

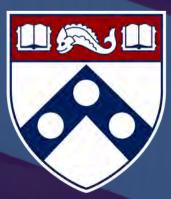
## PENN DERM

SKIN BIOLOGY & DISEASES RESOURCE-BASED CENTER (SBDRC)

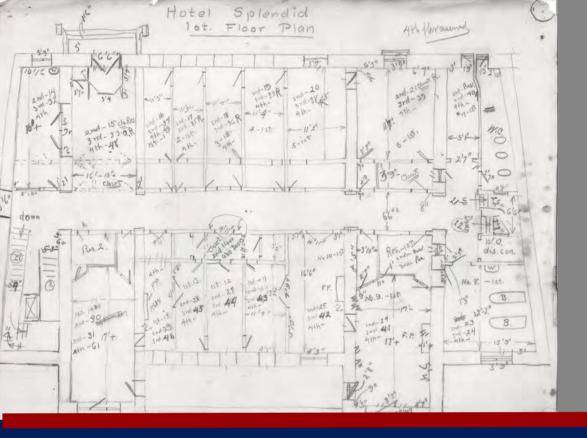
#### INSIDE THIS ISSUE

A Brief History of Penn Dermatology and the Military

Brian C. Capell, MD,
PhD and Laboratory
Address Epigenetics
and Cancer



SPRING 2023



#### Left:

Copy of a floor plan of a French hotel converted into a hospital during World War I; Members of Base Hospital no. 20, located at the University of Pennsylvania, were stationed here and in other converted buildings to support our allies.

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#### Did You Know?

According to a **study published** in the Journal of the American Academy of Dermatology, Penn Dermatology was tied for first in employing the highest number of graduates of military dermatology residencies (GMDR) in academic dermatology.



#### Dear Friends and Colleagues,

Since the inception of the Department, service in all forms has been prioritized – this holds true to military service. Starting with our founder, Louis Adolphus Duhring, MD, who served in the military upon completing his sophomore year at the University of Pennsylvania. Dr. Duhring enlisted as a member of the 32nd Regiment of Pennsylvania Volunteers to protect Pennsylvania from ongoing threats in the 1860s. Throughout its history, Penn Derm has had a strong relationship with the Armed Forces. Some examples include our work at the Philadelphia Corporal Michael J. Crescenz VA Medical Center, research collaborations with the Department of Defense, service as advisors for the highest officials of the United States, as members of the United States Public Health Service Corp, and individual contributions by members of our faculty and trainees. I think you'll enjoy reading about some of this history and key players in this area.

In line with the military theme, we check in with Penn Dermatology alumnus (2004) and Clinical Associate Professor, **Glen H. Crawford, MD**. Dr. Crawford joined our residency program after serving in the US Air Force. Upon graduation, he followed in the footsteps of Dr. Paul Gross and served as the Chief of Dermatology at Pennsylvania Hospital for 15 years. We hope you enjoy learning some notable pearls he took away from his training here.

We also highlight **Brian C. Capell, MD, PhD**, and his research. Dr. Capell is an Assistant Professor in Dermatology with a secondary appointment in Genetics. He studies epigenetic modifications and interactions with the environment that promote skin cancer. Dr. Capell is at the forefront of research and you can get a glimpse into his current projects.

Our 47th Annual M.H. Samitz, MD, Memorial Lecture was given this past October by our very own **Ellen J. Kim, MD**, who discussed her research on Cutaneous T Cell Lymphoma (CTCL), as well as her career taking care of CTCL patients and educating the next generation of CTCL researchers.

Our Skin Biology and Disease Resource-based Center (SBDRC) Annual Symposium and Trainee Retreat was held in March. We heard from **Suephy Chen, MD, MS**, Chair of Dermatology at Duke University School of Medicine, who discussed health services research.

This newsletter also includes information about the Dermatopathology division of our department and introduces us to the Dermatologic Surgery and Laser Program at the Children's Hospital of Philadelphia (CHOP).

Lastly, please join me in congratulating **Susan C. Taylor, MD**, Vice Chair of Diversity, Equity and Inclusion and the Bernett L. Johnson, Jr., MD, Professor of Penn Dermatology for being elected the 84th president of the American Academy of Dermatology. She will serve as President-Elect from March 2024 – February 2025 and will assume her role as President in March of 2025.

Please reflect on the immense time and effort going into the success of our department. Our ability to provide opportunities derives from the generosity of our alumni and community partners. I encourage you to contribute to one of the many worthwhile programs in Dermatology, some of which are listed below. Please feel free to reach out to me directly, or to **Caitlin Crowe Doelp** in the Development Office at (215) 746 - 2167 or <a href="mailto:crowe@upenn.edu">crowe@upenn.edu</a>, to discuss the many ways in which you can help and support our work. Please know that your generosity is vital to advance our missions.

Enjoy reading this issue of the Penn Derm Newsletter and I wish you all the best for an exciting, fulfilling, and healthy summer! Drop me a line and let me know what you are doing.

Best wishes,

George Cotsarelis, MD

Milton B. Hartzell Professor and Chair

#### PARTNERING WITH PENN DERMATOLOGY

Penn directs 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 future generations 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, the Department will continue 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 who work collaboratively and across disciplines, such as with the School of Engineering. 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 one of the highest priorities. Endowed professorships in investigative dermatology provide Penn Dermatology with the ability to retain and attract exceptional faculty. Penn's preeminent dermatologists and researchers consistently receive recognition for excellence in patient care, research discoveries, and education. Endowed professorships are instrumental to the Department's faculty and their important work.

#### Community Education Fund

Inspiring the Next Generation

Penn Dermatology is committed to serving youth in the Philadelphia community. Through programs like the Penn Academy for Skin Health (PASH), high school students are offered an invaluable STEM experience - working side-by-side with our nationally renowned experts in the laboratory, as well as participating in college workshops.

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.

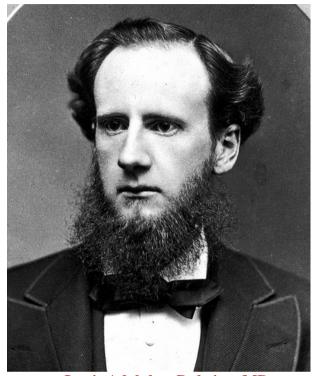
For more information about partnering with Penn Dermatology, please contact **Caitlin Crowe Doelp**, Senior Director of Development, at **(215)** 746 - 2167 or ccrowe@upenn.edu.

## A Brief History of Penn Dermatology and the Military

Embedded in the history of Penn Dermatology are ties between many of our department members and the military dating back to the Department's founding in the 1800s. Louis Adolphus Duhring, MD, the first Chair of Penn Dermatology, served during the American Civil War. While a sophomore at the University of Pennsylvania, Duhring took a break from his studies to enlist as one of the Ninety Day Volunteers in the Thirty-Second Regiment of Pennsylvania Volunteers to support and defend Pennsylvania citizens from ongoing threats. It was not until he returned to the University that Duhring shifted his focus from the arts to the sciences, and eventually decided to pursue a career as a physician.

In response to the Geneva Convention of 1863, there was a global push for each nation to organize their own hospital services. In the midst of the ongoing American Civil War, the University of Pennsylvania was at the forefront of establishing these networks. Before the American military entrance into World War I, also known as the "Great War" because of the extent of destruction that ensued, Pennsylvania Hospital board members used a \$25,000 donation by the Pennsylvania Committee for National Preparedness to establish the "Pennsylvania Hospital Base Unit Hospital no. 20." Captain Alexander Randall, Lieutenant Joseph C. Birdsall, Sergeant Charles Deibert and Privates, first class, Dale Logan and Samuel B. Harvey led the Dermatology and Urology Units at this site.

One month after the United States declared war on Germany in 1917, 24 physicians, two dental surgeons, 64 nurses, and 157 enlisted men from the University sailed to Le Treport, France to assist our allies with medical treatment at a 2,000-bed facility. A few months later, many Penn and Penn-affiliated physicians traveled to serve in this French hospital, including Frank Crozier Knowles, a graduate of the University of Pennsylvania and Medical Reserve Corp member in the Army, who served as a dermatology consultant.



Louis Adolphus Duhring, MD First Chair of Penn Dermatology

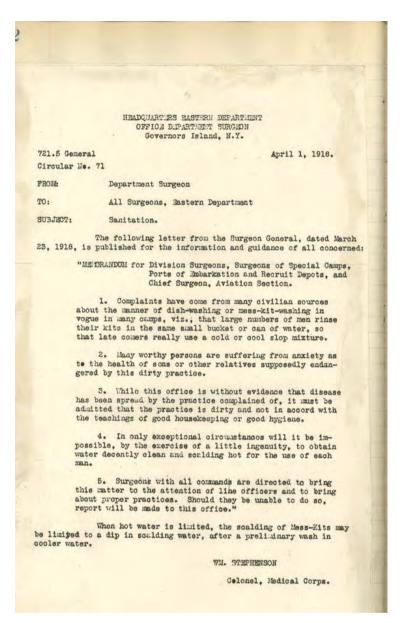
The connection between Penn Dermatology and military service became increasingly evident during the years surrounding World War II. Multiple faculty members and three Chairs of Department served in the military during this era. Military camps throughout the world faced numerous cases of venereal disease due to poor hygiene, as they had during the First World War. Both syphilis and gonorrhea were rampant and, at the start of the war, incapacitated over 18,000 soldiers daily. In response, the U.S. Armed Services Medical Departments began making efforts to reduce the disease burden. Due to awareness campaigns, technological innovation, and increased access to therapeutics, this number reduced thirtyfold by the end of the war.

One man particularly well suited to aid in this effort was the third Chair of Penn Dermatology, **John H. Stokes, MD**. The Department recruited Dr. Stokes as Professor and Chair in 1924. He dedicated a



John H. Stokes, MD Third Chair of Penn Dermatology

large portion of his career to studying syphilology and published the third edition of Modern Clinical Syphilology in 1944, solidifying his eminence as a researcher in the field. During the Second World War, the United States Public Health Service commissioned Dr. Stokes as a reserve senior surgeon. The U.S. Army appointed him as the consultant to the Surgeon General and the Secretary of War, sitting on the Subcommittee on Venereal Diseases of the National Research Council. After the War, Dr. Stokes received two citations and the Meritorious Service Medal, an award presented to U.S. Armed Forces members for their non-combat service and achievement. The U.S. Army also presented him with the William Freeman Snow Award for Distinguished Service to Humanity for his research in penicillin therapy and syphilis.



Archived memo found at the Base Hospital at the University of Pennsylvania; this memo was sent to all Base Hospitals addressing sanitation concerns for troops during World War I.

**Donald M. Pillsbury, MD**, joined Penn Dermatology in 1928 and would eventually assume the role of Chair after Dr. Stokes. Like Dr. Stokes, he was another integral advisor to leaders of the U.S. military on the home front and abroad. Shortly after the U.S. entered the war in the summer of 1942, the U.S. Army appointed Dr. Pillsbury as Senior Consultant of Dermatology and Syphilology for the U.S. troops stationed in Europe. After arriving in England, Dr. Pillsbury received orders to develop new treatment policies for venereal diseases. After conducting lengthy research, Dr. Pillsbury treated roughly 4,000 patients with an intensive, twenty-day treatment schedule using arsenic, resulting in zero mortality. Later that same year, Dr. Pillsbury, Marion Sulzberger, MD, and **Clarence S. Livingood, MD**, coauthored the Manual of Dermatology, a guide to help doctors on the front lines to diagnose and treat common skin problems in soldiers. The U.S. government continued to utilize Dr. Pillsbury's

expertise in dermatological research after the war. He participated in at least twenty major national committees and commissions as an advisor, including for the Veterans Administration, Public Health Service, U.S. Army, and U.S. Air Force.

