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B is just bursting with interesting stories! In this issue we tackle the NIH review process, interview an activist, travel halfway around the globe, eat meat, save you money, offer sage advice, and look at LBMs. LBMs? We’ll explain inside.

A Connecticut Yankee in Beijing
By Andrea Stavoe

The taxi was racing through the Beijing streets at 50 mph, and I was holding on for dear life. Wind rushed into my face as the driver rounded corners, bringing dust and smog into my rarely open eyes. When I cautiously squinted out into the Beijing night, oncoming headlights blinded me and I suddenly realized we were driving in the wrong lane. When we finally reached Beiwai (Beijing Foreign Studies University or BFSU), I was finally able to breathe normally. I went to Beijing knowing only one phrase: Ni hao (hello). I quickly learned that I was an American fish in the middle of a Chinese desert – far, far away from water.

For a month this summer, I was a conversation partner in a Yale English immersion program set in Beijing. I conversed with incoming graduate students who completed undergraduate education in China. Our goal was to improve the students’ English and to minimize culture shock upon arrival in New Haven. The students hailed from schools and hometowns all over China and entered the program with varying degrees of English proficiency. Roughly a quarter of the participating students are joining BBS tracks; the majority of the BBS students are entering MCGD. There were three other conversation partners in the program, each representing a discipline reflective of the incoming students.

I had heard that Westerners in China are frequently asked to pose in pictures, but I didn’t actually think it was true. Beijing hosts many tourists – many foreign tourists but even more Chinese tourists. While Beijing residents are accustomed to Caucasians, I quickly discovered that the other tourists were not. Museums were especially bad. At the Military Museum, I was followed through an entire exhibit by two young girls who peered around corners or stole glances from a safe distance. As soon as I looked at them or tried to smile, they would scamper away out of the dangerous proximity. At the Beijing Capital Museum, I was stopped by a middle-aged woman who wanted my picture and later tracked me down to demand my e-mail address and name. Since she spoke as many words of English as I did Chinese, e-mail will not be a successful mode of communication. Only a few minutes later, I was stopped by three teenage girls also desiring a picture. With each encounter, I blushed to increasing shades of red. Needless to say, my fellow conversation partners found my experiences highly amusing.

I visited many famous sites in Beijing: the Great
NEW STUDENT ADVICE
By Kathryn Tworkowski

All right folks, brace yourselves; we have another round of new Ph.D. students. Yes, a whole new group of people not yet jaded by long lab hours and who serve as a reminder of the fact that we have completed yet another year at Yale. In light of these imminent new arrivals, B magazine decided that it might be a good idea to offer advice to our new brethren. After an extensive search of a vast array of candidates (not really), I was selected to offer my widely sought advice (as before) to these neophytes, thereby greatly allowing them to attain new levels of joy (ditto) in their graduate experience. So, without further ado, I proudly present (fanfare please): advice for the incoming students!

• Don't be afraid of the professors. They will not bite your head off if you admit ignorance, and they are here to help you make the most of your graduate years. Take advantage of their experience!

• Say goodbye to your vacations; the month-long Christmas break, spring break and summer vacation are now things of the past. Bearing that in mind, if you have the opportunity to take a vacation in your first year, do it without feeling guilty.

• Make use of the shuttle system on weekdays. Whether you’re coming from the lab or the bar, it will take you where you need to go!

• Try one rotation outside of your field. You’ll learn a lot, and you may just discover something new that you truly enjoy.

• Meet as many new people as you can. It is possible (and even fun) to hang out with people who are not BBS students. Try a couple of the social events during orientation, check out the GPSCY parties, and introduce yourself to your neighbors.

• Actually read (or skim) the McDougal Student Life Notes (they’re e-mailed weekly). You may not discover something interesting every week, but it’s a good way to find out about cheap, local events.

• Join a club. I know you’ve heard this before, but it’s nice to have a regular activity outside of work. Yale has graduate sports teams, government assemblies, journals, and orchestras (among other things). So get involved!

• Parking is a pain. It can be very hard to find a spot in downtown New Haven, so bear that in mind when you head out. Be aware that you don’t need to feed the meters after 7pm Mon.-Sat. or at any time on a Sunday.

• Take transportation precautions. It’s sad but true: if you have a car in New Haven, you should look into getting a club for it. If you have a bike, invest in a good bike lock. Trust me; it’ll pay for itself in the end.

• Explore Connecticut! It’s true that you can always go into NYC or Boston, but there’s also a lot to do just outside of New Haven. Generally, a quick Google search is all that’s needed to find entertainment, whether it be a museum, an aquarium, a beach, a hiking trail, or a farm where you can pick your own produce.

• Don’t stress out about your scientific progress during your rotations. While you shouldn’t slack off in lab, no one expects you to get a paper out of your rotation either. Just make sure you get a feel for the type of work the lab does, the mentorship the PI provides, and the overall lab environment.

