

# The Vulcan Letter

Voice of the MSTP at the University of Alabama at Birmingham

Summer 2011



## UPDATE FROM THE DIRECTOR:

I want to begin by saying WELCOME to our new students and by giving a big THANKS to all of our current students for their efforts during the past year. Each of your unique talents and efforts are helping us achieve our goal of making the UAB MSTP one of the best programs in the country.

We have several significant changes that are occurring. First, as you all have heard, we have several people leaving the UAB MSTP family this summer. Paula will be moving with her new daughter and husband to TN and Nicholas Parrish and Mark Stoddard will be moving with their mentor(s) to U. Penn MSTP. We wish them all the best. We are currently in the process of interviewing applicants for our new Program Manager and expect to have that position filled in early summer. Second, the GBS Core courses are being lengthened by 3 weeks. This change means that the GBS Core courses now partially overlap with Fundamentals II. We are working with the medical school and the GBS Office to minimize this overlap. Finally, due primarily to the efforts of Mark Stoddard, we are quickly moving forward on the Clinical Continuity Experiences that will be offered next year to all MSTP students during their research years. Please see the article in this newsletter for additional information.

I also wanted to give you an update on recruitment. As you know, we recently initiated a multifaceted approach to making the UAB MSTP name known throughout the United States. As part of

this initiative, I would like you to continue to promote our program when you go back to your home institutions or travel to meetings. Please include a slide indicating that you are part of the UAB MSTP if appropriate. I thought you might like to see a few numbers from the most recent recruiting season to see how these new initiatives have worked.



2010-2011	Number of Applicants	M/F	States Represented	Average MCAT	Average GPA
All Applicants	273	177/96	43	31.95 (11-41)	3.63 (2.51-4)
Applicants Interviewed	42	28/14	22	34.8 (30-41)	3.81 (3.14-4)

These numbers can be compared to the 09-10 season, when we had 234 applicants, with an average MCAT of 32.9 and an average GPA of 3.63. Of the applicants invited for interview in 2009-2010, the average MCAT was 34.8 and the average GPA was 3.81. Our goal for next recruiting season is to continue to increase the number of applications to our program, to increase our national recognition, and to get the word out about how great it is to be part of our family.

Finally, I want to congratulate our students who received individual fellowships this year: Juan Calix (F31 from NIAID),

Vishnu Cuddapah (F31 from NINDS) and Heather Allen (F31 from NINDS). In addition, I want to congratulate my fantastic MSTP team (Paula, Mindy, and Lou) for the successes of our program over the past year. They all care deeply about this program and about each student's welfare and I think they, along with our students, are a significant part of what makes the UAB MSTP one of the best atmospheres for developing physician scientists anywhere in the US. Please come and discuss with me any ideas or concerns that you might have about the UAB MSTP.



# GRADUATING MSTP STUDENTS

## *Dr. Daniel Schreeder*



Daniel completed his PhD in the department of microbiology with an emphasis in immunology. His dissertation work explored the expression pattern, ligand, and function of a newly discovered immune cell surface receptor named Fc Receptor-Like 6 (FCRL6). Daniel enjoyed his time

in Birmingham and will miss our wonderful restaurants. He matched into internal medicine at Johns Hopkins Hospital. Internal medicine was the right fit for Daniel because he enjoys caring for sick adults as well as the intellectual challenge of patient management. He ultimately wants to specialize in oncology. Starting his first year back in clinics, Dr. Schreeder was torn between pediatrics and medicine, but eventually chose against pediatrics. While he likes kids, he doesn't like them as patients. He recommends that all MD/PhD students educate themselves on research track internal medicine residency programs.

