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Dear Sackler Community and Incoming Sackler Students,

Congratulations to the incoming class of 2014 on your admission to the NYU Sackler Institute of Graduate Biomedical Sciences! On behalf of the 2014-2015 Sackler Student Council (SSC), we would like to welcome you to Sackler.

This year’s SSC is composed entirely of second year graduate students. Since we were all recently in your shoes, our goal is to make your transition to Sackler and New York City as smooth as possible.

As the SSC, we will strive for scientific and academic excellence. Also, we vow to uphold the current and past social traditions of our Sackler community with the utmost respect. These include, but are not limited to: extremely fun orientation events, interview weekends, holiday parties, semi-formals and beyond.

We believe that while it is paramount to the character of our community to respect these traditions, it is also important to embrace a new future. We intend to start a Fall Potluck at Waterside Plaza to bring community to our housing areas. We also hope to create monthly coffee mentorship sessions, an NYU Scientific Community Outreach Program, a writing center, and a fitness initiative.

With a new dean and new Student Council leadership, we promise to focus on serving the student body to the fullest extent. As SSC, we serve as your liaison between Sackler students, faculty, and administration. We come from diverse backgrounds and a myriad of different academic programs from Molecular Biophysics and Imaging to Pathobiology and Molecular Oncology. With our multitude of backgrounds and passion to serve, we feel ready and able to lead you all as a Student Council.

We are looking forward to representing you and are thrilled to move forward in a positive new direction for the 2014-2015 school year. Please feel free to share your opinions with us and to get involved with the SSC.

Sackler Student Council 2014-2015

From left to right: Jessica Chukwu, Julia Derk, Nicole Wake, Lili Blumenberg, Russell Ledet, Kayan Tam, and David Hernandez. Photo courtesy of Michael Escosia.

Cover photo (Summer Sunset in NYC) courtesy of Daisuke Chihara
Welcome to Graduate School
By Michael Burel

In many ways, graduate school is a lot like Disney’s Beauty and the Beast. Belle, an intelligent girl with her “nose stuck in a book,” seeks to escape her small, provincial life and adventure to “the great wide somewhere” (wherever that may be). Along her journey, she becomes imprisoned in a castle governed by the fearsome Beast, exudes patience and compassion in the face of seemingly insurmountable challenges, and catalyzes the transformation of her once nemesis into a benevolent, more universally accepted form. The parallels should be obvious: You are Belle. Graduate school is the castle. Beast is your thesis. (And that patience/compassion part is just Disney magic.)

Pursuing a PhD is jarringly different than undergraduate education, industry jobs, or the like. First of all, you won’t know anything. Literally. That’s kind of the whole point. You wade into a project in which the unknown is your only foundation, much like flailing for the bathroom light switch in the middle of the night. You will become a connoisseur of seminar cuisine (read: cookies, stale crackers, room-temperature cubes of cheese, more cookies, and pizza). Also, vacations become confused for the term “conference.” One could argue a conference is just an evolved species of a vacation, but alas, I’m not an ecologist.

So how does one embrace this flood of change with all the patience and compassion of a Disney protagonist? Here are some tips to get you started:

Embrace ignorance
As many will attest, graduate school levels the playing field. You may have been at the top of your class as an undergraduate, but so too are your next-door neighbors here. But really, who cares? There is no longer a fight to be the best; there is only the fight to do your best. Science demands humility as you stumble for ways to find the answers to exceedingly difficult, nearly impossible questions. Being ignorant is innate to the job description: If you already knew something, then why study it? The excitement lies in what we do not know. Learn to say “I don’t know” with care and confidence. Admit it, embrace it.

Be confident
The first year of graduate school is incredibly demanding. You must balance challenging rotations, difficult classes, and unfamiliar environments. When things get difficult, remember this: You are here for a reason. People had enough confidence in you to pay you to live here and study what you love.

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Naoko Tanese can’t remember a time when she didn’t think about being a scientist. From Columbia, to Berkeley and an illustrious tenure here at NYU Medical Center, she has navigated the academic ranks with laser sharp focus, passion, and skill. However, while her path has been a traditional one, her agenda might shock those that aren’t prepared for the type of progressive thinking that this woman is prepared to implement. I had the opportunity to sit down with her to discuss the future of the Sackler Graduate Program as our leader and three distinct goals permeated the conversation: Top-tier scientific research and training, fostering a robustly diverse student community, and most of all: mentorship, mentorship, mentorship!

Yes, Naoko wants us to make discoveries. She wants us to be trained to tinker with lab equipment, know about our reagents, think deeply, and explore. Most remarkably though, she wants to foster systemic support for our community and the people within it. She recognizes that science is not known as the home of diversity and acceptance of all regardless of background and she’s on a mission to change that.

