“If a cluttered desk is a sign of a cluttered mind, of what, then, is an empty desk a sign of?”

-Albert Einstein
The 2016 annual MSTP retreat was held August 19-21. On Friday morning at Scaife Hall, we heard from Dr. Steinman about the state of the program and celebrated the 10-year anniversary of the Dr. and Mrs. S. Sutton Hamilton Award, which is awarded each year to a senior student who has made significant contributions to the scientific literature during his or her graduate career. To celebrate this occasion, we were joined by Dr. and Mrs. Hamilton as well as by four alumni Hamilton Award winners: Aaron Secrest (2011), Corrine Kliment (2010), Sherrie Divito (2009) and Jared Knickelbein (2008). Corrine was joined by husband Judd Englert (Pitt MSTP 2011) and their 1.5-year old son, Brayden. Alumni shared a few words about their career trajectories and offered advice to current students. Dr. Hamilton joined Dr. Steinman to present this year’s Hamilton Award to Taylor Eddens, who recently defended his thesis in Immunology in the lab of Jay Kolls. The Carol and S. Sutton Outstanding Service Award, also funded by the Hamilton Family, was awarded to Jared Moreines for his work with the MSTP and medical school curriculum committees. Finally, the William E. Brown Mentorship Award was awarded to Dr. Gustavo Rohde, thesis advisor to MSTP student Shinjini Kundu, who spoke eloquently about Dr. Rohde’s balance between providing direction and encouraging intellectual independence.
Aaron Secrest, MD, PhD. Hamilton Awardee, 2011
Aaron graduated from the Pitt/CMU MSTP in 2012. He completed his PhD in Epidemiology under the guidance of his advisor Dr. Trevor Orchard in the School of Public Health, and studied “Mortality Trends in a Population-based Type 1 Diabetes Cohort.” He then went on to complete an intern year at Cincinnati Children’s Hospital Medical Center, followed by residency in dermatology at the University of Utah. He completed residency in 2016 and is currently a clinical instructor in the Department of Dermatology at the University of Utah, studying how to optimize patient outcomes with cost-effective care. He is happily married with 6 children.

Sherrie Divito, MD, PhD. Hamilton Awardee, 2009
Sherrie graduated from the program in 2011. She studied how recipient dendritic cells dictate allograft fate in organ transplantation with Dr. Adrian Morelli, and received her PhD in Immunology. She then spent her intern year at Brigham and Women’s Hospital, and completed the Harvard Combined Dermatology residency program in 2015. She is now an instructor and physician at Harvard Medical School/Brigham & Women’s Hospital and is continuing her research in basic and translational immunology.

Corinne Kliment, MD, PhD. Hamilton Awardee, 2010.
Corinne graduated from the Pitt/CMU MSTP in 2011. She received a PhD in Cellular and Molecular Pathology for her work with Dr. Tim Oury, studying “Extracellular superoxide dismutase, oxidative stress, and extracellular matrix syndecans in pulmonary and cardiac fibrosis.” She went on to complete residency in Internal Medicine at Brigham and Women’s Hospital in 2014, and is currently a Clinical Fellow in Pulmonary & Critical Care at Johns Hopkins University. She is conducting her fellowship research with Dr. Douglas Robinson in cell biology. She is happily married to Judd Englert (see below) and they have a beautiful 1 year old son Brayden.

Judd Englert, MD, PhD.
Judd graduate in 2011 along with his wife Corinne. He also worked with Dr. Tim Oury in Cellular and Molecular Pathology, producing “A pathophysiologic evaluation of the receptor for advanced glycation end products (RAGE) in the lung.” He went on to complete residency in Internal Medicine at Brigham and Women’s Hospital in 2014, and is finishing up his fellowship in Hematology-Oncology at Johns Hopkins University. He has accepted a position at MedImmune and is excited to continue working on tumor immunology in industry.

