PENNDERM

SKIN BIOLOGY & DISEASES RESOURCE-BASED CENTER

Inside This Issue:

FALL 2019

INSIDE THIS ISSUE

A

B

C

D

Did you know?

A collection of large paintings lines the hallway of the Dermatology offices on the tenth floor of the Biomedical Research Building (BRB II/III). These paintings are of influential figures to the history of Penn Dermatology. Each painted by a different, prolific artist of their time, these pieces represent a unique part of the Department's history. Be sure to check them out next time you're in the BRB!

A: *Dr. Albert Kligman*
B: *Dr. Donald Pillsbury*
C: *Dr. Walter Shelley*
D: *Dr. Gerald Lazarus*

CHAIRMAN'S MESSAGE

A note from Dr. George Cotsarelis, MD, Milton Bixler Hartzell Professor and Chairman of the Department of Dermatology at the University of Pennsylvania Perelman School of Medicine

Dear Friends and Colleagues,

Penn Dermatology continues to lead in research, clinical care, and education. In this issue, we pay special tribute to the efforts of our faculty and staff providing world-class training to our resident physicians and doctoral trainees. Our program cultivates the future leaders of dermatology.

We first acknowledge the immense impact of Dr. William James on our residency training program. During the last twenty-five years, Dr. James transformed our dermatology residency curriculum and elevated our program into the one of the finest in the world. As he shepherded the program into the 21st century, he helped to develop many future leaders in our field, including Drs. Misha Rosenbach and Sara Samimi, who as the new Residency Program Director and Associate Program Director, respectively, will lead us into the future.

We also highlight Elizabeth Grice, PhD, and David Margolis, MD, PhD, who now co-direct our NIH T32 training grant that provides training for doctoral and postdoctoral students pursuing a career in dermatologic research. The T32 grant is in its 36th year of funding from the NIH and has supported virtually every research faculty member in our department. This grant forms the foundation for our research training programs and strengthens our resources for our students and trainees.

As we are committed to training the next generation of scientists and physicians, we believe we are in a position to increase their diversity. For the fourth consecutive year this upcoming Spring we will host the Penn Academy for Skin Health (PASH). PASH aims to provide local high school students with hands on experience in dermatology, basic laboratory skills and, importantly, to begin building support through a network of both peers and mentors throughout the Department, School of Medicine and University communities. We continue to work with local Philadelphia high schools to recruit driven and exceptional applicants who may one day enter the field of dermatology.

The success of our training program depends on the dedication of our faculty, our excellent administration and staff, the rich variety of patients and cases referred to us by the community, NIH grant funding, philanthropic support, state of the art research and clinical facilities, and a pipeline of superb students and trainees. We are fortunate to have strengths in all of these areas and we greatly benefit from the engagement of our alumnae. We offer the opportunity to pay it forward!

I invite each of you to join me in celebrating the end of another great year at Penn Dermatology and wish you all the best for a happy, healthy holiday season and New Year.

Sincerely,

George Cotsarelis, MD
Milton Bixler Hartzell Professor and Chair

PENN ACADEMY *for* SKIN HEALTH

The Penn Academy for Skin Health (PASH) will be hosted by Penn Dermatology for its fourth consecutive year in the Spring of 2020. Funded by a grant through the University of Pennsylvania's Skin Biology and Diseases Resource-Based Center, PASH aims to provide students with a greater understanding of dermatology, laboratory techniques, and biomedical ethics. For four consecutive Saturdays, PASH students participate in educational lectures followed by laboratory instruction. Students learn the ins-and-outs of dermatology and basic skills of laboratory work. They work hand-in-hand with Penn Dermatology attending physicians, researchers, and students. Exceptionally motivated students are hired as summer interns in labs at both Penn Dermatology or Thomas Jefferson University. Students who participate in the internship regularly have such positive experiences that they return in subsequent years, often to the same labs.

PASH alumni gain a support network of peers and mentors through the Department, the School of Medicine, and the University as a whole. Mahir Johnson, a past PASH student, two-summer internship awardee, and current Temple University student had this to say:

"The most special memories from PASH and my summers interning were the relationships I formed with everyone involved – it felt like a second family to me. Everyone was so connected and worked together so well. It was a great overall experience."
Gaining that support system is integral for students being introduced to the medical and research fields. Through PASH, students have the opportunity to learn in a supportive environment with their peers and gain experience as a group. Most end up maintaining those relationships after completing PASH.

Many PASH students continue on to a college major in the STEM field, with career goals of medicine or research. They all attribute their time with PASH as a key factor in solidifying that decision. Megan Shelton, a current freshman at the University of Pennsylvania on the pre-med track, talked about her experience:

"It's rare to find a program so perfect for me and specific to my passions. I was so interested in being a part of the field to begin with, and PASH reinforced my interest in becoming a dermatologist. I gained valuable exposure to the specialty through PASH and learned more not just about the superficial aspects of the field, but the actuality of doing both clinical and research work."

The robust curriculum of PASH is continuously evolving in order to expose PASH scholars to cutting-edge topics that influence the practice of dermatology and laboratory investigations. For example, a recently incorporated module on health disparities in dermatology highlights sociocultural impacts on health care, and the avoidable health differences in skin diseases and their burden, especially among racial and ethnic minorities. Kaylah King, a PASH scholar and a current freshman at Temple University pursuing a major in

"I learned so much that has prepared me for college. I learned about time management, organizational skills, and how to study effectively. I feel more prepared than other students in my college classes, because I have already been exposed to some of the materials and lessons being covered in my Biology class and lab."

Mahir Johnson, PASH Alumni, Summer Internship Awardee (2018, 2019)

Health Professions with the ultimate goal of becoming a physician's assistant in dermatology, was particularly impacted during the health disparities module:

"When Dr. Junko Takeshita lectured to us, I discovered a passion for epidemiology and studying how certain health factors are more prevalent in different populations. Dr. Takeshita studies eczema and brought in a woman who was misdiagnosed for years because of her race, and I became particularly interested in how healthcare is affected by sociocultural factors."

Students who participate in PASH are introduced to college-level laboratory techniques, and gain a level of familiarity in the lab that prepares them for future educational endeavors. Mahir recounts:

"I learned so much that has prepared me for college. I learned about time management, organizational skills, and how to study effectively. I feel more prepared than other students in my college classes, because I have already been exposed to some of the materials and lessons being covered in my Biology class and lab."

Vitally important to the success of PASH are the cohort of student and faculty volunteers who make the whole venture possible. Laurice Flowers, PhD, a post-doctoral fellow in Dr. Elizabeth Grice's lab, and DJ Moran, a PhD student in Dr. Sarah Millar's lab, have volunteered with the program since its inception. Dr. Flowers said:

"I was impressed by the students' level of curiosity toward skin and skin health and research. It was really fun to work with a group of youth so excited about research. The enthusiasm they bring to the department and the space is an inspiration."

DJ had similar experiences:

"I love the moment when we first take the students into the lab. Many haven't been in one before. I was particularly struck by the moment when one student first used a pipette and described it as 'the coolest thing ever.' I use a pipette almost daily in the lab, and being able to see one of my everyday tools through the eyes of PASH students was so refreshing and inspiring."

So many have volunteered to play a role in PASH that sometimes there is even an overabundance of offers. In Spring 2020, PASH will host its largest cohort yet, consisting of 12 students. PASH students will embark on the summer research experience with a strong science foundation, lab skills, and an eagerness to contribute. The Program is seeking more labs to serve as summer placements; if you are interested in hosting a summer intern, please email **Dr. Jamie Shuda** at **jshuda@sas.upenn.edu**.

Pictured Above (Left):
A PASH student working in the Penn Derm labs; ***(Right):*** *PASH students working on a project with DJ Moran, a graduate student in Dr. Sarah Millar's lab*

MEDICINE & MENTORSHIP: A PENN DERM RESIDENCY

As the Penn Dermatology Residency leadership shifts gears, core values remain intact