In every step of the process, she believes that great mentorship is key. Young recruits need meaningful role models to assure them they are capable of this grand endeavor. Junior graduate students need advice in picking the right project, the right lab, and a space they can find harmony to do great work. Senior graduate students need more diverse career planning opportunities and the training that will make them the most competitive. In any way she can, she is working to incentivize better mentorship that will lead to greater success of our student, post-doc, and faculty population. Through enriched community building, accessible experts, a multiplicity of new mentorship programs, and hearing from us directly – the best is yet to come for Naoko’s NYU!

So what’s she like?
For her thesis work, Naoko worked for Steven Goff at Colombia studying retroviruses. He had recently set up a new system and she was excited to dive into work with him. She remembers him as very hands off yet accessible, productive, and kind. While he wasn’t one to print out every protocol for you, he’d help you ask questions, set conditions, and would scribble directions down on a piece of paper before he sent her on your way to do her thing. She’d tinker with lab equipment, trouble shoot, explore, and her favorite parts of the day were the small victories in being able to solve problems. Although she thought a few times of being a doctor, Naoko was always drawn to science, scientific questions, and
serving her community through discovery.

As far as personalities go, Naoko is as straightforward as they come. She speaks candidly about the difficulties we will face throughout our scientific careers. She will not delude you. The road to a PhD is an extremely challenging one. We pour our lives into our work only to come out on the other end with overwhelming competition for jobs and funding. The questions we ask get more complicated as big data gets even bigger. Even more, she’ll admit the systemic issues rendering a STEM PhD largely inaccessible and unheard of for entire populations of people. However, there’s not a problem in sight that she’s not ready to admit, discuss, and explore with you. For our new Dean, her goals are to address the most important national issues in science and train an army of intellectual warriors that are ready to serve their communities. Even better, she wants you to help her execute her plan.

Lessons in Humanity
Was it always easy? Of course not! Naoko quietly reflected on the setbacks she had along the way. At one point she planned to mutate a few specific amino acids on a viral genome and borrowed a plasmid that a colleague in the lab had recently characterized. Little did she know her clone wasn’t identical to the one he characterized. Unbeknownst to her, this plasmid made huge truncations resulting in deleted proteins and she built an entire year’s work on an incorrect plasmid map.

What does she remember most vividly from this depressing time? She remembers the support of her mentor. They used the truncation findings, but interpreted it in a new way. Then they started over with the correct construct and they got new data. He wasn’t mad. He accepted the problem and they kept moving together. There have been moments of doubt on her journey, but it’s clear to me after speaking with her that Naoko is ready to greet hardship with honesty and hard work.

Wise Words
After so much time spent discussing mentorship, it came as no surprise when Naoko offered her advice to first years: First, be excited about the projects! Find research that makes you want to get out of bed in the morning. Go talk to the principal investigators. Make sure you feel comfortable with them. Do a rotation and see what the labs are like. Can you communicate with your mentor? Do you sense a “block”? No matter how big or small the labs, how “hot” the projects are, or the location of the lab, the single most important factor is that you can communicate with your mentor. Beyond that, Naoko says follow your gut instinct. It brought you to NYU, didn't it?!

A Sweet Treat
As if the whirlwind of success and utter support for us all weren’t enough, there’s one aspect of Naoko that can’t be left amiss. To know her is to know her baking. Naoko is such a fabulous dessert chef that a previous lab of hers even put in an oven so that she could bake for her lab mates between experiments. Yes! She’s brilliant, she’s kind, she’s communicative, and she wants to make us delicious desserts. It seems we’ve struck a gold mine.

More Than a Buzzword
Finally, Naoko will be working to address

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A Guide to Rotations
By Jason Wong

Half of a first year’s job is to study hard and do well in his/her courses. The other half is to complete three lab rotations so that by the end of the first year, a lab from one of those three will be selected to complete your dissertation. So, how do these rotation things work? There are three short things you have to do. First, find labs to rotate in, then do the rotations, and finally choose your lab.

How to find a rotation lab
There are plenty of opportunities to explore potential rotation labs. Even if you think you know which labs you want to rotate in, it’s best to partake in some or all of the following to make sure you pick the best rotations for you.

1. Open houses: Early in the Fall semester there are open houses that each of the training programs host. This involves an informal introduction to some of the P.I.s in the program, a poster session from representative post-docs and grad students, as well as some free food.

2. Chalk talks: Once a week from September till about February, first years are given a short presentation on a chalkboard by one or two P.I.s about what his or her lab does and potential rotation projects currently available. This is an essential to go to, not only because Lisabeth says it’s mandatory of all first years, but also because it exposes you to a wide variety of labs that might spark your interest. Also, complimentary lunch should never be turned down at any point in your graduate career.

3. Talk with people: There are a hundred people out there who would gladly help guide your search for rotation labs. Including but not limited to: 2nd years, 3rd years, 4th years, other first years, the dean (Naoko Tanese), the previous dean (Joel Oppenheim), as well as the P.I.s themselves. Don’t be afraid to contact any of these people to set up a meeting to chat about rotations to get everyone’s two cents.

