

# USU Graduate Student



## Spring Newsletter



USUHS  
Graduate  
Student Council  
Newsletter 2006-  
2007

Volume 1, Issue 3

April 24, 2007

Special points  
of interest:

- Check out the latest news and upcoming events at our website!!  
<http://www.usuhs.mil/geo/gsa>
- Register for the **USU Career Development Symposium**

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## GSC President's Corner

By Patrick M. High

We have entered a new year and Spring has finally sprung. As I review the past three months, I cannot believe I am already writing my next to last column in the Graduate Student Newsletter. You read correctly, I only have one more column to write as President of the Graduate Student Council. More information about this can be read on page 8.

These past three months have been a whirlwind. During this time the Graduate Programs have held not one but two Open Houses. The first Open House, scheduled for Monday, 26 February did not go as flawlessly as many of us had hoped. Due to the inclement weather that was of course out of our control, the dinner on the eve of the Open House was canceled. Many of the students who were scheduled to fly in for the Open House were unable to make it. A majority of these students were part way into their travel itinerary to D.C. and were forced to turn back because Washington Reagan National Airport (DCA) was closed. As unfortunate as the situation was for some students, many were still able to make it, the weather passed, the Federal Government did not close down or delay opening, and thus the Open House was able to continue. Overall, the students who were able to make it had nothing but positive things to say about the experience. Many, if not everyone, thought it ran smoothly and was much better than those held at larger universities. This could not have been done with everyone who took the time to house a prospective student and/or be a point of contact for these students. Additionally, this would not have gone as smoothly as it did without the coordination of the Graduate Student Council and the Graduate Education Office.

In addition to the regularly scheduled Open House, the programs that had missing students decided to have a second but scaled back Open House for interviews. This occurred on 14 March and was preceded by a dinner at Bertucci's with current graduate students. Thank you to all who helped not once, but twice to make both of these Open Houses run as smoothly as they did. While it was a bit more work, it helped facilitate the programs and the decisions of prospective students.

Also during this past quarter the GSC began the process to obtain formal recognition by the Dean, SOM. As of this writing, the paperwork has been submitted through Dr. Metcalf, ADGE and is currently being reviewed by the Dean.

Another notable occurrence was the change to our 1099-MISC tax forms. As you are already aware, our stipend was moved from box 3, "Other Income" to box 7, "Non-Employee Compensation. This matter was brought to the attention of Dr. Metcalf, and through her dedicated support and persistence, she was able to solve this problem and have the status of our stipend corrected. For this, I and the graduate students sincerely thank Dr. Metcalf, as this will most likely prevent us all from having to pay more in taxes.

To all students, no matter where you are in the course of your degree, good luck and I wish you much speed.

Sincerely,

Patrick M. High, MPH

President, GSC



**Patrick M. High**  
GSC President  
2006-2007

# Learning to Teach: Prepare yourself for an academic career now.

By Jeremy Henriques



“...surely the argument could be made that although one may not want to pursue teaching as a career, it must be acknowledged as an invaluable resource for self-assessment.”

In our endeavor to obtain our graduate degrees, we are expected to master our respective areas of research, to conjure new and innovative ideas to broaden the concepts of what we study, and to become successful writers and presenters of our science in order to ensure both successful publishing and funding scholarships. During my time at the Uniformed Services University (USU), I have found myself developing in these areas with some success. I am, however, aware of the shortcomings of our current programs.

With the exception of the Medical and Clinical Psychology program, the USU Doctoral programs do not require teaching assistantships. The goal of teaching assistantships is typically to enable students to become more equipped to handle teaching, as this is classically part of one’s scientific career. In the new age of science where teaching professorships are not the only avenue to pursue research, maybe it is correct that teaching not be required for all graduate students. On the other hand, surely the argument could be made that although one may not want to pursue teaching as a career, it must be acknowledged as an invaluable resource for self-assessment. It allows one to express their ideas in clear and concise ways as well as promote original and ingenious thinking to inspire a thirst for knowledge in others. However, it may be advantageous for us not to have to divide our time between classes, research, and teaching, if one does not plan to teach. Admittedly, if teaching was mandated to all students, including those not interested in teaching, the junior students would be impacted negatively; it is no red herring

to blame bad education on bad teaching. Education is a vocation that requires one’s whole-hearted efforts. We are here to learn the best we can from the best our school can provide.

