Stressed?
Sources of support, and tips for coping.
p.2

Podium Player
SEAS PhD student Aaron Kuan conducts himself well. p.3

Global GSAS
Five international students win prestigious Howard Hughes fellowships. p.4

Road Scholars
A CONVERSATION WITH STUDENTS FRESH OFF THEIR RESEARCH TRIPS YIELDS TALES OF ADVENTURE AND TRIUMPH, SHOWING THAT AN INTERNATIONAL EXPERIENCE CAN BE ESSENTIAL TO A PHD BY CYNTHIA VERBA

Returning Fulbright fellows, Sheldon fellows, and other traveling scholars always have a good tale to tell; they almost never disappoint. And so it was in a recent conversation, hosted by the GSAS Office of Fellowships, where three former traveling scholars agreed to share their experiences with current and future applicants. Their experiences show that even though undergraduates are the focus of most study abroad programs, graduate students often derive singular, and lasting, value from their overseas discoveries.

What was particularly remarkable in this conversation was that during the travel year, each scholar experienced an unexpected challenge that might readily have undermined what he or she could accomplish on their journey. And yet in every case, the students managed to adapt and to emerge from the year with a solid body of research that would allow them to go forward with the dissertation.

Peter Christensen, a PhD candidate in architecture, underwent a challenge that was perhaps the most dramatic. As part of his Fulbright fellowship in Germany, researching the Berlin-Baghdad Railway for what it could tell us about the architectural and infrastructural exchange between East and West in the late 19th and early 20th centuries, he felt it was important to take the trip himself. However, as he photographed the train’s environs near the Syrian border, he was picked up as a “suspicious-looking character,” and held until the American embassy was able to vouch that he was who he said he was, which was accomplished within a matter of hours. It was extremely helpful that Christensen had all his Fulbright documents with him at the time, including the necessary contact information for the office in Berlin.

His second unexpected experience was of a much more pleasant variety: He discovered that an archive in Frankfurt had papers relevant to his work, which led to a fruitful collaboration with a fellow scholar. He also found that the local museum was eager to sponsor his research, which allowed him to gather additional data for his dissertation.

Peter Christensen, a PhD candidate in architecture, underwent a challenge that was perhaps the most dramatic. As part of his Fulbright fellowship in Germany, researching the Berlin-Baghdad Railway for what it could tell us about the architectural and infrastructural exchange between East and West in the late 19th and early 20th centuries, he felt it was important to take the trip himself. However, as he photographed the train’s environs near the Syrian border, he was picked up as a “suspicious-looking character,” and held until the American embassy was able to vouch that he was who he said he was, which was accomplished within a matter of hours. It was extremely helpful that Christensen had all his Fulbright documents with him at the time, including the necessary contact information for the office in Berlin.

His second unexpected experience was of a much more pleasant variety: He discovered that an archive in Frankfurt had papers relevant to his work, which led to a fruitful collaboration with a fellow scholar. He also found that the local museum was eager to sponsor his research, which allowed him to gather additional data for his dissertation.
HGWISE Happenings

- **Mentoring Program Kick-Off**
  Harvard Graduate Women in Science and Engineering kicked off a new year for its Mentoring Program by hosting a collegial and well-attended welcome dinner for students and faculty on October 4. The evening’s guest was Dr. Joan Reede, the dean for diversity and community partnerships at Harvard Medical School. Reede, who develops and manages programs to recruit and support underrepresented minority faculty, is a longtime supporter of initiatives at Harvard and beyond to promote minorities in science and medicine.

- **Industrial Researchers Career Panel**
  Thursday, November 8, 4 p.m. (reception to follow); Jefferson 256.
  Don’t miss this great opportunity to explore the ins and outs of working as a scientist in industry and to begin to understand the differences between academic and industrial research. The panel will feature Aimee Usera of the Novartis Institute for Biomedical Research, Laura Brattain of the MIT Lincoln Laboratory (and a current Harvard PhD student), and Stacy Lynn Reeder of Schlumberger-Doll Research.

---

**Consider a Harvard Leadership Position**

Interested in leadership roles at Harvard — and in the community-building and professional-development benefits they bring?

Attend an informational meeting about resident and Dudley fellow positions for the 2013-2014 academic year.

**Monday, December 10, 4 p.m., Dudley House Common Room**

The meeting will feature a student-led discussion about opportunities as freshman proctors in the freshman dormitories, resident tutors in the Houses, resident advisors in the GSAS residence halls, and Dudley fellows. Students currently holding these positions will discuss their experiences and share application tips.