Jared Knickelbein, MD, PhD. Hamilton Awardee, 2008
Jared graduated in 2010 and completed his PhD in Immunology with Dr. Robert Hendricks, studying “Noncytotoxic lytic granule-mediated maintenance of HSV-1 neuronal latency.” He completed residency in Ophthalmology at the University of Pittsburgh, and currently works at Retina Vitreous Consultants. He is happily married and has 2 children.
Following the morning presentation, students and faculty attended a poster session given by MS1, MS2 and G1 students, and short talks by graduate students. Alumni guests, students and program leadership then headed to Hidden Valley Resort, about an hour southeast of Pittsburgh, for the remainder of the weekend. Over an outdoor dinner, we became acquainted with the incoming MS1 class, who introduced themselves with a personalized parody of Bon Jovi’s “Living on a Prayer” (“woah, we’re 2% there...”). We heard words of wisdom from our graduating MS4s, and a bonfire and s’mores were enjoyed by all! On Saturday morning, we highlighted students’ recent personal and professional milestones and accomplishments, and were pleased to receive updates from the six children of current MSTP students! Our five attending alumni participated in an insightful and encouraging Q&A panel, answering students’ questions and giving advice on making the most of Pitt’s MSTP training, which they repeatedly praised as top-notch! Dr. Steinman shared details of the program’s very positive T32 5-year renewal results and Dr. Flynn and Dr. Schwarz addressed career advisor- and CMU-specific questions, respectively.

Specialty Sessions
• Choosing a PhD Advisor
  Hosted by: Patricia Castillo and Mirana Culley
• Clinical Research During the PhD Years –
  Hosted by: Ben Rothraff and Colin Beckwitt
• Balancing Clinical and Research Endeavors Post-MSTP
  Hosted by: Aaron Secrest and Jared Knickelbein
• Effective Science Communication with a Lay Audience
  Hosted by: Elliot Collins and Jared Kopelman
• Managing the Transition Back to 3rd Year
  Hosted by: Beth Oczypok and Josh Sturm
• Work-Life Balance as a Physician-Scientist
  Hosted by: Corinne Kliment and Judd Englert

Our retreat programming closed out Saturday night with dinner at the Ski Lodge and a keynote address by Dr. Terry Dermody, the new Chair of Pediatrics at Children’s Hospital of Pittsburgh. Dr. Dermody recently came to Pittsburgh from Vanderbilt University, where he served as the Director of the Vanderbilt University MSTP for the past 13 years. His talk, titled “A Way Forward for Physician-Scientists” challenged students to address head on the lack of diversity in medicine and science and to work toward scientific progress while always keeping in mind that “the patient in front of you” is the most important.

- Colleen Judge and Alexander Kikuchi, Retreat Committee Chairs

“I loved having the alumni present at the retreat! They represented the wide array of the possibilities available after the MD/PhD program.”

- Atinuke Dosunmu-Ogunbi
WELCOME CLASS OF 2016

Michael used us all in his study
On pupillometry, now no one can see. Can’t see
Roger found T cells in transplants
Now he hasn’t left the lab in 3 days for data, for data

Helene has seen Dave Matthews three times
And Ansen just runs everywhere she goes all summer
Ali loves the cavaliers
They won the finals, for the first time in history, in history

Wes has got to hold on to the sulfate he’s got.
When he spills it on himself he says it’s really hot
Sam’s got his coffee
Wait, he just spilled it again
But he gave it a shot!
Whooa, we’re 2% there
Whoooo, livin’ on a prayer

LIVIN’ ON A PRAYER

Take my hand, we’ll make it we hope
Whooa, livin’ on a prayer

Paulo really likes his bikes
He can probably ride back home to Tennessee
For Alex data falls into his lap
Because he studies epidemiology
Eileen’s lighting up the brain to see,
To find pain pathways because that’s the key.

Andrew dreams of going to Darragh
he does blots in the night,
Roger whispers “that’s what’s up,
That’s what’s up”

Ananya has got to figure out what’s wrong with her gels
And Bryan spent all day imaging his cells
And we wrote this song to help you all
Get to know The MS-1’s!

