Accepted applicants return for Second Look and join in honoring MS4s at the Senior Recognition Dinner

-Brian Liu
Second Look Committee Chair 2014-15

Second Look 2015 was one of the largest in recent history, with a total of 32 applicants participating. The research interests of the prospective class ranged from Biomedical Informatics to Molecular Genetics, with heavy representation from Immunology, Biomedical Engineering, and Neuroscience. This was certainly a talented group as well, with interests ranging from Irish dance to rock piano to brewing. Many applicants fought through weather delays to arrive on Thursday, February 26th. Current MSTP students welcomed them with a tour of Pittsburgh housing options before taking them to a coffee social hosted by the Women and Science and Student speakers at the Graduate Recognition Dinner: Uzoma Iheagwara (MS4), Niyathi Hegde Shah (MS3), Josiah Radder (G2), Gil Hofman (MS4), Cecilia Hofman (MED’18), Annie Liu (G2), John Kang (MS4), Liang Kang (MS4), and Jeff Wong (MS4)

Students thank Dr. Manjit Singh for almost two decades of service to the MSTP

This June, Dr. Manjit Singh will be leaving her current position as Administrative Director of the MSTP. During the eighteen years that she has held this position, she has played a central role in the training of several generations of MSTP students. Most of us were probably contacted by Manjit for the first time when we received our invitations to interview with Pitt-CMU’s MSTP and from that point on, she has been there to help with every major requirement and transition in our MSTP lives. For many alumni reading this newsletter, she has likely served as your liaison to the program even after you have moved on to residency and beyond.

See Manjit continued on page 4...
Medicine Association. Dr. Steinman graciously invited the group to his house for dinner, where the cake really took the cake.

The applicants tackled a full day of talks, panels, and faculty meetings on Friday before joining the MSTP class at the annual Second Look and Senior Recognition Banquet, held in the Hall of Sculpture at the Carnegie Museum of Art. The graduating class took this opportunity to show the incoming class the kinds of stories and memories you will create as a member of the program through short slide show presentations.
I write in appreciation of student involvement in our MSTP. It has been a great asset to have student leaders participate in our monthly MSTP administrative meetings. This not only helps us to follow student suggestions and concerns, but also provides a critical conduit for actions to strengthen our program. Science is evolving rapidly in both the depth and breadth of discovery and in how experiments (both at bench and in silico) are executed. The diagnosis and treatment of disease is also evolving, with more solid footing in preclinical science. It is therefore critical for MSTP training itself to innovate, both in content and in how best to build skills that will propel meaningful and productive careers. Your involvement at all stages of the program, through committees, course feedback, and suggestions to your career advisors and to the program will help our MSTP evolve. Student involvement in MSTP activities keeps us from having to guess what is working and what is not—this is appreciated!

From the Administrative side, I am delighted to share that Dr. Joanne Flynn has now joined Ken Hallows and Russell Schwartz to make an outstanding Co-Director team for our program. Joanne is world-renowned for her groundbreaking tuberculosis research, is experienced in training outstanding scientists, and is the PI of a highly successful T32 grant on Immunology in Infectious Disease. Joanne has served the MSTP as a career advisor, as a frequent participant in teaching MSTP courses, and as a valued member of the MSTP Promotions Committee. She will work with Program Directors to offer you the strongest possible affiliated faculty, not only in their outstanding science but also in their commitment to and skill in mentoring.