Dr. Livingood earned his MD from the University of Pennsylvania School of Medicine in 1936. He then completed an internship and residency in internal medicine, followed by a second residency in dermatology, training directly under Dr. Stokes. At the end of his residency in 1941, Dr. Livingood enlisted in the U.S. Army and was stationed at the Army Hospital in Indiantown Gap, PA, where he served as Chief of Dermatology. Later, the Army deployed him to Burma and India with other members of the Penn hospital unit. When he returned, he served as the Vice Chair of the Department of Dermatology under Dr. Pillsbury. Dr. Livingood proceeded to serve as the Chair of Dermatology at Thomas Jefferson University at the young age of 37. He then went on to serve as Chair of Dermatology at two more institutions (University of Texas - Galveston and the Henry Ford Hospital in Detroit, Michigan). He was also elected President of the American Academy of Dermatology, the Society for and Investigative Dermatology, the American Dermatological Association. Many remember Dr. Pillsbury fondly for his love of humanity and for urging his colleagues to focus on the healing power of medicine over profit. As of the year 2000, there were more lectureships established in his honor than any other American dermatologist.

Prior to joining Penn Dermatology, <u>Harvey Blank, MD</u>, served in World War II. Following medical school, although he had no formal training in the discipline, the U.S. Army appointed Dr. Blank as Chief of Dermatology for a large field hospital in India. After witnessing hundreds of soldiers perish from skin disease, Dr. Blank began to expand his knowledge and practice of dermatology through reading and experimentation. While serving in the Army, Dr. Blank became acquainted with Dr. Livingood, who convinced him to join Penn Dermatology at the end of his military service. At the conclusion of World War II, Dr. Blank formally trained in



Donald M. Pillsbury, MD Fourth Chair of Penn Dermatology

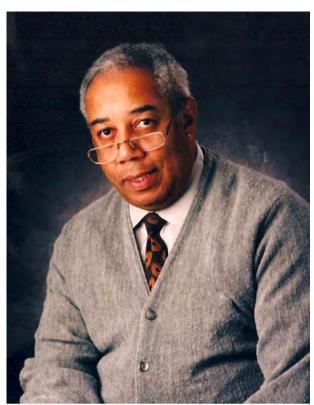


Walter B. Shelley, MD, PhD Fifth Chair of Penn Dermatology

dermatology under Dr. Pillsbury and developed a special interest in virology, which later led him to produce the first electron micrographs of the varicella and zoster viruses. After completing his training and leaving the University of Pennsylvania, Dr. Blank developed several dermatologic therapeutics, including topical nystatin and the first halogenated steroid ointment. He also founded the Department of Dermatology at the University of Miami and became its first Chair.

Walter B. Shelley, MD, PhD, would become the fifth Chair of Penn Dermatology. Prior to joining Penn, Dr. Shelley was in charge of the 80 dermatology hospital beds at the Rayburn Army Hospital in McKinney, Texas. During WWII this hospital primarily treated patients from the Pacific fronts. In an article written for the Journal of the American Academy of Dermatology, Dr. Shelley stated that he "also had an outpatient dermatology service where [he] compared patient lesions with the photos in Pillsbury, Sulzberger and Livingood's military manual." Dr. Shelley spent the majority of the war at the Army Medical Research Laboratory (AMRL) at Fort Knox, Kentucky, where he conducted research on human sweat mechanisms and the effects of heat on soldiers. From his research in the Army's massive "hot room," Dr. Shelley concluded "that a soldier's performance in battle correlated with [their] hydration" and convinced generals to frequently supply the Army's tank corps with water. After World War II, Dr. Shelley officially joined Penn Dermatology as a resident and continued to serve as a special Air Force dermatology consultant for military hospitals around the world. Dr. Shelley coauthored *Dermatology* with Dr. Pillsbury in 1956, which became a primary American textbook used to teach dermatology residents. In 1965, the Department appointed him Chair of Dermatology. He continued a bountiful research career, developing therapeutic interventions for diseases of eccrine and apocrine sweat glands and identified various dermatologic conditions.

Thanks to the work of researchers, many of whom were associated with Penn Dermatology, by the end of World War II new treatments and awareness programs for



Bernett "Bernie" L. Johnson, Jr., MD Senior Medical Officer Hospital of the University of Pennsylvania

venereal diseases greatly reduced the number of incapacitated soldiers by thirty-fold. Cases of gonorrhea, for example, no longer required a thirty-day hospitalization. Instead, soldiers remained on duty while receiving treatment for the disease over the course of five days. This development allowed medical personnel to focus their treatment efforts on the life-threatening injuries of other soldiers.

Following World War II, Isaac Willis, MD, Samuel L. Moschella, MD, and Bernett "Bernie" L. Johnson, Jr., MD, continued the legacy of providing medical expertise to the U.S. military. Dr. Willis, a former Penn Dermatology resident and faculty member, was a Colonel in the U.S. Army, serving as the commander of the 3297th U.S. Army Hospital in Atlanta, Georgia. Later, the military sent him to the Walter Reed and Letterman Army Medical Centers where he assisted multiple military personnel, including Dr. Sulzberger, to conduct research and advance the U.S. military education on chemical warfare and skin disease. After leaving the military, Dr. Willis became the Director of Dermatology Research and Professor of Dermatology at

the Morehouse School of Medicine in Atlanta. Later, in 1992, he was appointed to the Board of the National Institute of Arthritis and Musculoskeletal and Skin Diseases.

<u>Dr. Johnson</u> completed post-doctoral training in Dermatology at Penn. The U.S. Navy commissioned him for the Medical Corps as Chairman of the Dermatology Department and Commanding Officer of the Naval Regional Medical Center in Philadelphia. After his retirement as a Captain in the Navy, Dr. Johnson joined Penn Faculty and worked as the Senior Associate Dean for the Veterans Affairs and the Senior Medical Officer for the Hospital of the

University of Pennsylvania. Dr. Johnson became a strong proponent for aid to underserved communities, frequently reminding his students of the importance of global health. In addition to working as the Senior Associate Dean for Diversity and Community Outreach at the School of Medicine, Dr. Johnson served as interim Chair of Penn Dermatology and was lauded for his teaching and volunteer work. Working with the Secretary of Veterans Affairs, Dr. Johnson served on both the advisory committees for Veterans Health Administration Academic Affiliations and Veterans Health Administration Resident Education. He established a collaboration between Penn and Sayre High School, working tirelessly to help open the Sayre Health Center (now known as the Dr. Bernett L. Johnson, Jr. Sayre Health Center) in 2007. The Department honors his legacy through an endowed professorship in the Department, currently held by Susan Taylor, MD.

Gerald S. Lazarus, MD, the sixth Chair of Penn Dermatology, is noted for his work in helping U.S. veterans. As the founder of the Johns Hopkins Wound Healing Center, Dr. Lazarus worked diligently to evaluate patients for underlying diseases and provide them with specific therapeutic regimens that insured



Gerald S. Lazarus, MD Sixth Chair of Penn Dermatology

healing of some of the most difficult to treat wounds. He was also "very aware of the importance of having a preeminent site to quantitatively evaluate outcomes - from healing rates to quality of life measurements - for the pharmaceutical industry." To this end, Dr. Lazarus worked tirelessly to establish a collaboration with Walter Reed and the National Naval Medical Center to assist the Wounded Warrior Project, a nonprofit organization that continues to this day to provide injured veterans with various services, such as mental health programs, fitness and wellness coaching, and career counseling programs. Dr. Lazarus continues to practice medicine at Johns Hopkins Hospital in Baltimore, Maryland. The Department honors his legacy through an endowed professorship in the Department currently held by **David Margolis, MD, PhD.** 

Prior to joining the faculty and serving as Director of the Dermatology Residency Program at the University of Pennsylvania, **William D. James, MD**, graduated from the United States Military Academy West Point and served as the Chief of Dermatology at the Walter Reed Medical Center. Twelve years into his stint at the Center, Dr. James was recruited by Dr. John Stanley at Penn Dermatology. Later on, he was commissioned by the U.S. military to write a follow-up manual for Pillsbury, Sulzburger and Livingood's Manual of Dermatology. With the help of dermatology faculty in military teaching programs across the country, Dr. James compiled, authored, and edited the

Textbook of Military Medicine: Military Dermatology. This placed military dermatology in historical context while highlighting conditions that specialists and general medical officers in the field are likely to encounter. Presently, Dr. James holds the Paul R. Gross, MD, Professorship of Dermatology and is set to retire this year.

Douglas J. Pugliese, MD, MPH, CWSP, Associate Professor of Clinical Dermatology and Chief of Dermatology, Penn Presbyterian Medical Center, served in Iraq as a member of the Navy and Marine Corps. After completing his service tours, the military awarded him two medals between 2006 and 2008. The first medal was the Iraqi Campaign Medal, an award presented to military personnel who have served in Iraq. The second medal was the Navy and Marine Corps Commendation Medal with Two Gold Stars, awarded to Navy or Marine Corps personnel who have demonstrated distinguishing heroism or meritorious achievement during their service.

Prior to his position as Professor of Clinical Dermatology at Penn Medicine, Rudolf R. Roth, MD, attended the U.S. Air Force Academy and graduated in 1975. After graduation. he worked Communications Electronics officer for two years before attending the Uniformed Services University of the Health Sciences, earning his MD in 1981. After his internship, he worked as a flight surgeon for an F-15 squadron before dermatology residency at Walter Reed Medical Center. Dr. Roth worked as an Air Force dermatologist in Alaska and California before retiring from service in 2001 and joining Penn's faculty.

Alain Rook, MD, worked as Senior Surgeon in the United States Public Health Service. After leaving this position in 1986, Dr. Rook became a dermatology resident at the University of Pennsylvania School of Medicine. Since completing his residency, Dr. Rook has worked as a Professor of Dermatology and the Director of the Cutaneous Lymphoma Program.



William D. James, MD, writing an updated Military Manual of Dermatology



Douglas J. Pugliese, MD, MPH, CWSP



Air Force Academy Graduation Photo of Rudolf R. Roth, MD

In addition to our faculty members, Penn Dermatology has had several residents either come to Penn Dermatology with military experience or enlist in the military after their training. After completing his dermatology residency in 2004, **Kenneth Katz, MD, MSc, MSCE**, joined the Commission Corps in the U.S. Public Health Service which assists with U.S. efforts around the world, including the H1N1 flu outbreak and flu surveillance in Africa. Since leaving the U.S. Public Health Service, Dr. Katz has continued to work as a dermatologist at the Zuckerberg San Francisco General Hospital and Trauma Center. He also works part-time as the Chairperson of the Dermatologic and Ophthalmic Drugs Advisory Committee of the FDA.

Glen H. Crawford, MD, was a Captain and Flight Surgeon in the Air Force assigned to a Special Operations Unit in the Republic of Korea. He participated in helicopter search and rescue and provided medical assistance to troops and civilians. This included collaborations with the Navy, Army and Air Force. The military named Dr. Crawford the Air Force Special Operations Surgeon of the year in 1999. He later spent time in Germany, where he took part in missions throughout Europe and Africa while also working as the medical coordinator for the Department of Defense Manned Space Flight Support Office for NASA Space Shuttle Operations. Later in 2001, he was honored with the Meritorious Service Medal before he was honorably discharged. Upon completing his residency at Penn Dermatology, Dr. Crawford served as the Chief of Dermatology at Pennsylvania Hospital from 2004 until 2018. Currently, he is a Clinical Associate Professor of Dermatology at the University of Pennsylvania and is Chief Medical Officer for the Schweiger Dermatology Group in Philadelphia.