For information, contact Ellen Fox (efox@fas.harvard.edu; 617-495-5005), GSAS director of student services.

---

Stressed? Worried? Help Is at Hand

As the term progresses, so too does anxiety over workload, deadlines, and obligations. If you find yourself preoccupied with worry or struggling to manage the demands on your time, you’re not alone. Please read on for sources of assistance.

### Getting Help at GSAS: Where to Start

- **The Dean for GSAS Student Affairs**
  Garth McCavana has general responsibility for the welfare of graduate students, and he assists students who are experiencing issues that affect their academic progress. He is a good sounding board on matters both academic and personal, and he is an experienced guide to Harvard’s mental health resources.
  Holyoke Center, 3rd floor; 617-495-1814
  Dudley House, 3rd Floor; 617-496-3362
  mccavana@fas.harvard.edu

- **Director of GSAS Student Services**
  Ellen Fox provides ongoing, confidential support to students with any academic or personal problem, big or small. She serves in an advisory role and can connect students to information about counseling and other services at Harvard.
  Dudley House B-2; 617-495-5005
  efox@fas.harvard.edu

- **University Health Services: Mental Health Services**
  HUHS Mental Health Services has a staff of psychiatrists, psychologists, social workers, and clinical nurse specialists experienced in helping students resolve personal problems. Appointments can be made by phone or by coming in person to the fourth floor of HUHS.
  Holyoke Center, 75 Mt. Auburn St., 4th Floor; 617-495-2042
  24-hour urgent care: 617-495-5711
  Insurance issues: hushp.harvard.edu/mental-health-benefits

- **The Bureau of Study Counsel**
  The Bureau of Study Counsel is a resource center for students’ academic and personal development. The BSC offers academic/personal counseling and an extensive series of workshops and discussion groups.
  5 Linden Street
  617-495-258; bsc@harvard.edu

---

**Manage Your Stress — Right Now**

According to HUHS, one strategy for managing stress in the moment, and for setting yourself on a positive long-term course for stress reduction, is the Stop-Breathe-Reflect-Choose technique. Try it the next time you encounter a stressful situation:

**Stop.** For a few seconds, stop what you’re doing, and stop the flow of negative thoughts about the situation.

**Breathe.** Take in a deep breath, release tension in your body as you exhale.

**Reflect.** Consider what is really going on. Is the situation a crisis? Will this matter to you in two weeks? What action will serve you in this particular situation?

**Choose.** You can make a choice about how you are going to react in a positive manner. Through this process you can begin to realize that you have the power to choose your actions in the face of stress.
Orchestral Maneuvers

What does the rapid sequencing of DNA through graphene nanopores have to do with playing solo violin?

Not a lot.

Ordinarily, this is where some slick rhetoric should help demonstrate the surprising and illuminating correspondences between these two very different pursuits. For graduate students attempting to launch academic careers without sacrificing everything else in their lives, though, the challenge is often about managing identities between which few correspondences can be found.

As music director and conductor of the Dudley House Orchestra, Aaron Kuan stands at the head of a room full of scholars who are trying to retain a place for music amid teaching loads and draft chapters. Like them, he sees the orchestra as a welcome break from his work as a PhD candidate in applied physics. Unlike them, though, Kuan is just as much a professional musician as a professional academic: he holds an M.M. from the New England Conservatory and has performed as a violin soloist with the Schenectady Symphony, the Yonkers Philharmonic and the Empire State Repertory Orchestra.

His unusual straddle of these two worlds began in his freshman year of college, when he joined the inaugural class of NEC’s joint program with the Harvard Music Department, which allows students to graduate in five years with degrees from both schools. Kuan was a pre-college student at Juilliard, but was also interested in science, and was glad for the opportunity of a liberal arts education unavailable to most conservatory students. He was also glad, he admits, “to delay the decision about a professional track.”

Taking classes at Harvard and traveling across the river for private lessons, he quickly realized the different demands made by the different tracks. “Solo violin requires a certain stage personality, you have to be comfortable almost improvising, Science requires a personality that likes to be well prepared.” Although he had already made a name for himself in the concert hall, he realized that his own personality was better suited to the lab, where he liked the sense of clear expectations and definite progress.