How to do your rotation
Well, rotations are sort of complicated to figure out. I can’t exactly tell you what to do and how to do it, but do them well. Sure rotations allow you get a taste of a potential lab to join, but likewise, it’s a chance for the lab to get a taste of you. Rotations are like three month long interviews. Every day you should be on your toes and prove your worth to the lab. This is a time for a lab to impress you as well as for you to impress the lab.

Choosing your lab: how to know which lab is best
You did awesome in all three of your rotations and now have the option to join any one of

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Scizzle is a site (started by Sackler alumnus Gaia Vasiliver-Shamis) that provides a new way to stay on top of the hottest science literature. Check it out at myscizzle.com! The site also features a blog with graduate student writers. Several Sackler students participate in this blog and each issue, we will feature one of their latest posts.

**How I Chose a Lab in 3 Easy Steps**

By Lauren Larkin

There are four big decisions one has to make when deciding to pursue a graduate education: 1) to actually pursue a graduate education, 2) at which institution, 3) working on what, and 4) in whose lab. Once you have answered for yourself that yes, you do want to go for your Masters and/or Ph.D., you have some control in determining where, but once you have submitted your grades and gone on your interviews, whether or not an institution accepts you is largely out of your control. What you do have more control over, and what I personally found more daunting, is deciding what you want to work on, and for whom. Your lab is not only is it where you will spend a considerable portion of your time for the upcoming years, but it is your first foray into Science as a career and can follow after your graduation.

In my last post, I wrote about how I approached graduate school a little more nonchalantly than I should have and therefore struggled to hit my stride. One of the ways this manifested was when I was tasked with choosing three labs in which to rotate and to finally choose one in which to complete my thesis. I knew I wanted to study molecular/cell biology most preferably in the context of cancer or immunology. This was not a very helpful way to narrow down labs at a major medical research institution with an umbrella graduate program.

I was overwhelmed by the sheer number of potential labs so I sort of panicked and made rash decisions. Luckily, I wised up enough by the end of my first year and ended up in a lab I am happy with and am enjoying my research. From this experience (as well as watching others go through the rotation/choosing process), I’d offer the following advice that I wish I had taken:

**Clearly decide what you want to study and how you want to study it**

I alluded to this in my last post that this was an important decision to make even before choosing to go to graduate school. Some people enter into an institution already knowing exactly whose lab they want to enter into, but for those who don’t it is good to have as distinct a focus as possible be it a disease, cellular process, or technique. Doing so will help narrow down your choices to make the most out of your first year. It will also afford you the opportunity to learn more deeply about your particular field. With the multiple perspectives you can learn how different labs approach the same problem, learn different ways to ask questions, and rotations are a good opportunity to try new methods.

What goes along with this is deciding

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6 Top Tips For Choosing the Right Lab for You – Part 1
by Susan Sheng

I’m still somewhat in disbelief that I’ve been in my thesis lab for nearly a year now, we’re halfway through summer, and my qualifying exam is fast approaching (eek!). A good friend of mine is getting ready to move across the country to start a PhD program of her own, and recently she has been asking me lots of questions about how to choose a rotation (and eventually, a thesis) lab. Looking back to my first year, I remember being overwhelmed with the number of rotation options, and worrying about “choosing the right one.” (one may recall the PhD Comic comparing PhD programs to marriage). After much discussion with more senior students and a few post docs, and meeting with potential PI mentors, I finally settled on three labs to rotate through. I was fortunate to have generally good experiences with all three labs, and it came down to weighing the pros and cons of each lab to decide which one I would ultimately be happiest in and do my best work. Below are some of the major factors that swayed my decision, and hopefully this will help incoming students narrow down their rotation/thesis lab options.

1. Don’t commit too early
First thing’s first though, don’t feel pressured into committing to three rotation labs right as soon as you arrive in the program. I remember talking to a few classmates on the first day of orientation, and they already had all three rotations lined up! When I started at NYU, I had a list of maybe 10 labs that sounded interesting. During the first month of grad school, I made appointments to meet with the PIs and discuss the possibility of rotating in their labs. From there, I narrowed down that list to about 4-5 labs. I decided my first rotation would be in a learning and memory lab, since it was an area I had worked in previously and thus it would be easier for me to hit the ground running while I adjusted to graduate school life. I told the other PIs that I was interested in possibly doing a second or third rotation with them, but that I would get back in touch with them at a later date to confirm. Luckily those PIs were amenable to this arrangement, and I realize this may not work in labs where there are a lot of other students interested in rotating/joining. However the advantage of not committing early meant that I had the flexibility to see how my interests developed through my work in the first rotation and through classes and seminars I attended in the first semester. I actually ended up doing my third rotation in a lab I had not even heard of prior to arriving at NYU, and in a totally different department (microbiology, instead of neuroscience), and that was based on chatting with a graduate student at a poster session I attended. Keep your options open!