Chad Hivnor, MD, was a flight surgeon at the Lackland Air Force Base. After completing his dermatology residency at the University of Pennsylvania School of Medicine in 2004, he returned to the U.S. Air Force as the 59th Medical Specialty Squadron Dermatologist Lieutenant Colonel. While serving at the Lackland Air Force Base, Dr. Hivnor was awarded a 1.1 million dollar



Glen H. Crawford, MD

grant to use lasers to treat veterans with burns and amputee scars and thereby assist with assimilation back into society. Since retiring from the military in 2014, Dr. Hivnor has worked as a dermatologist at Dermatology Associates of San Antonio. Currently Dr. Hivnor is the Chief of Dermatology, South Texas Veterans Health Care System and is a Clinical Associate Professor Uniformed Services University Health Sciences.

Ronald Bernardin, MD, served as an active duty physician in the United States Air Force for eleven years before embarking on a four-year career as flight surgeon at Dover Air Force Base. After this, he temporarily left the military to complete his residency in Dermatology at the University of Pennsylvania's School of Medicine, participating in several courses, including a month-long elective, which allowed him to provide dermatological service at Princess Marina Hospital in Botswana. Following his residency, he returned to the military to serve as the Chief of Dermatology at Elmendorf Air Force Base in Alaska for three years. Dr. Bernardin currently works as a dermatologist at Macaione & Papa Dermatology Associates.

Josephine C. Nguyen, MD, graduated from the United States Naval Academy. After completing her residency at Penn Dermatology in 2010, a Navy mentor requested Dr. Nguyen to be the Director of Medical Student Accessions, a position in which she flourished. Around

this time, the Navy appointed her as a Naval Lieutenant Commander, becoming the sole Navy dermatologist for the Pacific Northwest region. Since her enlistment, Dr. Nguyen has fulfilled multiple roles in the U.S. Navy. In addition to serving as a Navy Representative on the Dermatology Section Council (DSC) at the American Academy of Dermatology, she has served as the Senior Dermatology Consultant to the U.S. Navy Surgeon General since July 2019. She is also the Director of Telehealth, Chair of the Healthcare Ethics Committee, and Wardroom Vice President for Naval Hospital Bremerton in Washington, D.C.

Richard G. Bennett, MD, served as a lieutenant commander in the U.S. Navy after he completed his residency in dermatology at the University of Pennsylvania. After leaving the military, Dr. Bennett started his own practice in Mohs micrographic surgery and trained fellows in the technique. He also was a full-time faculty member at Emory University School of Medicine, receiving teaching awards from the medical school there. Presently, Dr. Bennett is affiliated with multiple hospitals in Santa Monica, California, including Providence St. John's Health Center, Children's Hospital Los Angeles and USC Norris Comprehensive Cancer Center.

**Amanda Derwae, MD**, was a Global Health track resident in the Dermatology Department at Penn. After she finished her residency, Dr. Derwae moved to California where she became a dermatologist at the Travis Air Force Base. She continues to work at Travis Air Force Base as both a Major and staff physician.

Furthermore, we continue to see engagement of our present faculty in supporting the mission of the U.S. Armed Forces. An article in the Journal for the American Academy of Dermatology published in 2018 identifies that veterans and active military members are at higher risk for skin cancer than the general population. The Congressionally-Directed Medical Research Programs (CDMRP), run by the Department of Defense, awarded **Todd W. Ridky, MD, PhD** with a grant totaling over a million dollars. This grant supports

his laboratory's research, "Preventing Melanoma Progression by Targeting Nonclassical Androgen Signaling," which aims to develop pharmacologic prevention of melanoma for patients at high risk due to light skin or family history of melanoma. Dr. Ridky also received the Mid-Career Accelerator Award from the Melanoma Research Program (MRP) for this research. He currently serves as an Associate Professor of Dermatology at the Perelman School of Medicine at the University of Pennsylvania.

The Department of Veterans Affairs (VA) also funds research of Assistant Professor of Dermatology Thomas H. Leung, MD, PhD. One of the most recent projects that the Leung Laboratory pursued includes "Immune and Genetic Controls of Tissue Regeneration in Mice and Humans" with the aim of studying murine ear tissue regeneration to eventually devise "novel methods to stimulate self- repair mechanisms and to promote scarless wound healing/full tissue regeneration in humans." Veterans are at high risk for cutaneous wounds both during and after service, which often include pressure ulcers, diabetic foot ulcers, pathological scar formation, and other wartime trauma. Presently, the treatment models for wound healing remain ineffective and determining the genetic regulation of wound healing and scar formation provides a unique opportunity to enhance quality of life for both service members and civilians. In this study, the Leung Lab researched molecular differences between mice that formed scars and those that were scarless and identified the molecular pathway that regulates this behavior. Given the success of the project, the VA granted Dr. Leung another award that will investigate how the pathway works. This funding commences in July of this year.

**Victoria P. Werth, MD**, whose career and research were highlighted in the <u>Winter 2022 Penn Derm Newsletter</u>, is another recipient of VA and Department of Defense funding. The Department of Defense funded project is a collaboration with Ben Chong, MD, at the UT Southwestern Medical Center. Together, Drs. Werth and Chong are evaluating the reliability and validity of the Cutaneous Lupus Erythematosus Quality of Life

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Victoria P. Werth, MD, Chief of Dermatology (left), at the Philadelphia Corporal Michael J. Crescenz Department of Veterans Affairs Medical Center (right)

Measure (CLEQoL) in comparison to the Cutaneous Lupus Erythematosus Disease Area and Severity Index (CLASI). According to the Lupus Foundation of America, research continues to show that active duty military and veterans are at higher risk for developing lupus and other autoimmune disorders. In 2009 alone, 20,000 patients were treated in the VA system for lupus. In addition, the Werth Lab has an upcoming grant from the VA that will be used to determine the mechanistic role of extracellular vesicles as a mediator of immune activation and extracellular matrix changes in ultraviolet B irradiation-induced photoaging and skin inflammation. Dr. Werth is interested in the role of keratinocyte-derived microvesicles in crosstalk between the dermis and epidermis, which is believed to be important in presentation and severity of photosensitive autoimmune diseases. This topic has been a long-standing interest to Dr. Werth, particularly due to issues active duty military and veterans face with photoaging.

Beyond our faculty and Department's direct military work and accomplishments, Penn Medicine has been committed to promoting and improving the health of veterans for many years. Penn Dermatology exemplifies this through its longstanding affiliation with the <u>Philadelphia Corporal Michael J. Crescenz Veterans Affairs Medical Center (PVAMC)</u>. Located one block from the Hospital of the University of Pennsylvania, the PVAMC was constructed in 1950 as a Dean's Hospital. Currently, Dr. Werth serves as the Chief of Dermatology at the PVAMC.

Today, the PVAMC acts as a teaching hospital for the University of Pennsylvania's Perelman School of Medicine. It employs 2,000 medical personnel and supports 145 acute care beds and a 135-bed Community Living Center. The PVAMC's dermatology faculty divide their time between working full-time at Penn and working part-time at the center. Medical students, dermatology residents, and fellows are assigned to a four-month rotation where they provide veterans with all forms of patient care. Many of the veterans who visit the Dermatology Department at the PVAMC commute long distances from central and northeastern Pennsylvania, southern New Jersey and Delaware. Some of the most common skin conditions PVAMC patients present with are psoriasis, eczema, and cutaneous T-cell lymphoma.

As demonstrated by the many faculty and Penn-affiliated physicians mentioned in this article, our Department's history has intersected with military service since its inception. Residents and faculty have long dedicated their time and expertise to the betterment of the armed forces through both direct service and support of the nation's highest military officials. Penn Dermatology prioritizes service in all forms and we honor all of those who have dedicated their lives to serving our country.

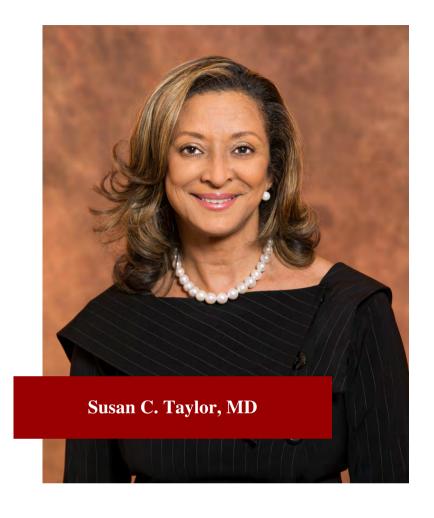
Please note: This article was written with the intent to provide an overview of the history of Penn Dermatology and the US Military. The focus is on former Chairs of the department, current faculty, their research, and recent alumni. We would like to acknowledge that there are many other individuals associated with Penn Dermatology that have honorably served in the US Military. We are immensely grateful for their sacrifice and wish to recognize all that have served for the greater good.

## Susan C. Taylor, MD, FAAD, and Her Appointment as President of the American Academy of Dermatology

We are proud to recognize the American Academy of Dermatology's (AAD) selection of **Susan C. Taylor, MD, FAAD**, as the new President of the organization. Her term as President-Elect begins in March, 2024 while her term as President commences in March 2025. Dr. Taylor is world-renowned for promoting diversity, equity, and inclusion in healthcare, especially within the discipline of Dermatology. Her leadership is crucial given the growing need for a more diverse and inclusive workforce to care for an increasingly diverse patient population.

Dr. Taylor has a history of success: she graduated from the University of Pennsylvania and Harvard Medical School, completed her dermatology residency at Columbia Presbyterian Medical Center and is boardcertified in both internal medicine and dermatology. As a member of our Department, Dr. Taylor created and spearheads numerous initiatives to lead to a more equitable environment for patients and providers alike. She founded the Skin of Color Center at St. Luke's-Roosevelt Hospital in New York City and the Skin of Color Society, the leading national organization that promotes awareness and excellence in skin of color dermatology.

Her dedication to enhance the quality of care for patients of color and promote mentorship is outstanding. She actively involves herself in several programs, both locally and nationally, focused on introducing dermatology to young students, including the PASH (Penn Academy for Skin Health) Program, the Health Sciences Educational Pipeline Program, and our Diversity and Community Engagement residency track program.



Dr. Taylor chaired several AAD committees, served as the AAD Vice President, and published numerous articles on skin conditions in people of color. She designed an educational curriculum consisting of seventy 20-minute training sessions for treating skin of color, demonstrating her passion for inclusivity.

As President of the AAD, <u>Dr. Taylor aims</u> to improve the unity of the dermatology specialty by hosting frequent forums to share differences and goals of dermatologists; eliminate external threats to their practices, expand advocacy efforts by engaging patients worldwide; and broaden the scope of dermatology practices. Her leadership and expertise will undoubtedly advance the field of dermatology and continue to promote diversity, equity, and inclusion in healthcare.

### New Faculty Announcement



Anna E. Kersh, M.D., PhD

Penn Dermatology is proud to welcome Anna E. Kersh, MD, PhD, to our faculty as an Assistant Professor of Dermatology. In 2009, Dr. Kersh graduated from the University of Pennsylvania with a BA in Biology. She completed the Medical Scientist Training Program at the Emory University School of Medicine, with an MD and a PhD in Immunology & Molecular Pathogenesis at Emory's Laney Graduate School. At Emory, Dr. Kersh received both the Immunology and Molecular Pathogenesis Scholar of the Year Award (2015) and the Dean's Award (2017). Dr. Kersh completed her internship at Kettering Medical Center in Ohio, followed by a residency in Dermatology at the Hospital of the University of Pennsylvania (HUP). She has received grants from the NIH (F31), American Contact Dermatitis Society, and the Dermatology Foundation. Since 2020, she has been a postdoctoral fellow in the Dr. Thomas Leung Laboratory at Penn, investigating the pathogenesis of lichen planus and lichenoid dermatoses and identifying the cytology and signaling mechanisms of lesion skin cells. As an Assistant Professor, she will continue to study lichen planus while seeing patients with lichenoid dermatoses, contact dermatitis, and general dermatologic issues.

