



The GSChronicles

November 2008

Table of Contents

Upcoming Events
Announcements
GSC Co-Chair Elections Section
Graduate Student Spotlight: Emma Kurnat-Thoma
GSC Meeting Overview
Grad Student Entertainment

Upcoming Events

November

27 Thanksgiving Day

December

2 Manna Food Center packing

8 GSC Meeting, 5pm

11 GSC Holiday Party, 6-11pm

25 Christmas Day

January

1 New Year's Day

19 Martin Luther King Jr. Day

20 Inauguration Day

Announcements

▪ GSC Meeting:

The next GSC meeting will be held on Monday, **December 8th at 5pm** in the Grad Student Lounge, Building 10 Rm 6S235.

▪ Nominations for GSC Positions:

The three students nominated for the GSC co-chair position are Kim Baxter, Kate Callahan, and Shau-Ming Wei. Each nominee's plans for the GSC are in the **Election Section on pages 4-5**. The elections for all GSC positions for 2009 will be held in December. This includes positions in the Executive, Social, Academic, Career Development, Trainee Advisory, Public Relations, Symposium, and Thesis Committees. Partnership Representatives will also be elected. Nominations should be emailed to GSCcochair@od.nih.gov and may be anonymous.

▪ Upcoming Social Events:

This year's holiday party will be held on December 11th from 6-11pm in conjunction with FelCom at the FAES House. The cost will be \$10 for all you can eat and drink at the party. This year's party will even have a live jazz band to entertain guests.

▪ Graduate Student Symposium Success:

The Fifth Annual NIH Graduate Student Symposium was a sensation! The day began with Dr. Story Landis, Director for NINDS, reflecting on

her own graduate training and how scientific advances have changed the face of graduate education as we know it today.

Dr. Peter Friedl, from Radboud University Nijmegen Medical Center in the Netherlands, made the keynote address. His research expands our understanding of the invasive processes in cancer through the development of microscopy techniques to follow cell migration in 3D matrices and *in vivo*. Dr. Friedl demonstrated through exquisite images and videos how cancer cells migrate into normal tissue by cleaving and repatterning collagen fibers. In the afternoon Dr. Friedl and Dr. Sharon Milgram, the Director of OITE and the GPP, led an interactive discussion on career development in which they expressed great excitement and a willingness to share their career experiences.

Over 85 GPP students participated in the poster competition. Ten travel awards for \$500 each were given to winners from each category. Thank you to the over 90 post-doctoral fellows who participated in the poster judging. The poster session was a wonderful opportunity for the NIH community to interact with our GPP students.

Our eight graduate student speakers shared their excitement for their science and reflect the diverse thesis research projects studied by GPP students. The day concluded with an awards ceremony honoring recent graduates, outstanding mentors, and the winners of the NIH Graduate Student Research Award.

Thank you to everyone for attending and participating in the symposium. It is because of you that it was such a success. To provide feedback, please go to www.surveymonkey.com/s.aspx?sm=lzs82iGF6SzKXQGrC8_2fkMg_3d_3d

▪ Career Advancement Toolkit:

OITE has started a seminar series for trainees on campus called the Career Advancement Toolkit. These sessions, which are currently scheduled through May 2009, focus on different aspects of career development for people at different stages of training. The three series are Career Decisions 101, Academia, and Industry. Look on the OITE website for information about upcoming seminars for these areas. Satellite campuses should ask about the Career Advancement Toolkit being offered at their location or by videocast.

▪ Community Service:

The GSC is hosting several community service events next month. First, we will be at Manna Center in Rockville “aliquotting” food donations on December 2nd at 7pm. Second, the next graduate student blood drive will be held on December 11th. Finally, we hope to schedule a day this winter to prepare and serve a meal at the Children’s Inn on campus for clinical center patients and their families. For more information or to sign up, email GSCservice@od.nih.gov.

▪ Pathways:

Pathways is a monthly meeting where career options and development are discussed, usually from the perspective of someone outside of basic research. The next event is “Faculty at Primarily Undergraduate Institutions” which will be held on December 11th from 1-3pm in Lipsett Auditorium. There will be a graduate student lunch held with the speakers at 12pm in the Graduate Student Lounge.