For those of you, who do want to pursue a career in teaching, join the club! There are opportunities here at the USU you can take advantage of, but they are not for side-liners. In my experience, most instructors welcome any student help regarding scheduling and coordinating lectures and lecturers. However, if you are like me and really want to know if teaching is the right career path for you, then instead of simply creating the course schedule, you must approach these situations with specific personal goals and objectives in mind. Some easy suggestions for taking steps to obtain the position and experience you would like are:

1. Identify a course with which you feel comfortable assisting (i.e. your research area, or a content area or course in which you would like to deepen your knowledge).
2. Know what you seek from the teaching experience. Answer for yourself a few key questions: Do you want involvement with grading to further your assessment skills? Do you want to give lectures to maximize your potential as a speaker? Do you have insight on a particular topic that may enable more class discussion than one of the scheduled lecturers? Do you want to improve the course from when you were on the learning end of things?



## Teaching con't...

3. Approach the course director about assisting well in advance of the course (optimally one year prior). This allows the course director to accommodate your mutual set of needs and affords time for you to discuss any course design changes. Remember that you have a bargaining chip: you are willing and able to aid the over-worked director in terms of administrative duties and other time-consuming tasks.
4. Be proactive -- offer to help in all areas you can, even if it means aiding in the perceived tedium of scheduling and coordination. These are valuable skills that are often overlooked but usually result in clearer teaching and in deeper learning for students. Just think about how a thoroughly planned experiment usually results in fewer headaches.
5. Clearly define your role as a teaching assistant. Prior to the onset of the course, you and the director should determine your responsibilities and status in the course. Solidify your boundaries and respect the position of the director. Keep in mind that while you will be performing in a teaching role, you are still a student.

If you complete a teaching assistantship with distinction, you will have opened a new avenue of credibility with the faculty. You will hopefully have obtained at least one additional letter of recommendation for future jobs; one that does not come from your advisor. You will have also gained a wealth of knowledge about the teaching experience. Perhaps most importantly, you will have improved the learning of fellow students who may have been approaching a difficult course with dread. These students may have this time come out of it thinking that it was not that bad, or at least that they learned an astonishing amount of information well.

Do not limit yourself to just the classes taught here at USU. There are plenty of other universities and colleges in the Washington, D.C. area that have faculty who teach full-time and would welcome any

help, but they do not know who you are. Obtaining outside positions can be tricky, though, because you must first approach your advisor and clear it with them. On the positive side, perhaps your advisor has contacts in the area that can help you. For example, a second year Neuroscience student has recently given an outside lecture to a college class as set up by her advisor. Her advisor had a former student in the area and now the second-year student obtained the experience of preparing and delivering a full 50 minute lecture! Of course, this situation is ideal and perhaps not very likely. Take this advice: contact the program and department heads of the schools where you are willing to assist. They will be able to tell you whether someone is in need of help or who further to contact. You may also set yourself up for a guest lecture or a summer course instruction opportunity.

When approaching the final years of our tenure at USU, we will ask ourselves if we feel fully prepared for our future endeavors. While being required to give scientific talks on the initiation and progression of our research, we may be saddled with a false sense of security thinking that presenting our science well will double for being a good educator, but this is not the case. I am sure some or all of you have had a lecturer that gave a good science talk but neglected to present the information in a format for optimal learning. That being said, I encourage you all to make the distinction between the two skill sets and be willing to actively mold yourself through mentorship and training into what you want to be. Do not take teaching and educational skills for granted, because this may be the last chance you have to acquire these skills with a safety net of faculty course directors for instruction and feedback.



# They Made It...Will We??

## Students Who Defended a Thesis Spring 2007



“[Those] who have an excessive faith in their theories or in their ideas are not only poorly disposed to make discoveries, but they also make very poor observations.”

*Claude Bernard  
(1813-78) French  
physiologist, 1865*

**Erika Lamb**, Emerging Infectious Diseases Program

Thesis Title: “Blood Fluke Exploitation of Innate-Adaptive Immune Interactions that Facilitate Parasite Development”

Major Advisor: Stephen Davies, Ph.D.