By their fourth year, his colleagues in the program were all charting careers in music, but Kuan began planning a PhD application. “In order to go into professional music one really has to have the sense that the world needs to hear you, that it would be a crime not to perform,” he says. “I wasn’t sure. In science, it’s much clearer what the point is, and you’re still making progress even if on a certain day you don’t do a great job.”

Kuan is especially optimistic about that progress now, in Professor Jene Golovchenko’s lab. His research on nanopore DNA sequencing, he says, “is going to change the way we live. Imagine having a complete genome in just ten minutes. It’s very clear why this is important.”

Even as he builds a career in engineering, the Dudley House Orchestra has allowed Kuan to preserve his musical identity, planning repertoire, organizing rehearsals and performances, and conducting. And by trading the bow for the baton, Kuan has found a way to at least partially reconcile his art and his science: “Conducting is a lot more suited to my practical personality. A soloist can’t always be thinking of the practical side of things. In conducting, that’s an asset.”

And despite his professional background, he says the orchestra has never disappointed him: “We actually have plenty of musicians who are just as good or better than me.” Even more importantly, though, “Everyone is obviously incredibly intelligent, so things come together very quickly.”

That’s an advantage especially important in a roomful of musicians all competing for time with their alternate identities.

Harvard Course in Reading and Study Strategies
ANNOUNCING A JANUARY SESSION FOR
NON-NATIVE ENGLISH SPEAKERS
January 14-18, 2013, 3–5 p.m.
A version of the Harvard Course in Reading and Study Strategies tailored to students for whom English is not their native language.

Designed to help students develop a repertoire of strategies for reading expository text, with particular attention to the structure of American academic/expository texts, the implicit assumptions about authority at work for American academic writers and readers, and students’ experience of adjusting to Harvard courses and classrooms. Bureau of Study Counsel, bsc@harvard.edu
not restricted in the directions that I want to take my research. I have all the resources I need to tackle my research project, with the support of a great community with expertise in a wide variety of topics.

**Wendy Liu**

Wendy Liu, a PhD candidate in the Division of Medical Sciences who came to Harvard from Australia, works in Rachel Wilson’s neurobiology lab to discover how the brain perceives and processes sensory information, and how these perceptions are transformed from one brain region to another. “Ultimately, we are interested in how these sensory representations give rise to behavior,” Liu says. “I study the role of interneurons in modulating the activity of the olfactory circuit in Drosophila and how diverse interneuron types may shape the response to olfactory stimuli.”

“Another issue, the process of development itself is absolutely fascinating,” Chew adds. “The concurrent control of the expression of over 20,000 genes over the time and space of development, with multiple layers of control, to yield a single coherent organism — that’s just a beautiful problem that’s aching to be solved.”

And working to do so at Harvard is “fantastic,” he says, “because I’m simply

**Guo-Liang Chew**

Guo-Liang Chew, a native of Singapore and a PhD candidate in Alex Schier’s lab in molecular and cellular biology, says he was drawn to developmental biology in part because of how visual it is. Exploring questions of how gene expression is regulated in a developmental context — in particular, how the process of making proteins from RNA is regulated — “you can actually see the processes happening over time,” he says. That is especially true in the case of the zebrafish, where researchers can observe the organism growing from a single cell into a recognizable animal within 72 hours.

“Our concern, the process of development itself is absolutely fascinating,” Chew adds. “The concurrent control of the expression of over 20,000 genes over the time and space of development, with multiple layers of control, to yield a single coherent organism — that’s just a beautiful problem that’s aching to be solved.”

And working to do so at Harvard is “fantastic,” he says, “because I’m simply

**Sandeep Koshy**

Sandeep Koshy, a PhD candidate in engineering and applied sciences who came to Harvard from Canada, is working on an implantable cancer vaccine in David Mooney’s lab at the Wyss Institute for Biologically Inspired Engineering. Koshy’s work builds on significant results that Mooney’s lab announced in 2009, when researchers described an implant that could carry vaccine material into the body and then pull in immune cells, “This work will give us clues if our animal models will translate to humans and serves as a critical bridge between bench and bedside for our technology,” he says.

Koshy finds daily motivation just outside his door. “I walk out and see Children’s Hospital Boston, where Sidney Farber tried the first chemotherapy on children with leukemia more than 60 years ago. Being in a place with such a history of individuals who dared to fight this ‘unsolvable’ disease is truly inspirational. Harvard continues to be at the forefront of research in cancer biology and therapy, and I’m glad I can be a small part of it.”