▪ GS3:

The **Graduate Student Seminar Series (GS3)** is a monthly meeting where students present their work to fellow graduate students as a great practice for talks, conferences, retreats, a dissertation defense, etc. The sessions are held the third Thursday of the month at lunchtime with two speakers who each give 20-minute talks. If you would like to present your research to your fellow grad students, please email Matt Berberich (berberichm@mail.nih.gov) to schedule a date.

▪ Biophysics and Structural Biology Group:

The Biophysics and Structural Biology Graduate Student Interest Group has been meeting bimonthly. The first meeting of the month focuses on learning a new laboratory technique, whereas the second meeting of the month is used to discuss a paper that uses the technique. If you are interested in attending or have any questions, contact Matt Berberich (berberichm@mail.nih.gov).

▪ SNIG:

The **Systems Neuroscience Interest Group for Graduate Students** is a group of students interested in systems/ cognitive/ clinical neuroscience. The group meets once a month to discuss the latest topics of systems neuroscience and to listen to a talk from a member of the group. An informational email is sent out once a week. From time to time there will be lunches with renowned outside speakers from the NIH Neuroscience series. Please contact Kara Lindstrom (lindstrk@mail.nih.gov) if you would like to join.

▪ New Interest Groups:

There was a fair amount of interest from the GPP retreat survey for interest groups in immunology as well as genetics. If you would like to help organize one of these interest groups, please contact a co-chair at GSCcochair@od.nih.gov.

▪ Campus Area Listservs:

Please join your appropriate list at <http://gpp.nih.gov/Current/GraduateStudentCouncil/GSCListSrvs/>. The purpose of these lists is to foster communication among grad students and have a monthly lunch with grad students in your region of campus. There are also listservs for the other campuses. Look out for emails announcing lunches in your area!

▪ GSX Listserv:

The Graduate Student Exchange (GSX) is a social listserv for grad students at NIH. Postings for roommates, items for sale, and social outings are common. It’s a great way to connect to the group of grad students. To join the group, visit the GSC webpage and follow the link.

▪ GSC “Activity Pass”

The GSC is offering an “activity pass” for interested students to pay a once-a-year nominal fee of \$20 to attend any ticket-requiring GSC events throughout that year. The pass will not be required to attend events, but will prove much cheaper than paying for each event separately. Contact the treasurer (GSCtreasurer@od.nih.gov) for more information or to purchase a pass.

Happy Birthday to: Danielle Basset (Nov 3rd), Kim Baxter (Nov 8th), Maureen Kiley (Nov 13th), Nazanin Ashourian (Nov 15th), and Stephanie Kim (Nov 22nd).

Upcoming Birthdays: Kate Szarama (Dec 1st), Dan Crooks (Dec 3rd), Lisa Higginbotham (Dec 8th), Candace Pfefferkorn (Dec 11th), Shantelle Lucas (Dec 12th), Kitman Tsang (Dec 14th), Ashley Owen (Dec 20th), Vanessa McMains (Dec 22nd), Khalisa Herman (Dec 25th), and Matt McElmer (Dec 26th).



Congratulations to Florian Mueller, who recently graduated from the Institute for Genomics and Bioinformatics, Graz University of Technology, Austria!

Please **send your publications, awards, graduation, and birthday announcements** to GSCChronicles@od.nih.gov for recognition.

Graduate Student Spotlight:



Emma Kurnat-Thoma

November's spotlighted graduate student is Emma Kurnat-Thoma, a fourth-year student in the National Institute of Nursing Research (NINR) GPP program. Originally from York, PA, a small city in the south-central part of the state, Emma grew up in a very family-oriented and hardworking environment. She reminisces that it was a wonderful place to grow up since there was always snow to play in during the winter, while it was also easy to get to the beach in the summer.

As a college student at Bloomsburg University in Bloomsburg, PA, Emma pursued a major in Nursing, because she had witnessed the positive influence that home care nurses were able to provide an ill relative with terminal cancer. She was drawn to the level of support that they gave to both the patient and the rest of the family, and she found that the nurses were amazing advocates who coordinated critical health care needs effortlessly. Emma writes, "Their insights into relieving emotional and physical human suffering changed my perspective forever."