## PENN CUTANEOUS PATHOLOGY SERVICES

400



A facility of the University of Pennsylvania Health System

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INTERNATIONALLY RECOGNIZED DERMATOPATHOLOGISTS

FAST TURNAROUND TIME

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- 7 Dermatopathologists with Specialties including:
- Melanoma & Melanocytic Lesions
- Pediatric Dermatology
- Alopecia
- Adnexal Tumors
- Genetic Skin Diseases
- Nail Disorders & Histopathology of the Nail Unit
- Tropical & Infectious Dermtologic Conditions
- Cutaneous Lymphoma

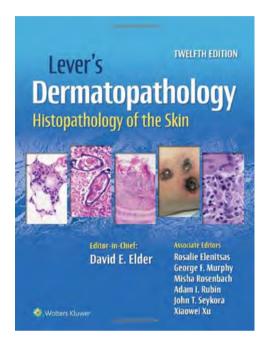
Oral Pathologist with specialties in:

- Inflammatory & Autoimmune Mucosal Lesions, Oral Preneoplasia and Cancer

# What's New at Penn Dermatopathology?

Penn dermatopathologists are renowned experts in their field, boasting a wealth of knowledge, experience, and innovation. The Penn Dermatopathology program (Penn Cutaneous Pathology Services, PCPS) maintains its unrivaled reputation due to the expertise and passion of its leading physicians including Drs. Rosalie Elenitsas, John Seykora, Carrie Kovarik, Adam Rubin, Emily Chu, and oral pathologist, Dr. Faizan Alawi. Their ongoing dedication to positioning themselves at the forefront of advances in dermatopathology ensures that they are equipped with the latest knowledge, skills, and tools, making them a trusted resource for accurate diagnoses of patients with skin diseases and disorders. Their expertise and contributions to the field have earned them recognition and respect among their peers, leaving them highly sought-after experts in dermatopathology. What have our dermatopathology faculty been up to? Read on!

Penn Cutaneous Pathology Services provides expert processing and evaluation of scalp biopsies for alopecia. To maximize the diagnostic information from a patients' scalp biopsy, we provide a range of processing methods to ensure accurate diagnosis. Typically, we perform horizontal or HoVert sectioning, which visualizes all the follicles allowing us to evaluate inflammation at key locations in the specimen. HoVert sectioning was developed in our laboratory and is invaluable for assessing scarring alopecias. With HoVert processing, we vertically section the epidermis and superficial dermis of the scalp biopsy and horizontally section the dermal component. These approaches allow us to provide comprehensive and valuable information to the dermatologists so that you can provide the best patient care possible.



Penn Medicine's dermatopathologists contributed to the recently published 12th edition of Lever's Histopathology of the Skin.

Our dermatopathology faculty also are involved in multiple research projects. For example, Dr. Seykora's work seeks to better understand alopecias so that ultimately we can better diagnose and treat them. For example, in collaboration with multiple faculty members, he made three novel observations in central centrifugal cicatricial alopecia (CCCA): 1) this lymphocytic alopecia is associated with a predominance of CD4+ lymphocytes, 2) CCCA lymphocytes demonstrate activation of the JAK-STAT pathway, which raises the possibility that CCCA may respond to JAK inhibitors and 3) follicular scarring in CCCA, lichen planopilaris and lupus erythematosus, may be related to the depletion of stem cells through the formation of "fibrotic trochanters." Together, these findings help us better diagnose this form of alopecia and help guide the design of relevant clinical trials.



All new cases of malignant melanoma are reviewed at the daily Consensus Conference as part of the quality assurance process.

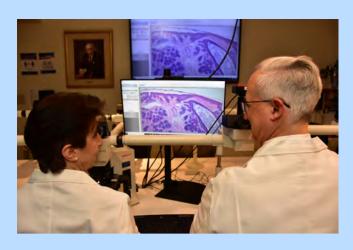
Dr. Chu and colleagues in the multidisciplinary melanoma program recently published a study entitled "Association Between Metastatic Melanoma Response to Checkpoint Inhibitor Therapy and Tumor-Infiltrating Lymphocyte Classification on Primary Cutaneous Melanoma Biopsies" in the February 2023 issue of JAMA Dermatology. Immune checkpoint inhibitor therapy has become the standard of care for advanced melanoma. Identifying biomarkers for tumor response to immune checkpoint inhibition is important for determining which patients are most likely to benefit from therapy, since only about 40% of patients respond to checkpoint inhibition and immunerelated adverse events are common. In their study, Dr. Chu and colleagues investigated the relationship between presence and absence of tumor-infiltrating lymphocytes (TILs) in primary melanomas of patients with stage IV disease, and found that absence of TILs was strongly correlated to progression of disease in patients treated with immune checkpoint inhibitors. These findings suggest that primary melanoma TILs classification may be a cost-effective biomarker of metastatic disease response to immune checkpoint inhibitors. Since TILs in melanoma have been known to have clinical predictive value and potentially therapeutic importance, these results provide another reason for pathologists to consider including TILs classification in melanoma diagnostic reports if they do not already do so.

Penn dermatopathologists also help support the educational mission Dermatology of the Department through their involvement in the Dermatopathology Fellowship Program. This Program provides in-depth training in dermatopathology and prepares fellows for careers as future leaders in the field. Dr. Elenitsas, the Program Director, has led the program for many years with the help of Dr. John Seykora. Next year, she will pass the reigns to Dr. Emily Chu, who is now an Associate Director, Dr. Seykora will continue in his role as an Associate Director.

We train two dermatopathology fellows per year and occasionally have a year-long dermatopathology observership for an international dermatologist who learns from us, then returns to their country to practice and teach dermatopathology. We also provide an optional research year in dermatopathology, which is partially supported by an endowment established by the late Waine C. Johnson, MD, a world-renowned dermatopathologist, philanthropist and educator who was associated with the Department for over four decades.

**Dr. Matthew Hedberg**, the inaugural Waine C. Johnson research fellow, is working in Dr. Seykora's laboratory and applying new technologies, including high resolution spatial transcriptomics, on skin biopsies to identify new biomarkers of diseases which helps us improve diagnostic accuracy and potentially provide new therapeutic targets. By combining diagnostic excellence of skin biopsies with innovative research, Penn Cutaneous Pathology Services will continue to provide physicians and their patients with the highest quality dermatopathology services.

In addition to their contributions to the scientific literature, all of our dermatopathologists are actively involved in authoring the textbooks of our specialties, such as the 12th edition of Lever's Histopathology of the Skin. This comprehensive dermatopathology textbook has been the cornerstone for educating dermatologists, pathologists, dermatopathologists dermatology residents and fellows for decades. All of our dermatopathologists have written chapters for the current edition, and Drs. Elenitsas, Seykora, and Rubin served as associate editors under the distinguished leadership of Penn's Dr. David Elder. Another important reference for pathologists is the WHO (World Health Organization) Classification of Tumors textbook series. While the series of concise and authoritative books covers various organ systems, the 5th edition of the Skin Tumors was just completed in 2023. Drs. Chu, Rubin, and Elenitsas contributed chapters, and Dr. Elenitsas served as an expert reviewer for this edition, again under the editorial leadership of Dr. Elder.



Senior dermatopathologists Dr. Rosalie Elenitsas and Dr. John Seykora discuss an interesting case at one of the many clinico-pathological conferences at the microscope.

### Save the Date!

18th Wallace H. Clark, Jr., MD Lectureship in Cutaneous Oncology and Melanoma Symposium

Thursday, October 12, 2023 8am - noon

The 18th Wallace H. Clark Jr., MD, Lectureship in Cutaneous Oncology and Melanoma Symposium will include a series of lectures, and a panel discussion, highlighting the latest updates in the care and treatment of melanoma and other cutaneous oncologic conditions. Healthcare professionals with a background in melanoma and skin cancer will listen and learn from Penn Medicine physicians and other invited lecturers at the forefront of the field. Attendees receive up-to-date information on scientific advances in the field, including topics such as management of melanoma patients, improvements in surgical interventions, and discussions on novel therapeutics for malignant melanoma. Please save the date to join us virtually on Thursday, October 12, 2023 from 8:00 AM until noon.

The Clark Symposium is named after the late Dr. Wallace H. Clark Jr., a dermatopathologist who worked at the University of Pennsylvania for over a decade. Before joining Penn, he received his M.D. at Tulane University in 1947, remaining a faculty member until 1962, before moving to Harvard University and Massachusetts General Hospital. During his time at these institutions, Dr. Clark founded the first pigmented lesion clinic in the United States with Dr. Thomas B. Fitzpatrick. He also designed a prognostic melanoma classification system known as Clark's Levels of Invasion. He moved to Philadelphia in 1969, working as a professor and the Chair of the Pathology Department at Temple University until 1978, before finally joining the University of Pennsylvania School of Medicine as a Professor of Dermatology and Pathology. At Penn, he founded and led another pigmented lesion clinic with several colleagues and friends who followed him from Temple. Dr. Clark was known for his rich collaborations and his cultivation of strong friendships to further develop interdisciplinary melanoma studies. His lifelong commitment to this topic continued beyond his retirement from Penn in 1991, when he returned to Boston to work at the Beth Israel Hospital in the Pigmented Lesion Group. We honor his name by continuing research in skin cancer and collaborating with healthcare professionals involved in dermatology and oncology.

18

## **ALUMNI CORNER**

Where Penn Derm Alumni share their stories.

#### IN THE SPOTLIGHT

"I'm very thankful to Penn for that opportunity to train me the way that the program did, especially you [William James, MD] as my mentor, you've had an incredible impact on me, and I am very grateful for that."

Glen H. Crawford, MD



Glen H. Crawford, MD, is a graduate of New York University School of Medicine. Prior to joining Penn Dermatology as a resident, Dr. Crawford served in the Air Force and at NASA where he worked as a flight surgeon. He was Chief Resident from 2003-2004. Upon his graduation, Dr. Crawford became the Chief of the Section of Dermatology at Pennsylvania Hospital, a role he held for fifteen years. He has published over 40 peer-reviewed articles and has held numerous leadership roles including President of the Philadelphia Dermatological Society and President of the Pennsylvania Academy of Dermatology and Dermatologic Surgery. Presently, Dr. Crawford is the Chief Medical Officer of Schweiger Dermatology Group and a Clinical Associate Professor of Dermatology at Penn. He practices general medical, cosmetic, and surgical dermatology in Center City Philadelphia.

Penn Derm Alumni Corner can now be found where you get your podcasts! To listen to Alumni Corner interviews, please search for "PennDerm" on <u>Spotify</u> or <u>Apple Podcasts</u>. To watch this episode on Vimeo, please click <u>here</u>.

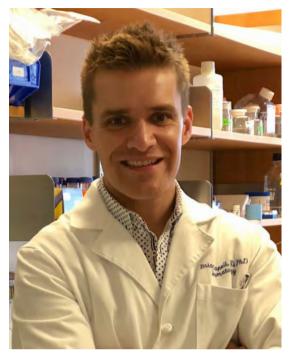
Want to share your story? Visit us at our new website <u>dermatology.upenn.edu/alumni/</u>, email us at <u>PennDermAlumni@uphs.upenn.edu</u>, follow us on Instagram <u>@PennDerm</u>, and join us on <u>Facebook</u>. Check out our monthly Spotlight featuring fellow PennDerm alumni and current faculty research. We look forward to hearing from you.