• Stay in touch. Whether it’s an old PI or a friend from undergrad, send out occasional e-mails to keep things going. You never know when an old contact will help you out.

In Memoriam

At this time, B magazine wishes to pay tribute to Annie Le. Annie, who was 24 years old, was a third year graduate student in the Pharmacology department. During her brief time here, she made many important contributions to this magazine, to her scientific discipline, and to the general Yale community. She was a valuable colleague and a wonderful friend. We miss you, Annie.
Wall, Tiananmen Square, the Forbidden City, the Temple of Heaven, and the Summer Palace, to name a few. I enjoyed the less famous attractions, as they were not crowded and felt more authentic. I was able to linger at smaller sites and absorb their character and information. However, I had to take taxis to reach any tourist destination. Hailing a cab in Beijing is something of an adventure. Locals are quite aggressive when they are trying to get from one place to another, and it appeared that the Chinese do not appreciate lines and order as Americans do; transportation in Beijing is similar to a free-for-all. Despite our reputation for worldwide aggression, as Americans, we had limited success with taxis. In short, you have to fight off hordes of people while running after a taxi that is dropping a fare off at your exact location and jump into the back at the same time as the previous passengers are exiting.

Once I understood the concept, it was still nearly impossible to implement, especially if it was raining.

I never got used to some aspects of life in Beijing, such as the squat toilets or the locals’ refusal to stand in line. After I got over the mandatory digestive system malfunction (it seems that everyone has problems when first visiting China), I began to enjoy many different types of Chinese cuisine. As any Chinese grad student will inform you, the “Chinese” food in America, is nothing like real Chinese food. In addition, the price of food is significantly lower in Beijing compared to America and I found myself quickly complaining about prices that were still incredibly reasonable by New Haven standards. I’m still shocked when I shop at Shaw’s.

The pace and pattern of life is obviously different in Beijing than in US cities. That difference can be extremely frustrating and disorienting to a person who is used to only one of the cultures. I applaud all of the international students that decided to pursue graduate studies at Yale; some of the incoming students this summer have never previously been outside of China. I can only claim a cursory hint of knowledge of Chinese culture after one month only in Beijing; I was not in China long enough to let the society seep into me. I learned enough to know that I certainly will make my way back to China and next time, I will know more Chinese than “Ni hao.”

My advice to all BBS students: cross the cultural divide and befriend both native and foreign students. From where I’m sitting, all of us want to learn about other cultures and forge new friendships. It is a benefit to all of us if we refuse to segregate into language and culture groups; share what you know about your culture and learn from other cultures.

Sunset over Houhai Lake. Photo courtesy of Andrea Stavoe

#
B magazine congratulates Thomas Steitz, the Sterling Professor of Molecular Biophysics & Biochemistry, on being awarded the 2009 Nobel Prize in Chemistry. He will share the prize with Venkatraman Ramakrishnan of the MRC Laboratory of Molecular Biology in the U.K. and Ada Yonath of the Weizmann Institute in Israel, all three of whom are being recognized for their pioneering work in solving the crystal structure of the ribosome. In particular, Dr. Steitz is known for publishing the crystal structure of the 50S ribosome. As President Levin described it at a press conference the day the prize was announced, this endeavor was “one of the most challenging and difficult problems in molecular science.” He additionally described Dr. Steitz as “a towering figure in the field of structural biology.” Well, now this towering figure has some serious bling for his trophy case and a nice chunk of change (one third of the $1.4 million prize) for his piggy bank.

Think he’ll autograph a copy of B? "

According to a report released earlier this year by the Pew Research Center, the number of Americans who list a science-related event as the nation’s greatest achievement has dropped by 20% over the last decade. Perhaps more troubling is the finding that only 49% of laypeople—compared with 84% of scientists—agree with the statement that the planet is warming because of human interventions. Rather than simply lamenting the gap between scientists and the public, and the decline of science in American culture from its Sputnik-era apex, science journalist and blogger Chris Mooney (Yale College, ’99) returned to his alma mater in July to discuss his new book, Unscientific America: How Scientific Illiteracy Threatens Our Future. Originally envisioned as a “50-year update to C.P. Snow,” Unscientific America is Mooney’s third book, and a sequel to the popular The Republican War on Science. It was co-written with Sheril Kirshenbaum, who also works with Mooney on their Discover Magazine blog, “The Intersection,” which explores the similar terrain of science, culture, and politics. B magazine spoke with Mooney after his talk, which was sponsored by Scientists and Engineers for America (SEA). The interview that follows has been edited for brevity.

B: You claim that the “Republican war on science” is over. Do you really believe that and what is your reaction so far to the Obama administration?