Whooa, we’re 2% there
Whoooa, livin’ on a prayer
Take my hand, we’ll make it we hope
Whooa, livin’ on a prayer

Adapted from “Livin’ on a Prayer” by Bon Jovi

Top: Andrew Gutierrez, Eileen Nguyen, Ananya Mukundan Middle: Ansen Burr, Alison Butler, Helene Altmann, Alexandar Layden Bottom: Roger Tieu, Michael Granovetter, Wesley Brown, Samuel Dienel, Bryan Hurttle Not photographed: Paolo Vignali
Second Look 2016 was one of our largest second look weekend so far, as we welcomed over 30 accepted applicants back to Pittsburgh! Students arrived on Thursday morning, and after a quick lunch embarked on a housing tour featuring apartments in Shadyside, Squirrel Hill, East Liberty, and Oakland. This quick introduction to a few major residential neighborhoods helped attendees get a sense for the student life in Pittsburgh and the unique charms and quirks of each neighborhood.

After an afternoon of apartment hopping, our accepted applicants joined current MSTP students and faculty for a casual, welcoming dinner at Dr. Steinman’s home in Point Breeze, followed by a fun night of bowling at Arsenal Bowling Lanes.
Friday started off on a more serious note, with talks from Senior Vice Chancellor for the Health Sciences and Dean of the School of Medicine, Arthur Levine, MD, as well as the Assistant Dean for Student Affairs and Director of Diversity Programs, Chenits Pettigrew, PhD. Our student committee chairs and other current students formed a panel to answer questions about academics, work-life balance, and clinical and research opportunities at Pitt and CMU. Our prospective students then had lunch with graduate program directors in their departments of interest, followed by individual faculty meetings and lab tours. These fruitful sessions helped students begin to think about their choice of mentor for their first lab rotation and explore potential projects for the summer.

A long afternoon of research meetings gave way to a well-deserved break with a cocktail hour and dinner in the gorgeous Hall of Architecture at the Carnegie Museums of Art and Natural History. An annual tradition, the Senior Recognition Dinner brought our whole program together to celebrate the graduating seniors and their accomplishments.

Saturday marked the conclusion of our Second Look program. As a final fun event, MS2s Adriana Johnson and Lloyd Harvey put together a scavenger hunt for the accepted applicants to explore the lively Strip District. Featuring such Pittsburgh staples as the Wigle Distillery, P&G Polish Deli, Enrico Biscotti, and Mon Aimee Chocolate, the scavenger hunt showcased a variety of shops, restaurants and bars that make the Strip District a vibrant shopping and eating destination. A delicious conclusion to an exciting Second Look weekend!

-Laura Molina

Second Look Committee Chair:
Lloyd Harvey
Recently Awarded

**Wonjae Chung, PhD**  
Neuroscience  
Thesis Advisor: David Lewis, MD

**Xuan Ding, PhD**  
Bioengineering  
Thesis Advisor: Kang Kim, PhD

**Taylor Eddens, PhD**  
Immunology  
Thesis Advisor: Jay Kolls, MD

**Matt Geramita, PhD**  
Neuroscience  
Thesis Advisor: Nathan Urban, PhD

**Shinjini Kundu, PhD**  
Biomedical Engineering, CMU  
Thesis Advisor: Gustavo Rohde, PhD

**Johannes Kutten, PhD**  
Cellular and Molecular Pathology  
Thesis Advisor: Jeffery Isenberg, MD, MPH

**Josiah Radder, PhD**  
Cellular and Molecular Pathology  
Thesis Advisor: Steve Shapiro, MD

**Ben Rothrauff, PhD**  
Cellular and Molecular Pathology  
Thesis Advisor: Rocky Tuan, PhD

**Bo Wang, PhD**  
Bioengineering  
Thesis Advisor: Joel Schuman, MD

**A NOTE FROM THE DIRECTOR**

This has been a busy year for our MSTP with much to celebrate and more positive news to anticipate. Our new class of 13 incoming and one internal student bring tremendous talent and drive to the program and an esprit de corps that was evident (musically) this August at our Annual Scientific Retreat. At that retreat, beautifully planned by Colleen Judge and Alex Kikuchi with Phuong Pham’s staff support, we were lucky to host a cadre of distinguished alumni recipients of our annual Hamilton Research Award sharing the craft of steering a physician scientist trajectory after medical school. A key message that I heard from these remarkable (though over-modest) MD-PhD’s was that they identified personal goals and worked hard to find the resources, time, and relationships to drive their agenda and the flexibility to develop new career or scientific passions in the face of serendipitous opportunity. It was a year in which we formed an External Advisory Board of Drs. Parkos, McManus, Szabo and Portera-Cailliau whom we look forward to helping our program and engaging with our students in future visits. It was a year in which 54 of our alumni stepped forward and offered to mentor MSTP students interested in their fields.