## Brian C. Capell, MD, PhD and Laboratory Address Epigenetics and Cancer

In July of 2017, the Penn Derm Newsletter welcomed Brian C. Capell, MD, PhD, to the Penn Medicine faculty. That same month, the Capell Laboratory began operation. Dr. Capell's research lies at "the intersection of epigenetics, epithelial biology, and cancer" and aims to understand how epigenetic gene regulatory mechanisms interact with homeostatic processes to promote diseases like cancer. The Capell Lab utilizes in vivo modeling of disease, employing numerous mouse models, primary cells, and patient samples to investigate how epigenetic and epitranscriptomic mechanisms control squamous epithelial cell regeneration, proliferation, and all in pursuit differentiation, of novel therapeutic methodologies for diseases of epithelial tissues such as squamous cell carcinoma (SCC). The current research team is composed of two PhD students (Gina Pacella and Alex Maldonado-Lopez), one MD-PhD student (Nina Kuprasertkul), one postdoctoral fellow (Eun Kyung Ko), one bioinformatician (Sijia Huang), two undergraduates (Lydia Bao and Claudia Magahis), and one post-baccalaureate research specialist/lab manager (Carina D'Souza).



The Capell Lab enjoys some fun and science at the Penn Epigenetics Retreat at Citizens Bank Park in 2021.



Brian C. Capell, MD, PhD

Dr. Capell graduated with a BS in Biology from Boston College in 2000. He then earned his PhD in Cellular and Molecular Biology in 2008 and subsequently his MD in 2009 from New York University (NYU). While at NYU, Dr. Capell was selected as a Howard Hughes Medical Institute-NIH Research Scholar and began his "first intensive long term research experience" in physician-geneticist Francis Collins' lab at the National Human Genome Research Institute. While studying Hutchinson-Gilford Progeria Syndrome (HGPS) with Dr. Collins, Capell developed and tested a treatment for HGPS on individual patient cells and in mouse models. Subsequently, this treatment became the first FDA approved therapy for the condition, and is now the standard of care for HGPS patients. Dr. Capell credits this treatment discovery and the invaluable mentorship of Francis Collins, MD, PhD, ForMemRS, recently retired Director of the National Institutes of Health, as his motivation to center research in his career as a dermatologist. He said:

"I don't think I ever felt like I had done something so meaningful in my life. I felt like this would be a way you could really impact people. I went into medicine because I want to help people, and with research, it felt like you could potentially impact people even more broadly than just on an individual patient level."

After completing his Dermatology Residency at the University of Pennsylvania (Penn), Dr. Capell began his postdoctoral fellowship at Penn's Epigenetics Institute, training under Shelley Berger, PhD. While there, he studied the basic mechanisms of epigenetics and gene regulation and became interested in how many of the processes "that go wrong during aging are key drivers" of diseases of aging such as cancer.

Currently, Dr. Capell is an Assistant Professor of Dermatology and Genetics at Penn's Perelman School of Medicine. He is also the Tumor Biology Program Liaison for Community Outreach and Engagement (COE) at the Abramson Cancer Center (ACC) and the Co-Director of the Cutaneous Phenomics and Transcriptomics (CPAT) Core of the Penn Skin Biology and Diseases Resource - based



The Capell Lab Holiday Party 2022 at Walnut Street Café.

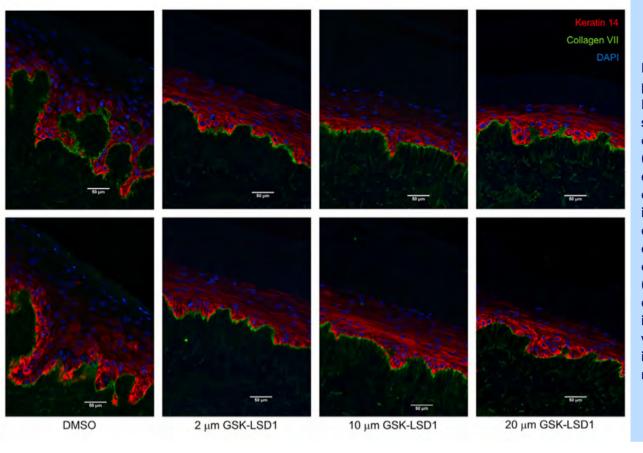


The Capell Lab enjoying research.

Center (SBDRC). His laboratory presently receives funding from the Dermatology Foundation, the Skin Cancer Foundation, the NIH Wistar/Penn SPORE Collaboration, and the NIH/National Institute of Arthritis & Musculoskeletal & Skin Diseases/Department of Human Health Services R01 program.

#### The Impact of Epigenetic Regulation on Cell Development & Differentiation in Epithelial Tissues

The epigenome is composed of compounds that modify or mark an organism's DNA, switching genes "on" or "off," thereby directing when, where, and how genes are expressed. It contains a record of the modifications to the DNA and histone proteins that do not change the nucleotide sequence. Beyond mutations in the DNA, cancer can often occur when there is an imbalance in chromatin-modifying enzymes due to issues with histone modifications and/or DNA methylation. DNA methylation facilitates gene silencing by adding a methyl group or "cap" to a DNA molecule. In vivo, most DNA wraps around histone proteins to form nucleosomes, which produce chromatin patterns, creating the characteristic DNA double helix structure. If histones wind tightly enough around



In one of the lab's first papers (Egolf, et al. Cell Reports. 2019), they showed that an epigenetic drug (inhibitors of the histone demethylase, LSD1) could suppress tumor infiltration in a human organoid model of cutaneous squamous cell carcinoma (cSCC) (GSK-LSD1 versus control DMSO). The lab is now testing a topical version of a LSD1 inhibitor in mouse models of cSCC.

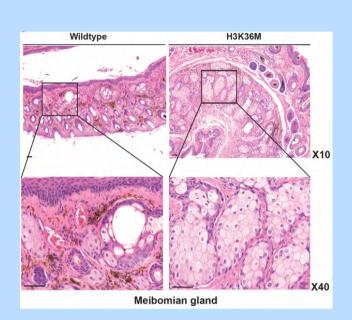
DNA, a cell cannot read the nucleotide code to create its sequenced protein, turning a gene "on." Certain modifications can loosen the histones for specialized transcription factors to permit replication and transcription of the DNA. Self-renewing cells, such as squamous epithelia, rely on the correct balance of chromatin-modifying proteins to regulate epithelial progenitor cell maintenance and differentiation.

In 2019, Capell co-authored "LSD1 Inhibition Promotes Epithelial Differentiation through Derepression of Fate-Determining Transcription Factors." This study indicated that the chromatin modifier, LSD1 (histone demethylase), is overexpressed in many types of cancer, including epithelial cancers. Generally, LSD1 silences genes by removing the histone H3 lysine K4 (H3K4) to repress master epithelial transcription factors that promote differentiation. It was determined that LSD1 inhibitors prevent LSD1 from binding to chromatin, increasing H3K4 methylation and gene transcription of factors that determine cell fate. This increased methylation results in premature differentiation of epidermal progenitor cells and repression of SCC.

Squamous epithelia are flat, scale-like cells found in many different locations throughout the human body. They form the outer layer of the skin, the epidermis, as well as the surface of other epithelial tissues like the tongue and cornea. According to Dr. Capell:

"Squamous epithelia like the skin and tongue are particularly relevant to our interests in both gene regulation and cancer biology. First of all, squamous cell carcinomas are, in aggregate, the most common cancer type in the world and can occur on a variety of tissues that stratify (skin, tongue, lung, cornea etc.). Second of all, they are our barrier to the external environment and are constantly exposed to carcinogens, making the understanding of those processes of endogenous tumor suppression and oncogenesis really critical to understand for cancer prevention. Finally, squamous epithelia are constantly turning over, and as they do this, they undergo dramatic, highly orchestrated changes in gene expression. Any failure to properly coordinate these changes can lead to cancer, and so for a lab interested in what regulates gene expression, this is a ripe and vital area of investigation."

In 2021, the Capell Lab's research article, "MLL4 mediates differentiation and tumor suppression through ferroptosis, was published in Science Advances. The study focused on the regulatory properties of MLL4 (KMT2D), one of the most commonly mutated genes across all types of human cancers. Past studies have shown that MLL4 tends to accumulate loss of function mutations that diminish its ability to suppress initiation and progression of cancer. The research team began by developing mice with epidermal MLL4 deletions. These mice were then crossed with keratin 14 Cre (Krt14-Cre)-expressing mice, generating offspring with epidermal Mll4-eKO deletions. These Mll4-eKO mice exhibited many epidermal abnormalities including tissue disorganization and dispersed regions of hyperplasia and hyperkeratosis. These phenotypical traits are consistent with features observed



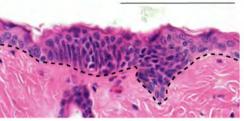
Recent work in the lab has shown that a single epigenetic mutation (H3K36M) can drive the aberrant formation and hyperplasia of numerous epithelial glands (sebaceous, meibomian, salivary) (Ko, et al. BioRxiv. 2022). Collectively, these data suggest that using epigenetic drugs may offer the ability to increase or decrease gland size if needed depending upon the clinical symptoms (i.e. acne, sebaceous hyperplasia, dry eye disease, Sjogren's syndrome).

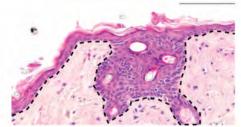
in precancerous human cutaneous SCC, demonstrating that deletion of MLL4 has adverse consequences. The Mll4-eKO mice also displayed significant loss of expression of key genes involved in lipoxygenase activity like Alox12. Alox12 in particular are known to direct ferroptosis, a novel, iron-dependent type of programmed cell death, which promotes differentiation of epidermal cells. These findings suggest that a lack of MLL4 impairs normal differentiation to "result in features of precancerous neoplasms in the epidermis" (Egolf et al., 2021).

In a soon-to-be published study ("H3K36M provokes cellular plasticity to drive aberrant glandular formation and squamous carcinogenesis"), Capell and his research team created a mouse with a "mutation that disrupts its chromatin, that's been observed in a variety of cancers, but not yet studied in skin." The Capell Lab tested if these mice would develop more cancer at a faster rate than "normal" mice when exposed to a carcinogen. Ultimately, this genetically altered mouse developed much larger and faster-growing tumors in the presence of a carcinogen - particularly oral squamous cell carcinoma. Interestingly, developing SCC also seemed to change the overall determination of normal cell fate decisions. The cancer-mouse exhibited hypertrophy of salivary glands in the tongue, sebaceous glands in the skin, and Meibomian glands around the eye in addition to abnormal delocalized gland formation. Many diseases are characterized by the formation of too many or too few glands. In the near future, Dr. Capell hopes to "take advantage of this epigenetic control of gland formation" and use it to create epigenetic treatments that may "decrease or increase gland formation, such as increasing salivary gland size for Sjogren's syndrome or reducing sebaceous gland size for conditions such as acne or rosacea in the skin."

Control MII4-eKO







In a recent manuscript (Egolf, et al. Science Advances, 2021), the lab revealed the mechanism by which the loss of one of the most highly mutated genes in all of skin cancer (i.e. KMT2D or MLL4) could drive skin cancer. Mice lacking this tumor suppressor in the skin develop cutaneous neoplasms that progress with aging.

Dr. Capell sees patients weekly, most of whom have skin cancer. Since the LSD1 inhibitor worked effectively in 3D organoid models, his lab is currently testing it in mouse models of SCC. Dr. Capell anticipates one day being able to incorporate the LSD1 inhibitor into a topical agent that can be tested for use on humans with precancer or early-stage cancers. However, as with all research, it takes considerable time and effort to transfer a potential treatment from the modelling stage to human treatment application. For this reason, Dr. Capell often reminds his research team that E.O. Wilson once said: "Persist! The world needs all you can give." To learn more about Dr. Capell and his research, please visit the Capell Lab's website <a href="here">here</a>.