CM: I believe that the particular form of anti-science that I was criticizing was closely tied to Republican politics. … It really is over when they stop running the government. If you see them in Congress, as the minority, they still say the same kind of stuff about global warming, but they don’t have the power of government to enforce what is basically, misinformation, anymore. Now, does that mean that you couldn’t have some sort of science-related scandal under the Obama administration? No. I’m not aware of one yet ... but you certainly could. It would depend so much on the issue, and it’s going to be a different issue that’s going to be a problem, if there is one.

B: What is your reaction to Obama’s executive order repealing Bush’s 2001 restrictions on federal funding of stem cell research?

CM: It was a long time coming, and thank goodness, and it was quite a moderate thing to do. I think it’s a no brainer ... people were waiting for this forever.

B: Where exactly are you placing blame for America’s failure to be educated about science?

CM: You could say I’m placing blame on scientists, but you would have to say I’m not only placing blame on scientists. I’m saying that scientists have not made a significant investment ... they have not seen it as part of their responsibility to bring the public along with them ... But when I say it’s not just their blame, I think it’s the responsibility of a citizen to be informed ...
just like paying taxes. Clearly, that’s not happening either. It’s the responsibility of a journalist to write about things that really matter. And that’s not happening.

A lot of scientists don’t believe it’s their responsibility to solve the public illiteracy problem. They want to do science. Even if they are interested, they are likely to be completely overwhelmed because, as you say, it’s a huge issue that is fundamentally part of the cultural value system. How successful will your approach be?

With the scientists, we’re only addressing a piece of the puzzle. Nevertheless, it’s a big piece. I think that if more people knew scientists personally, if they had more interactions with them, if they were the young scientists we’re talking about—who are really out there trying to do something to make America function better, with regard to science—I think it would have a real impact. I don’t know how precisely what indicator I’d give you to measure, to say, ‘Look we did it!’ We say in the book, we can finally rest when the Creationism number goes down to 20%, which is setting a goal that is so massively hard. … But things can happen. If you just think about the impact a teacher has, how do you quantify it? … But that doesn’t mean it’s not important. And knowing scientists, I’m sure that if they do anything, they will try to measure it.

**B:** Your new book is quite polemical, in particular garnering a lot of online critics over your discussion of religion. Could you describe briefly some of the controversy?

**CM:** We came around, after a couple years on the blogosphere, that there are a lot of destructive things happening within science itself. … [One] is the New Atheists movement, which I think has become very counterproductive, very nasty at times, and it seems to thrive on assaulting people’s faith. … A lot of people who care about science have been radicalized around this idea that religion is the problem. And that idea is simplistic and doesn’t help us. Religion is involved in the problem, but even though that’s true, the way to deal with that part of it is not the New Atheism. The way to deal with that part of it is to actually learn about religion in America and figure out why it is there is so much resistance to evolution, then address that. … I don’t think blasting from across the frontier of the culture war is going to ever change that. I think you need a completely different approach. … We said people by name, and we described one of the most awful episodes, in which one of the New Atheist bloggers defiled a communion wafer, publicly… We said, how does that advance science? You think you’ve proved that it’s just a cracker? And you’ve managed to offend the beliefs of a lot of Catholics, who aren’t even anti-evolution… How did we get from caring about science to this? … This is about being angry at religion… And I’ve been angry about religion; I know how it feels. But you still have to look at what the problem actually is and whether your approach to it is really going to do anything. I don’t think it’s the right way to go.

**B:** One might argue that your book will only be read by people who already agree with you. Are you preaching to the choir?

**CM:** It’s polarizing the choir. That’s not preaching to the choir. We threw a bomb in the choir … [but] it’s so divided, we still might be preaching to the choir because the [New] Atheists won’t read us. They’re just attacking without reading. But for that same reason, we might be able to bring some of this to the religious community.

**B:** What advice do you have for current graduate students who are interested in doing more to improve the scientific illiteracy problem in America?

**CM:** I’d be lobbying the school … to create opportunities to learn more in these areas. And I myself would be taking steps out of interest, to learn more. Whether that means taking a course in a different part of the university, or something like that, I think that that’s really important. … One of the central things is to be studying media. To be learning, as I think too few people do, [about] how information about science actually gets across. Because it’s not obvious, and it’s not simple. **B**
Cell Biology

John Goss (Derek Toomre)
Investigating the Spatial and Temporal Regulation of Mammalian Constitutive Exocytosis

Amanda Poholek (Joe Craft)
Key Factors in Follicular Helper Cell Development

Li Zhang (Michael Caplan)
Regulation of Epithelial Tight Junction Assembly by AMPK and GSK-3β

Cellular And Molecular Physiology

Diego Correa (Roland Baron)
Zfp521, a Novel Zinc Finger Transcription Factor, Regulates Chondrocyte Differentiation at Multiple Steps Acting Downstream of Parathyroid Hormone (PTH)-related Peptide (PTHrP)

