A human embryoid body
Alec Nickolls (NINDS, Brown University)
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Visit our social media pages for more updates and connections:

- [instagram.com/graduate_student_underground](https://instagram.com/graduate_student_underground)
- [facebook.com/groups/GSCunderground](https://facebook.com/groups/GSCunderground)
- [linkedin.com/groups/12314339](https://linkedin.com/groups/12314339)

Search for: NIH Graduate Partnerships Program - Current Students & Alumni
The Second Annual

Art of Science Competition

Submit an image that captures the “art of science”
by **February 28, 2020**!
Entries can be microscopy images, sketches, comics, graphic design, or any artistic renderings of your science. Get creative!

Email your entry to
**GSChronicles@od.nih.gov**

A jury from the GSC will select the winning images to be published in the upcoming issues of The GSChronicles!

Include:
- Your image
- Your name
- Your advisor’s name
- Your institution and school
- Title and brief description of image/research
Upcoming OITE Events

Discussion for Building Resilience
Assertiveness, Self-Confidence, & Imposter Fears
Baltimore NIDA Tower, 4A508
Dec 09, 2019 10:00-11:00 am & 11:15-12:15 am
Build 2, 2W15
Dec 13, 2019 11:30-12:30 pm

Navigating NIH as an International Trainee
Building 2, 2W15
Dec 10, 2019 1:45-2:45 pm

Job Search Stress
Building 2, 2W15
Dec 10, 2019 3:00-4:00 pm

Trainees of Color
Building 2, 2W15
Dec 13, 2019 12:45-1:45 pm

LGBTQI+ Trainees
Building 2, 2W15
Jan 16, 2020 11:45-12:45 am

Self-Compassion for Trainees
Building 2, 2W15
Jan 16, 2020 10:30-11:30 am

Wellness Wednesday
Finding Meaning & Connection During the Holidays
Building 2, 2W15
Dec 11, 2019 12:00-1:00 pm

Career Skills Workshops
Networking for Your Career
Natcher, E1/E2
Dec 09, 2019 2:30-4:00 pm

Academic Job Interviews
Building 40, 1201/1203
Dec 10, 2019 1:00-4:00 pm

CVs, Resumes, and Cover Letters: Essential Job Search Documents
Frederick, Building 549, Conf EBR
Dec 10, 2019 1:30-3:00 pm

Workplace Dynamics V: Diversity in a Multicultural Society
Natcher, E1/E2
Dec 13, 2019 10:00-1:00 pm

The STAR Interviewing Technique
Baltimore, TBA
Jan 08, 2020 12:00-12:45 pm

Workplace Dynamics II: Self-Awareness, the Key to Professional Success
Building 50, 1227
Jan 13, 2020 2:00-4:00 pm

Ethics in Research Training for Postbacs and Grad Students
Shady Grove, 2E032/34
Jan 14, 2020 9:00-3:30 pm

Management Bootcamp
Jan 23 – 24, 2020 9 am – 4 pm

Grant Writing 101
Baltimore BRC 3C211
Jan 30, 2020 10:00-11:30 am

OITE Orientation for Graduate Students and Postdoctoral Fellows
Building 1, Wilson Hall
Feb 04, 2020 8:30-10:00 am

Workplace Dynamics III: Conflict & Feedback
Natcher, F1/F2
Feb 05, 2020 10:00-12:00 pm

Answering Strengths & Weakness Questions During Interviews
Baltimore 3C219
Feb 06, 2020 12:00-12:45 pm

OITE Holiday Party for Trainees
Building 35, 620/630
Dec 17 3:00-4:30 pm

16th Annual NIH Graduate Student Research Symposium
Feb 20, 2020 9 am – 4:45 pm

Register at https://www.training.nih.gov/events/upcoming
GSC Update

The Graduate Student Council (GSC) was formed in 2001 with the goal of facilitating the intellectual, social, and living needs of graduate students conducting research at the NIH. As such, the council organizes regular events through eight committees and liaisons.

We are always looking for talented graduate students to help with these committees – if you would like to get more involved with any of the following initiatives, please contact the Graduate Student Council Co-Chairs at GSCcochair@mail.nih.gov. Read on to learn more about our exciting work!
Public Relations Committee – Led by Dana Lewis, Jayasai Rajagopal, Delia Sass, Emily Phung, Katelyn McCann and Keyla Tumas, the Public Relations Committee promotes opportunities available to graduate students on the NIH campus through publication of the quarterly **GSChronicles**, the official newsletter of the NIH Graduate Student Community; publication of the monthly **Graduate Student Newsletter**; and maintenance of the social media accounts for the Graduate Student Community, including the **Facebook**, **Google**, and **Instagram accounts**. Please note that the social media accounts are not affiliated with the NIH nor the Graduate Student Council; and that users should not represent themselves as such.