Lastly, all of our appreciation is due to Dr. Manjit Singh, who is retiring as Administrative Director this summer. Manjit has been a great asset to our program and a key driver of its success over the past 18 years. Her dedication to the MSTP and its students has been remarkable and unwavering. She has frequently extended herself to an extraordinary degree to tackle challenges confronting students, whether by preparing students’ F30 budgets, managing myriad details for events including Second Look and retreats, facilitating the logistics of medical-graduate-medical school transitions, and in managing the T32 grant. Manjit is remarkable in keeping specific details at her fingertips that she uses with her expert knowledge of how to get things done. All best wishes go with her.
As Dr. Clayton Wiley, who worked with Manjit as Director of the MSTP from 1997 to 2012, stated in his farewell note, “Manjit quite simply made the Pitt-CMU MSTP happen.” From helping students navigate the complicated waters of medical school and graduate school requirements to her critical role in the planning of annual retreats and second look events, she has long served as a cornerstone of our MSTP student community. Similarly, she has played a major role in assisting the Director and Co-Directors with important administrative duties such as maintaining continued training grant funding, making our program, as she describes in her own words, “one of the finest MSTPs in the country.” Of course, these are only a few examples of the myriad responsibilities Manjit has had during her tenure as Administrative Director. As students, members of student committees and currently in our role as MSTP Student Committee co-chairs, we, like many of you, have always been impressed by Manjit’s dedication to students as both individuals and future physician-scientists. We’d like to take this opportunity to thank her for this dedication and for her years of service to the Pitt-CMU MSTP. Although we’ll be sad to see her leave our program, we wish her the best of luck in her future endeavors.

A TRIBUTE TO THE GRADUATING SENIORS
-Dr. Richard Steinman MSTP Director

Each year at the Senior Recognition Dinner, Dr. Richard Steinman composes a witty sonnet with a verse dedicate to each of the graduating seniors to recognize and honor their accomplishments during their time in the program. This year’s sonnet is published below.

I

Rachel Stopczynski Gupta showed how nerves in pancreatic cancer triggered pain. In Boston now, her humanism serves nonprofits. Peds will be Rachelle’s domain.

Lolita N. uncovered aging’s score: the whisper of translation gone to sleep to lullaby of miR’s baton. No snoring in her work. Int. Medicine’s her leap.

Psychiatry. The shine of chandeliers in brains’ dark rooms. The neural circuits seeding schizophrenia. A landscape where Gil Hoffman’s kind of brilliance will succeed.

These MSTP seniors graced our school with humor, smarts, and insights beaming joules.

II

Chlamydia, that unexpected guest, seduces neutrophils to stick around, as Lauren Frazer showed. Her work addressed the whole immuno dance. She’s ID bound.

Jeff Walch and Brian Rosborough are stars of transplantation immunology; MDSC’s and tales of T’s that jarred the status quo. So plastic surgery and pulmonology can hear their song. Another maestro of the host defense (by interleukin-18) is Jeff Wong. Oncology draws Jeff—this goal makes sense—New immuno-treatments make cancer swoon. Now we have to adapt—they leave so soon!

III

With judgment (and with baking) Liang drew such deep respect from all she oversaw as program rep. First Service prize. She knew her future in Pathology would draw from research she did on fibrotic paths. But how do tugs and stretches of a cell link to its many parts? John Kang used math to model every move. After Pitt, he’ll meld his stethoscope with slide rule (what are those?). Uzoma I.’s provocative research: can viral-tickled T cells in kids close the door on cancer risk? Could be. He perched at podiums and made the case. All fine physician scientists. All midnight shine.

IV

Of old, capricious spinning wheels sowed sleep or activated golden genes in straw. Now, nano-spinning fibers alchemy: make MSC’s from stem cell fate withdraw, in chondrocytic dance choreographed

Ablaze with future. Training done? Started, just?