**Nader Halim**, Molecular and Cellular Biology Program

Thesis Title: “Regulation of Brain Glucose Metabolic Patterns by Protein Phosphorylation and Drug Therapy”

Major Advisor: Ajay Verma, MD, Ph.D.

**Leigh Johnson**, Department of Medical and Clinical Psychology

Thesis Title: “Problem Solving and Emotional Distress Among Brain and Breast Cancer Survivors”

Major Advisor: Michael Feuerstein, Ph.D.

**Andrea Bertke**, Emerging Infectious Diseases Program

Thesis Title: “Influence of Herpes Simplex Virus Latency-Associated Transcript (LAT) on the Distribution of Latently-Infected Neurons”

Major Advisor: CAPT Philip Krause, USPHS

**Miranda Oakley**, Emerging Infectious Diseases Program

Thesis Title: “Molecular Factors and Biological Pathways Associated with Malaria Fever and the Pathogenesis of Cerebral Malaria”

Major Advisor: Thomas McCutchen, Ph.D.

**Jared Patch**, Emerging Infectious Diseases Program

Thesis Title: “The Central Role of the Matrix Protein in Nipah Virus Assembly and Morphogenesis”

Major Advisor: Christopher Broder, Ph.D.

**Alisa Schaefer**, Neuroscience Program

Thesis Title: “Repair of Neocortex in a Model of Cortical Dysplasia”

Major Advisor: Sharon Juliano, Ph.D.

**Shilpi Paul**, Molecular and Cell Biology Program

Thesis Title: “Characterization of Enzymes Involved in Fatty Acid Elongation”

Major Advisor: Teresa Dunn, Ph.D.

**Randall Merling**, Molecular and Cell Biology Program

Thesis Title: “The Effects of HTLV-I Tax on Mitotic Regulation”

Major Advisor: Chou-Zen Giam, Ph.D.

**Ali Weinstein**, Department of Medical and Clinical Psychology

Thesis Title: “Biobehavioral Correlates of Depression in Reaction to Mental and Physical Challenge”

Major Advisor: Willem J. Kop, Ph.D

**William Johnson**, Department of Medical and Clinical Psychology

Thesis Title: “Ambulatory Assessment of Depression in Primary Care”

Major Advisor: Willem Kop, Ph.D.

**Gabriel Defang**, Emerging Infectious Diseases Program

Thesis Title: “Toward Viral Vaccine Development: A Modified Venezuelan Equine Encephalitis Replicon as a Strategy for Optimizing Immunogenicity”

Major Advisor: CAPT Gerald Quinnan, USPHS

# The USUHS Graduate Student Council sends our deepest sympathies to the families of the victims of the recent violence at Virginia Tech.

Ross Abdallah Alameddine

Christopher James Bishop

Brian Roy Bluhm

Ryan Christopher Clark

Austin Michelle Cloyd

Jocelyne Couture-Nowak

Kevin P. Granata

Matthew Gregory Gwaltney

Caitlin Millar Hammaren

Jeremy Michael Herbstritt

Rachael Elizabeth Hill

Emily Jane Hilscher

Jarrett Lee Lane

Matthew Joseph La Porte

Henry J. Lee

G.V. Loganathan

Daniel Patrick O'Neil

Juan Ramon Ortiz-Ortiz

Minal Hiralal Panchal

Daniel Alejandro Perez

Erin Nicole Peterson

Michael Steven Pohle, Jr.

Julia Kathleen Pryde

Mary Karen Read

Reema Joseph Samaha

Waleed Mohamed Shaalan

Leslie Geraldine Sherman

Maxine Shelly Turner

Nicole White

Partahi Mamora Halomoan  
Lumbantoruan

Lauren Ashley McCain

Liviu Librescu



"Today our nation grieves with those who've lost loved ones at Virginia Tech. We hold the victims in our hearts, we lift them up in our prayers, and we ask a loving God to comfort those who are suffering today."