## *Dr. Louisa Pyle*



Louisa completed her PhD in the integrated genetics graduate program. Her dissertation work explored ion channel physiology in cases of cystic fibrosis. Louisa, originally from the northeast, is happy she chose to spend her time with an MSTP in the south. She was very active in extracurricular

activities and rarely missed a weekend farmer's market. Louisa matched into a combined residency in pediatrics and medical genetics. She will be joining other UAB MSTP graduates, Lisa and Rizwan, at the Children's Hospital of Philadelphia. Dr. Pyle strongly recommended networking with past MSTP students during residency interviews to save money on hotels.

## *Dr. George Atkinson*



George completed his PhD in the department of cell biology. His dissertation work focused on NF-KappaB signaling in glioma cells. George loved the Magic City's great weather, and rarely missed an opportunity to zoom around town on his bike or hang out with our sizable hipster population. George

loves working with kids, and as such matched into pediatrics at Tufts Medical Center in Boston, Massachusetts. Dr. Atkinson recommended that, while not ignoring the importance of academic success, students should enjoy their time in both medical and graduate school.

## *Dr. Lisa Nowoslawski Akhtar*



Lisa completed her PhD in the department of cell biology. Her dissertation focused on the role of SOCS protein in HIV immune evasion. Lisa, a former UAB soccer player, enjoyed pursuing athletics during her time in the UAB MSTP. She loved running and actively participated in UAB

intramural sports. Lisa is joining other UAB MSTP graduates, Louisa and Rizwan, at the Children's Hospital of Philadelphia for a residency in pediatrics. Lisa strongly recommends that MSTP students take advantage of the networking opportunities being part of the UAB MSTP program provides.

## *Dr. Yawar Qadri*



Yawar completed his PhD in the department of physiology and biophysics. His dissertation focus was on finding novel inhibitors of an ion channel implicated in a variety of ailments. These ailments depended largely on the grant organization to which he was speaking. Yawar met his wife in

Birmingham, and quickly named her as his favorite thing about his time in Alabama. Dr. Qadri matched into Anesthesiology at the University of North Carolina in Chapel Hill. Yawar was attracted to the dual medical and surgical elements present in the field of anesthesiology. He was also attracted to a specialty that allowed him to work directly with his hands. Yawar advised that students remember that, while grades and test scores are very important, happiness and mental health are far more important.



### ***Dr. Jason Paik***



Jason graduated from the department of cell biology. He specialized in cancer biology with a specific emphasis on tumor suppressor regulation. Jason loved the great people and collegial atmosphere he found during his stay in Birmingham, Alabama. Dr. Paik matched into internal

medicine at Stanford University. He chose internal medicine because of how well it jived with his research interests as well as the close interaction he could still have with patients. He strongly advised students to generate a strict game plan during third year for choosing a residency. He further advised that all MSTP students take their grades and test scores very seriously.

### ***Dr. Lauren Graham***



Lauren graduated from the department of molecular and cellular pathology. Her dissertation focused on the role of Celreticulin in collagen regulation. Lauren, like many MSTP students, loved Birmingham's restaurants. She also enjoyed all the outdoor activities Birmingham's great

weather allows. Dr. Graham matched into dermatology at Northwestern University in windy Chicago, Illinois. Lauren was attracted to dermatology because of the way it combines both the medical and surgical disciplines as well as the vast opportunities for research inherent to the field. She recommended that students considering residency choose a field which inspires them intellectually and allows them the lifestyle they want. Lauren also recommended that students take advantage of the strong student and faculty support network UAB has.

### ***Dr. John Wang***



John graduated from the department cellular and molecular pathology. His primary focus was B Cell biology. John enjoyed Birmingham's beautiful sunny weather as well as the friendly people in the UAB MSTP. Because of a strong research interest, John matched into

pathology at Cedars Sinai Medical Center in Los Angeles, California. Dr. Wang was also attracted the the "relatively" normal working hours a career in pathology allows. He recommended that students entering their last year of the

program apply very broadly for residency programs. One is not required to attend every interview they are offered.