Computational Biology & Bioinformatics

David Ballard (Hongyu Zhao)
Integration of Genome Data to Identify Genes and Pathways Associated with Disease

Tara Gianoli (Michael Snyder/ Mark Gerstein)
Mining Biological Complexity: Cross Integration of Large-Scale Metagenomics, Environmental, and Chemical Datasets

Sujun Hua (Kevin White)
Genomic Studies on Nuclear Receptor-Mediated Transcriptional Networks in Breast Cancer Cells

Xiaowei Zhu (Michael Snyder)
Mapping Regulatory Networks Using Genomic and Proteomic Approaches

Immunobiology

Leah Eardley (Joe Craft)
The Development of Inflammatory and Follicular Helper T Cells in Lupus

Timothy Hand (Susan Kaech)
Cytokines and Memory T Cell Homeostasis

Diana Harmreaves (Ruslan Medzhitov)
Regulation of the TLR Induced Transcriptional Program

Nikhil Joshi (Susan Kaech)
T Bet Regulates the Terminal Differentiation of Effector and Memory CD8

Interdepartmental Neuroscience Program

Genevieve Bender (Dana Small)
Hierarchical Processing in the Gustatory and Olfactory System

Denise Davis (Stephen Strittmatter)
Signaling Mechanisms of the Axon Guidance Molecule: RGM, Repulsive Guidance Molecule

Kathleen Egan (Angélique Bordey)
Glutamatergic and GABA-ergic Signaling in Postnatal Neurogenic Niches

Shannon Gourley (Jane Taylor)
Sensitivity of Goal-Directed Action to Medial Prefrontal BDNF Expression Interactions with Chronic Glucocorticoid Exposure

Ken Kwan (Nenand Sestan)
SOX5 Regulates Migration, Post-migratory Differentiation, and Axonal Projections of Subplate and Deep-Layer Neocortical Neurons

Nicole Horst (Mark Laubach)
The Role of Rat Medial Prefrontal Cortex in Spatial Working Memory

Congratulations to all of the students (and their
P.I.s) ON THEIR SUCCESSFUL THESIS DEFENSES OVER THE PAST 12 MONTHS

**Microbiology**

Anisah Alyahya (Christine Jacobs-Wagner) Identification of Novel Determinants of Bacterial Cell Morphogenesis

Keke Fairfax (Michael Cappello) The Role of Fatty Acid Binding Proteins in the Pathology of the Hookworm Anclylostoma Ceylanicum

Ella Hinson (Peter Cresswell) Biochemical and Functional Characterization of the Interferon-Induced Antiviral Protein Viperin

Ismaele Jacques (Barbara Kazmierczak) Molecular Characterization of the Leishmania Amazonensis Ion Transporter, LIT1

Nadya Morales (Paul Turner) The Evolutionary Ecology of Microbes

Kristin Patrick (Christian Tschudi) RNA Interference Pathways in the African Trypanosome, Trypanosoma Brucei

Shanta Whitaker (Diane Mcmahon-Pratt) New World Leishmania and Macrophage Interaction: Investigating the Biological Function of the Proteoglycolipid Complex

**Molecular Biophysics & Biochemistry**

Matthew Calabrese (Andrew Miranker) Cu2+-Dependent Amyloid Function by Beta 2-Microglobulin

Christopher Defeo (Vinzenz Unger) Insight into Copper Uptake From the 3D Structure of the Human Copper Transporter

Crystal Dela Torre (Alanna Schepartz) Towards Specific Miniature Protein Activators of Src Family Kinases

Kimberly Durniak (Tom Steitz) Structural Insights into the Mechanism of Transcription By T7 RNA Polymerase

Adam Fogel (Thomas Biederer) Identification and Characterization of the Synaptic Adhesion Complex

Kendra Frederick (Enrique De La Cruz) Effects of Solution Crowding on Actin Polymerization: A Theoretical and Experimental Evaluation

Jessica Goodman (Alanna Schepartz) Understanding the Relationship Between Sequence and Structure: Biophysical Studies of Beta-Bundles and Bipartite Tetracysteine Display in Beta Sheets

Shar-in Huang (Donald Crothers) The Role of Nucleotide Cofactor Binding with Cortactin to Produce Adhesion-Dependent Cell Edge Protrusions

Stefanie Lapetina (Tony Koleske) The Nonreceptor Tyrosine Kinase Arg Interacts with Cortactin to Produce Adhesion-Dependent Cell Edge Protrusions

James Lulo (Joseph Schlessinger) X-ray Crystal Structures of the Focal Adhesion Targeting and FERM Domains of the Tyrosine Kinase Pyk2

Dennis Mishler (Joan Steitz) Selection of the Exon Junction Complex Deposition Site During Pre-mRNA Splicing

Aditya Paul (Tom Pollard) The Mechanism of Actin Polymerization by FH1FH2-Formins and Profilin