2. Funding
As an international student, one major concern I had was funding. Because I’m not a US citizen or permanent resident, I
don’t qualify for the vast majority of grants/fellowships in the US (i.e. institutional training grants, NRSA/F31, NSF, etc.). Additionally, I also found myself ineligible for funding from my home country (Canada), so I needed to find a lab that was well-established and well-funded enough that I wouldn’t be expected to bring in my own funding sources. Troubleshooting experiments and collecting good data is hard enough as it is without wondering whether you will have the funding to buy reagents or supplies!

When meeting with potential PIs, it’s good to be upfront and ask whether the lab can support a student, and be clear about what grants you are (and are not) eligible for. It seems a bit awkward at first but is a common question that comes up so don’t be afraid to ask! Another resource is NIH RePORTER which lists active NIH grants held by a PI. Depending on the field, this database will be more or less useful, as it does not give any indication of other funding sources, such as NSF or private foundations, but it can be a good starting point to get a sense of a lab’s financial situation.

### 3. Mentoring style

In terms of mentoring style, PIs can range from micro-managers who want constant updates to very laissez-faire with only occasional check-ins, to everything in between. It’s important to consider your own working style and be honest about what kind of mentor would help you achieve your greatest potential and succeed in your program. For myself, I wanted a mentor who would check-in with me regularly to make sure I was making good progress (and give suggestions if I get really stuck), but would also allow me the freedom to explore my ideas. Too much leeway and I was worried I would either procrastinate horribly, or waste time wandering down paths that are less important or novel. On the other hand, one of my classmates remarked that if she was in my lab she would be too stressed and frustrated with weekly meetings, and instead prefers the greater freedom her PI allows her with monthly check-ins.

There is no right answer of course, but it’s important to be honest with yourself, and find the best fit. This is something you should be able to gauge from a lab rotation and from talking to current students in the lab. Generally I found that newer PIs tend to be much more involved with their students’ work (I have friends who are regularly in the lab until the wee hours of the morning, working alongside their PI) and older PIs tend to be less involved and give more mentoring responsibility to the post-docs in the lab, but this is not always the case.

*Check out Part 2 at myscizzle.com!*
Biocanvas: A Science-as-Art Corner
by Michael Burel

Abigail Anderson
Laboratory of Erika Bach
Departments of Biochemistry and Molecular Pharmacology

In the wild, parasitic wasps can lay their eggs inside Drosophila larvae, providing an on-the-go food source for newly hatched wasps that eventually kills the fly larva. Drosophila can mount a defense response by quickly sensing the egg and initiating the production of blood-derived lamellocytes. These lamellocytes encapsulate the egg, become melanized to form dark masses, and release reactive oxygen species that kill the wasp egg. Interestingly, increased activity of the JAK/STAT pathway brought about by a hyperactive mutation in the Drosophila JAK gene causes a massive increase in blood cells. These blood cells also aggregate and become melanized, appearing similar to the response of a wasp egg infection. Here, Drosophila blood cells (lamellocytes in green, macrophage-like plasmatocytes in red) can be seen aggregating due to JAK hyperactivity. Mutations in the Drosophila JAK gene can be used as a low complexity model to study JAK/STAT-dysregulated blood disorders in humans.

Submit your science-as-art images to BiocanvasMessenger@gmail.com!
Even though its neighbor is the recently renovated and empowering Barclays Center, the Brooklyn Academy of Music (also known as BAM) need not envy the nearby arena. BAM is rich in history starting as early as 1861 when it was first inaugurated as the Academy of Music. The Academy of Music opened its doors in a new home, still its current home, after a fire burned to the ground the original Academy of Music. For more than 150 years, BAM has been a world leader in performance arts and continues to strive to offer a place where ideas and artists can explore the arts. BAM doesn't limit itself, but advances the arts by encouraging global and local initiatives through theater, dance, music, opera, film or other artistic expression medium. This coming fall is no exception! On September 5th they will be hosting a 24-hour movie marathon to support K-12 art after school programs. From September 9th through December 20th BAM will be hosting “New York City’s largest experiment in live performance,” the 2014 Next Wave Festival featuring diverse performances in theater, dance, film and music. Event calendar can be found at: www.bam.org.

If theater and music and all that jazz doesn't ring the bell of entertainment maybe a trip to Six Flags Great Adventure & Safari in Jackson, NJ might be for you. It’s the largest amusement park in the world and just 1.5 hours away from NYC makes it the ideal place to find your thrills and chills. If your interest is still not peaked, then meet Kingda Ka and Zumanjaro. Kingda Ka is North America’s tallest and fastest rollercoaster reaching 456 feet and goes from 0 to 128 miles per hour in 3.5 seconds! If you are not satisfied with Kingda Ka you can ride their newest attraction: Zumanjaro. Zumanjaro is the world’s tallest drop ride dropping 415 feet and reaching 90 miles per hour, with a height equal to two Lady Liberty’s stacked on top of each other. Still not interested? Then head toward the safari section of the park and meet 1,200 wild animals throughout the park. Tickets can be bought at the Ticket Xpress Box Office at Greenberg Hall #6E (open Tuesday, Wednesday, & Thursday: 3:30 - 5:00pm, Friday: 11am – 12:30pm).