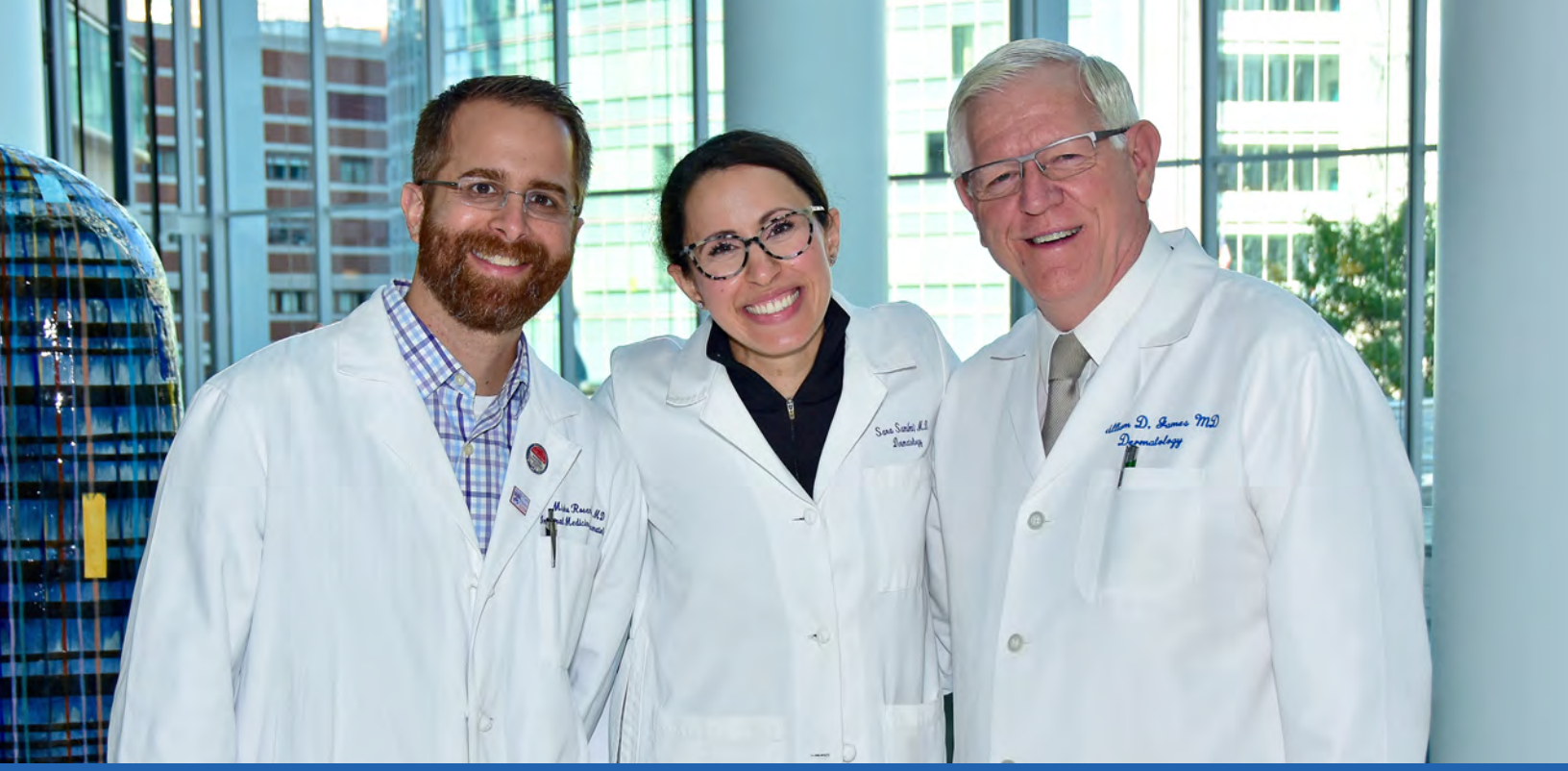
"I suppose I've always really enjoyed academics and teaching," shares Dr. William James, MD, Director of Education. Simply looking around Dr. James' office tells the impressive story of his 25-year tenure at Penn Dermatology. Medical texts, some of which he's written, adorn the shelves and pictures with former students cover every available inch of a file cabinet near the back. He has trained well over a hundred residents during his impressive career at Penn and stays in contact with many of them.

Dr. James earned his Medical Degree from the Indiana University School of Medicine, and for the majority of his medical training was totally undecided about which specialty to pursue. He says, "I had mainly considered internal medicine until I was introduced to dermatology through a classmate. It wasn't a required rotation, so I didn't know much about it, but I learned that there are many internal medicine-type problems in this field." After completing his residency at the Letterman Army Medical Center, he served as a physician at Walter Reed Army Medical Center for 12 years, the last eight of which he served as the Chief of Service and residency program director.

Dr. James then arrived at Penn Dermatology, and for the past 24 years he has been our Director of the Penn Dermatology Residency program. During this time, the Department has grown in both size and expertise. The residency training program has always been strong, but during this time it has excelled and now consistently ranks among the top few in the nation. The applicant pool continues to grow more impressive every year. Under Dr. James' leadership, we have recruited and trained exceptional physicians and physician-scientists in the field, many of whom are world-renowned. Graduate residents of our program populate the faculty at Harvard, Penn, Johns Hopkins, MD Anderson, Dartmouth, Yale, University of California, San Francisco, Penn State, Northwestern, New York University, Ohio State, Emory, the National Institutes of Health, University of Texas at Austin, Medical College of Wisconsin, Washington University, and the Universities of Washington, Pittsburgh, Vermont, Colorado, Connecticut, South Carolina and Massachusetts. Additionally, some enter private practice to become pillars of community medicine.

He dutifully served in this role up until this past summer, at which point Dr. Misha Rosenbach assumed the position of Director of the Residency Program, and Dr. Sara Samimi joined on as the Associate Director. This new leadership team, each former Penn Dermatology residents, considers Dr. James' mentorship as a key contributing factor to their career success.

"Our Department's residency training is so strong because of the impactful leadership of Dr. James," says Dr. Sara Samimi. Dr. Samimi completed both her MD



and dermatology residency at the University of Pennsylvania, and Dr. James is a stand-out role model to her. She continues, "I only hope that Dr. Rosenbach and I can come close to filling the enormous shoes we've stepped into." Dr. Rosenbach adds, "Our program is very selective, and everyone who applies is just so talented. We get several hundred applicants each year, and then have to narrow that down to the five or six who we feel are the best fit for our culture and training. The residents who come through Penn Dermatology are the best of the best."

In addition to Dr. James' undeniable mentorship, Dr. Rosenbach also accounts much of his decision to become a focused inpatient dermatologist to the guidance of Dr. John Stanley, MD, whom he cites as being the reason he even committed to the field. He recalls, "I found dermatology very late during medical school, and was fortunate that Dr. Werth and the Penn Dermatology Department had recently created a dual-residency in internal medicine and dermatology. Going through residency, Dr. Stanley was incredibly supportive of my decision to focus on inpatients." On the future of the program, he adds, "We want to provide that same level of guidance for our current and future trainees that Drs. James, Stanley, and Cotsarelis have long supported--we take these pluripotent stem-cell residents and train them into fully specialized and accomplished physicians and dermatologists."

Both Drs. Samimi and Rosenbach have worked closely with Dr. James to ensure a seamless transition for both residents and faculty. They aim to further incorporate hands-on training and resident involvement in curriculum tailoring during their tenure as directors. Dr. Samimi continues, "I was Chief Resident when I was a third year at Penn, and as Chief Resident you're very involved in curriculum development and determining what content will be most relevant for your cohort's learning. Now, I'm also the Director of Quality and Safety for the Department, and through that I'm able to develop a quality improvement curriculum for both our residents and the American Academy of Dermatology. I've remained involved in curriculum planning since my time here as a resident. It's so important to let the residents be able to determine some of what they want to learn, and I hope to further that option for our current resident physicians."

Brittany Oliver, MD, second year Penn Dermatology resident, shares that, "the interactions with faculty and current residents on my interview day made it clear that coming to [Penn Dermatology] would give me the ability to train in the type of progressive and collegial environment that would both motivate me and accommodate my learning style." She also notes that the guidance and mentorship within the Department are superb: "the opportunities and resources here are endless – for every tough or complex patient I see in my resident clinic, I know exactly whom in the department I can approach for guidance."

Pictured Above (from L-R): *Misha Rosenbach, MD, Sara Samimi, MD, William James, MD.*

Christoph Ellebrecht, MD, currently a second year resident, appreciates the close relationships he's been able to form with his direct advisors and with his co-residents. He shares, "Earlier this year, my family suffered an unfortunate personal loss. During this time, my fellow residents, chiefs, program leadership, and everybody in the Penn Derm family provided me unbelievable support and kindness. Words cannot describe how grateful I felt to have these people in my life." Dr. Ellebrecht, who completed medical school in Germany, said that it was a talk given by former Penn Dermatology Chair, Dr. John Stanley, that ignited his interest in studying at Penn. "When I was a medical student in Germany, Dr. John Stanley gave a talk within our department. I was so impressed by his eloquence and passion for his research that I decided to send him an email to ask if I could complete a research fellowship at Penn. Dr. Stanley connected me with Dr. Aimee Payne, who provided me plentiful opportunities to grow and develop my scientific skills."

Mohammed Dany, MD, PhD, first year resident, adds, "The Department fosters excellence in clinical training, supports research endeavors, and has outstanding mentors, many of whom are leaders in the field. I'm also impressed with the enormously diverse research environment, from basic science to clinical research and epidemiology." He continues, "One goal of residency is to show trainees that the medical landscape is not fixed or rigid, but rather flexible, and that flexibility can be an advantage to us as dermatologists. As residents, we are the future of the field, and our work will directly affect patients' clinical care."

One particular asset of a Penn Dermatology residency, where students can gain experience in varying medical landscapes, is through our resident exchange programs. Since the late 1990s, Penn Dermatology and Keio University Dermatology in Tokyo have had an exchange program involving faculty and residents. Notably, the Department increased its commitment to global education and healthcare advocacy, specifically in Botswana and Guatemala, through a resident training/exchange program under the umbrella of the Penn Global Dermatology Program. The Botswana-UPenn Partnership (BUP) was formed in 2001 in an effort to combat the spread of HIV/AIDS in the country. Since 2006, Penn Dermatology, under the leadership of Dr. Carrie Kovarik, in collaboration with the Botswana Ministry of Health and the American Academy of Dermatology, has participated in a thriving resident training and exchange program there. Yearly, around 15 US and Canadian dermatology residents, many of whom are from Penn Dermatology, are offered the opportunity to learn from this exchange. *Philanthropic support of this program from resident alumnae has been critical for its success.*

> *We take these pluripotent stem-cell residents and train them into fully-specialized physicians and dermatologists.*

Similarly, a Penn-Guatemala Partnership has deep roots in global and community health-related endeavors, and also depends on philanthropic funds. This Partnership goes back over 100 years, beginning with the work of the Penn Museum in Guatemala, and in 2005, the Penn-Guatemala Health Initiative was formed with a strong Penn Dermatology presence. In 2012, Dr. Rudolf Roth led a dermatology-specific collaborative effort with INDERA, the main Latin American residency training program for Central America. Twice yearly, our physicians, residents and fellows venture to underserved areas of the country to provide dermatologic care and assist in the training of Guatemalan dermatologists and healthcare workers. Furthermore, Penn Dermatology regularly hosts faculty, students, and trainees from either program in an effort to provide a valuable experience in cross-cultural medical learning and competency. In both initiatives, residents and fellows acquire hands-on training while dealing with many community-specific diseases in a real-world global health setting. In addition to a global health specialized residency track, the Department offers a specialty track in Healthcare Leadership in Quality (HLQ), a combined residency in internal medicine and dermatology (Med/Derm), a basic science or epidemiology research track and a focused residency track in cutaneous oncology.