Sarah Roush (Frank Slack) Transcriptional Regulation of the C. Elegans Let-7 MicroRNA

Bradford Stanley (Don Engelman) Cytidine Deamination In Viral Immunity and TRNA Maturation

Robin Stanley (Tom Steitz) Structural Studies of the 70S Ribosome and its Associated Factors

Fang Fang Yin (David Schatz) Crystal Structure of the RAG1 Nonamer-Binding Domain in Complex with DNA

**Molecular, Cellular, & Developmental Biology**

Ivan Acosta (Stephen Dellaporta) Investigating the Role of Tasselseed1 and Silkless1 in the Sex Determinatin Process of Maize

Ee-chun Cheng (Diane Krause) Role for MKL1 in Megakaryocytic Maturation

Lina Chin (Frank Slack) A Study of Microna Complementary Sites in the 3’ UTRs of Lung Cancer Associated Oncogenes

Janice Friend (Tom Pollard) Myo2 Regulation in S. Pombe

Jennifer Holtzman (Alanna Schepartz) Remodeling Miniature Proteins that Target EVH1 Domains with High Affinity and Specificity

Audrey Jackson (John Carlson) Spatial Organization of Gene Expression in Caulobacter Crescentus

Jane Kim (Ronald Breaker) Discovery and Applications of Purine-Sensing Riboswitches

Irvin Pan (Vivian Irish) Functional Analysis of Agamous Clade Genes in Tomato

Xiaoxiao Pan (Craig Roy) A Legionella Pneumophila Dot/Icm Substrate Protein that Interferes with Vesicular Transport

Huaping Tang (Carl Hashimoto) Serine Proteases and Serpins Involved in Drosophila Immune Melanization

Andrea Tichy (John Carlson) A Novel Drosophila POU Gene, Pdm3, Acts in Olfactory Receptor Neuron Development

**Neurobiology**

Anna Hagenston (Mark Yeckel) Characteristics and Consequences of Calcium Waves in Pyramidal Neurons

Bilal Haider (David McCormick) Cellular Mechanisms of Neocortical Network Activity In Vivo

Avis Hains (Amy Arnsten) The Role Of Phosphatidylinositol-Protein Kinase C Signaling in Functional and Structural Alterations to Rat Prefrontal Cortex: Implications for Mental Illness and Aging

**Pharmacology**

Christopher Bailey (Karen Anderson) Mechanistic Insight Into the Design of Novel Bifunctional Inhibitors of HIV-1 Reverse Transcriptas

Maya Davis (Angus Nairn) The Calcineurin Connection: Regulator of Calmodulin Signaling (RCS) and Nuclear Factor of Activated T-cells (NFAT) in Rodent Striatum

Erin Lew (Joseph Schlessinger) Altered Neuronal Circuits as the Basis for Adpeaf Epilepsy: LG1 Binding To ADAM23 Is Required for Dendritic Morphology

Rachel Roth (Anton Bennett) Regulation of Metabolic Homeostasis by the Map Kinase Phosphatase-1

Michael Sivula (Stephen Strittmatter) Trp1 is a Peripheral Neuronal Sensor for Oxidants And Lipid Peroxidation Products B
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.)

Dear B,
I work ridiculously long hours, get minimal results, and find no personal satisfaction. Will life improve once I get my Ph.D.? --Hitting Bottom

Dear HB,
See that postdoc sitting across from you? The one with the dark circles under his eyes, facial tic, permanently wrinkled shirt, and air of despair? Just asking.

Dear B,
Is it ok to ask a faculty member out on a date?

--Hooked on Cougars

Dear HoC,
Woah, woah, woah!! Faculty as cougars?! I don’t see it. Deadly vipers? Sure. Blood-sucking aliens? Ok. But cougars? I suggest you stick to hitting on the ladies in your aunt’s knitting circle.

Dear B,
I have absolutely no new data for my upcoming committee meeting. What do I do?

--Stuck in Neutral

Dear SIN,
This is a common problem with a tried and true solution:
1. load up the ppt slides from your previous committee meeting;
2. put the current date on the first slide;
3. turn the thermostat way up in the meeting room;
4. close the blinds and turn off the lights;
5. “forget” to bring coffee for everyone;
6. deliver your presentation in a monotone.

If all goes well, your committee gains an hour of REM sleep. You live to fight another day. Everybody wins.

DEAR B

Summer has always been a time to unwind a bit, unless you’ve applied for an NIH grant in April. Then summer also brings a study section that assigns your proposal a score. These scores can usually be used to predict if you will get funded, but if you are part of the coterie of applicants that submitted in April 2009, you are also the first group subjected to NIH’s new Enhanced Peer Review System.

In June 2007, the NIH started a self-evaluation process in an effort to streamline the peer-reviewed grant application process. The year-long study found several areas that could be changed in order to facilitate a more efficient and transparent process. These changes are currently being implemented.