Upcoming attractions on pg. 20
Finding Your Stride in Athletics and Science

By Artur Belov

Whether you’ve been part of an organized club, team, or just an individual running miles in the gym, the academic environment makes it difficult to balance the day-to-day spontaneity of lab work with a consistent workout or cardio routine. Many students and faculty alike come to NYU getting much more than they expected on the research front, and find it increasingly difficult to stay involved in activities and sports they once loved.

However, you needn’t look far for some encouragement or accountability to keep in shape or practice your athletic skills, as both NYU and NYC offer opportunities for busy New Yorkers to keep in touch with their active hobbies, on the recreational as well as competitive levels.

Anthony Bainor, a rising 4th year student in the David Lab finds plenty of time to practice his rugby passion alongside his interests in epigenetics. “When I first moved here, I kept up my workout routine, but I missed the team environment. After speaking with one of the captains of the rugby team, I went to a practice, and I fell in love with it. It’s a lot of fun. The main practices are on Wednesdays at Coles at 6pm, with games on Saturdays, which makes it easy to juggle your schedule once a week.”

Contrary to popular belief, there is no need to have previous expertise or inclination to the sport to get involved. Anthony says getting integrated into the team was easy, regardless of your experience level. “I had no idea what I was doing at first, but you learn pretty quickly. As long as you show up to games, you’ll end up playing.” This club is unfortunately only open to men from NYU, but “there are various teams run by the city that women can join...games aren’t co-ed, but practices sometimes are.” With dues starting at $100 for the entire academic year, rugby offers a great way to shed that turmoil building up inside due to failed experiments with your competitors.

Anthony also shared that “...we don’t have a coach. We’re not super organized so there aren’t real consequences for not showing up to practice. You get out of it what you put in. But the culture is great. I’d encourage new people to ask about it.”

If contact sports aren’t your thing, NYU offers a number of other team sports that have a large number of graduate students involved. Simón Vidal, a 4th year student studying stem cell biology in the Stadtfeld lab, is a member of the NYU Cycling race team by day (we’re talking 5:45am practices), and graduate student during normal working hours. “I hate it, it’s tough” said Simón, “but the early practices show which people want to be committed to the team.”

Before joining NYU Cycling, Simón was
involved with BMX biking for the Chilean national team. “I was looking for something more competitive when I came to the US,” Simón stated. “I first bought a bike to commute, but quickly realized I missed the competitive environment.”

While NYU Cycling may seem intimidating, it is open to anyone who owns a bike and wants to learn the routes and trails in and around the greater NYC area. NYU Cycling organizes casual rides early on in the academic year, showcasing the best streets and travel tips necessary for navigating the streets. However, for those wanting to go head-to-head with other athletes, the club will not disappoint.

“One of the hard things about being on the team is the commitment, especially for those involved around race season, which takes up every weekend of March and April.” Simón was particular to note, “it’s not an easy conversation to have with your PI” that you’ll be away on Saturday/Sundays, but “they (PIs) understand why it’s important to you, especially if they cycle themselves. It’s vital to keep your work and recreational activities separate, but being very involved with both activities mutually helps that process.”

Factoring in the early morning AM practices, races during the academic and summer months, as well as the training necessary to be competitive, you may think that PIs would be totally against the idea of investing your time so heavily in anything that does relate to your research. However, you’d be pleasantly surprised to learn that some of our very own faculty are intimately aware and involved with their competitive hobbies.

Dr. David Stokes, professor and director of the molecular biophysics program, knows first hand how to balance the work as well as the play, showcased by his own involvement in athletics, before, during, and after his PhD/postdoc training. “You might call me somewhat of a cycling fanatic,” shared David. “After biking across the country in 1976... and also competing during my first bike race on that trip (a reward for which I earned a night stay at a local frat house), I’ve used it as a form of exercise and getting away from classes/work ever since.”

Since moving to the city in 1995, Dr. Stokes has seen a major change in the culture of casual and competitive cycling. “Well, for one, there are bike lanes now, it’s no longer the Wild West! When I first came, it was really intimidating with all the potholes and traffic, and I thought to myself, ‘Oh my God, this is really intense,’ but quickly, I got used to it after understanding the ebb and flow of the traffic lights. As long as you’re not too aggressive, you should be OK.”

When asked about student involvement in sports, Stokes shared, “It depends on the relationship you have with your mentor. You can spend too much time on extracurricular activities, but it is very important to have those other interests, whether it’s going to the theater, bird watching, or whatever it is you do. It’s quite healthy to open your mind to other things, which I think helps you think more clearly about your research.”

“You need an avenue to ‘release’ some of the stresses associated with research... but also need to have a reasonable sense of priorities to do so. There are times when extracurricular activities help you put your research efforts in perspective,” David shared.