In her undergraduate clinical rotations, Emma noticed that parents of asthmatic children with moderate to severe symptoms experienced chronic anxiety unacknowledged by health care providers. As part of the Honors' Program, she and a faculty member performed a qualitative descriptive research study examining this issue. She found that health care providers also need to assess parental stress levels when treating pediatric asthma patients, and she consequently published her findings in a peer-review journal, *Pediatric Nursing*. Emma loved every aspect of the project, but she enjoyed the writing the most.

After receiving her degree, Emma worked for 5 years as a Pediatric Intensive Care Unit staff nurse with a focus on metabolic care, which involved conditions such as decompensated cancer states, septic shock, liver and kidney disease/transplants, critical enzyme deficiencies, and hormonal

imbalances. She often worked with newborns and young children with genetic conditions, and became fascinated by how a single DNA mutation could have so many downstream system effects.

To learn more about the genetic basis of disease, Emma enrolled in a nurse practitioner program at University of Utah, where the faculty recommended that she pursue a PhD since she loved genetics so much. In the meantime, she switched to adult oncology as a practice specialty due to its focus on genetics. In 2004, she was accepted by the NINR Summer Genetics Institute and spent 8 weeks at NIH. The science at NIH was such an amazing experience that Emma knew she had to return. She was accepted into the NIH/NINR GPP in 2005, and she and her husband relocated to Bethesda in the fall of 2006.

Currently, Emma is affiliated with the University of Utah's College of Nursing, and she expects to graduate in August 2009. She is training in Dr. Lawrence Brody's lab in the Genome Technology Branch at NHGRI. Since the last 3 years of her clinical experience were adult-based, she became interested in the genetics of aging and what makes it more difficult for some elderly patients compared to others. She is focusing on frailty as a phenotype—a physiological cascade of progressive weakness and decreasing physical function, causing increased mortality and disability.

Emma explains that the progression of frailty is very similar to clinical symptoms of decreased Vitamin B12, a critical nutrient for DNA synthesis and methylation. To identify genes that may be involved, Emma is performing a candidate gene association study of vitamin B12 metabolic pathway targets in a group of 800 elderly women. She will examine approximately 100 single nucleotide polymorphism genotypes and their relationships to serum biochemical metabolites and various quantitative clinical measurements (depression, physical strength, walking speed, anemia, peripheral sensation).

Because of her professional origins as a clinical nurse, Emma is especially interested in the translation of laboratory findings into meaningful clinical interventions. As elderly individuals are particularly susceptible to B12 deficiency from inadequate intestinal absorption, supplemental intramuscular B12 injections may be an inexpensive and worthwhile clinical intervention to prevent frailty or its progression.

Emma is also involved in NIH activities outside of her research. This year, she served as the GSC

representative for the NINR GPP and the NCI Molecular Pathology programs. She attends the meetings regularly and keeps her constituents up to date on GSC events. Beyond the NIH fence, she loves cooking and doing cross-stitch or antique-style embroidery. Her latest project is a large sampler, but unfortunately, progress is slow due to the amount of work that comes with a PhD!

Emma also loves spending time outdoors. She and her husband tried crabbing this summer for the first time. They bought all the equipment and tried to crab locally off piers with no luck. Finally, they decided to find a more isolated location on the Eastern Shore and experienced success. They caught a total of 3 crabs, which represented a 300% increase from previous attempts. Although they were very proud of themselves, they let them go and instead bought 2 dozen cooked crabs for dinner later that night! Recently, in anticipation of further outdoor adventures, she and her husband bought a 28-foot sailboat, which they keep at a marina on the Chesapeake Bay in Galesville, MD. They just pulled it out of the water for the winter, but they are excited to explore nearby islands and inlets next spring when it warms up. The couple also own two 70 lb sled-dogs (malamute/husky mixes) that keep them busy by chasing squirrels at the most surprising times.

At the next GSC event, consider introducing yourself to Emma to find out more about her insights on the value of the translation of research from “bench to bedside.” Or, if you are looking for some motivation for your own work, think about her advice to other students: “Follow your heart and everything seems to work out just like it’s supposed to!”

The *GSCChronicles* is looking for a **new assistant editor**! They will work with the current editor to produce this monthly newsletter for the GPP students and administration. Email GSCChronicles@od.nih.gov for more information.