The Capell Lab celebrates the thesis defense and graduation of their first graduate student, Shaun Egolf, in 2022.

## THE 47TH ANNUAL M.H. SAMITZ, MD, MEMORIAL LECTURE

The forty-seventh annual M.H. Samitz, MD, Lecture in Cutaneous Medicine was held on October 20, 2022 at the University of Pennsylvania (Penn) Smilow Center for Translational Research. The Samitz Lecture celebrates the legacy of **Morris H. Samitz, MD**. Dr. Samitz was a passionate clinician, influential mentor, and renowned leader in the Penn Medicine Department of Dermatology for many years.

Dr. Samitz was born and raised in Philadelphia and earned his MD at Temple University Medical School. He trained at the Graduate School of Medicine at Johns Hopkins, New York University, and Penn. During his career, he served as the Chief of Dermatology at Graduate Hospital, the Chairman of the Graduate School in Dermatology at Penn, and was an esteemed Professor in the Department of Dermatology at the University of Pennsylvania School of Medicine. The Dermatology Foundation awarded Dr. Samitz the Clark W. Finnerud Award that honors dermatologists who demonstrate exemplary performance in research, clinical care, and medical teaching. Dr. Samitz was devoted to his patients, students, and colleagues and was known as an expert in complex dermatologic conditions. During 1975, the year of his retirement, Dr. Samitz's students launched a fundraising campaign to endow the Lectureship to honor his memory.

In 2022, the Samitz Lectureship series featured <u>Ellen J. Kim, MD</u>, Professor of Dermatology at the University of Pennsylvania School of Medicine and Medical Director of the Perelman Center for Advanced Medicine Dermatology Clinic at the Hospital of the University of Pennsylvania (HUP). Dr. Kim earned her MD from the University of Pennsylvania and went on to complete residency at Boston University-Tufts University combined training program and research fellowship in dermatology at Boston University School of Medicine. In 2003, Dr. Kim joined the faculty at the University of Pennsylvania as an assistant professor.

Dr. Kim held the endowed Sandra J. Lazarus Professorship, awarded to a female researcher that is "distinguished by intense creativity and demonstrates remarkable compassion, humanity and social commitment." Dr. Kim has been listed as one of the "Best Doctors of America" every year since 2007. Dr. Kim has earned seven awards for outstanding teaching, including at Boston University School of Medicine, the University of Pennsylvania, and the Philadelphia Dermatological Society's Founders Award. She now directs the Penn Cutaneous Lymphoma Program at the Hospital of the University of Pennsylvania's Department of Dermatology. Much of her research focuses on research on the diagnosis, management, and clinical trials of novel therapies for Cutaneous T Cell Lymphoma (CTCL). She has served on the US Cutaneous Lymphoma Consortium Board of Directors and was Chair of the Medical Advisory Committee of the Cutaneous Lymphoma Foundation.

Dr. Kim's presentation, entitled "Becoming a CTCL Dermatologist: Clinical Trials, Tribulations, and Teaching," provided an insight into the implications of past research on CTCL, the methodology behind her targeted therapeutics for CTCL, the challenges associated with choosing Cutaneous T Cell Lymphoma as a dermatologic specialty, and approaches to educating the next generation of CTCL researchers and clinicians. We are grateful for her time and thank her for the engaging presentation.



Ellen J. Kim, MD



M. H. Samitz, MD

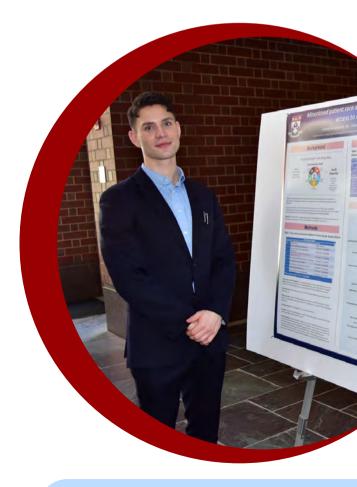
### SBDRC Annual Scientific Symposium & Trainee Retreat



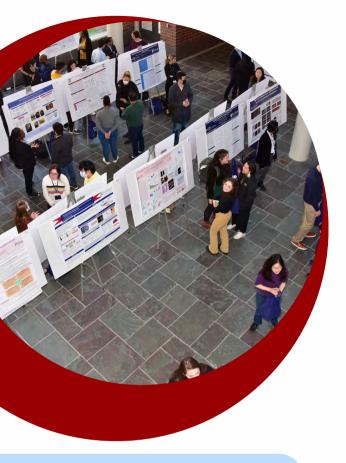
The Penn Skin Biology and Disease Resource-based Center (SBDRC) hosted its annual Scientific Symposium and Trainee Retreat on Thursday, March 9, 2023. Through oral presentations and poster sessions, the symposium highlighted the many research accomplishments of our skin investigators including SBDRC mini-grant and Pilot & Feasibility Grant awardees, T32 trainees, and a wonderful presentation by our invited keynote speaker, Suephy Chen, MD, MS, of Duke University. This year, the symposium featured a variety of skin-related topics, from basic research to clinical studies and health disparities in dermatology.

Caitlin Cavarocchi; SBDRC REDCap specialist.

The symposium took place in person with the option to attend virtually. After the keynote speaker presentation, symposium attendees engaged in an afternoon of fascinating trainee talks, poster sessions, opportunities for networking and collaboration. Three of our Penn Academy for Skin Health (PASH) high school alumni also presented their summer research at the poster session. The PASH alumni participated in a Roundtable session to discuss how the Penn Dermatology outreach program contributed to their interest in pursuing a career in science and research. All attendees enjoyed a day devoted to bringing skin investigators of all levels together to share their exciting projects.



Jeromy Gotschall; Medical Student and Research Fellow; Takeshita Research Group



SBDRC Scientific Symposium and Trainee Retreat presentation floor.

here.

Dr. Chen serves as the Chair of the Department of Dermatology at Duke University School of Medicine, a position she has held since 2021. Before joining the Duke faculty, Dr. Chen was Vice Chair and Professor of Dermatology at Emory University. Dr. Chen is highly recognized in the community, most recently as a Naomi M. Kanof Clinical Investigator Award from the Society of Investigative Dermatology, an award that honors an individual that contributed significantly to the improvement of health through clinical research. You can read more about Dr. Chen's research on her faculty page

We enthusiastically welcomed our keynote speaker, Suephy Chen, MD, MS, who presented her keynote entitled "Health Services Research in Dermatology." Dr. Chen is an internationally dermatologist recognized and health services researcher focusing on cutaneous melanoma. pigmented lesions, and applications of health outcome/services research in dermatology. Her keynote addressed the importance of studying patient adherence to dermatologist-recommended therapies the significance of quality of life for and dermatological conditions, namely pruritus. Dr. Chen also presented her research regarding improving access to health services using teledermatology. She has published over 160 peer-reviewed original research articles.



Dr. Suephy Chen, MD, MS, from Duke University presenting as Keynote Speaker.

## The Dermatologic Surgery and Laser Program at the Children's Hospital of Philadelphia

The Dermatologic Surgery and Laser Program at the Children's Hospital of Philadelphia (CHOP) Section of Pediatric Dermatology develops an individualized plan for every child.

When approaching surgical procedures in children, the clinicians at CHOP engage families in a conversation to determine the best location for the procedure. procedures under local anesthesia, our clinicians are assisted by a talented team of pediatric nurses and a dedicated Child Life specialist, Mitzi McEneany. Mitzi helps children understand medical procedures in ageappropriate language, emotionally supports them before, during, and after the procedure, and engages them in age-appropriate distraction techniques. If the family feels the child cannot tolerate the procedure under local anesthesia, then the procedure can be performed under sedation or general anesthesia by the Director of Dermatologic Surgery and Laser, Melinda Jen, MD. Dr. Jen collaborates with the CHOP Sedation Team and Department of Pediatric Anesthesia to comfortably perform a range of procedures, from biopsies to injections to excisions. A surgical nurse navigator guides the family through the process of planning and scheduling a surgical procedure.

"Dr. Jen has allowed us to provide procedures and laser treatments for patients of all ages in a wide range of settings, in addition to the traditional clinic space, sparing families the need to be referred to another surgical specialist after seeing dermatology. This program has enhanced patient care and coordination at CHOP which is particularly important for families who must take time off from school and work for procedures. I am grateful for Dr. Jen's dedication to building and enhancing this wonderful program," said **Marissa J. Perman**, Section Chief of Pediatric Dermatology.

In addition to surgical procedures, CHOP pediatric dermatology also offers laser treatments. A pulsed dye laser (PDL) and a potassium titanyl phosphate (KTP) laser are available for the treatment of vascular lesions.



Melinda Jen, MD

Laser treatment of port wine birthmarks ideally starts in infancy. The clinical team at CHOP aims to complete the initial series of treatments without general anesthesia. However, if a child is not tolerating, or is too old to tolerate, treatments while awake, PDL is also available under general anesthesia. With these options, a child of any age can be treated with PDL at CHOP. Additionally, Nd:YAG and Alexandrite lasers allow for hair laser treatment for cosmetic and medical indications, such hirsutism, pilonidal disease. hidradenitis suppurativa. Finally, a fractional CO2 laser can treat selected epidermal nevi, scars, and keloids, and can also be used for laser assisted delivery of triamcinolone and poly-L-lactic acid when needed.

For referrals or to learn more about the Dermatology section's surgical and laser treatments, please contact Melinda Jen, MD, the Director of Dermatologic Surgery and Laser, at jenn@chop.edu.

#### Faculty Awards and Honors May 2022 - March 2023



#### **Emily Baumrin, MD**

- Received the Abramson Cancer Center's Paul Calabresi Career Development Award for Clinical Oncology K12 on March 1, 2023
- Title: Development and Validation of a Skin-specific Patient-reported Outcome Measure for Chronic Graft vs. Host Disease



#### Bruce Brod, MD

- American Academy of Dermatology Presidential Award
- Received American Contact
   Dermatitis Society Presidential
   Citation
- Associate Dean of Continuing Medical Education and Interprofessional Collaboration



#### Brian Capell, MD, PhD

- Received the Todd Nagel
   Memorial Research Grant

   Award from the Skin Cancer
   Foundation in late October
- Title: Elucidating Epitranscriptomic Mechanisms to Inhibit Keratinocyte Cancers



Emily Chu, MD, PhD

 Elected to the Board of Directors of the Women's Dermatologic Society



Neha Jariwala, MD

- Received the American Society of Dermatologic Surgery's Cutting Edge Research Grant
- Title: Studies in the Surgical Management of Acral Melanoma



Ellen Kim, MD

- Awarded R01 grant from the FDA Office of Orphan Projects Development for a multicenter Investigator initiated open-label clinical trial
- Title: Visible Light Activated Synthetic Hypericin Ointment in Early Stage Mycosis Fungoides Patients



Carrie Kovarik, MD

- Penn Research Award of Excellence: the Luigi Mastroianni Clinical Innovator Award
- American Academy of Dermatology Presidential Citation For Leadership



#### David Margolis, MD, PhD

- Received the Marion B.
   Sulzberger, MD, Memorial
   Award and Lectureship at the
   American Academy of
   Dermatology Annual
   Meeting.
- Title: Dermatology, Dermatoepidemiology and Antibiotics



#### Aimee Payne, MD, PhD

- Society for Investigative Dermatology: President 2024-2025; President-Elect 2023-2024
- FDA approved Investigational New Drug for treating MuSK myasthenia gravis with patient trials