The overall procedure of applying and receiving a grant is unchanged. Once you’ve submitted your complete application, it is assigned to a specific study section, where your application is discussed and scores assigned. A formal critique of the application, called a summary statement, is made available to you along with the scores. These scores are then forwarded to the institute from which you are requesting funding. They then decide their funding cutoff for the year based on the spread of all the scores their institute has received for consideration. If your score falls below the cutoff, you are usually funded.

With the newly introduced Enhanced Peer Review system, each application is rated by the reviewers on a 1 to 9 scale in integer increments for overall impact, which is then averaged and transformed into a score that falls between 10 and 90. According to the NIH, a score of 1 would indicate an application that is “exceptionally strong with essentially no weaknesses.” This is dramatically different from the older system, where reviewers assigned scores on a 1 to 6 scale in 0.5 increments. This was then averaged and multiplied by 100 to yield scores between 100 and 500. The previous system tended to cluster scores in the positive range, which the NIH believes can be alleviated by having clearly described indicators for each score.

The summary statement also looks different from what has been seen before. Reviewers are encouraged to be concise and use bullet point lists of strengths and weaknesses. The individual criteria of evaluation (i.e., significance, investigator, approach etc.) are also scored on the 1 to 9 scale, but there is no direct correlation between these individual review criteria scores and overall impact scores. They are meant to help the applicant during a resubmission.

These changes are meant to ensure that the applicant has a clear understanding of the evaluation and to ease the bureaucratic burden placed on the reviewers. For example, in the past, applications could be changed and resubmitted up to two times, whereas only one resubmission will be allowed now. The NIH says that this is to make sure that applications that need to be overhauled are not repeatedly entering the peer-review pool.

This revamping of peer-review is difficult for those who have spent time trying to decipher the old scoring system, since these new numbers do not allow for any sort of predictions of fundability. The blogosphere is rampant with angry posts about the necessity and usefulness of this enhanced system, but it looks like it’s here to stay. The NIH’s website, enhancing-peer-review.nih.gov, is devoted to explaining these changes and is frequently updated to clarify ambiguities. For graduate students applying (or reapplying) for NRSAs, the NIAID website has a very useful step-by-step guide on how to write a grant which holds true for any of the other funding institutes too. The Grants and Contracts office and the Graduate Writing Center have frequent events and workshops that focus on writing grants that are helpful, too.
I spent my first four graduate school summers lazing away the last hours of daylight in backyards around New Haven, cold drink in hand, meat sizzling on a hot grill. This year was different. Maybe because it rained 27 days in June. Or because it was unseasonable chilly for most of July, only to become painfully humid those sticky weeks in August, and frightfully cold by Labor Day. Maybe the change was due to the inevitable drive to the finish line that impels us rising 6th years back to the bench, nights, weekends and holidays. Whatever the reason, this summer came and went in a flash, with regretfully few bucolic evenings on the lawn. I did manage, however, to make time for some great meals with friends, inside, civilized, away from the wet and wild. As autumn rolls in, I want to share my favorite recipes of the summer, which will serve you just as well in the coming months of indoor fare.

This recipe is adapted from my buddy John, who completed his Ph.D. in Cell Biology this past spring. John and his wife Erinn are frequent shoppers at the Wooster Square farmer’s market, where they first encountered meat from Four Mile River Farm*. Early this summer they organized a group of friends to purchase and share a quarter side of beef, 200 pounds hanging weight. At $4 per pound, that is a huge saving over market prices and fills the freezer with all sorts of cuts one might not try to fool with otherwise. The day finally came when Erinn and John picked up our lot of cow, butchered, cryo-wrapped and frozen. We divvied it up ensuring everyone got a fair share of grilling steaks, large roasts, braising cuts, ground beef, and soup bones. The first cut I cooked was a London broil, inspired by John’s advice.

1 london broil (1 – 1.5 lbs)
¼ cup soy sauce
¼ cup red wine or rice wine vinegar
2 Tbs. brown sugar
1 large clove garlic, minced, crushed, or grated
1 inch cube fresh ginger, grated
Sriracha hot sauce (optional)
Scallions, cilantro and lime to garnish

Combine soy sauce, vinegar, sugar, garlic, ginger and hot sauce to taste. Mix marinade until sugar is dissolved. Place the steak in a ziplock bag, add half the marinade (reserving the rest for sauce), and seal the bag removing all the air. Refrigerate steak at least 2 hours or overnight. To cook, move an oven rack to highest level and preheat the broiler. Place the steak on a wire roasting rack, baste with the marinade, and broil, 5 minutes a side for medium rare, 6 minutes a side for medium. While the roast is under the broiler, bring the reserved marinade to a boil. Finely chop scallions and pick some cilantro leaves. Once cooked, allow the steak to rest at room temperature 5 minutes before slicing. Serve over rice or Asian noodles, topped with green garnishes and the marinade-dipping sauce.