Medical resident education through the University of Pennsylvania Department of Dermatology has a rich, diverse and long history. Of course, the Perelman School of Medicine, known as the University of Pennsylvania School of Medicine, is actually the oldest medical school in the United States, and once stood at the corner of 8th and Pine in what's currently Old City, Philadelphia. From its onset, the School of Medicine was a leader in student physician bedside clinical training. Pennsylvania Hospital, founded by Benjamin Franklin, was used by the University of Pennsylvania School of Medicine,

"Most of the special memories I have made here involve time spent with my incredible co-residents, including but not limited to: karaoke nights, baby showers, hearing everyone's interesting life stories at resident retreat, apple blasters at Linvilla Orchards, and axe throwing at Bury the Hatchet (very therapeutic, 10/10 would recommend)."

Brittany Oliver, MD, PGY3

making it the first teaching hospital in America. In addition to being the first medical school in America, the School of Medicine was the first to establish medical specialty training in neurosurgery, ophthalmology, radiology, and of course, dermatology.

The first course in diseases of the skin was given at the School of Medicine in 1868 by Dr. H. Lenox Hodge, MD. The University of Pennsylvania was then moved to its present location in the 1870s, where it established The Hospital of the University of Pennsylvania (HUP)—the first teaching hospital built and operated by a medical school in the United States. Soon after, Dr. Louis Adolphus Duhring, founded the nation's first department of dermatology in 1874—known today as Penn Dermatology. Dr. Duhring was a pioneer in dermatology and his vision for the Department and legacy as a Penn benefactor significantly contributed to the development and growth of Penn Dermatology into its present world-renowned stature. As exemplified by Dr. Duhring, the tradition of excellence and mentorship has stood the test of time, as the Hospital of the University of Pennsylvania consistently ranks among the best in the nation. The diversity of residency training programs offered, however, has since grown from humble beginnings, and is now arguably the strongest it has ever been.

"I frequently get such nice messages from past residents, reaching out to tell me about an achievement or award they have received, or just an update about their family or work," says Dr. James. I guess I've played a role in a lot of residents' lives, and all have been a big contributor to my happiness. I've been so incredibly lucky."

Evidently, the Department has drawn exceptional mentors over the years whose guidance and insights have resonated with younger generations, like Dr. Rosenbach and Dr. Samimi, who will now do the same for our residents today and those to come. The recognition our program has received is a testament to the quality of training and exceptional talent of both our residents and faculty, proving that medicine and mentorship truly go hand in hand.

Pictured Above (from L-R):
Mohammed Dany, MD, PhD (PGY2);
Brittany Oliver, MD, (PGY3);
Christoph Ellebrecht, MD, (PGY3)

ALUMNI Q&A: E. MICHAEL KRAMER, MD

E. Michael Kramer, MD was a dermatology resident with the University of Pennsylvania, Perelman School of Medicine from 1983-1986. Following his residency, he spent 9 years in private practice before pursuing a fellowship in dermatopathology at Jefferson Medical College. Currently, he is the Vice President of Pathology and Medical Services for Dermpath Diagnostics and Ameripath at Quest Diagnostics. He manages the medical affairs of eleven dermatopathology, and almost thirty anatomic pathology, laboratories—staffed by over four hundred pathologists. He splits his time between Newtown Square, PA and Salt Lake City, UT, and remains involved with Penn Dermatology though the Botswana-UPenn Partnership.

Q: ***Why did you choose to go into Dermatology?***

A: I pursued medicine for similar reasons to other physicians; I wanted to be in a helping profession, and I had an interest in and aptitude for science. In dermatology, one has the option of a wide range of practice options, including: medical dermatology, surgical dermatology, dermatopathology, and cosmetic dermatology. I focused on pursuing an outpatient specialty, since I was looking to avoid a hospital setting. Dermatology and dermatopathology are very visual, cognitive specialties; that's certainly part of my skill set. My switch from dermatology to dermatopathology, nine years out of residency, was related to my desire for a new challenge.

Q: ***What do you love about what you do currently?***

A: I enjoy being part of an executive leadership team. I find interacting with corporate support functions, as well as laboratory leaders, to be highly rewarding.

Q: ***Do you have any contributions or accomplishments in your career of which you are particularly proud?***

A: The fact that I have been with the same dermatopathology practice and chain of companies for many years. Managing physicians, particularly in large numbers, is not an easy task. I have been successful in leading professional medical organizations from both a medical quality and business perspective.

Q: ***How do you see the scope of medicine in the near future, specifically for dermatopathology?***

A: Since 2012, the payers have continually reduced reimbursement. This has necessitated continuous efficiency improvements, which is not possible for many labs. As a result, there will be consolidation in pathology.

Another significant change is digital pathology, which will present challenges in the short term, but opportunities in the long run. Digitalization of data will help to drive continued advances in personalized, targeted therapy for cancer. Digital pathology will enable artificial intelligence and machine learning. It is difficult to

Pictured Above: *Dr. E, Michael Kramer, MD, former Penn Dermatology Resident from 1983-1986*

predict the timeline, but the future of anatomic pathology will certainly be different than it has been for the past one hundred-plus years.

Q: ***Do you have any specific passions?***

A: My wife and I have a continuing connection to the Dermatology Department through our work with the Botswana-UPenn Partnership and Carrie Kovarik, MD. About 15 years ago we began donating to help fund residents traveling to Botswana for their month-long rotations. That evolved into travel expense support for full-time Penn faculty to lead the Botswana-UPenn dermatology program (Tori Williams, MD and Amy Forrestel, MD).

Q: ***Do you have advice for current medical trainees?***

A: Keep an open mind. The possibilities are limitless, and it is just a matter of what you can imagine. Openness allows you to be ready when something new and exciting comes your way.

THE SPIRIT OF GIVING

Pictured Left (from L-R): *Amy Gwynn, Erica Dougherty, Erin Coonelly, Dr. Thuzar Shin, and Dr. Joseph Sobanko presenting a check for $7,000 to the Abramson Cancer Center*

This past October, Dr. Joseph Sobanko celebrated a milestone birthday with a silent auction at his villa party. The proceeds of the event were dedicated by the Division of Dermatologic Surgery to the Abramson Cancer Center's (ACC) Innovation and Discovery Fund. The Campaign provides critical support for high-risk, high-reward novel research across the Cancer Center by bringing new treatments from bench to bedside as quickly as possible.

The donation was made in honor of the care Dr. Stephen Schuster and the Lymphoma team successfully provided for his grandmother in 2017. He, his grandmother, and family were thrilled with the outcome and care she received. Dr. Sobanko has been a member of the Abramson Cancer Center since 2010 and he plans to continue to advocate for the ACC in the future.

SBDRC TUTORIAL VIDEOS

The Penn Skin Biology and Diseases Resource-Based Center (SBDRC) is building a collection of scientific and dermatology-specific online lectures! Topics so far include videos on statistical analyses, clinical trials, and the human microbiome! More exciting topics are coming soon.

These lectures are free and available to all! Please check out the link about if you're interested in learning more.

https://dermatology.upenn.edu/sbdrc/informational-videos/

PENN DERM IS EXPANDING!

Penn Dermatology is always expanding! Soon to join our Penn Derm practices in Radnor, Bucks County, Cherry Hill, Woodbury, University City, and at the Perelman Center is a brand new location at Pennsylvania Hospital (PAH)!

Slated to open in the new year, the PAH location will feature general dermatology as well as Mohs services.

Bucks County

Radnor

Perelman Center

TRAINING SPECIALIZED SCIENTISTS: PENN DERM'S DOCTORAL TRAINEES

Diverse nature of human skin draws basic science doctoral trainees to study in Penn Dermatology

Penn Dermatology offers a unique opportunity for basic science PhD students to pursue their dissertation studies in our cutting-edge dermatology laboratories. Students primarily come from graduate programs across the Medical School, notably from Genomics and Computational Biology, Cell and Molecular Biology, and the Immunology Graduate Group.

Students select a principal investigator (PI) and a lab in which to do their dissertation research after several rotations. "The point of the lab rotations is to make sure we can match students to good training environments in their area of research interest," says Dr. Elizabeth Grice, Associate Professor with tenure at Penn Dermatology. Dr. Grice continues, "Penn Dermatology is unique in that PhD students can train for their basic science degrees in a clinically-oriented department. This collaborative approach to PhD training is reflective of the cutting-edge and impactful research that's occurring in both the field and in our labs."

Dr. Grice co-directs the NIH T32 Dermatology Training Grant, which funds 3 doctoral students and 4 postdoctoral fellows. It also establishes infrastructure for training activities, including seminars, invited speakers, and a Trainee Research Symposium. She assumed the role this past year, after Dr. Sarah Millar's departure, and is eager to lead the program into the future. The grant is funded by the National Institute of Arthritis, Musculoskeletal, and Skin Diseases (NIAMS), and entered its 36th year of funding this past May.

The fact that Penn Dermatology has about ten doctoral trainees in its labs is unique for a clinical department. Dr. David Margolis, Professor with tenure and co-director of the Department's T32 training grant believes that this translational education not only contributes to our strength as a department, but also to the field at large. He says, "the goal is not just to produce research and breakthroughs to make Penn Dermatology look good, but ultimately to push cutaneous research forward." In addition to PhD trainees, the T32 grant also supports postdoctoral trainees in their pursuit of a graduate degree in the Master of Science in Clinical Epidemiology (MSCE).

Dr. Margolis is also greatly supportive of the collaborative nature of our training, noting that, "some of the doctors' research in our department focuses on topics traditionally unconventional to dermatology. For example, Dr. Elizabeth Grice studies the microbiome and Dr. Brian Capell researches genomics and epigenetics. Our Chairman, Dr. George Cotsarelis, was the physician who first pioneered the understanding of hair follicle stem cells and wound healing. We had never looked at that before and we should have."