— President Bush

# “The Dark Side”

By Bethanie L. Morrison

“After my Ph.D, I realized that although I enjoyed science, I felt that my skills might be better applied to enabling the application of science within a more commercial context....After spending two years in university technology transfer, I now negotiate Strategic Alliances on behalf of Pfizer and use my scientific knowledge and experiences on a day-to-day basis.” --Philip McGurk, Pfizer, California, USA.

The above is an excerpt from Alternative Careers in Science: Leaving the Ivory Tower, a book edited by Cynthia Robbins-Roth. Intrigued? Me too! As current graduate students, we all came in knowing that the academic job market is not an ideal market for early career scientists. The average age at which one receives their first ROI is roughly 40 years old! The average time spent at graduate school is 5 years, and the average time spent as a postdoc prior to securing a faculty position is 5 years and counting. Granted, if you know that you belong in academia, it is certainly possible to find fulfilling postdoc positions and eventually a lucrative faculty position. What do you do if you are unsure about your place in academia, or even research in general? As undergraduates most of us were most likely taught that we will have two major career options as scientists: academia or the biotech/pharmaceutical industry.

During your tenure at USU, you may begin to discover that bench science, whether academic or pharmaceutical, does not fit into the grand scheme of your life. Reasons will be different for everyone. Perhaps you are simply bored with pipetting, or maybe you dislike the dependency on grant writing and funding, or you may even lack the interest and patience required to solve a very specific biological question. Whatever your personal reason may be, it is extremely important to be honest with yourself and consider the rationale behind the decisions that you make at this early point in the game. During this time, it may be helpful for you to take a peek at what is known to the “wiser” scientific community as “The Dark Side,” also known as an alternative career.

On the next page you will find a very brief list of resources available to those of us looking to leave the bench. When looking at these career options and even finding more of your own, there are a few questions you must ask yourself and answer honestly:

1. Why do you want to leave the bench?
2. What is the most satisfying part of your life at this moment? What type of career will emphasize your favorite part of the day?
3. Are you willing to go back to school?
4. What type lifestyle suits you the best?
5. What are your strongest and weakest personality traits?
6. What is your skill set? Be clever with this one, it is most likely much larger than you think.
7. What can you do and with whom can you form a network in order to get your foot in the door?

Do not take this time in your life for granted. This is one of the last times where you have professional responsibility for very little outside of your own dissertation work. Take this time to really think about your life and where you would like it to go. Discover what you need to do to get there and do it! This is just the beginning; you have your entire career ahead of you. **Make it yours!**



“During your tenure at USU, you may begin to discover that bench science, whether academic or pharmaceutical, does not fit into the grand scheme of your life.”



# Alternative Career Resources

(This list will also be available on the GSC website)

## General Career Development

[http://sciencecareers.sciencemag.org/career\\_development/more\\_topics/alternative\\_careers](http://sciencecareers.sciencemag.org/career_development/more_topics/alternative_careers)

Book: Alternative Careers in Science: Leaving the Ivory Tower, by Cynthia Robbins-Roth (5-star rating by your fellow graduate students!) [http://www.elsevier.com/wps/find/bookdescription.cws\\_home/706221/description#description](http://www.elsevier.com/wps/find/bookdescription.cws_home/706221/description#description)

<http://www.sciencemag.org/cgi/content/full/281/5383/1584a>

[http://sciencecareers.sciencemag.org/career\\_development/tools\\_resources/forum/home](http://sciencecareers.sciencemag.org/career_development/tools_resources/forum/home)

[http://sciencecareers.sciencemag.org/career\\_development/tools\\_resources/careers\\_basics\\_booklet](http://sciencecareers.sciencemag.org/career_development/tools_resources/careers_basics_booklet)

## Science Writing/Editing

[http://www.vpul.upenn.edu/careerservices/gradstud/CarlClay.ppt#256.1.Alternative\\_Careers\\_in\\_Science\\_and\\_Medicine](http://www.vpul.upenn.edu/careerservices/gradstud/CarlClay.ppt#256.1.Alternative_Careers_in_Science_and_Medicine):

