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B magazine welcomes you to a new year, new staff members, and new stories. We also say hello to BBS applicants, each of whom gets a totally free copy of this amazing publication when they visit for on-campus interviews.

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There's No Place Like Yale

BY LINDSEY STAVOLA

In early July, I packed up my sundresses, shorts, Floridian flip-flops, said "bye!" to my family (who were proud their baby was going to Yale, although my dad still confuses it with Harvard), "see you over break!" to my friends (who, although I've explained what a Ph.D. in pharmacology meant several times, still think I am in pharmacy school), and moved into my new apartment in New Haven. Despite the mildly delusional behavior exhibited by my loved ones, I was certain about my decision to pursue education at this top out-of-state institution and to conduct research in the highest rated pharmacology department in the nation.

Upon settling in, however, I soon learned that getting adjusted to a new place takes more than just unpacking boxes and assembling Ikea furniture. Indeed, my first semester at Yale became a lesson for me in the subject of adjusting to new homes, both in terms of actual living space and laboratory environments. In an attempt to proactively help acclimate myself, I started a rotation early in the summer, which allowed me to experience two extremely different labs, research topics, and mentors within the first semester.

For my summer rotation, I joined a neuropharmacology lab, my designated oddball rotation since my predominant research interests

are in vascular biology. The first several weeks of rotation were what you'd expect: reading literature, locating everything on campus and in lab, reviewing lab techniques I had used as an undergraduate (finally understanding why I was using them), and befriending anyone I could, including the Yale security officers. The lab's environment proved phenomenal. Everyone worked efficiently alongside one another, and most days our lab technician, nicknamed "DJ Calpain," would take song requests as we worked at the bench. I really lucked out on my first rotation choice, especially since I was surrounded by helpful graduate students from whom I could seek advice or with whom I could grab a cup of coffee at Cappuccino's. My postdoc mentor cared about helping me get settled in, introduced me to new friends, and took me out to explore New Haven, while my PI designed a rotation project that significantly enhanced my skill set. Each day, our entirely female lab (which, we swear, was a coincidence) routinely crowded around the table eating lunch together which was often complimented by homemade ice cream, ice pops, and other desserts provided by my PI. I quickly grew to love the lab and the people in it.

After about a month, I became independent

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in the lab, collecting my own data and making progress. But then, out of nowhere, right when I had gotten into the swing of things and was pretty sure I would not ruin the lasers on the half-million-dollar confocal microscope, my rotation was over, and I had to be uprooted! Three months had flown by fast. Reluctantly, I was forced into a new home. Good bye, Sterling Hall of Medicine and your delicious food carts; hello, seemingly isolated 300 George. Moving from one rotation to the next felt like packing up and leaving home all over again.

As such, I felt hesitant about moving, especially to a predominantly postdoc-driven lab. (After all, who was going to answer all of my grad school questions?! Who was going to give me advice about preparing for exams?!) Within a week, I went from being an independent, relatively functional scientist back to "the new one," waiting at my freshly assigned desk for the postdoc to show me what to do next. To further the concern, the family-like lunch breaks I had grown to love now turned into eating by myself in the corner of the communal kitchen. And just to be picky, I was bummed that my new lab was now much farther away from my classes, which meant that I would often arrive to class cold and soaked from some harsh wind chill or rain spurt. (Did I mention Miami has really nice weather?) Despite these initial negatives, my transition actually ended up engendering many positives. My new PI was awesome, and I learned more from her in 10 minutes of conversation than I ever could from a pile of literature. The new lab experience also came with a lot of firsts for me: writing my first grant for a fellowship, publishing a book chapter with my lab mates, and even winning first place with my lab in the Cardiovascular Research Center's Halloween pumpkin carving contest.

Outside of lab, I had taken to my transition to a new town much more easily, as it came with many perks. With the Metro-North train, I could catch a short ride to NYC on the weekends, and the \$1 Megabus would take me to Boston to visit friends. Both of these options helped me recapture some of those big city features I had missed from Miami. Being a new Yale student has additional benefits, one being that it seems like everyone in the area is an expert in one thing

or another. In that sense, it's nice to be affiliated with a school known for reasons besides its football triumphs. Similarly, graduate classes feel much more advanced than undergraduate courses, with lectures often given by the authorities on whatever topic is being discussed in class.

Adjusting to a new city and different laboratory environments took some time, but stability did come. Now, after loading up on snow boots, down coats, and other winter accessories for the first time in my life, I like to think I'm invincible to anything else Yale has to throw at me. That isn't to say I have not still made a few newbie mistakes over the past couple of months, like waiting until the last minute to book holiday tickets home (For over \$600! Don't do this!) or accidentally wearing a bright red jacket to the Yale-Harvard football game.