**Ghazaleh Ashrafi**

Parkinson’s disease is the second most common neurodegenerative disorder, says Ghazaleh Ashrafi, a PhD candidate in Thomas Schwarzs lab in molecular and cellular biology, and there is currently no method to halt its progressive, and devastating, course.

Ashrafi, who hails from Canada, says that the loss of muscle control that Parkinson’s gradually inflicts is due to the death of a subset of brain neurons, but the mechanisms underlying that process are not well understood. Expanding on previous work that suggests that cells’ mitochondria play a role, Ashrafi will investigate two genes, PINK1 and Parkin, which are mutated in the inherited form of the disease, and which — when functional — can remove damaged mitochondria and promote the survival of brain neurons. She hopes to “shed more light on the molecular mechanisms that are potentially lost in PD.”

Ashrafi is excited at the opportunity “to study a fundamental cell biological question — namely, mitochondrial dynamics — in the unique context of a neuron.” And she finds satisfaction in the fact that her work “is directly relevant to neurodegenerative diseases.”

**Mingjie Dai**

Mingjie Dai, a PhD candidate in biophysics who is originally from China, is working with Peng Yin at the Wyss Institute for Biologically Inspired Engineering to develop novel ways to use DNA as a tool for drug delivery and other molecular interventions.

“Although DNA is commonly understood as a media of inheritance, in this field we exploit the precise Watson-Crick pairings to perform molecular computation and construction, and trigger biological signaling and regulation,” Dai says. “I was personally fascinated by this ability of DNA when I was an undergrad, and, as a physicist by training with great interest in understanding biology and the meaning of life in general, I was deeply attracted by the ability to rapidly prototype biological matter with nanometer precision.”

At Harvard, he says, “the vibrant environment and super-supportive community” has helped him hone his once-theoretical ideas. “I have been involved in more realistic and application-relevant projects, including the single-stranded tile assembly method that uses engineering-like modular bricks to build and write on a 100nm canvas, building scaffolds and engineering metabolic pathways in cells, and trying to enhance resolution of optical microscopy via programmable binding kinetics — each of which has great potential and wide biomedical applications.”

**Mingjie Dai**

Mingjie Dai, a PhD candidate in biophysics who is originally from China, is working with Peng Yin at the Wyss Institute for Biologically Inspired Engineering to develop novel ways to use DNA as a tool for drug delivery and other molecular interventions.

“Although DNA is commonly understood as a media of inheritance, in this field we exploit the precise Watson-Crick pairings to perform molecular computation and construction, and trigger biological signaling and regulation,” Dai says. “I was personally fascinated by this ability of DNA when I was an undergrad, and, as a physicist by training with great interest in understanding biology and the meaning of life in general, I was deeply attracted by the ability to rapidly prototype biological matter with nanometer precision.”

At Harvard, he says, “the vibrant environment and super-supportive community” has helped him hone his once-theoretical ideas. “I have been involved in more realistic and application-relevant projects, including the single-stranded tile assembly method that uses engineering-like modular bricks to build and write on a 100nm canvas, building scaffolds and engineering metabolic pathways in cells, and trying to enhance resolution of optical microscopy via programmable binding kinetics — each of which has great potential and wide biomedical applications.”

**Ghazaleh Ashrafi**

Parkinson’s disease is the second most common neurodegenerative disorder, says Ghazaleh Ashrafi, a PhD candidate in Thomas Schwarzs lab in molecular and cellular biology, and there is currently no method to halt its progressive, and devastating, course.

Ashrafi, who hails from Canada, says that the loss of muscle control that Parkinson’s gradually inflicts is due to the death of a subset of brain neurons, but the mechanisms underlying that process are not well understood. Expanding on previous work that suggests that cells’ mitochondria play a role, Ashrafi will investigate two genes, PINK1 and Parkin, which are mutated in the inherited form of the disease, and which — when functional — can remove damaged mitochondria and promote the survival of brain neurons. She hopes to “shed more light on the molecular mechanisms that are potentially lost in PD.”

Ashrafi is excited at the opportunity “to study a fundamental cell biological question — namely, mitochondrial dynamics — in the unique context of a neuron.” And she finds satisfaction in the fact that her work “is directly relevant to neurodegenerative diseases.”

Mingjie Dai, a PhD candidate in biophysics who is originally from China, is working with Peng Yin at the Wyss Institute for Biologically Inspired Engineering to develop novel ways to use DNA as a tool for drug delivery and other molecular interventions.