A member of Kissena Cycling, one of the biggest cycling communities in NYC, David

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Let’s face it, grad school is filled with stress. Anyone who tells you otherwise is full of baloney. From classes and rotations during your first year to submitting a paper and writing your thesis, pound-your-head-against-the-wall moments are abundant. You may be asking yourself, “Diana, how can I manage the difficult times that lie ahead?” Well, I’m glad you asked.

Disclaimer: The methods found below worked for one Diana Marie Klompstra. Other options including but not limited to underwater basket-weaving, salsa dancing, dog grooming, twerking, prancersizing, etc. may work better for stress-management in others.

My stress level hit an all-time high as I prepared for my qualifying exam. Here I was finishing my second year and I was about to face the firing squad known affectionately as my “thesis committee.” I found solace in cigarettes, something I knew was bad but it helped calm me down. Needless to say, I continued smoking after my exam was over to deal with the stress I faced everyday in lab and life. I knew this would not be a sustainable coping mechanism and that I would have to find another way to calm myself down and deal with things. I remembered back to my first year in grad school when a representative from the now defunct running club mentioned the Five-Borough Series put on by New York Road Runners. This series consists of races held in each borough throughout the year. Most of these races are half marathons. I thought to myself “I’m going to complete each of those races one day.” I figured this was the best time to begin my running journey. I wanted to get healthy and running would hopefully be an outlet for the stress I faced in lab. I had taken a running course in college where we had to complete a 10K (6.2 miles) and I almost died. I was now looking to run a little more than twice that distance. Was I crazy?

When I started my running regimen, it was slow-going and painful. I could barely run a mile and I had no idea how I would one day run a half marathon. Each week I would tack on extra distance and before I knew it, I was running farther than I ever had before. Obviously there’s a physical component to running but there is also a huge mental element. Once I learned to deal with the mental aspect, things became a little easier. Not only was I becoming more fit, I also found that I wasn’t as stressed as I usually was and my lab productivity increased. Running became a way to channel the tension and aggression that builds up overtime. My runs also provided time for me to think about my project. Some of my experiments were thought of while running.

Fast-forward to present day... I have run five half marathons and several smaller

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After the first 20 minutes of group meeting, I began counting the number of left-handed people seated around the table. As a second year PhD student that had just joined the lab, I found it difficult to understand what the animated debate was about. They might as well have been talking in another language. I watched how the others were able to jump into the conversation and say intelligent things, while I sat there in the background quiet and invisible. Frustrated and feeling quite defeated, I started counting. I realized that a majority of the senior faculty and post-docs were left-handed. That proved it. I am right handed and therefore I must be… well… stupid.

This feeling followed me around like a shadow. In fact, I felt so utterly incapable that I couldn't talk to my advisors without stuttering. I carried it along with me in research updates. Presenting, which I had considered my strength, had suddenly become my weakness. My throat would dry up and words would refuse to come out in an audible sentence. “Could you please speak up,” someone would say. I caught some people sleeping during my presentation, or playing games on their phones. To top it all, the questions after the presentation murdered my work. On a particularly bad day like that I would pack my bag, head home, and binge watch some terrible series on Netflix.

Looking back at how I felt then, I think the fact that really got to me was feeling alone. I thought I was probably the only one feeling stupid and struggling to keep up. I was the only one who felt surrounded by very smart individuals and I wasn't good enough. I felt my advisor probably regretting even taking me on board and I didn’t deserve to be in this lab.

And finally, something changed. In one of those dreaded group meetings, a post-doc brought an article published in the Journal of Cell Science to share with the group called, “The importance of stupidity in scientific research.” As he went through the article, I realized I wasn’t alone. Everyone felt stupid, and it was OK. A friend from another lab later told me, “I go home and cry after my research update meetings. I feel terrible.” After describing what I felt to a senior student in my lab, he said, “The learning curve during the first few years as a grad student is really steep, but after a while, it gets better.” A student once said to me, “There are days when I feel like I’m on top of the world, because I could explain something to someone. And then on other days I feel like I don’t know anything.” Another post-doc later came up to me and said, “Can you please explain something to me?” And I looked at him for a while and in my head I was like, “Whaaa, me? Explain something to you?” It made me feel happy.

Today, as a fourth year student I still feel stupid, though not invisible. There are still times in a meeting that I don't quite catch a point or two, but at least I understand the gist. And the stuff I don’t understand, I go back and read about or talk to someone about it. I think the key is to get used to the feeling, but not be OK with it. And that learning, to some extent, can fight off that feeling.
While you may not find confidence in yourself, know that others have already found it for you. You can do this.

**Manage your time**
This may be self-evident, but as you start juggling all of your responsibilities, you may find yourself saying, “Oh, wow, it’s 4 AM, and I forgot to eat today!” Don’t be this person. Budget time to complete your classwork, execute in rotations, and...oh yeah...eat! If you aren’t sure you are performing well, seek advice from a fellow student, tutor, or advisor. No one wants to see you fail. Everyone wants to see you succeed.