Nevertheless, with the changing year I welcome all the transitions Yale has in store for me and I offer the following advice for others doing the same: 1) Look for the good in the new, but appreciate the old; 2) Interact with people outside the lab; 3) And most importantly, whether embarking on a new laboratory environment or coming to a completely new school or new laboratory, it's important to keep an open mind. I still often miss the familiarity of my sunny Florida palm trees, but Yale has become the perfect change in environment for my scientific career. And, although I will always believe there is no place like home, I know that there is truly no place like Yale. **B**

RESOURCES WE NEVER KNEW WE HAD: A Look at the Graduate Teaching Center

BY KATHRYN TWORKOSKI

At Yale, as at so many universities, students are encouraged to teach as part of the graduate curriculum. Some students may find these teaching requirements onerous, while others discover that they enjoy the lectures, discussions, and even grading associated with education. For those in the latter group, the Yale Graduate School offers numerous opportunities for graduate students to improve their teaching abilities and enhance their chances of obtaining a career in education. Unfortunately, it isn't always readily apparent how to access these programs: as a fifth year graduate student, my burgeoning career search has only recently made me aware of these

teaching experience, and it provides insight into the process of acquiring a teaching-oriented job. For the Yale TAs, the "Frequently Asked Questions" portion of the GTC website contains a lot of useful information, particularly when dealing with undergraduates. Specifically, it tells TAs how to deal with plagiarism, dean's excuses, and the Classes v2 server. Anyone with more detailed questions or concerns can download the "Becoming Teachers" pamphlet or e-mail one of the GTC directors. The center also routinely presents seminars on improving teaching skills (such as the "Teaching at Yale" and "Fundamentals of Teaching" classes) and offers individual consultations for those who

students insight into the job application process. Every fall, the GTC works with Graduate Career Services to offer a series of seminars called the "Academic Job Search Series." This series teaches graduate students how to assemble the paperwork necessary for an academic interview and what to expect during job interviews. These seminars are offset by a series of panels in the spring that allows former graduate students to discuss their personal experience in the job application process as well as their opinions of their current positions. There are also numerous workshops throughout the year that describe how to design a course and the



courses. I'm sure there are other students out there who also enjoyed their experience as teaching assistants (TAs), and it's possible that they aren't as invested in procrastination as I am. So for those students who might want to explore educational opportunities a little earlier in their graduate careers, or even for those who share my love of delaying tasks as long as possible, I've decided to share my newly acquired expertise on Yale's Graduate Teaching Center.

It may surprise some of you (I know it surprised me) to learn that we actually have a Graduate Teaching Center (GTC). We do, however, and its offices are located at HGS and its website can be accessed at <http://www.yale.edu/graduateschool/teaching/>. Generally speaking, the GTC offers three types of services: it gives teaching tips specifically designed to help Yale TAs, it offers degree/certificate programs that provide documentation of

need help designing or implementing a course.

The GTC also offers two major certification programs. The first is the Certificate of College Teaching Preparation (CTP). In order to receive the CTP, a graduate student must document their teaching at Yale as well as occasions when the student observed others teaching. CTP candidates must also participate in a series of teaching classes, generate a teaching philosophy, and create two novel class syllabi. The second program is an Associates in Teaching (AT) degree, which allows Ph.D. candidates to design and teach an undergraduate class with the guidance of a faculty mentor. Participants in either the CTP or the AT aren't given any kind of grade upon completion of the program, but there are limited spots available for AT classes, while the CTP is open to anyone who can complete the requirements.

The final goal of the GTC is to give graduate

GTC offers examples and individual advice on how to construct documents like teaching philosophies as well as how to behave during professional interviews.

In the end, the GTC offers a lot of resources, whether you're looking for help in navigating through a tough TA assignment or trying to find out if you want to pursue a career in teaching. Regardless of what you think you want to do, I would encourage you to take a look at the GTC website. You may also want to actually skim through those "Graduate Teaching Notes" e-mails that mysteriously appear in your inbox every so often. Ultimately, no matter how much you elect to worship at the altar of procrastination, the directors and fellows of the GTC are always willing to help. Where ever you are in your graduate career, check out the GTC—you never know when it might be useful.

B

IN PRESS

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Movements in Food RECIPES

MUSHROOM AND PEA PASTRIES

By Natalie Ma

This is an "I don't want to have to seriously cook for the rest of the winter" kind of recipe. It makes about 16-20 pastries, which can be easily frozen and reheated later in a microwave or toaster oven. These pastries are a great snack when you're stuck running an experiment through lunch or late at night, and may even prevent starvation and cannibalism among lab members should you get snowed in at your lab.