The public relations committee is always looking for new ideas, as well as new writers, for the GSChronicles. Serving in this capacity is an excellent opportunity for graduate students to hone their writing skills and may be useful for professional development. Email us at **gschronicles@od.nih.gov** if you want to get involved!

Recently, the public relations committee has launched a website to showcase all issues of the GSChronicles, dating back to 2016: [https://www.training.nih.gov/gsc/chronicles](https://www.training.nih.gov/gsc/chronicles)

**Graduate Student Seminar Series** – The Graduate Student Seminar Series (GS3) is an excellent opportunity for graduate students to practice and receive feedback on their presentation skills in a relaxed setting. Graduate Student Seminars are held on the last Tuesday of every month, from 5-5:30pm in the Graduate Student Lounge (Building 10, Room 4-3330). **To sign up, please contact James Stamos at james.stamos@nih.gov**

**Upcoming GS3 talks: 5 pm in the Graduate Student Lounge**

<table>
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<tr>
<th>Date</th>
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<td>Jose Delgado</td>
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Social Committee – Led by Vincenzo Mercurio, Kat Daly, Maddie Dahut, and Shayan Nazari, the Social Committee organizes events to build camaraderie and promote networking among graduate students at the NIH. In the past few months, the Social Committee has organized the annual graduate student barbecue (September 22) and a rock-climbing event (October 18). In addition, the Social Committee has worked with postdoctoral and postbaccalaureate fellows to organize joint events such as happy hours, game nights, and a Halloween party. Looking forward, the social committee anticipates holding additional events such as a happy hour, a movie night, and a smores-making event.
Community Service/Mentoring/Outreach Committee – Led by Heather Rusch, Katelyn McCann, and Matan Cohen, this committee organizes events for graduate students to contribute to the community and to advance their personal and professional development. In the past few months, this committee has organized volunteer events at Manna Food Bank to prepare boxes of food for those in need and prepared treats for patients at the Children’s Inn.

This committee has also collaborated with the Prince George’s County Project Lead the Way to provide opportunities for graduate students to mentor aspiring biomedical scientists. Lastly, this committee has organized regular events to discuss professional development, including a career seminar series known as PhDs in the Real World and an academic mentoring series known as Finding Mentors and Building Networks. Graduate students who have attended these events have found them to be remarkably helpful in their personal and professional development.

Stay tuned for upcoming announcements for these volunteering and mentoring events!

Foundation for Advanced Education in the Sciences (FAES) Liaison – FAES provides educational and professional services in addition to fostering a collegial environment for the NIH scientific community. As such, FAES provides graduate students with educational opportunities and health insurance. In addition, FAES provides us with the Graduate Student Lounge (Building 10, Room 4-3330), a unique space for graduate students to meet, study, and conduct events specific to graduate students. The liaison to FAES, Delia Sass, thus provides a critical voice for graduate students in the design and implementation of FAES initiatives.

There is now badge access for the new lounge. Please check that your badge works on the side door access; if not, let the Phils know!

Fellow’s Committee Liaison – The liaison to the Fellows Committee, Carla Gibbs, helps organize social and professional events with postdocs. In the past few months, this has included graduate student involvement with the visiting fellows’ happy hour (September 26) and a Halloween party (November 1).

Postbac Liaison – The liaison to the Postbaccalaureate Committee works to deepen our relationship with the postbaccalaureate community at NIH. As such, the liaison has helped organized joint social events such as a game night (October 3) and happy hours.

OxCam Liaison – The liaison to the Oxford-Cambridge Program, Emily Kolyvas, furthers our relationship with this unique graduate program. As such, the liaison has helped secure attendance for NIH Graduate Students at the monthly OxCam clinical case conference. This conference helps bridge the gap between basic and translational science and has been well-received.
Annual GPP Retreat Recap

The Annual Graduate Student Retreat offers a unique opportunity to reconnect with old friends and build new ones through team-building activities and the love of science. Each retreat highlights one professional development topic, such as presentation skills and grant writing. The theme of this year’s retreat was team building. The retreat, which took place in the Smithsonian’s National Zoo, was kicked off with an inspirational talk by Dr. Francis Collins. He shared his journey of sequencing the human genome, emphasizing the importance of teamwork when he turned competition into collaboration to advance scientific innovation.