The next recipe comes from Kyle, a computer scientist friend on the West Coast. These Asian-style noodles are incredibly simple and can be eaten hot or cold. They are fantastic on their own or served as a bed for the London broil above.

1 lb. Asian noodles (any style works fine)
2 scallions
1 garlic clove, peeled
4 heaping Tbs. peanut butter
3 Tbs. soy sauce
½ to 1 bunch cilantro, washed
Juice and zest of 1 lime
1 Tbs. sugar
1 Tbs. sesame oil
1 Tbs. fresh ginger, peeled and chopped
1 jalapeño, chopped (remove the seeds if you want less heat)
1 Tbs. fish sauce (optional)

Cook the noodles according to the instructions on the package, and once cooked, rinse well in cold water. Combine all the remaining ingredients in a blender with a bit of hot water (i.e. the pasta water). Puree until the sauce is smooth, adding more water if it is too thick. If you want to serve the noodles hot, bring the sauce to a simmer in a pot and add the noodles to the sauce until they are warm. Otherwise, simply toss the noodles with the room-temperature sauce and dig in!

I had the good fortune of baby-sitting an ice cream maker this summer. I have to give it back to its owner, but it won’t be long before I go out and buy one for myself. The best part about making your own ice cream is getting to experiment with flavors. My two favorite creations of the season were basil ice cream and sweet corn ice cream. Go ahead, raise

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those eyebrows. Everyone who tried them did too, until they had a taste! One spoonful and you'll know, these classic summer flavors are as wonderful in dessert as they are on pasta or on the grill. Here is my adaptation of a recipe by Claudia Fleming, of Gramercy Tavern fame. Fleming, one of the most influential pastry chefs of our age, has revolutionized the use of typically savory ingredients in our sweets. I serve my sweet corn ice cream with a dark bitter chocolate sauce, but it is fantastic with just a spoon:

4 ears fresh corn, shucked
2 cups milk
2 cups heavy cream
½ cup brown sugar
¼ cup white sugar
1 tsp vanilla extract
6 large egg yolks

Cut corn kernels from the cob and place in a large sauce pan with milk, cream, brown sugar, and vanilla. Bring to a simmer, stirring frequently. Turn off the heat and puree corn mixture in a blender or with an immersion mixer. Refrigerate puree overnight. The next day, bring mixture back to a simmer and turn off heat. Whisk egg yolks with white sugar until they begin to lighten. Continue whisking while drizzling in 1 cup of hot corn mixture. Then, whisk the corn mixture while slowly adding egg yolks back to the sauce pan. Turn heat on low and stir constantly until the mixture begins to thicken. Pass through a fine strainer, pressing on the solids to get out all the liquid. Cover and allow custard to chill at least 4 hours. Freeze in an ice cream maker according to the machine instructions.

Here's to another New Haven summer come and gone… Happy cooking!


Lifestyles of the Poor and Academic
KEEPING THE G'S IN YOUR WALLET - PART II

By Phillip McCown

Due to popular request and several copious amounts of groaning, I have more tips to bestowed upon you for being green (filled with cash, that is). As mentioned before, the usual commercial disclaimer applies.

Tip #15- Don’t be afraid to treat yourself from time to time. Especially after a long week or month (or even year) or some other horrendous stretch of time, it can definitely take a lot of stress off you by having a meal out, going to the movies, etc. By avoiding burnouts, you save a lot of long term stress, which saves you cash in other ways. Plan a weekly or monthly outing that allows you to unwind.

Tip #16- Use your special talents for something. Have a language minor (or major) and want to do something with it? Like to garden or are you proficient at a musical instrument? Consider trading your talents for either cash or other things. For example, I spend maybe an hour a week (after hours, of course) checking Latin homework for a tax specialist's son. She wound up doing my taxes for free this year and is helping me set up an IRA (also for free).

Tip #17- Be wary on the auto-pay options that some of your companies offer. The best gauge for this is to use the postage stamp as a basis of comparison (44 cents, nowadays). Checks at most banks tend to be free when you sign up for a checking account, so stick to the stamp. If, for example, Comcast charges a dollar "convenience fee" for submitting electronic payments, opt to pay by check. However, there are some places that slap on ridiculous fee charges for checks. For example, my car insurance rates are $10 a month less because I pay by withdraws from my checking account versus mailing in a check. The one catch is to make sure you have enough cash in your checking account to cover the fees, or else you'll get bombarded with over-drafts, bounced checks, insufficient fund fees, etc.

Tip #18- Host parties and insist on pot-luck. It may seem a little strange, but there are bound to be leftovers, extra silverware, and many such other party items left around afterward. Plus, it also forces you to keep your apartment, condo, or house clean.