“Although DNA is commonly understood as a media of inheritance, in this field we exploit the precise Watson-Crick pairings to perform molecular computation and construction, and trigger biological signaling and regulation,” Dai says. “I was personally fascinated by this ability of DNA when I was an undergrad, and, as a physicist by training with great interest in understanding biology and the meaning of life in general, I was deeply attracted by the ability to rapidly prototype biological matter with nanometer precision.”

At Harvard, he says, “the vibrant environment and super-supportive community” has helped him hone his once-theoretical ideas. “I have been involved in more realistic and application-relevant projects, including the single-stranded tile assembly method that uses engineering-like modular bricks to build and write on a 100nm canvas, building scaffolds and engineering metabolic pathways in cells, and trying to enhance resolution of optical microscopy via programmable binding kinetics — each of which has great potential and wide biomedical applications.”

**Mingjie Dai**

Mingjie Dai, a PhD candidate in biophysics who is originally from China, is working with Peng Yin at the Wyss Institute for Biologically Inspired Engineering to develop novel ways to use DNA as a tool for drug delivery and other molecular interventions.

“Although DNA is commonly understood as a media of inheritance, in this field we exploit the precise Watson-Crick pairings to perform molecular computation and construction, and trigger biological signaling and regulation,” Dai says. “I was personally fascinated by this ability of DNA when I was an undergrad, and, as a physicist by training with great interest in understanding biology and the meaning of life in general, I was deeply attracted by the ability to rapidly prototype biological matter with nanometer precision.”

At Harvard, he says, “the vibrant environment and super-supportive community” has helped him hone his once-theoretical ideas. “I have been involved in more realistic and application-relevant projects, including the single-stranded tile assembly method that uses engineering-like modular bricks to build and write on a 100nm canvas, building scaffolds and engineering metabolic pathways in cells, and trying to enhance resolution of optical microscopy via programmable binding kinetics — each of which has great potential and wide biomedical applications.”

**Mingjie Dai**

Mingjie Dai, a PhD candidate in biophysics who is originally from China, is working with Peng Yin at the Wyss Institute for Biologically Inspired Engineering to develop novel ways to use DNA as a tool for drug delivery and other molecular interventions.

“Although DNA is commonly understood as a media of inheritance, in this field we exploit the precise Watson-Crick pairings to perform molecular computation and construction, and trigger biological signaling and regulation,” Dai says. “I was personally fascinated by this ability of DNA when I was an undergrad, and, as a physicist by training with great interest in understanding biology and the meaning of life in general, I was deeply attracted by the ability to rapidly prototype biological matter with nanometer precision.”

At Harvard, he says, “the vibrant environment and super-supportive community” has helped him hone his once-theoretical ideas. “I have been involved in more realistic and application-relevant projects, including the single-stranded tile assembly method that uses engineering-like modular bricks to build and write on a 100nm canvas, building scaffolds and engineering metabolic pathways in cells, and trying to enhance resolution of optical microscopy via programmable binding kinetics — each of which has great potential and wide biomedical applications.”
Don’t Miss!

OUR DUDLEY HOUSE PICKS OF THE MONTH. FOR MORE EVENTS, OUTINGS, AND GATHERINGS, GO TO WWW.GSAS.HARVARD.EDU/DUDLEYTHISMONTH.

Guided Wine Tasting
THURSDAY, NOVEMBER 8, 7 P.M., Private Dining Room. Learn about different varietals and deepen your appreciation for the subtleties of this elixir. Limited availability; tickets at the House Office. ◆ Contact dudley.intellectual@gmail.com.

Faculty-Student Dinner
THURSDAY, NOVEMBER 15, RECEPTION 5:30 P.M., Graduate Student Lounge; Dinner 6 p.m., Common Room. Enjoy a delicious three-course dinner with your faculty guest, at no cost to either of you. Once your guest has accepted your invitation, request tickets at the House Office. ◆ Contact dudley.social@gmail.com.

Climbing the Walls
SATURDAY, NOVEMBER 17, NOON–4 P.M. We’ve reserved the space for 20 Dudley members to climb, swing, and dangle on the high ropes at the MetroRock climbing gym in Everett. Tickets at the House office.

Concert Season
Come support — and be wowed by — our talented GSAS musicians at a series of fall concerts.