Furthering the spirit for an innovative educational

environment, Dr. Brian Capell, MD, PhD, Assistant Professor, shares, "Ten to fifteen years ago, you wouldn't have had close to the number of doctoral trainees in a clinical environment that we do in our labs...Dr, Cotsarelis has really tried to bring research training into close alignment with aspects of clinical training. It's much easier said than done, but we try our best to give the students that real-world exposure in some way. Whether it's through collaboration with interested companies or industry, we want them to have access to things outside the lab."

In Young Lee, a current third year Cell and Molecular Biology PhD student with Dr. Todd Ridky's Lab, says that this ability to study a diverse range of topics is what appealed the most to him when choosing Dermatology after his rotation. He says, "my eventual goal is to work in pharmaceuticals and drug development, and the translational experience from Dr. Ridky's lab will help me to do that. He's very supportive." In Young recalls another rotation while he was deciding between departments, and says "this other department was more focused on basic sciences and there were almost no clinicians on the floor. This led me to realize that Dermatology was the right choice for me."

Amy Campbell, a second year Genomics and Computational Biology PhD student with Dr. Grice's Lab, also places great emphasis on the translational nature of the training at Penn Dermatology. "The translational work of our department and the Dermatology's cross-training of medical residents with PhD students is so important…What we work on in the labs has the potential to be applied to clinical cases and across specialties." Amy also appreciates the sense of community formed amongst the students on the floor, "the regular research seminars and bi-weekly trainee 'happy hours' make it fun to be a trainee in the Department." Amy notes that another thing that makes the Department special is the Penn Academy for Skin Health (PASH) program, which allows her and other students to share their training with high school students from the Philadelphia Area.

Amy isn't alone in her praise of the Penn Dermatology research trainee seminar (fondly known as the 'happy hour'), as it is something many of the trainees look forward to every other week. At each session, a different student trainee presents their current work in 15-minute chalk-talk style presentations. This is great practice for students who may be presenting at an upcoming conference, or for those who might be nearing the stages of their qualifying examinations or even dissertation defense. This allows them the opportunity to garner feedback from a cohort of their peers in an inherently laid-back environment.

But why dermatology? What about cutaneous clinical science is helpful for those pursuing a basic science PhD? The answer is simple. According to Dr. Pantelis Rompolas, Assistant Professor, "there are all types of cells in the skin." He further elaborates, "I think that biomedical research is at the point where clinical research and basic research need to go hand in hand until all the last fruits have been picked. Science is incredibly fragmented right now and as a department, we're so lucky to have such a breadth of operation in both the clinical side and in the basic side."

Dr. Aimee Payne, Associate Professor with tenure, continues, "Because almost every type of cell can be found in the skin, regardless of whether your interests are in cancer biology, developmental biology, immunology, neuroscience, or microbiology, there's a home for you in dermatology." She shares, "the really unique thing about a PhD is that it's a particular point in your life where you can take a defined period of time to just dedicate yourself to research in a very deep way. You can really focus on the process rather than the goal. PhD training has been my favorite part of my career."

> *"Because almost every type of cell can be found in the skin, regardless of whether your interests are in cancer biology, developmental biology, immunology, neuroscience, or microbiology, there's a home for you in dermatology."*

In addition to doctoral trainees, the T32 grant is also responsible for funding the scholarship of postdoctoral fellows. Dr. John Seykora, Associate Professor with tenure, primarily has postdoctoral students in his lab—he shares, "based on the nature of my lab, I primarily attract post-doctoral trainees. What my lab does generally requires greater independent research and focus. Independent research is kind of natural at that stage, and it's just as important for those trainees to find the most productive environment." Dr. Seykora also has the unique responsibility of organizing an introductory graduate course for all PhD students in

the Cell and Molecular Biology doctoral program, and sees it as a way to introduce these students to our labs and dermatology in general. He has been in this role for close to ten years, and says, "In this course, we teach the students how to analyze and critique the scientific literature. It's required, and in their very first year of study, so naturally it facilitates an opportunity for the Dermatology PIs to meet potential incoming students, and for those students to explore projects of interest."

Dr. Todd Ridky, Assistant Professor, is another firm supporter of the unique structure of the PhD training program lending to its success. "There's great cooperation between the lab students, and a lot of collaboration even across specialties," he says. "We also teach them to be flexible and open to change whenever necessary. In addition to having good communication on the floor, we regularly collaborate with scientists and students in other departments of the School of Medicine. We let the science lead us to where it needs to be, and don't place barriers on the directions we may have to go." Such a statement is exemplified through the work that Dr. Ridky and his former student, Chris Natale, PhD, have expanded outside the lab.

A particularly fruitful collaboration formed in Penn Dermatology, Linnaeus Therapeutics Inc., was co-founded in 2016 by former doctoral student Chris Natale, PhD, and his former advisor, Dr. Todd Ridky. Specifically, Linnaeus is focused on the development and commercialization of novel, small molecule oncology therapeutics that target G protein-coupled receptors. Dr. Ridky's lab collaborates with Linnaeus to conduct additional mechanistic and preclinical efficacy studies to extend the scope of the intellectual property, and also with outside contract research organizations to perform the preclinical safety, formulation, and pharmacokinetic studies required for human trials. The company recently closed a $12 million series B round of funding this past September.

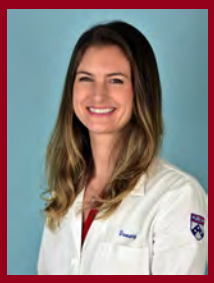
Pictured Above (from L to R):
Amy Campbell (graduate student in the Grice Lab);
In Young Lee (graduate student in the Ridky Lab)

Shortly after, the U.S. Food and Drug Administration (FDA) cleared the company's investigational new drug application (IND) for a potential treatment of solid and hematologic cancers. In fact, Linnaeus is the first Penn Center for Innovation (PCI) venture to ever receive IND approval. They have since initiated a phase 1 clinical trial in patients, and based on epidemiological evidence and strong preclinical data, the Linnaeus team believes that this treatment has very real potential to provide a meaningful and lasting clinical benefit.

Such innovation is simply remarkable but also incredibly common for students and alumni of the Penn Dermatology labs. "I love it when I get to see my trainees give a talk at a national meeting or international conference. I'd rather see them up there speaking than me, and when they have that opportunity to shine, it's the best feeling," says Dr. Grice. She continues, "My first PhD student ever was back at Penn recently and he was serving on a career panel. He's now a principal scientist at a major pharmaceutical company and seeing all that he's accomplished since leaving my lab—and knowing that I provided some of that foundation for those accomplishments—is just a very proud and warm moment for me."

All of the faculty consulted for this article are Penn Dermatology principal investigators and either have, or have once had, doctoral trainees in their labs. Over the years of training in the Department, many students have come through our labs and gone onto rewarding careers afterward. Graduates pursue careers in academia, research, industry, and policy; the opportunities are endless for scientists so specialized in an incredibly diverse field of study.

WELCOME NEW FACULTY



Cerrene Giordano, MD, *Assistant Professor*

Dr. Giordano received her MD from the University of Buffalo School of Medicine and Biomedical Sciences in Buffalo, NY. She then completed her internship in internal medicine at Carolinas Medical Center in Charlotte, NC. Following her internship, Dr. Giordano completed a dermatology residency at Henry Ford Health System in Detroit, MI, serving as chief resident in her final year. She then completed a fellowship in Mohs micrographic surgery and dermatologic oncology at Memorial Sloan Kettering Cancer Center and Weill Cornell in New York, NY. Dr. Giordano will be seeing patients at the Perelman Center for Advanced Medicine and Pennsylvania Hospital. Her clinical interests include Mohs micrographic surgery, reconstructive surgery, skin cancer, and inherited skin cancer syndromes.

H. William Higgins, MD, MBE, *Assistant Professor*

Dr. Higgins received his BA degree from Connecticut College, followed by his masters in bioethics from the University of South Florida, and then his MD from the Florida State University College of Medicine. He completed his internship at Yale University, followed by a dermatology residency at Brown University, where he served as chief resident his final year. He then completed a fellowship in Mohs micrographic surgery and procedural dermatology at Yale University. He will be seeing patients at Pennsylvania Hospital and the Perelman Center for Advanced Medicine. His clinical interests include Mohs micrographic surgery, reconstructive surgery, skin cancer, epidemiology, and political advocacy.

Nicholas Mollanazar, MD, MBA, *Assistant Professor*

Dr. Mollanazar earned his BS in neuroscience and behavioral biology from Emory University. He then received both his MD and MBA from Temple University School of Medicine and the Fox School of Business, respectively. He completed his internship in internal medicine at Pennsylvania Hospital, followed by his dermatology residency at Temple University Hospital. He will be seeing patients at the Perelman Center for Advanced Medicine, Pennsylvania Hospital, and Bucks County. His clinical interests include atopic dermatitis, chronic pruritus, LGBTQ dermatology, CTCL, and psoriasis.

Daniel Shin, PhD, *Assistant Professor, Research*

Dr. Shin received his BA degree from University of Pennsylvania. He served as coordinator and data analyst in the Pigmented Lesion Group and Gelfand Clinical Research Lab at Penn Dermatology before receiving his PhD in biostatistics from the University of Pennsylvania. Dr. Shin's research interests include statistical imaging, functional data analysis, big data, clinical trials, and epidemiology.

Michelle Weir, MD, *Assistant Professor*

Dr. Weir received her BA from Stanford University and her MD from Harvard Medical School. She completed her internship at New York University and her dermatology residency at University of Pennsylvania. She has served as faculty at Perlman School of Medicine in the department of dermatology and at University of Chicago in the division of dermatology. Dr. Weir will be seeing patients at Pennsylvania Hospital. Her clinical interests include general and medical dermatology, including acne, atopic dermatitis, inflammatory and autoimmune skin conditions, and skin cancer detection.