<http://www.geocities.com/capecanaveral/hangar/4707/write.html>

[http://sciencecareers.sciencemag.org/career\\_development/previous\\_issues/articles/1400/careers\\_in\\_science\\_editing\\_resources](http://sciencecareers.sciencemag.org/career_development/previous_issues/articles/1400/careers_in_science_editing_resources)

<http://www.nasw.org> (National Association of Science Writers)

<http://www.councilscienceeditors.org> (Council for Science Editors)

## Patent Law/ Technology Transfer

<http://www.piercelaw.edu/Tfield/carT.htm>

<http://www.oppedahl.com/opportunities/>

<http://www.geocities.com/CapeCanaveral/Hangar/4707/law.html>

<http://www.uspto.gov>

<http://www.geocities.com/CapeCanaveral/Hangar/4707/tech.html>

[http://sciencecareers.sciencemag.org/career\\_development/previous\\_issues/articles/0280/careers\\_in\\_technology\\_transfer\\_feature\\_index](http://sciencecareers.sciencemag.org/career_development/previous_issues/articles/0280/careers_in_technology_transfer_feature_index)

## Science and Public Policy

<http://fellowships.aaas.org/>

[http://sciencecareers.sciencemag.org/career\\_development/previous\\_issues/articles/2170/science\\_policy\\_establishing\\_guidelines\\_setting\\_priorities](http://sciencecareers.sciencemag.org/career_development/previous_issues/articles/2170/science_policy_establishing_guidelines_setting_priorities)

<http://www.phds.org/jobs/nonacademic-careers/internships-and-careers-in-science-policy/>

<http://www7.nationalacademies.org/policyfellows/index.html>

## Consulting

<http://www.shoafbiochem.com/>

[http://sciencecareers.sciencemag.org/career\\_development/previous\\_issues/articles/2100/consulting\\_the\\_career\\_path\\_not\\_of\\_taken](http://sciencecareers.sciencemag.org/career_development/previous_issues/articles/2100/consulting_the_career_path_not_of_taken)

<http://www.accessintel.com/products/sric/team.html>

## Investment Banking

<http://www.careeroverview.com/investment-banking-careers.html>

<http://www.nature.com/nbt/journal/v19/n9/full/nbt0901-889.html>

[http://sciencecareers.sciencemag.org/career\\_development/previous\\_issues/articles/0000/stock\\_market\\_what\\_work\\_at\\_an\\_investment\\_bank/\(parent\)/12095](http://sciencecareers.sciencemag.org/career_development/previous_issues/articles/0000/stock_market_what_work_at_an_investment_bank/(parent)/12095)

***USU Career  
Development  
Symposium***

***May 14th, 2007***

***Board of  
Regents Room***

***See Website***

***for***

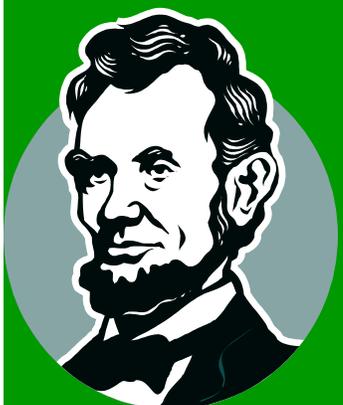
***Registration***

***Details (FREE***

***FOOD!!!)***



Washington



Lincoln



Kennedy

## Call for Nominations and Applications Graduate Student Council President 2007-2008

As you read in the President's Corner on page 1, I am nearing the end of my term as President of the Graduate Student Council. While there are no term limits for Presidents or Department/Program Representatives listed in our By-Laws, I am not running for another term as I plan to complete the requirements for my degree by the fall.

With this in mind, I am starting the call for nominations and applications process early. I want everyone to review and consider this position, its responsibility and weigh in their minds their dedication and interest in filling the President position. Whoever runs and is elected to this position should be willing to work to enrich the academic lives of all students.

Guidelines/Qualifications for President of the GSC are;

### President of GSC

- The President of the GSC also serves as the student representative to the GEC.
- There is no requirement as to which department/program the president should belong.
- The President may not concurrently hold the position of Department/Program Representative and President of GSC.
- New presidents will join the GSC before the August orientation of new students has occurred. Therefore, September will be the beginning of the yearly term for each president.
- There is no limit to the number of years a president may serve.