◆ DUDLEY HOUSE ORCHESTRA FALL CONCERT, featuring Mendelssohn’s Scottish Symphony and Tchaikovsky’s Swan Lake. FRIDAY, NOVEMBER 16, 8 P.M., John Knowles Paine Hall.
◆ THE DUDLEY HOUSE CHOIR presents On A Winter’s Eve: Carols, Classics, and Songs of the Season. SUNDAY, DECEMBER 2, 7 P.M., Dudley House Main Dining Room.
◆ DUDLEY HOUSE COMBO AND JAZZ ORCHESTRA CONCERT, a swinging evening of music and refreshment, featuring Thelonious Monk, Wayne Shorter, Curtis Fuller, and more. SATURDAY, DECEMBER 8, 8 P.M., Main Dining Room.
◆ DUDLEY HOUSE WORLD MUSIC ENSEMBLE CONCERT, an eclectic and exciting evening of music from around the world, with refreshments. SUNDAY, DECEMBER 9, 8 P.M., Main Dining Room.

Dudley Book Club
NOVEMBER 29, 7 P.M., Graduate Student Lounge. Recapture the joy of reading for pleasure! Each month we’ll read short, digestible classics and meet on the final Thursday for pithy discussion. ◆ Contact dudleyhouse.literary@gmail.com for November’s book.

Our Annual Winter Formal
SATURDAY, DECEMBER 1, 9:30 P.M.; WALTZ LESSON AT 8:30 P.M. Celebrate the end of classes by kicking up your heels in your best party garb. Tickets (including hors d’oeuvres, desserts, and drinks) on sale at the House Office on November 19. ◆ Contact dudley.social@gmail.com.

Dudley House Your Graduate Student Center since 1991
Lehman Hall, Harvard Yard ◆ www.dudley.harvard.edu ◆ 617-495-2255
HOUSE MASTERS James M. Hogle and Doreen M. Hogle ◆ HOUSE ADMINISTRATOR Susan Zawalich

Mingjie Dai, a PhD candidate in biophysics who is originally from China, is working with Peng Yin at the Wyss Institute for Biologically Inspired Engineering to develop novel ways to use DNA as a tool for drug delivery and other molecular interventions.

“Although DNA is commonly understood as a media of inheritance, in this field we exploit the precise Watson-Crick pairings to perform molecular computation and construction, and trigger biological signaling and regulation,” Dai says. “I was personally fascinated by this ability of DNA when I was an undergrad, and, as a physicist by training with great interest in understanding biology and the meaning of life in general, I was deeply attracted by the ability to rapidly prototype biological matter with nanometer precision.”

At Harvard, he says, “the vibrant environment and super-supportive community” has helped him hone his once-theoretical ideas. “I have been involved in more realistic and application-relevant projects, including the single-stranded tile assembly method that uses engineering-like modular bricks to build and write on a 100nm canvas, building scaffolds and engineering metabolic pathways in cells, and trying to enhance resolution of optical microscopy via programmable binding kinetics — each of which has great potential and wide biomedical applications.”

© Robbie Jack/Corbis

© Robbie Jack/Corbis

© Robbie Jack/Corbis

© Robbie Jack/Corbis

© Robbie Jack/Corbis
A Frog in Comp Lit?

A TF Goes Behind the Scenes to Find Objects to Trigger Curiosity and Conversation in the Classroom by Erin Blevins

In a series of posts last spring on the Bok Blog (blog.bokcenter.harvard.edu), Departmental Teaching Fellow Anna Nikklaus (Comparative Literature), Erin Blevins (Organismic and Evolutionary Biology), now a preceptor in expository writing at Harvard, and Meredith Schweig (Music) described how (and why) the inclusion of material objects can enrich one’s teaching. The GSAS Bulletin is reprinting three posts from that series, with permission; this is the second. (The first ran in the October 2012 Bulletin.)

Beyond the objects showcased in Harvard museums, many materials lurk behind the scenes in the research collections. These collections are not open to the public, but they are available to Harvard students! Collection managers are often enthusiastic about helping you borrow specimens for class or arrange a collection tour — not only do students get to see different objects than those displayed in the museum, they catch a glimpse of the “working materials” used by real researchers, which are often filed away on shelves and in drawers rather than in shiny cases under the spotlight.