The 21st Annual

HOHENBERG LECTURE

The 21st Annual Bernard L. Hohenberg Memorial Lecture took place on Thursday, June 6, 2019. This year's lecture, entitled "Diabetic Foot Ulceration: From Pathogenesis to Management," was presented by Dr. Aristidis Veves, MD, DSc. Dr. Veves is currently a Rongxiang Xu, MD, Professor of Surgery in the Field of Regenerative Therapeutics at Harvard Medical School; Director of the Rongxiang Xu, MD, Center for Regenerative Therapeutics; and Research Director of the Joslin-Beth Israel Deaconess Foot Center and of the Microcirculation Lab at Beth Israel Deaconess Medical Center.

Dr. Veves received his MD from Aristotelion University in Thessaloniki, Greece in 1981, his MSc from the University of Manchester in the UK in 1991, and his DSc from Athens Medical School in Greece in 1993. He then completed his internship and residency in Internal Medicine, first at Athens Naval Hospital and then Tsaggari General District Hospital in Athens, Greece. Dr. Veves continued on to the Department of Diabetes and Endocrinology at the Manchester Royal Infirmary in the UK as a Clinical Research Fellow. He then pursued a research fellowship at Deaconess-Joslin Foot Center at Deaconess Hospital in Boston, Massachusetts from 1993 to 1995. Following, Dr. Veves began his academic tenure at Harvard Medical school–first as an Instructor of Medicine, then an Assistant Professor of Surgery–followed by Associate Professor of Surgery and Professor of Surgery.

Dr. Veves' primary focus is 'bench to bedside' research, with the main goal being understanding the pathogenesis of diabetes complications so as to develop new therapeutic approaches. His research is funded largely by the National Institute of Health (NIH) and other nonprofit organizations, but he is also funded by industry partners for some investigator-initiated research. Dr. Veves' areas of expertise include wound healing, diabetic neuropathy, diabetic foot problems, and vascular reactivity, however his primary focus is on diabetes and its complications, particularly surrounding wound healing and cardiovascular disease.

Dr. Veves holds numerous editorial roles, including Series Editor of the Diabetes Book Series by Humana Press, Section Editor of Wounds: A Compendium of Clinical Research and Practice, Editor of the International Journal of Lower Limb Wounds, Associate Editor of Advances in Therapy and Academic Editor of PLOS ONE. He also serves as part of the Editorial Board for Advances in Therapy, Current Diabetes Reviews, European Journal of Wound and Burns Management, Experimental Diabetes Research and PLOS ONE. In Addition, Dr. Veves has received many notable awards for his work, including the Mary Jane Kugel Award from the Juvenile Diabetes Research Foundation and the Gold Medal Oration Award from Chennai Diabetes Research Center.

Pictured Above: *Dr. Aristidis Veves, MD, DSc, 21st Annual Hohenberg Guest Lecturer*

The 35th Annual PILLSBURY LECTURE

The 35th Annual Pillsbury Lectureship in Dermatology was held on May 23, 2019. This lecture celebrates the life and leadership of Dr. Donald M. Pillsbury, who helped raise the prestige of dermatology in the scientific world, the government, and the public during his time at the University of Pennsylvania. Dr. Amy Paller, MD, MS, Walter J. Hamlin Professor and Chair of the Department of Dermatology at Northwestern University, presented the lecture entitled, "New Treatment Options for Genetic Skin Disorders."

Dr. Paller graduated from Brown University and earned her Medical Degree from Stanford University. She completed her residency in Pediatrics and Dermatology at Northwestern University, followed by a postdoctoral research fellowship at the University of North Carolina. Dr. Paller is a leader in the field and at the forefront of skin disease research, serving as Principal Investigator of the NIH-funded Skin Biology and Diseases Resource-based Center (SBDRC) at Northwestern's Feinberg School of Medicine. She has also directed the Pediatric Dermatology Clinical Trials Unit at Northwestern/ Lurie Children's for the past 25 years, and has been the lead investigator on several landmark trials in pediatric skin disease. Dr. Paller's clinical and research interests focus on genetic disorders of the skin and cutaneous immunologic disorders in children, including atopic dermatitis and psoriasis.

An author of over 400 peer-reviewed publications, Dr. Paller has maintained strong research support from the NIH and serves on the NIAMS Council and Board of Scientific Counselors. She has been on the Board of Directors of the American Academy of Dermatology, the Society for Investigative Dermatology, and the Society for Pediatric Dermatology among others. She has co-edited several leading textbooks of dermatology, namely Fitzpatrick's Dermatology in General Medicine, Pediatric Dermatology, and Hurwitz's Clinical Pediatric Dermatology. She has been an Associate Editor of the Journal of Investigative Dermatology, and has served on the editorial boards of several other journals. Currently, she serves on the NIH Advisory Committee on Research on Women's Health.

Dr. Paller has received prestigious awards and honors for her work, including the renowned Stephen Rothman Award from the Society for Investigative Dermatology, the Clarence S. Livingood, MD Memorial Award from the AAD and several notable awards from the Women's Dermatological Society along with many other distinguished accolades.

Pictured Above: *Dr. Amy Paller, MD, MS, 35th Annual Pillsbury Guest Lecturer*

HAILS & FAREWELLS

Hail to our incoming 2019 residents and fellows!

Residents

Ashley Clark, MD

Medical School: University of California, Davis, School of Medicine

Mohammed Dany, MD, PhD

Medical School: Medical University of South Carolina College of Medicine

Diego Da Silva, MD

Medical School: Perelman School of Medicine at the Univerisity of Pennsylvania

Neha Jariwala, MD

Medical School: Drexel University College of Medicine

Nina Ran, MD

Medical School: Perelman School of Medicine at the Univerisity of Pennsylvania

Heather (Rosengard) Milbar, MD, MPH

Medical School: Johns Hopkins University School of Medicine

Fellows

Andrew Fischer, MD

Dermatopathology Fellow

Medical School: Baylor College of Medicine
Residency: University of Colorado Anschutz Medical Campus

Michele Khurana, MD

CHOP Pediatric Dermatology Fellow

Medical School: Jefferson Medical College
Residency: Stony Brook University Hospital

Aimee Krausz, MD

Micrographic Surgery and Dermatologic Oncology Fellow

Medical School: Albert Einstein College of Medicine
Residency: Albert Einstein College of Medicine

Daniel Clark, MD

CTCL Fellow

Medical School: Baylor College of Medicine

Susan Pei, MD

Dermatopathology Fellow

Medical School: University of Chicago Pritzker School of Medicine
Residency: University of Wisconsin

Future endeavors of graduating residents & fellows:

Oyinade Aderibigbe, MD: ***Assistant Professor of Dermatology at the Feinberg School of Medicine***
Avrom Caplan, MD: ***Assistant Professor of Dermatology at New York University Langone Health***
Anna Cogen, MD, PhD: ***Acting Instructor in the Division of Dermatology at the University of Washington***
Christine Cornejo, MD: ***Dermatologist at Brigham and Women's Hospital***
Amanda Derwae, MD: ***Physician at the Travis Air Force Base in California***
Elizabeth Heller, MD: ***Clinical Research Fellow at the National Institutes of Health (NIH)***
Cuong Nguyen, MD: ***Assistant Professor of Dermatology at the Feinberg School of Medicine***
Ata Moshiri, MD, MPH: ***Acting Instructor in the Division of Dermatology at the University of Washington***
Kelly MacArthur, MD: ***Assistant Professor of Dermatology at the Washington University School of Medicine in St. Louis***
Colleen Cotton, MD: ***Assistant Professor in the Department of Dermatology at the Medical University of South Carolina***
Cathryn Sibbald, MD: ***Dermatologist at The Hospital for Sick Children in Toronto***

PARTNERING WITH PENN DERMATOLOGY

Penn has consistently moved the field of dermatology forward through personalized care and therapeutic advances. The Department of Dermatology works continuously to develop new techniques and therapies through research and to educate the next generation of outstanding physicians and researchers.

To maximize our expertise and potential, improvements to our research infrastructure are required. Basic, translational and clinical research activities are the hallmark of our clinical care and patient outcomes. With significant philanthropic investments, this department will move forward addressing pressing medical challenges in dermatologic care and will be instrumental in improving diagnoses, new surgical techniques and quality of life. Lastly, offering the best multidisciplinary care for our patients remains a top priority.

Department of Dermatology Fundraising Priorities

Pilot Research Projects

Honoring Leaders

As the oldest dermatology department in the country, Penn Dermatology has been shaped by many great leaders whose legacies live on through their scientific breakthroughs. Established in 1874 by Dr. Louis Duhring, Penn Dermatology follows the traditions of many great 19th and 20th century physician researchers whoworked collaboratively and across disciplines, such as with the engineering school. As a contributor to pilot research projects in cutaneous regeneration, Penn investigators gain the ability to impact patients worldwide with novel approaches to skin diseases, innovative treatments and potential for cures.

Fellowship Training Programs

Supporting New Investigators

Penn Dermatology's training programs attract the most outstanding candidates, developing leaders in dermatologic research, academic, and clinical dermatology. Funds directed toward fellowship training programs guarantee Penn Dermatology's long tradition of educating exceptional scientists and physicians.

Endowed Professorships

Rewarding Innovation

Supporting the work of Penn's physician scientists is of utmost priority. Endowed professorships in investigative dermatology provide Penn Dermatology with the ability to retain and attract exceptional faculty. For decades, Penn's preeminent dermatologists and researchers consistently receive recognition for excellence in patient care, research discoveries and education. Endowed professorships are instrumental in permanently recognizing the dedication of the Department's faculty and their important work.

Laboratories and Research Facilities

Promoting Scientific Advancement

Research space is of great necessity. New laboratories and instruments provide the path to great discoveries. With the right resources, Penn Dermatology will develop a cutaneous regeneration and tissue engineering effort focused on developing new treatments for skin disorders.

Private philanthropy meets funding needs not covered by government grants or insurance reimbursements. Your donation enables us to break new ground and to improve upon existing therapies.