Dr. Collin’s talk was followed by an animated and engaging presentation about the science of team effectiveness, by Dr. Frank Golom from Loyola University. Equipped with charisma and humor, he captivated the audience by emphasizing the difference between working as a group versus working as a team, and the appropriate scenario to take advantage of either technique. He also highlighted the importance of honing and embracing conflict resolution skills in the workplace.

We utilized the skills learned from the two presentations by engaging in team-building exercises, coordinated by Dr. Lori Conlan and the GPP retreat committee. First, we broke off into teams of 6 and were tasked with completing a puzzle. Through this activity, we observed widely different strategies each team employed to complete the puzzle, and it was refreshing to see such diverse approaches from each team to accomplish the same goal.

Continuing on with the theme of team building, we split off into predetermined groups and embarked on a scavenger hunt around the zoo, with a clever list of clues serving as a guide. The scavenger hunt took us all over the park, where we encountered life-like dinosaurs, sleepy pandas, and curious cheetahs.

Overall, it was refreshing to spend a day out of the lab and away from the bench to strengthen bonds between the graduate student community, while simultaneously developing crucial professional skills that are necessary as a graduate student and beyond.
GPP RETREAT

Smithsonian National Zoological Park
Please give a brief description of your thesis work. My research reconstructs aspects of identity and lifestyles of the historic NYABG population. I’m analyzing 92 grave soil samples collected from skeletal remains. Soil chemistry analyses are performed to explore the environment of 17th century Lower Manhattan and the predominant diets of individuals in the burial ground. Bacterial DNA analyses are being performed to identify all human associated microbes, visualizing the human microbiome of the inhabitant, and bacterial disease pathogen to assign cause of death by infectious disease. Geospatial analyses are being performed to generate a digital representation of the burial ground and to visualize elemental and bacterial patterns within the site. Results of this research will give us insights about the ancestors of present-day African Americans and the existence of enslavement in NYC.

How would you describe your graduate school experience so far? My grad school experience has been unlike anything I’ve ever experienced. At times it is challenging, like performing DNA extractions for a year with no results. However, I’ve experienced my fair share of successes in securing grants and awards, so that’s always made the struggle worth it. This program has taught me a lot about myself, what my professional strengths and weaknesses. It’s also pushed me to become much more of a social butterfly. At this level, networking is key; so you have to get yourself out there to meet potential employers/PIs.

Is there anything you would have done differently as a PhD student? I think I did everything in the best order possible, from completing the coursework, to getting the training to perform the research. It would’ve been easier for someone to tell me that’s what I need to do though. I think one of the most difficult aspects of a Ph.D. is that there’s no guideline to getting a Ph.D. It’s like being thrown into a job without actually knowing what your job is, but you still have to produce results. I’d write myself a road map with all the things that I’ve already done so that way I wouldn’t have to figure it out, there’d already be a step-wise plan.

Is there anything you do or a place you like to go when lab is stressing you out? I like going to the Georgetown Waterfront park in DC, usually just before sunset. I can sit think and recharge after a long week or a frustrating round of experiments with no results. More regularly, I hit the gym. I try to go at least 4 days a week to run and clear my mind.
Do you have a favorite spot on the NIH campus? My favorite spot on the NIH campus is the lawn just outside of building 10. It’s a cool place to hang out and eat lunch, especially on food truck days. My second favorite spot is a on a path to building 35. It’s not a main path so there isn’t much foot traffic. For this reason, the animals roam freely. I always see rabbits or chipmunks here.

What did you find was the most difficult thing about transitioning to graduate school? What was the most fun? The most difficult part of transitioning into grad school was the false expectation. Being the first in my family (along with my sister) to go to college, I didn’t know what to expect. Honestly, I thought it’d be undergrad plus one level, but really it’s undergrad times five. You basically have to come up with a research question, a way to address your research question and then solve that question. You have to design your own program, except you don’t know what you’re doing yet. The most fun part of it is being around people who think like you. I’m most excited about being at an institution where the daily goal is to learn something new. It is result driven and thought provoking. It’s an environment that encourages you to push boundaries, and no matter whether you’re right or wrong you’ve made a contribution to scientific advancement. Another fun part of grad school is traveling to beautiful places for conferences like Los Angeles or Miami.