I invited Curatorial Assistant Andy Williston to introduce us to one of Harvard’s collections, the Ichthyology Collection (that’s fish to you), for ichthyophiles in the audience), modeling an exercise I’ve used in biology courses with concentrators and in GenFed. As Meredith Schweig mentioned in our earlier post, “The Why of Teaching with Objects,” objects can engage diverse groups with different levels of expertise, so a similar exercise can be fruitful in upper-level classes, with freshmen, or in my teaching conference “class” of graduate students from across GSAS. As everyone observes the fish and consults the specimen labels, they notice that the two fish are the same species, but have some striking differences—one of them is blind. Why is it blind? Where is it from? Is it just a one-off mutant? Have I made you curious to know? In class, these questions lead into a discussion of adaptation and evolution, tying into Darwin’s On the Origin of Species and current research. Students may hesitate to dive in and discuss complex ideas or big-name authors, but anyone can make observations about objects sitting right there, whether they’re commenting on a fish’s shiny scales or a painting’s big brush strokes. Curiosity about the object will get you started, basic observations will get everyone talking, and as fellow TF Matthew Magnon discussed in his Bok Blog about our conference session, concepts emerge organically. From two little fish, to evolution.

In the aftermath of our session, a challenge I’m issuing myself — and you — is to think more broadly about the kinds of objects I bring to class. Sure, I’m a biologist. Working with animal specimens (fish, lizards, frogs) in a biology class is an obvious choice, but it’s not the only one. What about historical scientific instruments? What about artwork? My fellow grad student Glenna Clifton opens a discussion of proportions and scaling during growth (often a dry topic) by showing her students paintings of “ugly Renaissance babies”—ugly, because the babies are often depicted with adult proportions, and it just looks wrong. As I plan future lessons, I hope to push myself past the familiar fish, drawing on a broader range of Harvard’s “tangible things.”

And if you’d like to bring a frog to your Comp Lit seminar, I’m happy to help.

Leading Universities Collaborate on Diversity

UNPRECEDENTED CONFERENCE UNITES IVIES AND PEERS TO BROADEN THE TALENT POOL IN STEM FIELDS

The Graduate School of Arts and Sciences was among the sponsors of the inaugural Ivy Plus STEM Symposium for Diverse Scholars, which was held at the University of Pennsylvania on October 4–6. This unprecedented conference was a collaborative effort by the country’s leading universities to expand the pipeline of underrepresented minority scientists and to encourage exceptional undergraduate students toward advanced training in science, technology, engineering, and mathematics — the so-called STEM fields.

The conference drew nearly 100 underrepresented graduates with outstanding academic records, who were accepted after an application process, from colleges across the United States. It featured a keynote address by Derrick Pitts, the senior scientist, chief astronomer, and planetarium director at the Franklin Institute Science Museum in Philadelphia. U.S. Rep. Chaka Fattah of Philadelphia delivered welcoming remarks.

Harvard’s participation was coordinated by Sheila Thomas, a Harvard Medical School faculty member who is the GSAS assistant dean for diversity and minority affairs. Three Harvard faculty members delivered symposium talks: Melissa Franklin, Mallinckrodt Professor and chair of physics; Catherine Dulac, Higgins Professor and chair of molecular and cellular biology; and Karine Gibbs, assistant professor of molecular and cellular biology.

Additional representatives from Harvard — including Tiffany Hong, assistant professor of genetics and complex diseases at the School for Public Health, and Sorell Massenburg, a PhD student in applied physics — also took part, along with Lori Philip Tabb, PhD ’10, biostatistics, now an assistant professor at Drexel University.

Also attending were faculty and staff from the other sponsoring institutions: Brown University, Columbia University, Cornell University, Dartmouth College, Massachusetts Institute of Technology, New York University, Princeton University, Stanford University, University of Chicago, and Yale University, as well as host University of Pennsylvania. The sponsoring institutions hope to make this an annually recurring event, with a campus location that will rotate among them each year.

Thomas, who helped to plan and organize the inaugural conference, as well as serving on the admissions panel and as a poster judge, told Penn News that academic excellence and diversity go hand in hand.

“The Ivy Plus STEM symposium is valuable for everyone. The best and brightest students are exposed to new schools and faculty, but, just as importantly, faculty are exposed to students from many different schools. This emphasizes that there is great talent everywhere, and it is an eye-opening experience for all of us,” Thomas said. “Events like this show us that we should keep our minds open, so that we’re attracting outstanding students from all schools, and this is one way to do that.”