Philanthropic gifts of all sizes to support our research, educational and clinical endeavors are greatly appreciated. Naming opportunities within the Department begin at the $25,000-level. Additionally, any gift can be given outright, through a planned giving vehicle, or can be structured to be paid over a 5-year period.

For more information about partnering with Penn Dermatology, please contact **Caitlin Crowe Doelp** at Penn Medicine Development & Alumni Relations at **(215) 746-2167** or **ccrowe@upenn.edu**.

FACULTY AWARDS & HONORS

Brian Capell, MD, PhD

- The Capell Lab had two major published articles:
1) "LSD1 Inhibition Promotes Epithelial Differentiation through Derepression of Fate-Determining Transcription Factors"
2) "The Unexpected Noncatalytic Roles of Histone Modifiers in Development and Disease"

William James, MD

- Received the American Academy of Dermatology's (AAD) Master Dermatologist Award; the award recognizes an Academy member who has made significant contributions to the specialty of dermatology, as well as to the leadership and/or educational programs of the AAD

H. William Higgins, MD

- Received the President's Award from the American Society for Dermatologic Surgery
- Served as a mentor this past year for the American Society of Dermatologic Surgery's Future Leaders Network
- Selected to serve as a delegate at the Alliance of Specialty Medicine's Washington DC senate/congressional fly
- Served as an advocate at the American Academy of Dermatology's Legislative fosum this past summer in Washington, DC

Aimee Payne, MD, PhD

- Eugene J. Van Scott Award for Innovative Therapy of the Skin; award lecture ot be presented at the AAD in March 2020

Cory Simpson, MD, PhD

- Received funds for NIH/NIAMS K08 Grant for Project in August, 2019

Bruce Brod, MD

- Received the American Academy of Dermatology's 2020 Presidential Citation Award for their dedication to members of the AAD and their patients by testifying on our behalf before Congress

Emily Chu, MD, PhD

- Chosen by the Dermatology Residents for the Bernett L. Johnson Attending Teaching Award

Victoria (Tori) Williams, MD

- Received a Dermlink Grant for Expanding Access to a Dermatology Mobile Decision Support Tool in Botswana from the International Foundation for Dermatology

Robert Micheletti, MD

- Awarded the 2019 Ed Bondi Medical Student Teaching Award
- Mentor to the 2019-2020 FOCUS Fellowship in Women's Health Awardee Dolly Ademide (MSIV) for the project "Beliefs, attitudes, effects, and outcomes of pregnancy in women living with hidradenitis suppurativa.

Jennifer Villasenor-Park, MD, PhD

- AAD Leadership Forum Participant in May 2019
- JAAD Mentorship Program Appointee: 2019-20

Joel Gelfand, MD, MSCE

- Awarded Penn Perelman School of Medicine 2019 Lady Barbara Colyton Prize for autoimmune research
- Article features in JAAD special issue, "Best of Psoriasis"
- A second article identified as "game changer" by the JAAD

Carrie Kovarik, MD

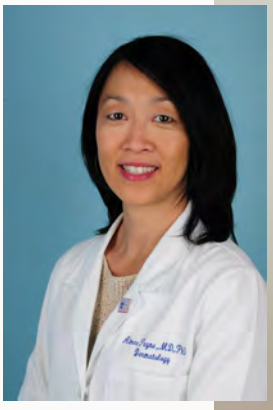
- Honored by the American Academy of Dermatology (AAD) as a Patient Care Hero for her collaboration to diagnose a patient suffering from leprosy; this award recognizes physicians who transform patients' lives by collaborating and utilizing their expertise with other physicians to treat serious skin disease
- Awarded Philadelphia Inquirer's Influencers of Healthcare Award for Excellence in Volunteerism

Joseph Sobanko, MD

- 2019 ASDS Cutting Edge Research Grant Program: "cost-analysis and shifting trends of melanoma surgery in different operative settings from 2008-2018"

HIGHLIGHTS OF DISCOVERIES

Could Immunotherapy Treat Diseases Besides Cancer?



Adapted from www.scientificamerican.com

The potential for immunotherapy to transform much of modern medicine is huge. Since the immune system is so fundamentally a part of our body's daily processes, there is tremendous power in leveraging it to fight cancer, which is exactly what immunotherapy does. Now, the technology is being applied to other areas of medicine**. Aimee Payne, MD, PhD,** Penn Dermatology Associate Professor with tenure is researching the use of immunotherapy in the treatment of pemphigus, a painful blistering disease. In a recent article from Scientific American, Dr. Payne discussed the immunotherapy revolution and her role in harnessing it for the precision treatment required in pemphigus.

While immunotherapy is not a new tool in the fight against disease, it is currently being employed in new areas. Cancer was the first disease to benefit from immunotherapy, and since that has proven to be so successful, physicians are becoming more confident in using it as a tool for autoimmune treatment.

Pemphigus shows promise in response to immunotherapeutic treatments, and the Payne Lab is currently preparing for human trials using reengineered T cells to treat the disease. Dr. Payne direct-engineered T cells to destroy the immune cells that make the antibodies which cause skin cells to lose their "stickiness" to one another, which in turn leads to the debilitating blisters so notorious of pemphigus.

Dr. Payne says her approach was inspired by all of the success of CAR-T therapy around Penn Medicine. She adds, "Why didn't we think of this earlier?"

Studies Reveal Possible Solution to Elevated Cancer Risk from Important Anti-Infection Drug

Adapted from www.pennmedicine.org

While it's been widely known that voriconazole, an effective antifungal medication used to prevent dangerous infections in patients with compromised immune systems, is linked to development of aggressive squamous cell carcinoma (SCC), the mechanism behind that link has been elusive until now. Reported in a recent Penn Medicine news release, the lab of **Dr. John Seykora, MD, PhD,** Associate Professor with tenure, may have recently unlocked a key discovery that could help us to better understand this mechanism.

Although SCC only develops in a subset of patients, the consequences can be major: tumors can develop, expand, invade, and metastasize to lymph nodes within unprecedented time. The discovery showed that voriconazole increases levels of oxidative stress in keratinocytes, and that a common antioxidant, acetylcysteine, can mitigate voriconazole's cancer-inducing side-effects. These findings were recently published in the journal *Experimental Dermatology*.

"*Once we knew what the relationship between voriconazole and catalase was, we could attempt to interfere with it and diminish the effects*," said Dr. Seykora. "*Conducting human trials to show that the combination of voriconazole and N-acetylcysteine is safe and effective is the next step in this research. Since N-acetylcysteine has existed for years and is a common treatment for other conditions, we anticipate a safe pairing. People with suppressed immune systems already have other medical concerns to worry about. We don't want them to have to worry about elevated skin-cancer risk, too.*"

5 Things People of Color Should Know About Taking Care of Their Skin

Adapted from www.self.com

Finding the right dermatologist can be a cumbersome process for anyone, and all patients should be able to see a specialist who can care for and understand their skin needs regardless of skin color. However, patients of color have expressed that some dermatologists do not fully understand their concerns, as varying conditions and treatments may present and work differently across skin and hair types. SELF Magazine interviewed expert dermatologists, including, **Dr. Temitayo Ogunleye, MD,** Associate Professor, who discussed common misconceptions and shared advice for patients of color on finding the right dermatologist.

"*You should always go to whomever you feel comfortable with, whomever you feel seems to be adept in treating what you need to be treated, and whomever seems to consider you and your culturally-specific issues*," Dr. Ogunleye says. "*Don't be afraid to ask questions…if you question whether the care is specific to you, you should ask that.*"

This article stresses five key things that people of color should know about taking care of their skin, ranging from differences in hair loss concerns to certain hyperpigmentation issues. The bottom line is that you should see a dermatologist whom you're comfortable with, and you should receive care that's adequate for your particular concerns. Everything from sunburns to scars may present on skin with a little (or a lot!) more melanin.

Why Dermatologists Should Be Concerned About DIY Sunscreeen

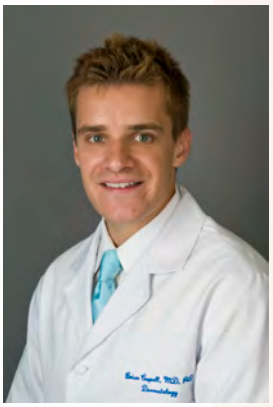
Adapted from www.the-dermatologist.com

It seems as though Pinterest and do-it-yourself (DIY) projects are taking the world by storm. However, certain DIY projects, homemade sunscreen being one of them, should never be attempted at home, warns **Dr. Bruce Brod, MD**, Penn Dermatology Clinical Professor. Since there is little regulation about what makes it onto these social media websites, people often end up following "recipes" which make broad claims and use questionable ingredients. It's important to know that while consumers who seek out these alternatives to conventional sunscreen mean well for themselves, their families and the environment, they may end up causing more harm to themselves than intended. While it's important to respect a patient's choice to seek alternatives, Dr. Brod emphasizes an all-encompassing approach to the issue. He also talks with his patients about more forms of sun protection than just sunscreen.

"*I talk to patients about the importance of a multi-faceted approach, which has always been my practice, and not to solely rely on sunscreens but use them as one item in the sun-protection tool kit,*" said Dr Brod. As most dermatologists and organizations recommend, he encourages patients to wear sun protective clothing and avoid the mid-day sun, in addition to using sunscreens. "*We have a responsibility as health care providers to educate our patients to be careful,*" he added.

In an age where bloggers and influencers can sway many people's opinion, Dr. Brod thinks that it's best to also utilize these voices to get scientifically-backed and tested skin protection information out there in the public, and to fight misinformation.

Helping Skin Cells Differentiate Could be the Key to Treating Common Skin Cancer



Adapted from www.pennmedicine.org

The outer layer of your skin will completely replace itself every couple of weeks, and when this process is blocked, cancer may grow. A new study from the lab of Penn Dermatology Assistant Professor **Dr. Brian Capell, MD, PhD,** has uncovered a key regulator of that block, known as LSD1, which may play a part in the growth of non-melanoma skin cancers.