Ingredients:

- 1/2 cup onion, diced (~ 1cm x 1cm)
- 2 tablespoons vegetable oil
- 1 8 oz package of button or baby bella mushrooms, sliced (~0.5 cm thickness)
- 1 oz dried wild mushrooms
- Half a can of condensed cream of mushroom soup (~5.5 oz or 2/3 of a cup)
- 1/2 cup water
- 2/3 cup frozen peas
- 1/3 cup mild cheese
(I used Trader Joe's Italian truffle cheese)
- 2 17.3 oz packages of frozen puff pastry
- 1 egg, beaten
- Salt and pepper to taste
- A nonstick or greased baking sheet



Methods:

1. Take puff pastry out to thaw, rinse mushrooms, and rinse and rehydrate (if necessary) wild mushrooms.
Note: wild mushrooms can be really, and I mean REALLY sandy. Wash them well, both before and after rehydrating by swirling them in a bowl of water. They will float while the grit on them will sink. Also, pick out any bits that are still woody after dehydration.
2. Cook onions in the oil in a pan over medium heat, until the onions begin to turn translucent. Add the sliced mushrooms and wild mushrooms, and cook for 10 more minutes with the lid on, stirring occasionally.
3. Add the cream of mushroom soup, water, and peas, and cook for 10 more minutes without the lid, stirring occasionally.
4. Turn off the heat and add the grated cheese to the mixture, stirring until it dissolves. Add salt and pepper to your taste.
5. Cut puff pastry into rectangles (4-5 per sheet of puff pastry)
6. Spoon the mushroom and pea mix onto one half of a puff pastry rectangle and fold the rest of pastry over the mix. Close by pressing down on the pastry's edges with a fork. Brush the top of the pastry with the beaten egg.
7. Bake at 450°F for 10-15 minutes, or until golden brown.
8. Remove pastries to cool on a rack or paper bag. Once cooled, they can be placed on baking sheets and frozen. To reheat, just put in microwave for 1 minute and 30 seconds on high or toaster oven for 5-10 minutes

The cool thing about cooking is that if you don't like an ingredient, you don't have to include it. Don't like the taste of wild mushrooms? Leave them out. Want to add corn kernels instead? Go ahead. You could even substitute fruit for the mushrooms, jam for soup, omit the peas, and use a sweet cheese and now you've made dessert! **B**

West Campus Welcomes Your BBS Experience

HIGHLIGHTING THE STUDENT EXPERIENCE OF ALEXIS ROVNER '2015

BY DANICA KELLY, COMMUNICATIONS AND ADMINISTRATIVE SERVICES MANAGER, WEST CAMPUS

The Yale West Campus, among other things, is a distinctive, intellectual scientific community. President Levin described this research space as the addition to the University's portfolio that makes "it possible for Yale Scientists to develop new discoveries, inventions and cures" at an unprecedented level and years in advance. The University's vision for this site is to strengthen science, medicine, and engineering at Yale through use of this facility and its extraordinary lab and research buildings.



The West Campus setting is designed to inspire research and collaboration. To date, six multi-disciplinary research institutes are in various stages of development in broad areas of Chemical Biology, Microbial Diversity, Systems Biology, Energy Sciences, BioDesign, and Cancer. These institutes will bring together faculty from the Medical School, the school of Engineering and Applied Sciences, and the FAS science departments.

The Biological and Biomedical Sciences (BBS) program at Yale is a combined program designed to make available to its students "everything the University has to offer in one comprehensive, interdisciplinary graduate program". Without the traditional departmental or geographical boundaries of most other University programs, the BBS curriculum provides students "access to courses, seminars, and faculty labs in every department...and research activities anywhere". It is no wonder the West Campus is becoming home to many BBS students and their scientific work while at Yale.

Alexis Rovner, a native of California and a second year BBS student with a long-term interest in Synthetic Biology, is conducting her thesis research in the Systems Biology Institute (SBI) under the direction of Professor Farren Isaacs (Assistant Professor of Molecular, Cellular, and Developmental Biology) at West Campus.

Alexis, affectionately known by her friends as "Lexi", began her matriculation of the BBS program in the MCGD (Molecular Cell Biology, Genetics and Development) track, commonly

known by students as the "Mega track". Like many first years, Rovner began the BBS program with an interest in Synthetic Biology, but utilized her lab rotations to entertain other possible interests. After three different lab rotations, Synthetic Biology, Virology, and Genetics, respectively, Rovner has returned to Synthetic Biology (her first love) and couldn't be more pleased. Beginning her second year, Rovner joined the Molecular Cellular and Developmental Biology (MCDB) program where she will complete the remainder of her matriculation. She says the one message she would give any first year would be to "keep an open mind". Being open about your interests, your thesis work, your options and opportunities, is essential in making the most of your educational experience and being successful in this program.