### ***Dr. Stephen Jordan***



Stephen graduated from the department of microbiology. His dissertation focused on potential malaria vaccine targets. Stephen enjoyed the low cost of living and friendly atmosphere of Birmingham, Alabama. He found it an ideal city for starting his family. Stephen matched into

internal medicine here at UAB. He also joined the growing list of UAB MSTP alumni who have entered research pathway residencies. Stephen strongly recommended that students preparing for residency consider research pathway residencies. The pathways combine a fellowship with residency and usually have an enormous amount of protected research time, thereby aiding a burgeoning physician scientist's path toward independent investigation.

### ***Dr. Chris Yuskitis***



Chris graduated from the department of cell biology. His dissertation focused on the role of Glycogen Synthase Kinase-3 in neurological disease. As with many MSTP students, one of Chris's favorite things about Birmingham was the restaurants. He also enjoyed Birmingham's

diversity, describing it as a place that had "a little to offer everyone." Dr. Yuskitis matched into child neurology at Beth Israel Deaconess Medical Center in Boston. Chris was drawn to child neurology because of how perfectly it sat at the intersection of his clinical and research interests. Chris stressed a careful step-wise approach to choosing a residency. He advised considering a resident's lifestyle, one's long term goals, as well as one's "gut feeling." Chris's final piece of advice was to not overly stress about the individual hurdles one has to overcome in the process of becoming a resident.



# 2011 UAB MSTP INCOMING STUDENTS

Sini Nwaobi

## *Sergey Antipenko*



Sergey graduated with a B.S. in Biochemistry and a B.S. in Biophysics from the University of Alabama at Birmingham in 2011. While at UAB he worked as a chemistry TA as well as participated in the technology honors program. His major research interests include tissue engineering and prosthetics. His past research included work on tissue regeneration using peptide amphiphiles. When he isn't working in the lab, Sergey remains active with TaeKwonDo.

## *Ryan Berry*



Ryan graduated in 2011 with a B.S. in Biochemistry and Spanish from Utah State University. His research interests include x-ray crystallography, diabetes and obesity. He has studied the structure-function of protein tyrosine phosphatases. Ryan stays active outside of science as a Spanish interpreter and oncology camp counselor. He also enjoys ballroom dancing.

## *Joshua Cohen*



Joshua graduated with a B.S. in Neuroscience from Muhlenberg College in 2011. His main research interests include molecular and behavioral neuroscience. He has studied the behavioral and molecular differences in response to intracerebroventricular injections of corticotrophin-releasing hormone. Outside of the lab, Joshua enjoys playing ice hockey and ultimate Frisbee.

## *Alex Dussaq*



Alex graduated from University of Nevada-Reno with a B.S. in Biochemistry and Mathematics in 2010. His main research interests include bioinformatics and computational biology. He has previously worked on isolating nitrifying archaea. Alex enjoys competing in math and science including the iGEM competition and Putnam Math competitions.

## *Anna Joy Graves*



Anna obtained her B.S. and M.A from Boston University in Epidemiology and Medical Anthropology. Her main research interests include nutritional, maternal, and fetal medicine. Her previous work has focused on the effects of cultural evolution and environment on pregnancy cravings as well as cross-cultural variations in the portrayal of pregnancy.

## *Vincent Laufer*



Vincent graduated from Notre Dame in 2005 with a B.A. from the Program of Liberal Studies. His research interests include neuroscience, oncology, and infectious disease. His previous work has included the effects of neonatal injury on stress response and automation of forward genetic screens in *C. elegans*. Vincent enjoys tutoring chemistry and has developed a YouTube science education channel.

## *Elizabeth Ma*



Elizabeth graduated from the University of California-Berkeley with a B.A. in Molecular Cell Biology in 2009. Her main research interests include tissue engineering and regenerative medicine. Previously, she has worked on determining an optimal injectable matrix for osteochondral implants from stem cells. Outside of the lab, Elizabeth remains active as the conductor of the Berkeley University Chamber Orchestra. She also competes in Wushu, a Chinese martial art.