What words of wisdom would you give to new or current graduate students? Two words: Stay Focused. While this may seem like a no brainer, it’s easy to get side-tracked from your research, even if it’s by other research. For example, side projects, getting on papers here or there, and attending conferences. Definitely, collaborate and be involved but make your research a priority. Also, make sure you pick a topic you LOVE. You’ll be staring at this research/data every day for the next 5 years, so I suggest you make it something you’d actually be interested in. And my last piece of advice is to know that it’s a marathon, not a race. Make sure you’re in this for the long haul. You’ll have good days and bad ones. Celebrate your victories along the way and keep your eye on the end goal.

What hobbies do you enjoy outside of the lab? I enjoy the movies (anything action or horror), rock climbing, and visiting modern art exhibits.

What would be your dream destination to visit? I dream of finally taking a vacation after I graduate. I want to designate 3 weeks, turn off my phone and backpack through India, visiting the temples, eating street food, and interacting with locals.

Want to be our next Student Spotlight? Email us at GSChronicles@od.nih.gov
The Science of Superstitions

Superstitions are incredibly common. 25% of people in the US consider themselves to be superstitious, and of the NIH trainees who responded to our survey about lab-related superstitions, 65% of respondents reported some level of superstition in the lab. So why do so many people subscribe to superstitious beliefs?

Research suggests that superstitions were important for our evolutionary survival. The development of superstitions balanced the human need for answers with a need for caution in life-or-death situations. For example, if an early human once saw a lion lurking in some tall grass, it would benefit their survival to avoid tall grass or to run away the moment they saw something moving in the tall grass, even if a lion isn’t always there waiting to gobble them up. A brain that waits for only the clearest and most foolproof evidence of an association between events might end up eaten by a lion.

The evolutionary basis of superstitious behavior plays out in modern day, too. Studies have shown that levels of superstition increase during times of stress & anxiety, such as wars & economic decline. For example, in Germany between 1918 and 1940, measures of economic threat correlated directly with measures of superstition.

In addition to serving an evolutionary role in survival, superstitious beliefs & behaviors have been shown to help improve positive mental attitude, behavioral flexibility, and self-confidence. Some research suggest that this may be due to increased levels of the neurotransmitter dopamine in the brain driving pattern-identification.

Superstitious beliefs aren’t all beneficial, however. In that same study, researchers showed that individuals with self-reported “paranormal” beliefs and those treated with a drug to increase dopamine levels were more likely to mistake scrambled words or faces for unscrambled ones. In the case of evolutionary survival, these kinds of mistakes are not detrimental as they err on the side of caution. However, these kind of association errors might be detrimental in non life-or-death scenarios. Further, studies have shown that, even when people recognize a belief is irrational, it still influences how they think, feel, & behave, suggesting that our superstitions stick with us, even if we know they are irrational or untrue.

Results from a poll of NIH Trainees when asked “Do you have superstitions in research?”

There were three common themes in our lab-related superstitions…check them out (with some examples) on the next page!
Lab Superstitions @ NIH

Pipettes (31.8%)

- Use new set of tip boxes if last experiment did not go well.
- When I do serial dilutions, I pipette up and down 12 times for each dilution.
- Never use the first recording pipette you pull for experiments.
- I always use the pipette tips in a certain order.
- The pipettes have to go in order in by line.
- Use pipette tips and aliquots from left to right, bottom to top.

Bad luck (50%)

- In electrophysiology, if the first cell is unsuccessful, the rest of the day will be unsuccessful.
- Never start the plate reader until the endpoint has been reached; starting beforehand will foreshadow bad results!
- Friday afternoon experiments are doomed.
- I try to avoid a certain number, including trying not to submit a paper to a journal on a certain date.
- Any experiment conducted 1-2 days before a lab meeting will fail.
- Start experiments early for better results.
- Always use the same equipment.

Magical (18.2%)

- Our lab has an invisible unicorn named Tom. Experiments only work when he is present. Because he is invisible you never know if he is present...you just hope.
- I have to say nice things to the lab My Little Pony before starting an experiment.
- There is a handmade rag doll my PI found in her lab space when she started research at NIH. We are pretty sure that seeing it brings bad luck and warn new members about where it sits and to never look there lest they be cursed. Its name is Michael Roy and we are pretty sure it’s responsible for a phage outbreak in lab.
- I have a sleeping buddha on my desk which I always rub before an important flow experiment.
Comics

Piled Higher and Deeper by Jorge Cham

**THE CONFERENCE MORNING SESSION**

Welcome, everyone!

Sorry, I haven't had my coffee yet...

(Awkward silence)

Thanks for attending. I couldn't find an earlier flight.