GSC Elections

The three nominees for GSC Co-chair 2009 are Kim Baxter, Kate Callahan and Shau-Ming Wei. All three have substantial service records in the GSC and have written their plans for the GSC below. Voting is now open, so go to www.surveymonkey.com/s.aspx?sm=JvgonijpzWwdRS6QvTa_2ffa_3d_3d to vote for the two candidates you would like as co-chairs next year.

Kim Baxter



I’m a graduate student in the Johns Hopkins-GPP and my research focuses on gene regulation in pathogenic bacteria. I’ve been involved with the GSC for three years.

Currently, I hold the positions of Secretary of the GSC and Chair of the Community Service Committee. On the Community Service Committee, I’ve organized events with the NIH Blood Bank, Manna Food, and Transitional Housing Corporation. These events have increased our outreach into the community and raised the public’s awareness of the NIH graduate student community. As Secretary, I’ve maintained the records of the GSC and learned about some of the recurring issues the Council faces. This role has also given me insight into how the GSC is organized. I look forward to sharing my ideas for how it can continue to be improved.

I think the GSC should spend the next year strengthening its foundation and core functions, as described in Article II of our Constitution: representing the Graduate Student Body to the NIH community, ensuring the welfare of graduate students, providing/promoting extracurricular activities, facilitating the orientation of new students, and providing a means of communication among students. In essence, we should focus on the quality of what we have to offer the graduate student community over the quantity.

1. Our lack of funds limits our ability to carry out some of these functions. Let’s establish a better system of raising money, hosting social events, and renewing our funds.

2. We can be a stronger council through collaboration. Let’s foster more inter-committee work: the Social Committee and Treasurer should work together in planning social events, and the Academic and Community Service Committees could develop new teaching opportunities to benefit the greater community.

3. Also integral to strengthening our foundation is fostering those recent initiatives that are still gaining momentum: thesis talks, triad lunches, and the involvement of Partnership Reps.

In summary, I look forward to providing leadership as our community benefits from strengthening the foundation that has been laid by previous Graduate Student Councils.

Kate Callahan

Hello NIH Graduate Students, I'm Kate Callahan, and I am running for the position of GSC Co-chair. I'm a fourth year graduate student in the Georgetown-NIH program. I am excited about the prospect of serving as your GSC Co-chair. It is a unique opportunity to provide leadership to the NIH graduate student community. One of my overarching goals for the GSC is to foster an environment for NIH graduate student interaction and to offer an open forum for students to communicate their ideas and concerns, while strengthening participation in the activities run by the council. I intend to provide increased support for new and international students as they matriculate to NIH, not only during orientation, but also throughout their first and second years of graduate study. I wish to reinstate the buddy system where new students are paired with more seasoned graduate students so that they have a resource and contact person to whom they can ask questions and get to know the GSC and NIH more intimately. I also want to find ways to re-energize existing programs to increase participation, like the lunch clubs, the GS3 Seminar series, and career development events.

It is because I enjoy interacting with graduate students at NIH that I have become an active member of the GSC. Thus far, I have been intimately involved in the planning and implementation of many of the GSC's educational and networking objectives. I've helped plan the 2007 and 2008 NIH Graduate Student Research Symposia, as well as the 2006 NIH Graduate Student Retreat. I currently serve in the position of the formal partnership representative for the OITE Training Advisory Committee and am responsible for organizing the election of the Formal Partnership Representative. (Remember all of the emails you received from me in the spring?). I serve on the Teaching Committee that is involved in organizing the journal clubs for summer students as well as the graduate student run FAES course. To say the least, I've enjoyed participating in the council. I would appreciate your support as I run for GSC Co-chair.



Shau-Ming Wei

I am currently in my 3rd year in the Brown neuroscience partnership working with Dr. Karen F. Berman in the Genes, Cognition, and Psychosis Program in the NIMH. I am interested in looking at how the interaction between gonadal steroid hormones and the BDNF Val⁶⁶Met single nucleotide polymorphism affect the neural circuitries underlying human cognition and behavior. As a GSC member, I have been involved as a member of the Pathways committee since February 2008. Pathways aims to help students explore alternative career paths after attaining their PhDs. The committee members now work alongside the Felcom career development subcommittee to plan career-related seminars for both graduate students and post-docs. In addition, I am also the partnership representative for the Brown program and am trying to gather current students to bond more outside of the lab setting.