## *Alice Weaver*



Alice graduated from the University of Georgia in Athens with a B.S. in Genetics in 2010. Her main research interests include genetics, gene therapy, and cancer biology. She has studied the synthesis, trafficking, and function of non-coding RNAs. Outside of the lab, Alice enjoys playing tennis on the USTA women's tennis team.



# THE GRIFFIN SOCIETY AND THE CLINICAL MENTORSHIP STEERING COMMITTEE

Stephanie Brosius

As MD/PhD students, we learn early on in the program to strike a balance between graduate courses and medical school, swapping two separate ways of thinking and problem solving regularly. However, after transitioning to our doctoral research there are few resources or courses focused on maintaining or improving the clinical and reasoning skills we've worked so hard to develop during our first two years of medical school. This can make the transition back to clinical rotations a stressful experience as the out-of-practice MD/PhD returns to the clinic alongside the latest group of freshly trained traditional medical students.

This is where the Griffin Society hopes to come in. When it was originally formed, the Griffin Society was envisioned as an organization dedicated to "promote interactions between MSTP students, residents and fellows with interests in biomedical research, and MD/PhD faculty" and to "help MSTP students to understand the clinical context of their research and enable them to form contacts with people at more advanced stages of training." Pursuant to those goals, the Griffin Society student representatives and the society's newly formed Clinical Mentorship Steering Committee is working to bring you new resources and a new class to help maintain clinical skills. All entering classes beginning in 2009 will be required to participate in this course, but it will also be open to all students in their graduate years. We'd like to encourage all to take advantage of this opportunity.

Students will be required to attend 20 half day clinics over the course of four years (five per year): half designed on reinforcing taking a clinical history and physical (H&P) and presenting the relevant data to a clinician through an oral presentation or write-up, and half designed to allow the MD/PhD student to shadow a specialist on the job. The program is designed to allow for scheduling flexibility, but optimally four of the H&P clinics would be saved for the final doctoral year so that those skills are fresh upon returning to medical school. Preceptors for H&P sessions, termed Physical Diagnosis

Mentors, will be internal medicine residents at UAB. The other ten clinic sessions are dedicated to shadowing faculty to help students decide what specialty they might want to pursue since the number of clinical rotations available to MD/PhD students can be limited compared to traditional students. The faculty on the Clinical Mentorship Steering Committee span a wide variety of fields in medicine and have each recommended colleagues who they feel exemplify the principles of good clinical practice and interest in medical research to serve as Clinical Specialty Mentors. Shadowing these mentors will enable students to see what physicians in various fields of medicine do without having to independently look for mentors. Furthermore, if a student feels especially interested in a specific specialty, the Clinical Specialty Mentors will help guide the student in the specifics of their specialty including how to make their resume more competitive and what are the challenges and benefits of their field.

The Griffin Society student representatives and faculty of the Clinical Mentorship Steering Committee are working to create a database of Physical Diagnosis Mentors (residents) and Clinical Specialty Mentors (faculty) before the end of 2011, so watch your inbox for announcements about this new program. We are excited about this initiative and hope that it will seriously improve the rocky return to clinics, perhaps even giving each of us the advantage of a little more experience and a better understanding of our own interests.

Griffin Society student representatives

Mark Stoddard

Stephanie Brosius

Heather Allen

Any questions regarding this new course may be directed to the Griffin Society student representatives.



# MSTP STUDENT NEWS

Jennifer Hadley

## *Science:*

- Brian Warmus (G2) was an author of an article titled, "Bidirectional axonal plasticity during reorganization of adult rat primary somatosensory cortex" in the April 2011 issue of Brain Research (Brain Res. 2011 Apr 28;1387:46-60. PMID: 21362411)

- Evan Thomas (G2) received a 2011 Radiological Society of North America Medical Student Research Grant for his project titled "Utilization of Dual Energy CT for Treatment Planning Scans in Patients with Metal Artifact".