**Read**
... a lot. Reading scientific articles is one of the most important yet underdeveloped skills a graduate student possesses. To help get you started, try what I do: For every figure, write out the question being asked, the experiments that answer the question, the results of those experiments, and how those results feed into the overarching message of the work. You’ll ace discussions, and reading will become faster and second nature.

**Be happy, be healthy**
(Not to quote Cheerios, but it is sound advice). Being healthy is a mental process as much as it is a physical one. Exercise, eat well, and play. Develop a close circle of friends you can lean on in times of need. Go to a Broadway show. Take a weekend trip upstate. Relax and build time for yourself. You cannot perform your duties as a graduate student (or anything, really) if you are miserable and ailing. Take care of yourself first so you can be your best version every day. If on some days you can’t remember what that version is, then please, channel your inner-Belle. Be curious, courageous, and open to change. Steer clear of Gastons. Tame the Beast.

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**Continued from pg. 14 - Why I Run**

races. After I run the Staten Island Half in October, I will have completed the Five-Borough Series. I’m definitely not a fast runner and I know I’ll never win these races but that doesn’t matter. The high you get from the crowds during a race and when you cross the finish line is incredible. People often tell me that they would love to get into running but that it’s just too difficult for them. Once you conquer the mental roadblock that comes along with running (and get a good pair of running shoes), the sky is the limit! Happy running, Sackler!
the approach you want to take to what it is that you want to study. For example, my background is in biology and chemistry, therefore I’m most interested in asking questions from a biochemical and molecular point of view. But if I someone asked me to think deeply about genetics or systems biology, my head would just about explode, which would be unfortunate for everyone involved.

**Consider lab dynamics and your potential relationship with your mentor**

Would you prefer to work in a big lab or little lab? Social or quiet? More closely managed or more flexible? These factors will be important when you are late into your third year and the newness of your graduate career has worn off and you see how long the road is ahead of you.

Also important to take into consideration is your relationship with your mentor. As much as scientists would like to think of the world as a logical and fair place, we are human beings first and how you interact with your boss can and will affect your graduate career and the science you do. However, because we are all different snowflakes, this is a highly personal preference. Some people know they need their boss to be a little bit of a hardass to push them. If that were me, on the other hand, would constantly be on the edge of a mental breakdown. Personally, I like a good balance of pushing versus flexibility. I know I learn best by trying on my own (usually followed by failing a lot on my own), then asking for help.

Your mentor is also just about the only constant in the lab. Other lab members will come and go, you could move your lab, even move to another institution, and your project is definitely not constant, but your mentor will remain. Make sure that it is someone you can stand, and ideally even enjoy, working for.

**Assess longer term funding capabilities**

My first two pieces of advice are the parts of choosing a lab that depends on you and your preferences, but this is the practical one. Although I think it is within everyone’s preference to join a lab that can, you know, buy things. With the uncertain funding climate, choosing a stable lab can be vital to your success as a graduate student. Stable does not mean that the lab will be able to afford all of your whims for kits and antibodies, but that it will be able to sustain you through your Masters or Ph.D. Having said that, I think it is a good idea during your stay in the lab to apply for outside funding if for no other reason than the education and to take pressure off of your PI. Regardless, choosing a financially stable lab will take ease stress throughout your stay.

If I had to do my first year over again, I’m confident I would wind up in the same lab, but I would have chosen my rotations differently and with more intention. For the first 6 months of my first year I felt like I was flapping around in the wind. In the end, choosing a lab is a personal choice. There’s no such thing as a perfect lab or an inherently bad lab. You will want to cry in lab (or desperately feel like it) if you chose what you think is an awesome lab, and you will have victorious science data days if you feel like you wound up in a bad lab. What matters is that you make the best decision for yourself that you can with what you have available.
Continued from pg. 5 - Naoko Tanese: Scientist, Mentor, Thinker, and Dean

a major question of our time: what is preventing us from diversifying STEM fields? Her hypothesis, though she admits many forces are at work, is that students need better role models. They need core people that they can connect to and feel comfortable coming to in times of trouble. Thus, she plans to sustain and broaden partnerships with undergraduate universities that strive to recruit top underrepresented minority students. She wants to foster a future where students of every race, gender, religion, ethnicity, culture and socioeconomic background can look to the NYU student body and think “If so and so can do it, then I can too.”

Our Dean and Our Biggest Supporter

I walked out of my interview with Naoko feeling more inspired than ever to take on the world. Yes, we chose a very difficult path. There will be times of difficulty and strife. However, we’re at NYU and our Dean is as powerful as she is compassionate. She’s our number one advocate and she’s ready to lead us on a path of discovery, one immensely mentored problem solver at a time.

Continued from pg. 13 - Finding Your Stride in Athletics and Science

has experienced the highs and lows of cycling, both during his PhD and his professorship. “Riding across the country, letting me see what the world was like in a new perspective during my postdoc in England was definitely a high...my low was when my bike was stolen, as well as crashing...but really, I can't say I've had too many bad experiences. These are the boom years (of cycling), it’s the fastest way to get around the city, and as long as you’re careful, keep your eyes open, and don’t ride the wrong way, it should be a great experience to try during your PhD.”

