to be social and network with people. We go to conferences, you have to get to know people and see what they are doing. Then people come here and you have lunch with them.

Out of school, what is your life like? Do you have a social life?
Sometimes, sometimes we go out and do stuff, not that often. If you want to do well in grad school you have to work a lot. That is what it is. You need papers and you need skills to get post doc jobs, but you can have fun. Dr. Mueller is really good at making sure we taken vacation time. Otherwise, you’re going to get burned out and you won’t want to keep going. I think it is very important to take breaks, but you still have to work hard.

What helped you with choosing to go to grad school?
I knew from the beginning that I wanted to do research, and that means I have to go to grad school. I think the best way to find out is to join a lab as an undergrad and see how you like it. If you’re still not sure you can always do a tech job, you can work at a university as a technician. If you want to do clinical you can get a job as a line therapist. Get a whole lot of experience so you know for sure that is what you want to do.

What is your ultimate goal?
When I’m done here I want to do post doc, where you work in another lab for 3-4 years to learn a few more skills. And then hopefully get a faculty job.
Profile of Dr. Mueller’s lab: the undergraduate student perspective

An interview with Carolynn Rafa Todd, a senior in Dr. Mueller’s lab

Carolynn works with graduate student, Madalyn Hafenbreidel (p. 7), in Dr. Mueller’s lab.

Interviewed by Faviola Valdez (‘15)

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How did you hear about research to begin with?
I was researching degrees in psychology online. If you have a bachelor’s degree in just psychology you’re not going to be a psychologist. I read you need to get research experience and I was Googling what do I have to do to get that and it said to go harass professors. I Googled all the psych researchers that there were at UWM, I picked the ones I liked and emailed Dr. Mueller.

Where do you plan on going to grad school to?
I haven’t figured it out yet. This summer I’m going to figure it out. I’m going to wait till next fall. I’ll have one semester off and the summer off, which is good for me. I know I want to do neuroscience, behavioral neurological-psychiatric disorders.

If you were to meet a freshman, would you recommend research to them and why?
Absolutely, because of self-confidence. Learning that you can be independent and you can trust your own intuition. You can question things. Trusting yourself and gaining exposure to things before you see them in a classroom. And it’s like job experience if you want to do research.

What have you gained most from research?
Don’t be discouraged would be the biggest thing. Plug away and stick with it and eventually instead of being scared you’re going to be like, “This is a resource. This is going to make me better.”

What is your ultimate goal?
If I had my way in the universe I could do academic research, like Dr. Mueller.
Beyond the Classroom: Field Placements
An interview with Sarah Zupek (*'14) about her work at a local crisis hotline

Interviewed by Nicole Marek

So your placement is at a local crisis hotline. Can you tell me a bit about what the goal of the hotline is?
Well, our main goal is just to listen. That’s a big thing we’ve learned: active listening. Our purpose isn’t to solve anyone’s problem; our job is to help them solve it on their own. We’re there to help them help themselves, and to listen.

What do you hope to get out of your experience?
I hope to get a sense of what it’s like to work with people who are mentally ill. A big thing for me so far is learning how to listen — to actually listen. It’s not about giving advice; a lot of it is about listening and getting to know the person’s problems. Another thing is learning to be empathetic, but also being detached from the person. You don’t want to go home and bring home any of those peoples’ problems with you.

What are the benefits and drawbacks you’ve experienced so far?
For benefits, as I said before, learning to be more empathetic, learning active listening, and learning that being on the lines isn’t about rescuing a person or solving every problem. The drawback would be...some of these people are really depressed, and hearing their same stories week after week, some of that can affect you. So it’s a drawback, but at the same time it’s something I’m going to encounter in my profession, so I’m just learning to build up those walls against negativity.

What would you tell someone who was considering doing a field placement?
I feel like it’s a great opportunity; it’s a great thing to put on your CV. Do it sooner rather than later. If you’re looking into this one, you need to do it for a year. So look into it at least a year before you graduate. Just do your homework, I guess.