Tip #19- On that note, keep your living areas clean. This saves on having health problems stemming from pests in the place and tripping hazards from that one banana peel you left at the top of the stairwell that will probably result in a broken leg, the medical costs for the crutches, some seriously nasty YouTube footage, and some embarrassing stories in the future.

Tip #20- If you own a car and have any other kind of insurance, or even if you don't have a car, try to get all of your insurances underwritten by one insurance company. The reason is that insurance companies offer discounts by having more than one type of insurance under that particular company.

Tip #21- Buying after-market may not be such a bad idea, but you need to make sure that the product you are purchasing is good, that you get an extended warranty if it is offered, and the company is reputable. Recommended websites include cheaperthandirt.com and buy.com.

Tip #22- When looking for airfare, try using a webservice, schedule in advance, or try using some specials that some airlines have. For example, Spirit has a $9 fare club that has very cheap airfare ($99!!!); Delta does coast-to-coast flights (LaGuardia or JFK to LAX for ~$99). Essentially, don’t settle on paying top dollar for airfare. There are deals out there, you just have to look for them.

Tip #23- Write for the B magazine. Yes, that’s right, write for the B magazine. You’ll get several fun perks, especially emails from your colleagues thinking that you’re nuts, quizzical looks from your parents, laughter from your grandparents who think you’re being silly, smirks from your friends who think it’s silly to have a month’s worth of socks… need I go on? It’s been great writing this column and I look forward to seeing your smiling faces for the next article I’ll be putting together which is…. [Editor’s note: title cut due to author being ridiculous and being a buzz-kill. You’ll just have to look forward to the next article.]
Mushrooms are small, brief-lived marvels of the woods; for most of us they visually disappear into the general background of the forest, noticed only when they’re especially large or colorful. For members of the Connecticut-Westchester Mycological Association, though, finding and learning about mushrooms provide reason enough to go into the woods at all. One beautiful Saturday morning three of us Yalies joined a few gentlemen who had met for one of the group’s weekly rambles through the woods on a search for mushrooms. They were thrilled to have young faces there to learn about mushrooms and, guidebooks in hand, we headed off into the woods of Wonder Lake State Park. Right away the group’s characters emerged. John was the group’s wild edibles aficionado, and as soon as we entered the woods he started pointing out tasty greenbrier shoots, breaking off aromatic branches of black birch for us to smell, and holding forth on the wonders of locust tree blossoms. Over the course of the hike we also heard a good bit about other things, that poisonous mushrooms will not harm you upon contact, but if ingested will, that mushrooms can be tree-specific, and that even a five-year-old could identify a morel once you show her what it looks like. After a few hours the gentlemen turned back and the three of us stretched our legs on a quick walk to Wonder Lake which, to be honest, inspired wonder only for the quantity of aquatic plants choking it. While this is a lovely little gem of a park, occupying the grounds of an old estate and sporting a newly created trail up and around the lake, I wouldn’t recommend it as a destination in and of itself. It was, however, a perfect spot for our morning of mushrooms.

The second hike, which I will mention only in brief, is a quick jaunt around Gay City in Hebron, CT. This park is notable for its history of settlement, feud, and failure; once a prosperous mill town, it limped through the difficulties of blockades, fires, and war, finally being abandoned not long after the Civil War. A collection of foundations is all that remains. The well-groomed trails offer a 4-mile and 7-mile loop and, though the ground is flat and the going is easy, we had to stop after the shorter of the two. We did get a chance to marvel at the old dam, but were more intrigued by the chorus of bullfrogs in the pond and the trees filled with the rolled leaves of caterpillar cocoons. In addition to the easy hiking and history that make this hike appealing, my fellow Trail Mix correspondent points out that the location of this hike is near the dairy on the campus of the University of Connecticut, making it a destination to pair with a stop for ice cream.

Both of these hikes are measured not so much in miles traveled or altitude gained, but rather in how much can be learned by keeping one’s eyes open. That is always a good reminder.

For more information on the mycological walks, which happen both in NY and southwestern CT, check out www.comafungi.org.
Julie Golomb (INP ’09) is engaged to Andy Leber.

Shannon Gourley & Warren Jones (both INP ’09) were married on September 26, 2009.

Doro Blaho (MB&B) got engaged to Doug Noble (employee at Yale in Environmental Health and Safety) on Aug 5. Their wedding is planned for fall, 2010.

Jim Hebda (MB&B) got engaged to Lauren Thomas on Aug 31. Their wedding is on January 16, 2010.

Kevin Keating (CBB) got engaged to Kate Kubera (post-doc at Yale in neurosurgery) on Oct 4. Their wedding is planned for fall, 2010.

Rachel Roth (Pharmacology) got married to Brian Flach on September 26, 2009.

Nick Last (MB&B) and his wife Julie had a son, Cedric Noah Last, on Sep 1, 2009 at 2:36 pm, 7 lb 5 oz, 21.25" long.