DR. AND MRS. HAMILTON GENEROSLY FUND NEW SERVICE AWARD

Dr. S. Sutton and Carol Hamilton, who so generously established the Hamilton award in recognition of outstanding research by a MSTP student, have offered additional support to the MSTP for recognition of students who have improved the program through their volunteer activities. The Carol and S. Sutton MD Outstanding Service Award will be given at the Annual MSTP retreat to a student who has stood out in the past year for extraordinary work in leading, planning and/or performing activities that have strengthened the program as a whole and benefited the student body. We appreciate the generosity of Dr. and Mrs. Hamilton and their continued interest in our program.
The University of Pittsburgh’s Women in Science and Medicine Association (WSMA) was excited to collaborate with the Biomedical Graduate Student Association to sponsor its third annual conference: “Doctoral Directions: Learning to Lead in Biomedicine.” This forward-looking program, held March 5-6, 2015, opened on Thursday evening featuring two exciting keynote talks. Joanne Kamens, PhD (Executive Director at Addgene) spoke about active networking and how to practice networking throughout training. Wiley “Chip” Souba, MD (Dean Emeritus of The Geisel School of Medicine) delivered a compelling speech on how to “Level the Playing Field” in the arena of leadership! Students were seated in multidisciplinary groups over dinner to encourage the exchange of ideas. Students were also able to interact with local faculty leaders who graciously volunteered their time to facilitate active mentoring. Thursday evening culminated in a panel discussion with local biomedical experts on work-life balance and leadership in the workplace.

Friday’s day-long program featured leadership development activities beginning with a dynamic keynote address from Dr. Kamens on practical ways to achieve work-life balance. This was followed by an interactive leadership session from Dr. Souba who discussed how to look at leadership training and development outside of traditional leadership methods in a talk entitled “Flipping the Leadership Paradigm.” Following the keynote addresses, students engaged in an interactive communication lunch with table topics relevant to their training and prepared for afternoon breakout sessions. Breakout sessions were hosted by Ora Weisz, PhD (Professor and Vice Chair of Faculty Development, Department of Medicine), Marion Skalweit, MD, PhD (Assistant Professor of Medicine and Biochemistry, Case Western Reserve University), and Angela M. Gronenborn, PhD (UPMC Rosalind Franklin Professor and Chair, Department of Structural Biology), who spoke about effective interviewing strategies, time management techniques, and transdisciplinary research, respectively. The afternoon concluded with a mentorship workshop entitled, “How to Be an Effective Mentee” lead by Doris Rubio, PhD (Professor of Medicine, Biostatistics, Nursing, and Clinical and Translational Science) and Linda McAllister-Lucas, MD PhD (Chief of Hematology/Oncology and Associate Professor of Pediatrics, University of Pittsburgh School of Medicine). Finally, students had the opportunity to share their scholarly work at the Doctoral Directions poster session and abstract competition.

Altogether Doctoral Directions is an evolving trainee-focused experience that aims to facilitate long-term career accomplishment and satisfaction. WSMA as an organization seeks to enhance the professional development of graduate and medical students, male and female alike. We encourage you to stay current with WSMA activities by subscribing to our RSS feed on our website http://students.medschool.pitt.edu/wsma/ and following us on Twitter (@PittWSMA) and Facebook (PittWSMA). Please contact us at wsma.pitt@gmail.com for any comments and suggestions.
Alumni Feature: Dr. Judson Englert ('11) and Dr. Corrine Kliment ('11)

Judd Englert and Corrine Kliment met in Tim Oury’s lab as MSTPs, received PhDs in Cellular and Molecular Pathology in 2009, and went on to couples match in Internal Medicine at Brigham and Women’s Hospital in 2011. Now married, the two are currently completing fellowships at Johns Hopkins Hospital (Judd in Medical Oncology and Corrine in Pulmonary/Critical Care Medicine). They recently welcomed their son Brayden, who seems to be well on his way to joining the Pitt-CMU MSTP Class of 2044.

What were some of the important factors for you in choosing a residency?

JE: After both the residency and fellowship matches, I have come to realize that there is no “perfect” program. For me it really came down to three factors: work environment, location, and future career opportunities. When you are working 80 hours a week, the support of your co-workers and administration gets you through those challenging days. It is also important to live somewhere where you have the support of friends, family or both. Finally, it is important to make sure that people who graduate from your program are going on to the type of careers that you are interested in.