**DAY 1**
7:00am

**DAY 2**
7:00am

**DAY 3**
7:00am

**LAST DAY**
7:00am

WWW.PHDCOMICS.COM

Jorge Cham © 2017

**Footnote:** Thanks to the grads and faculty at Neurotrauma 2017 for this comic idea!

**Tival, I need to meet with the Dean today. Can we reschedule our meeting for Tuesday?**

**Actually, I have a visiting faculty on Tuesday. Can we meet on Wednesday instead?**

**Sure, no problem. Prof. Galvez.**

**That's fine.**

**Actually, my dog needs a bath. Can we...?**

**Come on!!**

**Oops, I'm supposed to meet with undergrads on Wednesday. How about Thursday?**

**Ok...**

WWW.PHDCOMICS.COM

**Footnote:** Thanks to Laura from Queens U. for this comic idea!
OITE Wellness Resources

**Workshop: Stress Management and Wellness for Scientists**
This workshop provides information on the impact of stress on both physical and mental health and presents strategies designed to enhance well-being. Participants will explore the role of mindfulness, holistic self-care, and self-compassion as helpful tools in creating and maintaining wellness in the midst of the challenges of daily life – including life at NIH. (Offered quarterly; check the OITE website for upcoming dates.)

**Workshop: Becoming a Resilient Scientist**
Navigating new jobs, the career exploration process, and graduate/professional school applications can seem overwhelming and lead us to doubt ourselves just when we need confidence the most. The workshop will highlight the emotional intelligence competencies needed for success in research and healthcare careers. (Offered quarterly; check the OITE website for upcoming dates.)

**Twice Weekly Mindfulness Meditation Group**
This drop-in meditation group is offered to trainees/fellows to support self-care and enhance well-being. Each 30-minute session will involve a few minutes of instruction followed by approximately 25 minutes of meditation practice. This group is open to trainees only and includes both beginners and experienced meditators; attendance can be on a drop-in basis – come when you can and as much as you like! Offered **Tuesdays 12:00-12:30 p.m. and Thursdays 5:00-5:30 p.m.** in the Graduate Student Lounge (Rm. 4–3330 in Bldg. 10).

**Wellness Wednesdays**
These weekly, lunchtime discussions will cover various aspects of holistic health (physical, mental, emotional, and spiritual self-care), with one session each month focused on completing an individualized self-care assessment and self-care plan. Feel free to bring your lunch – microwave available! **Wednesdays, 12:00-1:00 p.m.** in the OITE Conference Room (Building 2, 2nd Floor, Room 2W15).

**Weekly Discussion Groups**
Three separate discussion groups (postbacs, grad students, and postdocs) provide a welcoming and confidential space to explore the ups and downs of life as a trainee/fellow in a positive and proactive way. Check the OITE website for each week’s topic. Generally held on **Tuesday afternoons and Friday mornings** in the OITE Conference Room (Building 2, 2nd Floor, Room 2W15).

**OITE Wellness Events**
Throughout the year, OITE offers several gatherings to celebrate NIH trainees: ice cream socials, sports activities, popsicles and “I Am” photos, connecting through community, summer temporary tattoos and more. These events celebrate the diversity and hard work of our intramural trainees. Check the OITE website for the next event. (No food or tattoos are paid for by government funds.)

**Examples of OITE Blog Posts on Wellness:**
- Keep Stress From Derailing Your Work and Life
- Investing in Yourself: Knowing When to Seek Counseling
- Interview with Dr. Collins on Wellness
- Cognitive Distortions Create Imposter Fears
- Don’t Choke – Managing Stress Under Pressure
- Handling Holiday Stress
- Helpful Tips to Managing Stress and Anxiety In Interviews
- Job Stress, Resilience and Support
- PhD in Depression?

More: [https://oitecareersblog.wordpress.com/category/wellness/](https://oitecareersblog.wordpress.com/category/wellness/)

**Examples of Books in the OITE Library – Available for Checkout!**
- Graham, L. (2013). *Bouncing back: Rewiring your brain for maximum resilience and wellbeing*
- Thich Nhat Hanh (2015). *Peace in every step*
- Neff, K. (2015). *Self-Compassion: The proven power of being kind to yourself*
- Brown, B. (2015). *Daring greatly: How the courage to be vulnerable transforms the way we live, love, parent and lead*
The GSChronicles Team

Writers and Contributors
Carter Clinton
Dana Lewis
Emily Phung
Albert Sek

Editors and Design
Dana Lewis
Laura Marler
Sharon Milgram
Keyla Tumas
Jayasai Rajagopal
Phil Ryan
Phil Wang

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