— Bari Walsh
Civic Minded? Fund Your Project

Each year, the Harvard Coop provides funding for GSAS student groups to conduct public service projects in the greater Boston/Cambridge community. Do you have an idea for a public service project? If so, please consider applying. Previous Coop grant recipients have served the community in many ways, from doing science outreach in schools to leading seminars during Black History Month. Find more information and the application at www.dudley.harvard.edu, under Public Service.

Application deadline: Monday, November 26, midnight

The Dissertation

STRATEGIES FOR GETTING FROM BEGINNING TO END OF THE PROCESS

Monday, December 5, 4 p.m.,
Dudley House Common Room

Geared toward students in the humanities and social sciences, this panel discussion will generate tips for proceeding through the various stages of your final project — from choosing a topic, through the writing stage, and on to completion!

Jeffrey Schnapp on the Digital Humanities

Monday, December 3
Senior Common Room Dinner

Jeffrey Schnapp is a pioneering figure in the evolving set of practices known as digital humanities. Trained in Italian studies, Schnapp’s research interests now range widely, from antiquity to the present, encompassing the material history of literature, the history of 20th-century architecture and design, and the cultural history of science and engineering. He is a professor of Romance languages and literatures, professor at the Graduate School of Design, faculty co-director of the Berkman Center for Internet and Society, and founder of metaLAB at Harvard.

Tickets available in the Dudley House office, 3rd floor; Longwood students may call 617-495-2255. Contact the Intellectual/Cultural Fellows (dudley.intellectual@gmail.com).
**Talk your Way into a Great Job**
Wednesday, November 7, 9:30–11 a.m., 54 Dunster Street, Cambridge.
For nonacademic jobseekers, the best way to find the perfect job is to gather information from people already working in your field of interest. This workshop will demystify the process of networking and give you tips on how to get out there and do it. Register through Crimson Careers.

**Preparing for Campus Visits**
Thursday, November 15, 10–11:30 a.m., 54 Dunster Street, Cambridge.
You’ve aced the conference interview and been invited to campus. Find out what to expect and how to prepare for your job talk, teaching demo, conversations with faculty and deans, and social gatherings. Part of the “Becoming Faculty” series. Register through Crimson Careers.

**Career Information Listservs**
To stay informed about job opportunities, we encourage you to subscribe to either or both of our GSAS-focused listservs, with news about academic and nonacademic careers. Visit www.ocs.fas.harvard.edu and click on “For Students,” then “Join OCS ListSrvs.”

**Dossier Service**
If you intend to apply for academic jobs, you are encouraged to use this online service, specifically designed to help you manage letters of recommendation. Visit www.ocs.fas.harvard.edu/students/gsas/dossier.htm or call Maureen Hilton (617-495-2787).

**Give!**
**OPPORTUNITIES FOR COMMUNITY SERVICE**

**GSAS Toy Drive**
This holiday season, the Dudley Public Service Fellows are collecting gifts for needy children in our community, via the anti-poverty group ABCD. Please bring unwrapped gifts for children 4–16 to the third floor of Dudley House by 5 p.m. on Monday, December 3.

---

**Job Talk**
**PERIODIC UPDATES ON CAREERS, PROFESSIONAL DEVELOPMENT, AND LIFE AFTER GRADUATE SCHOOL**

**Talk Your Way into a Great Job**
Wednesday, November 7, 9:30–11 a.m., 54 Dunster Street, Cambridge.

**Preparing for Campus Visits**
Thursday, November 15, 10–11:30 a.m., 54 Dunster Street, Cambridge.

**Career Information Listservs**
To stay informed about job opportunities, we encourage you to subscribe to either or both of our GSAS-focused listservs, with news about academic and nonacademic careers. Visit www.ocs.fas.harvard.edu and click on “For Students,” then “Join OCS ListSrvs.”

**Dossier Service**
If you intend to apply for academic jobs, you are encouraged to use this online service, specifically designed to help you manage letters of recommendation. Visit www.ocs.fas.harvard.edu/students/gsas/dossier.htm or call Maureen Hilton (617-495-2787).

**Connect to GSAS Online**
**More News**
Bookmark the GSAS Bulletin’s online news site for features about graduate students and timely information about careers, fellowships, teaching, and deadlines! www.gsas.harvard.edu/news

**All About You**
As you move through your degree, keep track of your grades, status, and outstanding requirements by using the Graduate School’s Student Progress Database. https://asperin.fas.harvard.edu/progress

Your faculty advisor can also view your information, and your department administrator can update it if anything looks erroneous or incomplete.

**Follow HarvardGSAS**
Find us on Twitter and Facebook.