Rovner describes her experience at West Campus as "unique and fulfilling". The Systems Biology lab was newly created when Rovner arrived almost one year ago. There were no students to consult prior to her enrollment. Professor Isaacs had not yet arrived to Yale from his position at The Harvard Medical School, but his arrival was greatly anticipated. Rovner, along with two other second years from her class and her track, joined the lab together. The three students (now soon to be four) have worked closely with Professor Isaacs to create a lab culture, develop a working dynamic and conduct impactful research, which has become the foundation of SBI's success. A major benefit of this experience was the unique relationship that Rovner and her peers developed with

Professor Isaacs. "Farren is my mentor and my PI", says Rovner. "He is very accessible", which is a rarity in most labs. She describes this experience as being significantly rewarding.

West Campus, full of life and opportunity, has been a great experience for Rovner. Although vast in size, there is a strong sense of community with the people and with the science here. Like the Med School, labs with similar interests are in close proximity to one another. This makes scientific collaboration more plausible and more convenient. Interaction and

dialogue between scientists happen easily while dining in the cafeteria or an event in the auditorium. The commute to and from West Campus "has not limited my ability to go to main campus with ease - - it's only ten minutes", says Rovner when explaining her newest collaboration with the Söll lab at Bass on Science Hill.

"The campus life has actually grown significantly since I began my rotation" tells Rovner. There is hot food available in the cafeteria for both breakfast and lunch. The shuttle service is very accommodating with two lines dedicated to the campus. WiFi on the shuttles prevent any down time during your commute, and evening drops to your residence, if you live in the New Haven area, are now available. There are regularly a host of events, symposia and seminars on campus, and exposure to prominent faculty and scientific researchers is common. Rovner and others are very excited about the new, free gym facility scheduled to open in the coming months. "Just two buildings away" Rovner boasts - allowing the unique opportunity to place specimens in the incubator, go for a workout, and return to your research. "Only at West Campus can you do something like that".

Just ten minutes south of the Med School and Science Hill is a campus of great research and learning opportunity as well as scientific research with renowned faculty. It's a vibrant community that could be everything you've wanted in a lab experience. The West Campus welcomes your BBS experience. ■

DEAR **B**

Got a problem? Got questions? Just ask **B**. (*Advice is for entertainment purposes only, and you have only yourself to blame if you follow any of the stupid suggestions.*)



Crew Smith, 6th Year Cell Biology Student, answering questions at the 2011 Annual Biomedical Research Conference for Minority Students (ABRCMS).
Photo Courtesy of Monica Bowen



Monica Bowen, 3rd Year Genetics Student, manning the Yale BBS table at the 2011 Annual Biomedical Research Conference for Minority Students (ABRCMS).
Photo Courtesy of Monica Bowen

Right:
Students in the China Scholarship Council-Yale World Scholars Program at a meeting with representatives from the Chinese Consulate in New York.
Photo Courtesy of Lynn Cooley's iPhone

Dear B,

I just finished my thesis and can't wait to show it to people. Whom should I give copies to?

-Proud of My Work

Dear Proud of My Work,

Umm, other than your mom?

Dear B,

I want to make a difference in life. What project should I work on to benefit mankind?

-New in Neuro

Dear New in Neuro,

Society will owe you a debt of gratitude if you publish the following imaging study: "Whose brains are smaller - the cast of Jersey Shore or the people who tune in?"

Dear B,

There are all sorts of food carts around campus, and they rake in the dough. What could I offer that's a sure thing for making money?

-Capitalist on Campus

Dear Capitalist on Campus,

The secret to a successful cart is to give your customers what they really want: a quick pick-me-up and a reason to come back tomorrow. I therefore recommend the Three Martini Lunch cart.

Dear B,

Hypothetically speaking, if you should contaminate your iPhone with radioactivity, what should you do?

-Hot Hands

Dear Hot Hands,

First, call for help. Oh, wait. You can't. Hmm...nor can you text, tweet, facebook, email, check the weather, listen to music,

play Angry Birds, pay your bills, or do much of anything, can you? Wow. You've pretty much ruined your life. It's time to pack it in. Hypothetically speaking.

Dear B,

I'm having no luck with the ladies in the BBS program. What, exactly, do they want?

-Batting Zero

Dear Batting Zero,

They want a Ph.D. Duh.

Dear B,

My PI is a bit of a micro-manager. How do I get him to back off?

-Suffocating Student

Dear Suffocating Student,

You need to fight fire with fire by following these easy steps:

1. install large speakers in your PI's office.
2. Wear a microphone that transmits to the speakers.
3. Talk through your experiments. Be thorough:

"I'm walking over to the freezer. I'm opening the door and pulling out a box of samples. I'm scratching the sample box to remove the frost so I can read the label. The label is a bit smudged and I'm using a black Sharpie to fix the label. The Sharpie won't write because the label is wet. I'm using a Kim-wipe to dry the box. It's dry. I'm now writing on the label..."

By the time you actually get to describing an experiment your PI will have long since lost his mind. He'll be resting quietly in the hospital. You'll be at peace, too. **B**