This was a year in which many of our students blossomed as master communicators. The narrative included the story of our research that compelled the F30 study sections to applaud, with 7 new F30/F31 grants and at least 3 more with fundable scores. The scientific community benefited also from an award-winning review article, journal or conference interviews or editorials by our students. Streaming throughout, the quanta of student manuscripts spattered the scientific literature with light. And the public, through Scientific American, through television coverage, or through Women in Science and Medicine meetings had a healthful dose of MSTP insights. The beautiful new MSTP website arranged by Phuong entices an applicant pool to investigate our program.
This was the year when our MSTP submitted its 5-year renewal proposal to NIH—an opportunity to take stock of our strengths, weaknesses and progress since 2011. The review process allows us to shine and to measure our program based on an expert outside perspective. Most telling were comments in the review about our students: “bright, articulate and engaged with a good view of where they are heading in the future. They have a very high success rate with national fellowships.” Site visitors were impressed that our students were “very high quality... articulate and passionate about their research and career goals.”

In the view of the NIH review panel, our program distinguished itself by the exceptional research opportunities for students both at CMU and Pitt, the outstanding medical environment, interdepartmental and theme-based graduate programs, student productivity, the time (7.7 years on average) to dual degree, the career advisor and longitudinal clinical clerkship (LCC) structure, our workshop format fostering cohesion and the role and the involvement of students in shaping the program and its activities. “The panel had only minor concerns,” generally related to prior instances of below-goal matriculation that have largely been resolved. Altogether, our T32 renewal received a score of 23, reflecting the outstanding evaluation.

With the help of our students and the exceptional and dedicated faculty supporting the program, we look forward to building on these strengths. We plan further enhancement of our curriculum to ensure that all trainees have substantive skills in biostatistics and bioinformatics, under the leadership of MSTP Co-Director Russell Schwartz. With the help of Co-Directors Joanne Flynn and Paul Monga, students can ensure that their career advising meetings and LCC experiences are as robust and beneficial as possible. Ultimately, the MSTP exists to support each student through their dual degree training and to convey the tools needed to flourish in their physician scientist career. I have been impressed as well by how our students help each other. We hope that our current students can look back and say, like one of our alumni “the Pittsburgh MSTP is a very special family that can continue to support each other at all stages of training, which is what makes it so great!”

-Richard Steinman, MD, PhD
MSTP Director

**Awards**

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<thead>
<tr>
<th>Name</th>
<th>Institution</th>
<th>Date</th>
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<tbody>
<tr>
<td>Colin Beckwitt</td>
<td>NCI</td>
<td>September 2016</td>
</tr>
<tr>
<td>Annie Liu</td>
<td>NIDCD</td>
<td>July 2016</td>
</tr>
<tr>
<td>Nolan Priedigkeit</td>
<td>NCI</td>
<td>July 2016</td>
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<tr>
<td>Randall McAuley</td>
<td>NCI</td>
<td>April 2016</td>
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<td>Johannes Kutten (F31)</td>
<td>NIBIB</td>
<td>January 2016</td>
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<tr>
<td>Soma Jobbagy</td>
<td>NIDDK</td>
<td>September 2015</td>
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<td>Eric Zimmerman</td>
<td>NIMH</td>
<td>September 2015</td>
</tr>
<tr>
<td>Alex Kikuchi</td>
<td>NIDDK</td>
<td>June 2015</td>
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<tr>
<td>Jared Moreines</td>
<td>NIMH</td>
<td>February 2015</td>
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