### Election of the president—Guidelines/Qualifications

- Any member of the Graduate Student Body who has passed qualifying exams may be elected as president of the Graduate Student Council.
- The applicant may be self-nominated, nominated by another student, or nominated by a department/program director

More of the duties/responsibilities of the President position can be found in the GSC By-Laws on our webpage: <http://www.usuhs.mil/geo/gsa/Bylaws.pdf>

Contributed by Patrick M. High, MPH

## The Spotlight is on You!



The following students have had a successful quarter outside of their labs. Congratulations!!

**Amy Starosciak**, a 2nd year Neuroscience student, gave a lecture to an undergraduate Biopsychology class at Mount St. Mary's College entitled "Consciousness, Attention, and Related Disorders."

**Bethanie Morrison**, a 4th year Pathology student, presented a poster at the annual meeting of the American Association for Cancer Research in Los Angeles, California.

**Julie Wu** (5th year MCB), **Bethanie Morrison** (4th year Path), and **Gouri Chattopadhyay** (3rd year Path) all received Young Investigative Pathologist Fellowships from the American Society for Investigative Pathology.



USUHS Graduate Student Council  
Newsletter 2006-2007

Editor-in-Chief:  
Bethanie L. Morrison

Spring 2007 Contributors:  
Jeremy Henriques  
Patrick M. High  
Bethanie L. Morrison

Interested in contributing to your graduate student newsletter? We're very interested in hearing from you! Please email Bethanie Morrison at [bmorrison@usuhs.mil](mailto:bmorrison@usuhs.mil) with any ideas, comments, or questions. Thank you!

"The graduate programs in biomedical sciences and public health in the USU School of Medicine are committed to excellence in the didactic and research training of masters and doctoral degree students. We believe graduate students comprise important and integral components of the academic mission and scholarly environment of USU."

"Our graduates are prepared for productive and rewarding careers in many areas of the biomedical sciences and public health. USU graduates serve the nation in public service, create new knowledge, train the next generation of scientists, and/or contribute to the advancement of health and science in both public and private positions."

Uniformed Services University of Health Sciences  
<http://www.usuhs.mil/geo>



## Please Join Us on May 14th for the USU Career Development Symposium!

### Schedule of Events—Board of Regents Room

See the GSC website and watch for emails from your program representatives for registration information!

10am – CV/Interviewing Skills

– Dr. Tracy Sbrocco, Associate Professor, Director, Graduate Program in Dept. Of Medical and Clinical Psychology, USUHS

10:45am – Careers in Technology Transfer

– Steven M. Ferguson, Director, NIH Office of Technology Transfer

11:15am – Careers in Patent Law

– Shailendra K. Maheshwari –Associate, Firm of Greenburg Taurig, Washington, DC

11:45am – Armed Service Recruiters (Army, Air Force presenters TBD)

12pm – Lunch

1pm – Careers in Science Writing

– Sarah Goforth, News Producer, Discovery Channel News, Silver Spring, MD

1:30 – Obtaining a Postdoc at NIH

– Patricia Sokolove, Ph.D, Acting Director, FTP, Director of Interdisciplinary Training Programs, NIH

2pm – Scientists as Teachers

– Jenny Phillips, Ph.D, Assistant Professor of Psychology, Mount Saint Mary's University, Emmitsburg, MD (USU Alumna, Dept. of Medical and Clinical Psychology)

2:20pm – Doing Science Abroad

– Heather Rogers, Graduate Student in Dept. of Medical and Clinical Psychology, USUHS

2:40pm – Careers in Science Policy

– Maria Vassileva, Ph.D, Senior Program Associate, AAAS Research Competitiveness Program,

– Laura Brockway, Ph.D, Senior Science Policy Analyst, FASEB

3:30pm – Postdoc Life at the FDA

Beth McNichol, Ph.D, FDA (USU Alumna, EID program)

3:45pm – Postdoc Life at the NIH

– John Pesce, Ph.D, NIH (USU Alumni, MCB program)

4pm – Careers in Business and the Biotech Industry

– Eric Langer, Managing Partner, BioPlan Associates Inc., Rockville, MD

4:30pm—Reception