CK: The most important factors for me were: 1) finding a program with great clinical training that opens future career opportunities, 2) location, location, location, and 3) finding a place that would become family. Residency training can be some of the most challenging (and rewarding!) years because of the long hours, extremely steep learning curve and important career decisions that are made. The clinical training will shape you as a physician and build your clinical knowledge base, often to its peak level in a general area. Regarding location, we were willing to move to a new city for 3 years but wanted to be able to get to family easily in our very limited vacation days! We were also open to moving again for fellowship and at that time considered cities and institutions where we would be happy being young faculty and potentially starting a family. Finding a program that is a “family” was important because you need the support of your colleagues and it makes your time fun and memorable! Finally, as a couple, one of the most important factors for residency and even more so for fellowships, was finding programs that would foster both of our careers. The Brigham and Women’s Internal Medicine program in Boston will forever be a family and home for both of us!

Have your clinical or research goals changed since graduating from the MSTP?

JE: My career goals have not changed much over the last four years. I remain committed to a career studying the pathophysiology of lung cancer and treating patients afflicted by the disease.

CK: My career goal remains to become a physician-scientist at an academic institution doing basic science and remaining clinically active in the ICU. Clinically, during residency I was considering cardiology versus pulmonary and critical care medicine and ultimately chose pulmonary. I fell in love with the intensity and intellectual challenges of ICU care. Though I studied pulmonary fibrosis during my PhD, I have changed disease focus to COPD but remain very interested in the pathogenesis and therapeutics for pulmonary disease. While my research has remained in pulmonary medicine, it definitely does not have to be as a physician scientist. You should follow your interests and passions, which may change as you progress through residency.

Have you had the opportunity to do research during your training so far? How has this shaped your plans for the future?

JE: Since the changes in resident work hours, there has been a significant loss in the amount of research time during residency, making it very difficult to complete any significant basic science project. I elected to use the short period of time to explore leadership and management through a training track available at my program. As part of this, I took classes and participated in workshops to better understand healthcare administration and worked with a small group of my peers on a project to improve the safety and patient satisfaction associated with hospital discharges. While this is not directly relevant to my future career plans, it provided me insight into an aspect of healthcare that I had never before explored.

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See Alumni continued on page 7...

Judd and Corrine on their wedding day in Pittsburgh in 2011
My oncology fellowship consists of 1 clinical year followed by 2 years dedicated to research. I plan to focus both my clinical and research career on lung cancer. I am currently working to choose a research laboratory for my post-doctoral work. After completion of the fellowship I’m hoping to spend ½ day of week in the direct care of patients and the rest of my time starting an independent research career.

CK: Our residency program encouraged everyone to complete research during your training, but I also found it difficult to complete basic bench science during residency because of the intense clinical time demands and other activities (e.g. chief residency, Medical Leadership Track). However, I was able to get some exposure to a small clinical project that will result in a publication. Your research choice should ideally represent your clinical interests, especially if you are looking towards continuing on to a fellowship.

During fellowship, I have chosen to go through my research years first then complete my clinical year at the end. This has allowed for more flexibility and will hopefully make for a smooth transition for applying for early career grants and moving into a faculty position. My post-doctoral laboratory has expertise in a number of areas that are distinct from my prior training. This will enable me to combine my expertise to advance pulmonary research in new ways. After fellowship, I would like to join the faculty of an academic institution and remain clinically active in the ICU and with patients with obstructive lung disease. My vision is to focus on translational work through patient-care driven research and research-driven patient care. Pulmonary and Critical Care medicine is an open field for biomedical discoveries, novel therapeutics, and new clinical initiatives to improve care.

Do you have any advice for current students?

JE: It is important to create a balance between your personal life and work. This becomes even harder when being pulled by both clinical and research demands. It is important to put yourself into an environment that recognizes and supports these challenges. One of my mentors recently told me “Your papers won’t give you hugs.” While this might sound cliché, it is important to surround yourself with like-minded individuals.