Cutaneous squamous cell carcinoma (cSCC; a skin cancer caused by abnormal growth of skin cells), and basal cell carcinoma (BCC; a similar type of cancer), outnumber all other types of human cancers combined. While a lot of patients are able to just have these cancers removed, this isn't an option for all people. For some, surgical removal isn't possible, and as such they must rely on alternative treatment options, such as chemotherapy. Research has shown that these cancers can thrive when skin cells, which should be constantly renewing, aren't able to differentiate themselves as they reproduce.

"Our study shows that targeting LSD1 can force skin cells down a differentiation path, which could open the door to new topical therapies that can ultimately turn tumor cells into healthier, more normal cells," said Dr. Brian Capell. "By knocking out LSD1, we can essentially turn the switch back on what would tell the skin to differentiate in a healthy way."

Dr. Brian Capell is the senior author on this study, and the co-authors include Shaun Egolf, a graduate student in the Cancer Biology PhD program, and Dr. Yann Aubert, PhD, a postdoctoral researcher—both members of the Capell Lab. These findings were published in the journal *Cell Reports* this past August.

Help for Hand Psoriasis

Adapted from www.healthcentral.com

Psoriasis, while never pleasant, can be particularly difficult when symptoms exhibit on the hands. This can be both embarrassing and extremely painful for the patient, and needs to be treated with special insight and care. **Dr. Joel Gelfand, MD, MSCE,** Penn Dermatology Professor with tenure, recently spoke with Health Central to discuss the special care that needs to be taken when psoriasis is on the hands.

"*Patches of psoriasis affecting the thick skin of the palms tends to crack, bleed, and cause painful fissures*," says Dr. Gelfand. "*Making matters even more difficult is that palmoplantar psoriasis is often resistant to treatment. Current treatments, even our newest biologics, often have limited benefit for psoriasis of the palms.*"

Palmoplantar psoriasis is psoriasis that affects the palms of the hands. In addition to affecting one's physical palm, it can further manifest in myriad ways. These include dactylis, sometimes referred to as "sausage fingers," which involves a painful swelling of entire fingers or toes; enthesitis, which is a swelling of the connective tissues that joins ligaments and tendons to the bones in the hand; and nail disease, which can cause psoriasis to manifest under the cuticle and wreak havoc on the growth and overall health of the nail.

These symptoms can be stand-alone, or may be indicative of a related condition such as psoriatic arthritis. The bottom line is that one should always consult their dermatologist for any type of psoriatic issue, as a comprehensive treatment plan is often the best way to lessen its impact on one's body overall.

FACULTY 2019

George Cotsarelis, MD
Chairman
Hair & Scalp Disorders

(215) 662-2737

Joel Gelfand, MD, MSCE
Vice Chair, Clinical Research
Acne, Eczema, & Psoriasis

(215) 662-2737

David Margolis, MD, PhD
Vice Chair, Faculty Affairs
Chronic Wounds and Leg Ulcers

(215) 662-2737

Misha Rosenbach, MD
Vice Chair, Education
Cutaneous Sarcoidosis, Adverse Drug Reactions and Autoimmune Skin Diseases (Commective Tissue and Blistering)

(215) 662-2737

Carmela Vittorio, MD
Vice Chair, Operations
General Dermatology, Skin Cancer, Cutaneous T-Cell Lymphoma, Acne Vulgaris, Rosacea, and Laser Hair Removal

(215) 662-2737

Elena Bernardis, PhD

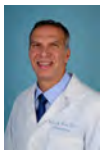
Computer Vision, Computational Dermatology

(215) 662-2223

Edward Bondi, MD

Sun Damaged Skin, Melanoma and Non-Melanoma Skin Cancer

(215) 662-2737



Bruce Brod, MD

Contact Dermatitis and Occupational Dermatology

(215) 662-2737

Katherine Brown, MD

General Dermatology

(610) 902-2400

Brian Capell, MD, PhD

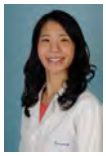
Epigenetics and Health Imbalances of the Skin

(215) 662-2737

Zelma Chiesa-Fuxench, MD, MSCE

Inflammatory Skin Disorders

(215) 662-2737



Juliana Choi, MD, PhD

General Dermatology, Acne, Rosacea and Hyperhidrosis

(215) 662-2737

Emily Chu, MD, PhD

Genodarmatosis, Dermatopathology, and Cutaneous Oncology

(215) 360-0909

Magaly Del Monaco, DO

General and Cosmetic Dermatology

(215) 504-7700

Cherie Ditre, MD

Cosmetic Dermatology

(610) 902-2400

Rosalie Elenitsas, MD

Pigmented Lesions and Melanoma

(215) 662-2737

Jeremy Etzkorn, MD

Micrographis Surgery, Reconstructive Surgery, and Cutaneous Oncology

(215) 504-7700

Amy Forrestel, MD

Complex Medical Dermatology, Inpatient Dermatology, and Global Health Dermatology

(215) 662-2737

Cerrene Giordano, MD

Micrographic Surgery, Reconstructive Surgery, Skin Cancer & Inherited Skin Cancer Symptoms

(215) 360-0909

Elizabeth Grice, PhD

Wound Healing, Genomics, Microbiome and Innate Immunity

(215) 898-3179

Paul Haun, MD, MS

Cutaneous T-Cell Lymphoma and Dermatopathology

(215) 662-2737

H. William Higgins, MD, MBE

Micrographic Surgery, Reconstructive Surgery, Skin Cancer, Epidemiology, and Political Advocacy

(215) 360-0909

Phillip Holler, MD, PhD

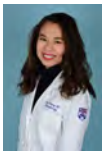
Medical Dermatology and Diseases of the Scalp

(215) 504-7700

Nicole Howe, MD

Micrographic Surgery, Reconstructive Surgery and Cutaneous Oncology

(215) 360-0909



Jing Huang, MD

General Dermatology

(215) 662-2737

William James, MD

Acne, Eczema, & Psoriasis

(215) 662-2737

Ellen Kim, MD

Cutaneous T-Cell Lymphoma, General Dermatology and Melanoma and Pigmentary Disorders

(215) 662-2737

Joseph Kist, MD

General Dermatology

(215) 662-2737

Carrie Kovarik, MD

Topical and Infectious Dermatologic Disorders and Dermatopathology

(215) 662-2737

Thomas Leung, MD, PhD

Wound Healing, Regenerative Medicine and Inflammatory Skin Diseases

(215) 662-2737

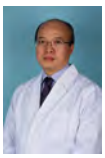
James Leyden, MD
Emeritus
Acne

(215) 662-2737

Jules Lipoff, MD

General and Medical Dermatology, HIV and Immunosuppression Dermatology

(215) 662-2737



Ming-Lin Liu, MD, PhD

Autoimmune Skin Inflammation and Diseases

(215) 823-4439

Robert Micheletti, MD

Graft versus Host Diseases, Vasculitis and Infectious Diseases

(215) 662-2737

Christopher Miller, MD

Micrographic Surgery, Reconstructive Surgery and Cutaneous Oncology

(215) 360-0909

Sarah Millar, PhD
Emeritus
Signaling Mechanisms, Refulating and Embryonic Development of Postnatal Growth of Skin Appendages

(215) 898-2633

Michael Ming, MD

Melanoma, Dysplastic Nevi and Pigmented Lesions

(215) 360-0909

Nicholas Mollanazar, MD, MBA

Atopic Dermatitis, Chronic Pruritus, LGBTQ Dermatology, CTCL, and Psoriasis

(215) 360-0909

Temitayo Ogunleye, MD

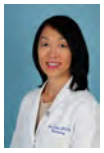
General Dermatology, Skin of Color, and Hair Disorders

(215) 662-2737

Lisa Pappas-Taffer, MD

General Dermatology, Autoimmune Conditions, Side Effects of Chemotherapy and Urticaria

(215) 504-7700



Aimee Payne, MD, PhD

General Dermatology and Autoimmune Blistering Diseases

(215) 662-2737

Douglas Pugliese, MD

General Dermatology and Wound Healing

(215) 662-2737

Todd Ridky, MD, PhD

General and Medical Dermatology, Tissue Engineering, Cancer Biology and Oncogene Signaling

(215) 573-5709

Pantelis Rompolas, PhD

Cutaneous Stem Cells in Regeneration, Homeostasis and Pathophysiology

(215) 573-4002

Alain Rook, MD

Cutaneous T-Cell Lymphoma and Other Immune Mediated Diseases

(215) 662-2737

Rudolf Roth, MD

General Dermatology and Dermatologic Surgery

(610) 902-2400

Adam Rubin, MD

Nail Disorders, Histopathology of the Nail Unit, and Dermatopathology

(215) 662-2737

Sarah Samimi, MD

General Dermatology, Cutaneous T-Cell Lymphoma and Melanoma

(215) 662-2737

John Seykora, MD, PhD

Dermatopathology and Cutaneous Diseases Exhibiting Abnormal Keratinocyte Differentiations

(215) 898-0170

Daniel Shin, PhD

Statistical Imaging, Functional Data Analysis, Big Data, Clinical Trials, and Epidemiology

(215) 360-0909

Thuzar Shin, MD, PhD

Micrographic Surgery, Reconstructive Surgery, and Cutaneous Oncology

(215) 360-0909

Joseph Sobanko, MD

Micrographic Surgery, Reconstructive Surgery, and Cosmetic Dermatology

(215) 360-0909

Shobana Sood, MD

Micrographic Surgery, Photodynamic Therapy, Laser Therapy and Cosmetic Dermatology

(610) 902-2400

Katherine Steele, MD

Complex Medical Dermatology, Inpatient Consultations and Dermatologic Oncology

(215) 662-2737

John Stanley, MD
Emeritus
Blistering Diseases and Pemphigus

(215) 662-2737

Junko Takeshita, MD, PhD, MSCE

Health Disparities and Inflammatory Skin Diseases

(215) 662-2737

Susan Taylor, MD

Cosmetic Dermatology and Skin of Color

(215) 662-2737

Jennifer Villasenor-Park, MD, PhD

Skin Lymphoma, Non-Melanoma Skin Cancer, General Dermatology, and Cosmetic Dermatology