Todd Ridky, MD, PhD

 Elected to the American Society for Clinical Investigation



#### Rudolf Roth, MD

- Received the Order of Saint Lazarus of Jerusalem in a ceremony at INDERMA in Guatemala
  - A special accolade given for unique projects throughout the world in the fields of Hospitaller, philanthropic, charitable, medical, cultural and social activities



#### Adam Rubin MD, MSCE

• Elected President of the Council for Nail Disorders



#### John Seykora, MD, PhD

- Elected to Executive Committee of the American Society of Dermatopathology
- Chair, Finance Committee, American Society of Dermatopathology
- Secretary, American Hair Research Society



#### Joseph Sobanko, MD, MBA

- Wharton Executive MBA Graduate
- 2023 Master Clinician Award



#### Susan Taylor, MD

- Penn Research Award of Excellence: the Christian R. and Mary Lindback Award for Distinguished Teaching
- President-Elect, American Academy of Dermatology



#### Jungian Zhang, MD

- First Annual Graduate Medical Education Award for Resident/Fellow as Teacher Award
  - Recognizes a resident or fellow who consistently demonstrates enthusiasm and excellence in teaching with significant contributions to humanism and the learning of other residents or fellows

#### **Dermatology Foundation 2023 Research Award Recipients**



Medical Dermatology Career
Development Award - Year 2
Emily Baumrin, MD
Chronic Graft-versus-host-Disease:
Development of a Skin-specific
Patient-reported Outcome Measure



Permatologist Investigator Research
Fellowship
Victoria Fang, MD, PhD
Highly Multiplexed Imaging and
Characterization of Tertiary Lymphoid
Structures in Hidradenitis



Dermatopathology Research
Career Development Award
Matthew Hedberg, MD, PhD
Cellular Characteristics and
Molecular Determinants of
Squamous Cell Carcinoma in Situ



Physician Scientist Career
Development Award - Year 2
Anna Kersh, MD, PhD
Understanding the Molecular
Pathogenesis of Lichen Planus
and Lichenoid Dermatoses



Science of Human Appearance Career Development Award Eun Kyung Ko, PhD Defining the Role of Human Epigenome in Sebaceous Gland Development and Disease



Physician Scientist Career
Development Award
Allen Si Won Oak, MD
Defining the Role of
Mechanotransduction in Scarring
Alopecias for Therapeutic Gain



Research Career Development
Award - Year 2
Satish Sati, PhD
Investigating Neuroimmune
Interactions to Promote Scarless
Skin Regeneration



Bristol Myers Squibb Psoriasis Research Award Junko Takeshita, MD, PhD, MSCE Increasing Participant Diversity in Clinical Trials for Psoriasis Through Video Education

#### **Newsweek America's Best Dermatologists**

Bruce Brod, MD William James, MD Ellen Kim, MD Christopher Miller, MD Misha Rosenbach, MD Adam Rubin, MD

Victoria Werth, MD



#### Philadelphia Magazine's Top Docs for 2022

Bruce Brod, MD George Cotsarelis, MD Cherie Ditre, MD Joel Gelfand, MD Analisa Halpern, MD William James, MD Ellen Kim, MD Christopher Miller, MD Michael Ming, MD Alain Rook, MD Misha Rosenbach, MD Adam Rubin, MD Joseph Sobanko, MD, MBA

## **Highlights of Discovery**

## Prior Authorization Rules Can Delay Treatment. New Laws May Help

For The Washington Post, **Bruce Brod, MD**, Professor of Clinical Dermatology, discussed some drawbacks of step therapy, a process in which patients must try other medications before moving on to one recommended by their doctor, including worsening physical and mental health. There is proposed federal legislation to ease some of the requirements for this process so patients can get the recommended therapies faster.



## <u>Apremilast's Effect on CVD Risk Markers Evaluated in</u> <u>Study</u>



A Medscape article highlighted **Joel Gelfand, MD, MSCE**, the James J. Leyden, MD, Professor of Clinical Investigation and Dermatology, and his novel research on apremilast (Otezla). His research suggests that although the psoriasis drug did not decrease vascular inflammation, it reduced body fat without affecting weight, a significant discovery due to the correlation between psoriasis and obesity.

#### New Treatment Shines Light on Generalized Pustular Psoriasis

**Joel Gelfand, MD, MSCE**, the James J. Leyden, MD, Professor of Clinical Investigation and Dermatology and Director of the Psoriasis and Phototherapy Center, was featured in a Dermatology Times article about a possible new treatment for generalized pustular psoriasis (GPP), which currently has no FDA-approved treatment. Gelfand says spesolimab may be a powerful treatment for "some of the sickest patients we see in dermatology."

#### 'Slugging': A TikTok Skin Trend That Has Some Merit

Medscape mentioned a review by **William D. James, MD**, the Paul R. Gross, MD, Professor of Dermatology, about the uses of petroleum jelly for the skin. The article discusses the latest TikTok skin trend called 'slugging,' which promises skin benefits such as curing acne, providing skin moisture, and skin protection.



## What Does Monkeypox Look Like Compared to Seven Other Skin Conditions

**Carrie Kovarik, MD**, Professor of Dermatology, discussed with Insider how mpox (monkeypox) manifests on the skin and how it differs from other conditions. While she does not expect patients to self-diagnose, she believes awareness of mpox is crucial, particularly for those at risk for severe disease.

## **Highlights of Discovery**

#### <u>The Challenges in Treating Vitiligo and Its Huge Impact</u> <u>on People of Color</u>

**Temitayo Ogunleye, MD**, Associate Professor of Clinical Dermatology, shed light on the lack of diversity in dermatology for a WHYY article. She discussed the value of having a provider with the same experiences or backgrounds as their patients, especially for conditions that significantly affect people of color, such as vitiligo.





#### A Decade of CAR-T Cell Therapy

**Aimee Payne, MD, PhD**, Professor of Dermatology, was mentioned in a feature article celebrating the decade-long research and development of CART-T cell therapy, highlighting hundreds of clinical trials underway, including treating blood and solid cancers, HIV, and even heart attacks. Payne co-founded Cabaletta Bio to develop CAR-T cell-like therapies for autoimmune diseases involving B-cells.

#### <u>Penn Research Shows that DOPA Protects Against</u> <u>Melanoma, Identifies Potential New Therapeutic Targets to</u> Treat Melanoma

**Todd Ridky, MD, PhD**, Associate Professor of Dermatology, explains in a Penn Medicine News article that the relative lack of dihydroxyphenylalanine (DOPA), and not simply susceptibility to sun damage, helps explain why melanoma is much more common in people with light skin tones. Ridky says this new insight offers exciting prospects for effective melanoma therapies.





#### Climate Change, Medical Education, and Dermatology

**Misha Rosenbach, MD**, Associate Professor of Dermatology, wrote for Medscape, urging clinicians and dermatologists to understand how climate change affects the health of individuals. He highlighted that climate change impacts dermatology in several ways, including heat-related illness, changing patterns of vector-borne diseases, pollution, and an uptick in skin cancer.

#### <u>Atopic Dermatitis: New Research May Help Improve</u> Treatment

**John T. Seykora, MD, PhD**, Professor of Dermatology, and Kang Ko, current dental student at the University of Pennsylvania, collaborated with University of Tennessee researchers to understand the role of the lkkb gene in fibroblast regulation. Understanding the role of the lkkb gene and its effect on transcription factors provides insight into novel treatments for atopic dermatitis. Prior Authorization Rules Can Delay Treatment. New Laws May Help.



## **Highlights of Discovery**



#### Does Plastic Surgery Improve Self-Confidence?

A research study by **Joseph Sobanko**, **MD**, **MBA**, Associate Professor of Dermatology, was mentioned in an article for Slate about plastic surgery and self-esteem. Sobanko and colleagues' research was featured in Dermatologic Surgery and found that cosmetic injections decreased dissatisfaction with one's physical appearance. Sobanko added that pre-procedure expectations are likely significant factors regarding a patient's self-esteem post-procedure.

#### Six Things People of Color Need to Know About Psoriasis

In a Self article, **Junko Takeshita**, **MD**, **PhD**, **MSCE**, Assistant Professor of Dermatology, offers critical insights about psoriasis on darker skin tones, including appearance, symptoms, and treatment. For example, Takeshita noted that individuals with darker skin may require higher doses to achieve optimal results.





#### What Experts Want You to Know About Hairstraightening Chemicals and Uterine Cancer

**Susan Taylor, MD**, the Bernett L. Johnson, Jr., MD, Professor in Dermatology, discusses the association between hair-straightening chemicals and uterine cancer in a Washington Post article. Taylor states the need for additional studies on the health risks of certain hair care practices. She encourages her patients to consider carefully all factors when deciding to use hair-straightening chemicals.

## New Drug Shows Promise Against Autoimmune Skin Disease

Penn Medicine News featured **Victoria Werth, MD**, Professor of Dermatology and Chief of Dermatology at the Corporal Michael J. Crescenz VAMC, and her study on litifilimab, a possible long-term treatment option for cutaneous lupus erythematosus (CLS). CLS is a form of lupus that occurs in the skin, which can cause scarring, permanent hair loss, and affect quality of life.



## **New Faculty Leadership**



#### KATHERINE BROWN, MD

**Dr. Katherine Brown** has been appointed the Medical Director of the Penn Medicine at Radnor Dermatology Practice. Dr. Brown received her MD from the Stanford University School of Medicine in 2006. She then served as an intern at Stanford Hospital & Clinics until 2007, and afterwards as a resident in dermatology at Northwestern Feinberg School of Medicine until 2010. In 2012, she started at the University of Pennsylvania School of Medicine as an Assistant Professor of Clinical Dermatology, and was promoted to Associate Professor in 2018.



DERMATOLOGY ONCOLOGY CENTER

## Mohs Surgery

At the Penn Dermatology Oncology Center, we do more than cure skin cancers. We find innovative ways to make our patients' lives better.

From our vast experience surgically treating more than 6,000 skin cancers each year, we have improved cure rates with advanced Mohs micrographic surgery, restored appearance with precise reconstructive surgery, and improved quality of life with tailored care plans.



#### Expert Academic Mohs Surgeons

We have assembled one of the world's largest teams of academic Mohs surgeons to care for the full spectrum of skin cancers. Our nine expert surgeons partner with referring providers to deliver world-class care.

#### State-of-the-Art Mohs Lab

Our advanced Mohs laboratory is a leader in frozen section immunostains to improve cure rates for melanoma, high-risk squamous cell skin cancer, Merkel cell cancer, and other rare tumors, such as extramammary Paget's disease.

#### PennDOC Connect

For more information please visit PennMedicine.org/Mohs. For Mohs and Dermatologic Surgery clinical consults and patient referrals call PennDOC Connect at 215-360-0909.