You are likely still not as large as you think – you may cross paths with those people in the future! You will also get a great sense of the “institutional culture” and who your colleagues will be. Again, it will become a new family for you!

JE: Regarding starting a family, there is never a “good time” but we definitely put some thought into it. Having a child during residency would have been really challenging given that both of us were going through training. With fellowship, we have had more flexibility during the research years that made it feasible. I also found a lab that is tremendously supportive with maternity leave and starting a family.

The alumni offered their advice to current students and answered audience questions about completing the MSTP, choosing residency programs, balancing medicine, research, and home life, and establishing an academic career.

The current students learned a lot and took away some great pieces of advice from the panelists. Hearing from former MSTP students at various stages in their post-MSTP careers was motivating and appreciated by all in attendance.

If you are a Pitt-CMU MSTP alumnus and would like to participate in an MSTP event or share your news in our newsletter, please email our Alumni Chair, Alexis Chidi, or Communications Chair, Beth Oczypok.

More Alumni News: Three Graduates Sit on Alumni Panel During February Workshop

On February 18th, Dr. David Levinthal (’06), Dr. Vivek Patel (’14), and Dr. Peter Vosler (’10) were featured in a panel during the monthly MSTP Workshop. All three physician-scientists currently work at the University of Pittsburgh. Dr. Levinthal is an Assistant Professor of Internal Medicine in the Division of Gastroenterology, Hepatology, and Nutrition. Dr. Patel is completing a transitional year at Shadyside Hospital before beginning his residency in Radiology at Stanford University this summer. Dr. Vosler is a PGY4 Otolaryngology Resident.

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If you are a Pitt-CMU MSTP alumnus and would like to participate in an MSTP event or share your news in our newsletter, please email our Alumni Chair, Alexis Chidi, or Communications Chair, Beth Oczypok.
**Meet Our New Co-Director: Dr. Joanne Flynn**

![Joanne Flynn, PhD](Image)

1. What would you like to contribute to the MSTP as you take on a co-director position?
   JF: Most importantly, I want to contribute to building this into the best MSTP possible. I want to help to facilitate student involvement in the MSTP and help Dr. Steinman showcase our program for the students, applicants, faculty, and funders.

2. What motivated you to become involved with the MSTP?
   JF: I have been involved in the MSTP as a Selection Committee member and a Career Advisor, among other roles, for many years. I enjoy working with such bright, committed, motivated and interesting students. I like watching students mature and make serious contributions to biomedical science.

3. What do you feel are the most difficult challenges for current MD/PhD students or recent graduates, and how will you help students navigate these challenges as a co-director?
   JF: At this point, I am still learning the concerns of the students, faculty and administration, so I can’t fully answer that question. However, integrating students from every year into the student organizations is important, as the students play a major role in the program. I am happy to provide some ideas about that. I think defining a career path for MSTP students is daunting, especially in the early years. Identifying the best use of their limited time in terms of career opportunities and areas for growth is important. Preparing for the increasing difficulties in securing funding and even publishing high impact papers is also a key area of concern for students. I hope I can be of some help in listening to the student concerns and providing advice. I also know that life/work balance is an issue for MSTP and beyond as they begin their post-MSTP training. I have been a professor and mother of 3 for many years, and hope that I can provide insight on that front.

4. What do you like to do for fun/in your free time?
   JF: In my free time, I enjoy cycling, running and reading. I also enjoy good food and wine! I have 3 kids (20, 17, and 12) so that keeps me busy. My oldest daughter is a special needs child, blind with cerebral palsy, and so navigating the challenges of that is pretty time-consuming. My other two kids are very involved in school and sports. I love going to every single sporting event of theirs. Raising kids is a whole lot of fun!

5. Anything else you’d like to comment on?
   JF: I look forward to the challenges and joys of interacting with the MSTP students, faculty and administration. As we begin the process of our T32 grant renewal, there will be many new things to learn and many areas where I hope to contribute. I also look forward to meeting the MSTP students that I have not already met. I am sure I can learn a lot from each of them!