Co-chairs of the GSC are responsible for not only leading the council but also building a united graduate student community. The priority duty of next year's co-chair is to recruit more dedicated and enthusiastic graduate students to join the GSC. The election of graduate student representatives will be of great help in recruitment since these reps can directly interact with their fellow graduate students in the programs. Reps can also nominate/recommend graduate students who were not familiar with the GSC or were never directly involved in any GSC activities to join a subcommittee or take part in organizing activities. In addition, the graduate student symposium was a great success this year, and many non-GSC members participated. Next year, we can set up a booth providing GSC information to encourage these students to participate. As for this year, we can send out emails announcing our next GSC meeting, and perhaps some of them will be interested.



GSC Meeting Overview: 11/3/08

*Nominations for GSC Co-Chairs were announced: Kim Baxter, Kate Callahan, and Shau-Ming Wei. A how-to-vote email will be sent out.

*Nominations for GSC Secretary and Treasurer were opened; email nominations to GSCcochair@od.nih.gov

*GSC decided that Partnership Representatives will have the lead student roles in Recruitment/Orientation by default. The Rep must find an alternate contact person if they do not want to be involved. An official vote will be held at the December GSC meeting.

*Vote on Partnership Rep redistribution: GSC voted that all US Institutional programs will have one rep each; any US Institutional program with >30 students may have two reps if someone volunteers to be the 2nd rep; US Individual programs will have at least three reps and International Individual programs will have at least three reps, but not more than 11 total reps between these two groups.

*GSC Retreat: a tentative date of 01/23/09 was set. All members of the GSC are expected to attend; committees will provide a review of the year and goals for next year.

*Social Committee reported that the Halloween Party, held jointly with FAES, was a success. The Christmas Party will be Dec. 11 at the FAES house with live music. Volunteers are needed for bartending, kitchen crew, and admission duty; contact Gayani Weerasinghe or Phil Wang to sign up or with suggestions.

*FAES Lab Techniques Class is going well, has 11 students.

*Pathways: Science Policy Lunch and Seminar were announced for Nov. 13.

*GS3: Nov. 20 meeting, with Amanda Higley and Wes Beckstead, was announced.

*Community Service: Next blood drive to be held in late November; Manna food-packing scheduled for Dec. 2. A volunteer is needed to help with planning/cooking a meal for Children's Inn families sometime this winter.

*Partnership Representatives: Nominations for 2009 are now open.

*GSC Newsletter: New assistant editor needed for 2009.

*FELCOM Rep: Networking Hour scheduled for Nov. 5 at Blackfinn.

*Symposium Committee: Symposium is Nov. 14. Requested that students post flyers and get the word out. Photos for Faces of Science slideshow should be emailed to Phil Wang. Happy Hour to follow at Blackfinn.

*Thesis Committee: Partnership Directors and Training Directors may join GPP students on the committee.

*Concerns about the graduate student lounge, such as phone usage and projector storage, were discussed. Email GSCcochair@od.nih.gov for more information.

*Budget and fundraising ideas were discussed.

*Angelo asked whether videoconferencing between Rocky Mountain Labs and the Lounge was possible. GSC will continue teleconferencing by speakerphone; iChat may be an option in the future.

Graduate Student Entertainment

If you enjoyed the 2008 Dance Your PhD contest submissions (featured in the October GSChronicles), don't forget to look at the videos from the second contest! The winners for 2009 AAAS/Science Dance Contest have been announced; you can find the videos at <http://gonzolabs.org/dance/contestants/> and the news article here: <http://scienow.sciencemag.org/cgi/content/full/2008/1120/2>. This newsletter editor found them quite entertaining, indeed, and was also inspired with some ideas for next year's competition!

Writers and Contributors:

Stephanie Guzik

Layout, Composition, Announcements,
Upcoming Events, Elections

Cynthia Chang

GSC Spotlight, Entertainment, Meeting
Overview

Kate Callahan

Symposium Recap

Kim Baxter, Kate Callahan and Shau-Ming Wei

Elections information

Emma Kurnat-Thoma

GSC Spotlight

Editors: Stephanie Guzik, Cynthia Chang,
Vanessa McMains, Athena Klutz, Megan
Cleland, Tracy Jill Doty, Cathy Kolf,
Caroline Duffy, Betsey Wade, Sharon
Milgram