- Eva Clark (MS4) and Ryan Wells (G5) were named as Fogarty International Research Scholars for 2011-2012.

- Asher Albertson (G4) won best oral presentation in the long-term research category at the 2011 UASOM Medical Student Research Day with his presentation, "HCN channels constrain network activity".

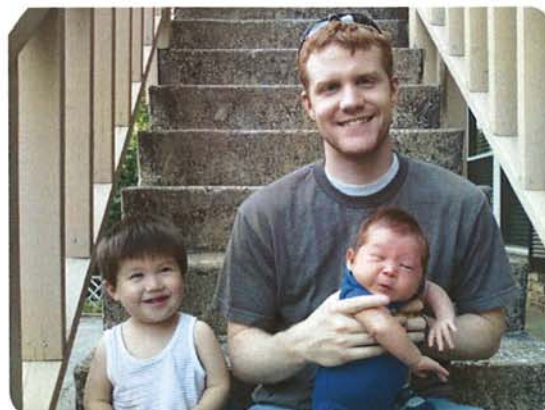
- John Jarboe (G3) won best oral presentation in the intermediate-term research category at the 2011 UASOM Medical Student Research Day with his presentation, "MARCKS can regulate glioma cell migration, proliferation, and radiation sensitivity"

- Congratulations to Alexander Bray (MS2), Daniel DiToro (MS2), David Figge (MS2), Jon Lockhart (MS2), Jeff Singer (MS2), Sara Stone (MS2), and Steven Witte (MS2) for completing their first year in the MSTP!

- Congratulations to Stephanie Brosius (G1), Mika Guzman Karlsson (G1), Travis Hull (G1), Jason LeGrand (G1), Jarrod Meadows (G1), and Jennifer Stanley (G1) for being done with Step 1! You made it!

## *Family:*

- Mark Stoddard (G2) and his wife Willow, along with their son Liam, welcomed the newest addition to their family, Evan Jihoon Stoddard, on April 28, 2011.



- Paula Willey Adams and her husband Kevin welcomed their first child, Chaney Annaleigh Adams on ---, 2011.



- Zachary Dobbin (G2) will wed Johanna Fasshauer on July 2, 2011, in Dickerson, MD.



- Ryan Corrick (G4) and his fiancée, Katie Wilson, plan to wed in October of this year, after which time he will adopt her 9 year old son Taylor.



- Juan Calix (G4) and his wife Marla are fostering a new puppy, Leuko.



- Congratulations to Stephanie Brosius (G1) and Brandon George on their engagement!



### ***Fun:***

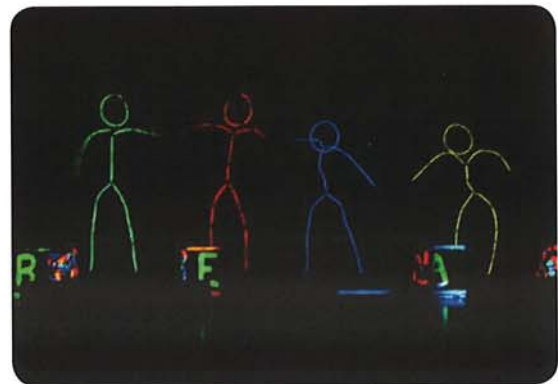
- Evan Thomas (G3) completed the 2010 Iron Man Cozumel Triathlon in November 2010.



- Brian Warmus (G2) and his family welcome their newest addition - Poppy, a chocolate lab.



- Brian Warmus (G2) and Mika Guzman Karlsson (G1) performed at UASOM's Annual Skit Night and were selected as the Best Live Act.





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ALABAMA AT BIRMINGHAM

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**The UAB MSTP would like to thank the following for their important contributions to *The Vulcan Letter*:**

UAB Printing Solutions

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