Example Field Placement Sites

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<th>UWM Psychology students have done field placement work at numerous agencies in the Milwaukee area (and some outside southeast Wisconsin), including:</th>
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<tbody>
<tr>
<td>COPE Services Crisis Line</td>
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<tr>
<td>Easter Seals</td>
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<tr>
<td>Milwaukee County Mental Health</td>
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<td>Milwaukee County Zoo</td>
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Tips for Timely Completion of Your Psychology Major or Minor

**Don’t wait to take Psych 210.**
Psych 210 is a prerequisite for 325, which in turn is a prerequisite for the advanced labs. If you delay 210 it will just delay the other courses too.

**Be aware of the GPA requirement to enroll in Psych 325.**
You need an average GPA of 2.62 across Psych 101 and Psych 210 to be eligible to enroll in Psych 325. If you don’t achieve this GPA you will need to retook 101 or 210.

**You must take Psych 325 before the advanced lab course(s).**
Psych 325 and the advanced labs cannot be taken simultaneously.

**Register early for Psych 325 and the advanced lab(s).**
These courses fill up quickly! Remember, it never hurts to email the instructor if the class is full. Showing up on the first day of class is also wise.

**Be aware of the requirements for the major and minor.**
Review the checklists for the [major and minor](https://example.com) on the department website. Read the [Undergraduate Handbook](https://example.com) describing the program requirements, declaring your major, using advising services, and other information about the Psychology program.

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Important New Prerequisites for Psych 210 and 325

The university has adopted new competency requirements for Quantitative Literacy (QL) and Oral and Written Communication (OWC). You need to satisfy a Part A and a Part B for both competencies. Psych 210 satisfies the Part B QL requirement, and Psych 325 satisfies the Part B OWC requirement. You MUST complete the Part A requirements BEFORE you can take the Part B QL and OWC courses.

**The QL Part A prerequisites for Psych 210 are one of the following:**
- earn a grade of C or higher in Math 103(106), 105, 175;
- earn a minimum of 2.5 credits with a grade of C or higher in an equivalent or higher-level math course;
- earn a placement code of 30 or higher on the Mathematics Placement Test

**The OWC Part A prerequisites for Psych 325 are one of the following:**
- earn a grade of C or higher in English 102 or equivalent course;
- earn a suitable score on the UW-System English Placement Test, as defined by the GER OWC guidelines
Undergraduate Student Accomplishments

A Sampling of Psychology Students Accepted to Graduate School in 2013-14

- Elizabeth Doncheck (Mueller, Larson) – Ph.D. in Neuroscience, Marquette University
- Megan Gaber (Davies) – Masters in Counseling Psychology, Alverno College
- Anna Lalik (Reddy) – Ph.D. in Clinical Psychology, University of Colorado-Colorado Springs
- Kim Lewis (Larson) – Ph.D. in Psychology, University of Chicago
- Sarah Schram (Frick) – Ph.D. in Neuroscience, University of Chicago
- Tony Tadych (Larson) – Masters in Counseling Psychology, Cardinal Stritch
- Nate Tratnik (Larson) – Masters in Counseling Psychology, Cardinal Stritch

Selected UWM Psychology Student Co-authors on Recent Published Papers


Selected UWM Psychology Student Conference Presentations


Psychology students elected to Phi Beta Kappa in spring 2013

- Vienna Behnke
- Brittany Benitez
- Robyn Brauer
- Briana Charlton
- Adam Cooper
- Leon Dixon
- Kimberly Duckworth
- Gina Fitzgerald
- Cassandra Gill
- Olivia Harmelink
- Luke Haroldson
- Zachary Harper
- Zachary Hosale
- Chloe Lewis
- Ciera Lewis
- Claribel Morales
- Julia Newcomb
- Sydney Park
- Kelsey Pedersen
- Megan Stobo
- Nicole Thompson
- Rebecca Tremmel
- Samantha Tucker
- Annette Umoru
- Vicky Yang

*If you know of an undergraduate accomplishment* please email Dr. Larson.