(215) 504-7700

Julie Wahrman Cramer, MD

General Dermatology, Pediatric Dermatology and Cosmetic Dermatology

(215) 504-7700

Michelle Weir, MD

General and Medical Dermatology, Acne, Atopic Dermatitis, Inflammatory and Autoimmune Skin Conditions, and Skin Cancer Detection

(215) 360-0909

Victoria Werth, MD

Autoimmune Blistering and Connective Tissue Diseases

(215) 504-7700

Victoria (Tori) Williams, MD

General Dermatology, Infectious Diseases, and Complex Medical Dermatology

(215) 662-2737

Richard Wortzel, MD, PhD

General Dermatology, Skin Cancer, Psoriasis, and Eczema

(215) 504-7700

Sandra Wortzel, MD

General Dermatology

(215) 504-7700

ASSOCIATED FACULTY

Faizan Alawi, MD

Oral and Maxillofacial Pathology

(215) 573-7638

Leslie Castelo-Soccio, MD, PhD

Pediatric Dermatology and Pediatric Hair Disorders

(215) 662-2737

Glen Crawford, MD

Allergic, Environmental, and Occupational Dermatology

(215) 662-2737

Steven Fakharzadeh, MD

General Dermatology and Genetic Skin Disorders

(215) 573-5709

Paul Gross, MD

Clinical Dermatology and Dermatopathology

(215) 829-3576

Melinda Jen, MD

Pediatric Dermatology

(215) 590-2169

Patrick McMahon, MD

Pediatric Dermatology

(215) 590-2169

Aditi Murthy, MD

Pediatric Dermatology

(215) 590-2169

Marissa Perman, MD

Pediatric Dermatology, Epidermolysis Bullosa and Polycyctic Ovarian Syndrome

(215) 590-2169

Daniel Roling, MD

Pediatric Dermatology

(215) 662-2737

James Treat, MD

Acne, Atopic Eczema, Genetic Skin Disorders, Hemangiomas, Port Wine Stains and Other Vascular Anomalies

(215) 662-2737

Albert Yan, MD

Acne, Atopic Dermatitis, Childhood Blistering Diseases, Hemangiomas and Vascular Lesions

(215) 590-2169

DUHRING GRAND ROUNDS SCHEDULE

January 2, 2020
No Duhring Grand Rounds this week

January 9, 2020
9:00 AM - 10:00 AM Patient Viewing, PCAM Suite 1-330S
10:00 AM - 11:00 AM Patient Discussion, SCTR Auditorium

January 10, 2020
Philly Derm: Main Line Health

January 16, 2020
9:00 AM - 10:00 AM Patient Viewing, PCAM Suite 1-330S
10:00 AM - 11:00 AM Patient Discussion, SCTR Auditorium

January 18, 2020
Philadelphia Dermatological Society: Pennsylvania Hospital

January 23, 2020
9:00 AM - 10:00 AM Patient Viewing, PCAM Suite 1-330S
10:00 AM - 11:00 AM Patient Discussion, SCTR Auditorium

January 30, 2020
9:00 AM - 10:00 AM Patient Viewing, PCAM Suite 1-330S
10:00 AM - 11:00 AM Patient Discussion, SCTR Auditorium

February 6, 2020
9:00 AM - 10:00 AM Patient Viewing, PCAM Suite 1-330S
10:00 AM - 11:00 AM Patient Discussion, SCTR Auditorium
11:00 AM - 12:00 PM Lecturer: **Ade Adamson, MD, MPP**
Assistant Professor and Director of Pigmented Lesion Clinic, University of Texas at Austin, Dell Medical School Internal Medicine, Division of Dermatology
Title: "Artificial Intelligence in Dermatology"
Location: SCTR Auditorium

February 13, 2020
9:00 AM - 10:00 AM Patient Viewing, PCAM Suite 1-330S
10:00 AM - 11:00 AM Patient Discussion, SCTR Auditorium
11:00 AM - 12:00 PM Lecturer: **Brian Kim, MD,**
Associate Professor and Co-Director, The Center for Study of Itch, Washington University School of Medicine, Department of Dermatology, Pathology, and Immunology
Title: "Neuroimmune axis in skin"
Location: SCTR Auditorium

February 20, 2020
9:00 AM - 10:00 AM Patient Viewing, PCAM Suite 1-330S
10:00 AM - 11:00 AM Patient Discussion, SCTR Auditorium

February 21, 2020
Philly Derm: Philadelphia Cooper Medical School of Rowan University

February 27, 2020
Location change this week
9:00 AM - 10:00 AM Patient Viewing, PCAM Suite 1-330S
10:00 AM - 11:00 AM Patient Discussion, BRB Auditorium & Lobby

March 5, 2020
9:00 AM - 10:00 AM Patient Viewing, PCAM Suite 1-330S
10:00 AM - 11:00 AM Patient Discussion, SCTR Auditorium
11:00 AM - 12:00 PM Lecturer: **Mary Gail Mercurio, MD**
Clinical and Residency Program Director, Professor, Department of Dermatology, Professor, Department of Obstetrics and Gynecology, University of Rochester Medical Center
Title: TBD
Location: SCTR Auditorium

March 12, 2020
9:00 AM - 10:00 AM Patient Viewing, PCAM Suite 1-330S
10:00 AM - 11:00 AM Patient Discussion, SCTR Auditorium
11:00 AM - 12:00 PM Annual Penn Dermatology Trainee Research Day; Keynote Speaker: **Amanda Lund, PhD**
Associate Professor, Cell, Developmental and Cancer Biology, Knight Cancer Institute, Oregon Health & Science University
Title: "The Immunological Consequences of Lymphatic Transport in Skin: From Infection to Cancer"
Location: SCTR Auditorium

March 19, 2020
No Duhring Grand Rounds this week

March 20-24, 2020
American Academy of Dermatology

March 26, 2020
9:00 AM - 10:00 AM Patient Viewing, PCAM Suite 1-330S
10:00 AM - 11:00 AM Patient Discussion, SCTR Auditorium

April 2, 2020
9:00 AM - 10:00 AM Patient Viewing, PCAM Suite 1-330S
10:00 AM - 11:00 AM Patient Discussion, SCTR Auditorium
11:00 AM - 12:00 PM Lecturer: **Tiffany Scharschmidt, MD**
Associate Professor, Department of Dermatology, University of California, San Francisco Biomedical Sciences
Title: TBD
Location: SCTR Auditorium

April 9, 2020
9:00 AM - 10:00 AM Patient Viewing, PCAM Suite 1-330S
10:00 AM - 11:00 AM Patient Discussion, SCTR Auditorium
11:00 AM - 12:00 PM Lecturer: **Antonella Tosti, MD**
Professor, Department of Dermatology and Cutaneous Surgery, University of Miami Miller School of Medicine
Title: TBD
Location: SCTR Auditorium

April 16, 2020
9:00 AM - 10:00 AM Patient Viewing, PCAM Suite 1-330S
10:00 AM - 11:00 AM Patient Discussion, SCTR Auditorium

April 17, 2020
Philly Derm: CHOP

April 23, 2020
9:00 AM - 10:00 AM Patient Viewing, PCAM Suite 1-330S
10:00 AM - 11:00 AM Patient Discussion, SCTR Auditorium

April 30, 2020
9:00 AM - 10:00 AM Patient Viewing, PCAM Suite 1-330S
10:00 AM - 11:00 AM Patient Discussion, SCTR Auditorium

May 7, 2020
9:00 AM - 10:00 AM Patient Viewing, PCAM Suite 1-330S
10:00 AM - 11:00 AM Patient Discussion, SCTR Auditorium
11:00 AM - 12:00 PM Lecturer: **David Fajgenbaum, MD, MBA, MSc;** Assistant Professor, Translational Medicine & Human Genetics,;Associate Director, Patient Impact, Orphan Disease Center, University of Pennsylvania; Co-Founder and Executive Director, Castleman Disease Collaborative Network (CDCN); **Title:** TBD
Location: SCTR Auditorium

May 14, 2020
No Duhring Grand Rounds this week

May 15, 2020
Philly Derm: Temple University School of Medicine

May 21, 2020
10:00 AM - 11:00 AM **Pillsbury Lecture;**
Lecturer: **Anthony E. Oro,MD, PhD**; Eugene and Gloria Bauer Professor of Dermatology; Co-Director, Maternal and Child Health Research Institute; Associate Director, Center for Definitive and Curative Medicine, Stanford University School of Medicine
Title: TBD
Location: SCTR Auditorium

May 28, 2020
9:00 AM - 10:00 AM Patient Viewing, PCAM Suite 1-330S
10:00 AM - 11:00 AM Patient Discussion, SCTR Auditorium

June 4, 2020
10:00 AM - 11:00 AM **Hohenberg Lecture;**
Lecturer: **Marjana Tomic-Canic, PhD**
Professor of Dermatology (Tenured); Director, Wound Healing and Regenerative Medicine Research Program; Department of Dermatology and Cutaneous Surgery, Miller School of Medicine, University of Miami
Title: TBD
Location: SCTR Auditorium

June 11, 2020
9:00 AM - 10:00 AM Patient Viewing, PCAM Suite 1-330S
10:00 AM - 11:00 AM Patient Discussion, SCTR Auditorium

June 18, 2020
Location change this week
9:00 AM - 10:00 AM Patient Viewing, PCAM Suite 1-330S
10:00 AM - 11:00 AM Patient Discussion, Law Auditorium in Jordan Medical Education Center (JMEC)

June 25, 2020
9:00 AM - 10:00 AM Patient Viewing, PCAM Suite 1-330S
10:00 AM - 11:00 AM Patient Discussion, SCTR Auditorium