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**The Biomimetic Drug Delivery Group: “Little” is the New Big**

*Jim Fisher (G4)*

**Graduate student, Little Lab**

*Steven Little, PhD*

**Life in the Lab**

Given the accolades received by Dr. Little and the various members of the research group, new students are generally somewhat intimidated, and have the assumption that the lab is hypercompetitive and malignant. However, almost everyone is very much surprised that this is the furthest thing from the truth, as the graduate students and senior staff are incredibly cohesive (both professionally and personally). Collaborations and new ideas are just as common as happy hours and potluck dinners (maybe more so the latter than the former).

Learn more about the Little Lab: [http://www.littlelab.pitt.edu/](http://www.littlelab.pitt.edu/)
CONGRATULATIONS TO ALL OF OUR MSTPS!

NEWLY FUNDED FELLOWSHIPS

Jared Moreines
Mentor: Anthony Grace, PhD
Afferent Circuitry of Dopamine Dysregulation in Depression
(F30, NIMH)

RECENTLY AWARDED PHDS

April 2015:

Mark Langhans
WDPCP affects skeletogenesis via the hedgehog pathway
Advisor: Rocky Tuan, PhD
(Molecular Genetics and Developmental Biology, Pitt)

Emily Rosenberger
Psychosocial factors and mobile health intervention: impact on long-term outcomes after lung transplantation
Advisor: Mary Amanda Dew, PhD
(Clinical and Translational Science, Pitt)

Daniel Simmonds
Protracted development of brain systems underlying working memory in adolescence: a longitudinal study
Advisor: Beatriz Luna, PhD
(Neuroscience, Pitt)

Adrienne Taren
Prefrontal regulatory mechanisms of mindfulness and stress reduction and links to markers of health
Advisor: Michael Tarr, PhD
(Neuroscience, Pitt/CMU)

Jared Moreines (G3) married Laura Tycon on December 6, 2014

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^ Eric Zimmerman (G2) married Carey Rieser (MED ‘15) on April 25, 2015

^ Alex Kikuchi (G2) proposed to Jeannette Guarriello (SHRS ‘13) on March 14, 2015.

^ Uzoma Iheagwara (MS4) married fiancée Becky Bayer on April 25, 2015

Taylor Eddens (G2) proposed to girlfriend Katie Ryan (DENTAL ‘14) on November 8, 2014. They are planning a wedding for August 27, 2016 (not pictured).

Josiah Radder (G2) > and his wife, Anna, welcomed a baby girl, June Caroline, on December 19, 2014.

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Samples of Recent MSTP Publications


Oczypok EA, Milutinovic PS, Alcorn JF, Khare A, Crum LT, Manni ML, Epperly MW, Pawluk AM, Ray A, Oury TD. Pulmonary receptor for advanced glycation endproducts promotes asthma pathogenesis via IL-33 and accumulation of group 2 innate lymphoid cells. J Allergy Clin Immunol. 2015 (Accepted)


The MSTP retreat will be held:
July 9-10, 2015
Salt Fork, OH

This will be a joint retreat with
The Ohio State University MSTP

The 60th Annual Scope and Scalpel presents:

“Modern Family Medicine”
May 15, 2015, 7PM
May 17, 2015, 2PM

Central Catholic High School Theater
4720 Fifth Avenue, Pittsburgh, PA 15213

Tickets on sale now:
http://scopeandscalpel.org/

Upcoming Events

May 2015
13th: MSTP Workshop, 5pm (MS4)
15th & 17th: Scope and Scalpel
18th: Graduation

June 2015
1st: New MS1 class reports

July 2015
9th & 10th: MSTP Retreat

University of Pittsburgh - Carnegie Mellon University
Medical Scientist Training Program
526 Scaife Hall
3550 Terrace Street
Pittsburgh, PA 15261
Telephone: (412) 648-2324
Email: mstp@medschool.pitt.edu