So there you have it: students and faculty agree that the balance between research and recreation sports are vital, and can (in fact) complement one another. If rugby or casual/competitive cycling isn’t your thing, be sure to check out the other clubs available at www.nyu.edu/life/student-life to see what clubs might be of interest to you.

If you’d like to share your story about training with a club/organization in or around the NYC area, feel free contact Artur.Belov@med.nyu.edu for more details!

SACKLER ON THE MOVE!!!

Sackler offices are now located at 341 East 25th Street, 2nd floor
Continued from pg. 6 - A Guide to Rotations

them, now what? There are many considerations to take in to account when assessing a lab and whether or not it’s something worth investing 4+ years of your life in. Here are some things to consider when the time comes:

*The science.* Of course, you have to at least like the work done in the lab. The more you like the science, the better; however, this should not be the sole driving force of your decision.

*The people.* The environment in the lab is very important. Reflect on the group dynamics of the post-docs, grad students, and techs and ask yourself, can I spend every day for the next x years of my life with these people? Not only should you be able to tolerate these people, but ideally you should also enjoy their company.

*The P.I., the boss of the lab.* The P.I. is the captain of the ship, so when you look up at the captain’s deck, how do you feel about (insert P.I.) steering the boat? Do you like his/her management style? Is he/she a good leader? Does the P.I. offer constructive criticism and help you when you need it?

Remember your objective in this program is to learn how to be a scientist. How to ask the right questions, to design the right experiments, execute efficient bench work, and communicate your science. The best lab will create an environment that best serves to accomplish all of these things.

**FYI (other reminders):**
- Just because you want to rotate in a lab doesn't mean you are able to. Some labs aren't in the position to take any additional people from limitations of funding, space, or just inconvenient timing.
- Prior to starting a rotation, you should confirm with the P.I., as well as with the dean, that the lab has sufficient funds to support you if you were to join that lab. It’s not an inappropriate discussion to bring up a P.I.’s money situation to find out the feasibility of joining the lab in the end.
- Many people do their PhD in a subject completely different from their post-doc work. Don't feel like it’s a requirement for you to do your PhD in the field of your post-doc.
- “Be the first one in lab and the last one out.” Your hard work will not go unrewarded. As busy as you think you are, the first year is the easiest of all, there’s always time to do an extra control or read an extra paper.
- Arguably most important, pick a lab that will make you happy. Grad students are some of the hardest longest workers out there. Working an 80hr week will breeze by if you’re where you like to be with the people you like to be with.

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**January 2015 Graduation Deadlines**

Preliminary dissertation deadline: December 5, 2014
Final dissertation deadline: January 16, 2015


Siegle, Jasmin M; Basin, Alice; Sastre-Perona, Ana; Yonekubo, Yoshiya; Brown, Jessie; Sennett, Rachel; Rendl, Michael; Tsirigos, Aristotelis; Carucci, John A; Schober, Markus. ‘SOX2 is a cancer-specific regulator of tumour initiating potential in cutaneous squamous cell carcinoma’. Nature communications. 2014 5():4511-4511 (#1090252)

Honors and Awards Highlights 2014

Wilnelly Martinez Ortiz, NIH NRSA
Vanguel Trapkov, American Heart Association FDA Winter 2014 Predoctoral Fellowship
Lamia Harper, NSF Graduate Research Fellowship
Michael Burel, NSF Graduate Research Fellowship
Kirsten Wiens, NSERC-PGS-M

Upcoming Movies

The Giver – August 15
Sin City: A Dame to Kill For – August 22
The Equalizer – September 26
Dracula Untold – October 17
Interstellar – November 7
The Hunger Games: Mockingjay Part 1 – November 21
Exodus – December 12
The Hobbit: There and Back Again – December 17

Upcoming Broadway Shows
(dates for previews/opening)

This is Our Youth (starring Michael Cera & Kieran Culkin) – Aug. 18 / Sept. 11
You Can’t Take it With You (starring James Earl Jones) – Aug. 26 / Sept 28
It’s Only a Play (starring Matthew Broderick & Nathan Lane) – Aug. 28 / Oct. 9
Disgraced (2013 Pulitzer Prize for Drama) – Sept. 27 / Oct. 23
The Real Thing (Starring Ewan McGregor, Maggie Gyllenhaal, Cynthia Nixon & Josh Hamilton) – Oct. 2 / Oct. 30
A Delicate Balance (Staring Glenn Close) – Oct. 20 / Nov. 20
The River (Starring Hugh Jackman) – Oct. 31 / Nov. 16
The Elephant Man (Starring Bradley Cooper) – Nov. 7 / Dec. 7
Honeymoon in Vegas (Starring Tony Danza) – Nov. 18 / Jan. 15
Constellations (Starring Jake Gyllenhaal) – Dec. 16 / Jan. 13