### FACULTY DIRECTORY 2023



George Cotsarelis, MD Chair Hair and Scalp Disorders



Joel Gelfand, MD, MSCE Vice Chair, Clinical Research Phototherapy, Psoriasis, Epidemiology



Elizabeth Grice, PhD Vice Chair, Basic Science Research Skin Microbiome



David Margolis, MD, PhD Vice Chair, Faculty Affairs Dermatopharmacoepidemiology



Misha Rosenbach, MD Vice Chair, Education Granulomatous Diseases, Neutrophilic Diseases, and Drug Reactions



Sara Samimi, MD Vice Chair, Quality and Safety Cutaneous T-Cell Lymphoma, General Dermatology



Susan Taylor, MD
Vice Chair, Diversity, Equity &
Inclusion
Hair and Scalp Disorders,
Hyperpigmentation, Melasma



Carmela Vittorio, MD Vice Chair, Operations Acne and Rosacea, Cutaneous T-Cell Lymphoma, General Dermatology



Elena Bernardis, PhD

Computer Vision,
Computational Dermatology



Edward Bondi, MD\*
General Dermatology



Allergic Contact Dermatitis, Patch Testing, Health Policy, Moles and Skin Cancer

Bruce Brod, MD



Atopic Dermatitis, Allergic Contact Dermatitis, General Dermatology

Katherine Brown, MD



Melanoma and Cutaneous Malignancies, High-Risk Skin Cancer, Aging Skin, Epigenetics

Brian Capell, MD, PhD



Zelma Chiesa Fuxench, MD, MSCE





Juliana Choi, MD, PhD





Emily Chu, MD, PhD

Dermatopathology, Melanoma and Cutaneous Malignancies, Genetic Diseases, Oncodermatology



Esther Chung MD

General Dermatology



Magaly Del Monaco, DO

Aging Skin, Cosmetic Skin Enhancement, Laser Treatment Services



Cherie Ditre, MD

Aging Skin, Laser Treatments, Cosmetic Skin Enhancements



Rosalie Elenitsas, MD

Dermatopathology, Melanoma and Cutaneous Malignancies



Christoph Ellebrecht, MD

Autoimmune Diseases, Blistering Diseases, General Dermatology



Jeremy Etzkorn, MD

Melanoma and Cutaneous Malignancies, Mohs and Reconstructive Surgery



Amy Forrestel, MD

Oncodermatology, General Dermatology



Cerrene Giordano, MD

Melanoma and Cutaneous Malignancies, Mohs and Reconstructive Surgery



Analisa Halpern, MD

Psoriasis, Acne and Rosacea, Atopic Dermatitis, General Dermatology



H. William Higgins, II, MD, MBE

Melanoma and Cutaneous Malignancies, Mohs and Reconstructive Surgery



Phillip Holler, MD, PhD

Hair and Scalp Disorders, General Dermatology



Claudia Hossain, MD

Acne and Rosacea, Aging Skin, Atopic Dermatitis, Cosmetic Skin Enhancement Services, Psoriasis, General Dermatology



Jing Huang, MD

Acne and Rosacea, Atopic Dermatitis, Psoriasis, General Dermatology



William James, MD\*

Acne and Rosacea, Allergic Contact Dermatitis, General Dermatology



Neha Jariwala, MD

General Dermatology, Cutaneous T cell Lymphoma, Melanoma and Cutaneous Malignancies



Anna E. Kersh, MD, PhD

Lichen Planus, Allergic Contact Dermatitis, Patch Testing, General Dermatology

#### FACULTY DIRECTORY 2023 (CONTINUED)



Ellen Kim, MD

Cutaneous T-Cell Lymphoma, Graft-VS-Host Disease, Photopheresis Services



Joseph Kist, MD

General Dermatology



Carrie Kovarik, MD

Dermatopathology, Infectious Diseases, LGBTQ+ Health, Telemedicine



Thomas Leung, MD, PhD

Aging Skin, Genetic Disease Dermatology



Ming- Lin Liu, MD, PhD

Research: Skin Inflammation, Autoimmune Diseases



Stacy McMurray, MD

Melanoma and Cutaneous Malignancies, Mohs and Reconstructive Surgery



Elizabeth Messenger, MD

General Dermatology



Robert Micheletti, MD

Autoimmune Disease, Blistering Diseases, Graft-VS-Host Disease, Infectious Disease, General Dermatology



Christopher Miller, MD

Melanoma and Cutaneous Malignancies, Mohs and Reconstructive Surgery



Michael Ming, MD, MSCE

Melanoma and Cutaneous Malignancies, Pigmented Lesions



Nicholas Mollanazar, MD, MBA

LGBTQ+ and Immunosuppressed Dermatology, Chronic pruritus, Eczema, General Dermatology



Michelle Oboite, MD

Hair and Scalp Disorders, General Dermatology, Pediatric Dermatology (CHOP)



Temitayo Ogunleye, MD

Skin of Color Dermatology, General Dermatology



Lisa Pappas-Taffer, MD

Morphea, Scleroderma, Lichen Sclerosus, Cutaneous Lupus, Dermatomyositis, Mucocutaneous Lichen Planus, Lichen Planopilaris



Aimee Payne, MD, PhD

Autoimmune Disease, Blistering Disease, Pemphigus, Pemphigoid



Douglas Pugliese, MD, MPH, CWSP

Wound Care, General Dermatology



Todd Ridky, MD, PhD

Melanoma and Cutaneous Malignancies, General Dermatology



Panteleimon Rompolas, PhD

Research: Stem Cells, Skin Regeneration, Novel Imaging Techniques



Alain Rook, MD\*

Cutaneous T-Cell Lymphoma Services, Photopheresis



Rudolf Roth, MD\*

General Dermatology



Adam Rubin, MD

Dermatopathology, Nail Disorders



John Seykora, MD, PhD

Dermatopathology, Hair and Scalp Dermatopathology



Daniel Shin, PhD

Dermatoepidemiology, Biostatistics, Clinical Trials



Meera Sivendran, MD

General Dermatology



Joseph Sobanko, MD, MBA

Aging Skin, Cosmetic Enhancements, Laser Treatment, Melanoma and Cutaneous Malignancies, Mohs and Reconstructive Surgery



Shobana Sood, MD

Aging Skin, Cosmetic Skin Enhancement, Laser Treatment, Melanoma and Cutaneous Malignancies, Mohs and Reconstructive Surgery



Katherine Steele, MD

Oncodermatology, Transplant Dermatology, General Dermatology



Junko Takeshita, MD, PhD,

Phototherapy Services, Psoriasis, General Dermatology



 ${\bf Jennifer\ Villase nor-Park, MD, PhD}$ 

Aging Skin, Cosmetic Skin Enhancements, Cutaneous T-Cell Lymphoma, Laser Treatment, General Dermatology



Julie Wahrman Cramer, MD

Cosmetic Skin Enhancements, General Dermatology



Joanna Walker, MD

Rare and Advanced Skin Cancer, Melanoma and Cutaneous Malignancies, Mohs and Reconstructive Surgery



Michelle Weir, MD

Hair Disorders, Hidradenitis Suppurativa, General Dermatology



Victoria Werth, MD

Lupus, Dermatomyositis, Autoimmune Blistering Diseases, Pemphigus, Pemphigoid, Autoimmune Skin Diseases



Richard Wortzel, MD, PhD

General Dermatology



Junqian Zhang, MD

Melanoma and Cutaneous Malignancies, Mohs and Reconstructive Surgery

#### CHOP PEDS-DERM FACULTY (2023)



Marissa Perman, MD Section Chief

Atopic Dermatitis, Hemangiomas/birthmarks, Epidermolysis Bullosa, Polycystic Ovarian Syndrome



Pigmented Lesions, Surgery and Laser Dermatology,

Melinda Jen, MD



Michele Khurana, MD

Teledermatology, General
Dermatology



Mary Larijani, MD

General Dermatology



Amanda Moon, MD

Teledermatology, General Dermatology



James Treat, MD

General Dermatology

Hemangiomas, Comprehensive Vascular Anomalies, Beckwith-Wiedemann Syndrome, General Dermatology



Albert Yan, MD

Atopic Dermatitis, Congenital Ichthyosis, Rare Skin Disorders

#### ASSOCIATED FACULTY



Roman Bronfenbrener, MD\*

General Dermatology



Steven Fakharzadeh, MD, PhD

Genetic Disease Dermatology



Daniel Roling, MD\*

General Dermatology

#### EMERITUS + RETIRED FACULTY



Paul Gross, MD



James Leyden, MD



Sarah Millar, PhD



John Stanley, MD

\*Please note that an asterisk designation indicates part-time



# Penn Medicine Dermatology

Established 1874

### DUHRING GRAND ROUNDS SCHEDULE JULY- DECEMBER 2023

\*Clark Symposium
No Duhring Grand Rounds this week\*

October 12, 2023

Please note that due to COVID-19, some sessions for Duhring Grand Rounds will continue to be conducted virtually.

Please email **PennDermAlumni@uphs.upenn.edu** with any questions.

July 6, 2023	*No Duhring Grand Rounds this week*	October 19, 2023 10:00 AM – 12:00 PM	48th Annual Morris H. Samitz Lectureship
July 13, 2023 10:00 AM – 11:00 AM	Hybrid Session Location: SCTR Auditorium and Zoom		Lecturer: <b>Dirk Elston, MD</b> Professor and Chairman  Department of Dermatology and Dermatologic Surgery  Medical University of South Carolina
July 20, 2023	*No Duhring Grand Rounds this week*		Past-president, American Academy of Dermatology & American Society of Dermatopathology
July 27, 2023	*No Duhring Grand Rounds this week*		Title: The best articles from JAAD
<b>August 3, 2023</b> 7:00 AM – 8:00 AM	Virtual Session	12:00 PM – 1:30 PM	Location: Hybrid Session – SCTR Auditorium & Via Zoom Luncheon Location: Jordan Atrium
<b>August 10, 2023</b> 10:00 AM – 11:00 AM	Hybrid Session Location: SCTR Auditorium and Zoom	October 26, 2023	*ADA Meeting, No Duhring Grand Rounds this week*
August 17, 2023	*No Duhring Grand Rounds this week*	November 2, 2023 7:00 AM – 8:00 AM	Virtual Patient Viewing & Discussion
August 24, 2023	*No Duhring Grand Rounds this week*	8:00 AM – 9:00 AM	Lecturer: <b>Bogi Andersen, MD</b> Professor, Department of Endocrinology and Biological
<b>August 31, 2023</b> 7:00 AM – 8:00 AM	Virtual Session		Chemistry University of California, Irvine, School of Medicine Title: TBA
<b>September 7, 2023</b> 7:00 AM – 8:00 AM	Virtual Patient Viewing & Disaussian		Location: Virtual Session
8:00 AM – 9:00 AM	Virtual Patient Viewing & Discussion Lecturer: Brett King, MD, PhD Associate Professor of Dermatology Yale School of Medicine	<b>November 9, 2023</b> 10:00 AM – 11:00 AM	Virtual Patient Viewing & Discussion
	Title: TBA Location: Virtual Session	November 16, 2023	*No Duhring Grand Rounds this week*
		November 23, 2023	*Thanksgiving, No Duhring Grand Rounds this week*
<b>September 14, 2023</b> 10:00 AM – 11:00 AM 11:00 AM – 12:00 PM	Hybrid Patient Viewing & Discussion Location: Discussion in Auditorium (hybrid Zoom option available)	<b>November 30, 2023</b> 7:00 AM – 8:00 AM	Virtual Patient Viewing & Discussion
	Duhring Lectureship Conference: Health Equity Grand Rounds Lecturer: TBA	<b>December 7, 2023</b> 7:00 AM – 8:00 AM	Virtual Patient Viewing & Discussion
	Title: TBA Location: Hybrid Session – SCTR Auditorium & Via Zoom	<b>December 14, 2023</b> 10:00 AM – 11:00 AM	Hybrid Patient Viewing & Discussion  Location: Discussion in Auditorium (hybrid Zoom option available)
<b>September 21, 2023</b> 7:00 AM – 8:00 AM	Virtual Patient Viewing & Discussion	11:00 AM – 12:00 PM	Lecturer: <b>Seemal Desai, MD, FAAD</b> President-elect 2024, American Academy of Dermatology
September 28, 2023	*No Duhring Grand Rounds this week*		Clinical Assistant Professor of Dermatology, The University of Texas Southwestern Medical Center
October 5, 2023 7:00 AM – 8:00 AM 8:00 AM – 9:00 AM	Virtual Patient Viewing & Discussion Lecturer: <b>Donald Y. M. Leung, MD, PhD</b> Distinguished Professor	December 21, 2023	Title: TBA  Location: Hybrid Session – SCTR Auditorium & Via Zoom
	Head, Division of Pediatric Allergy & Immunology Department of Pediatrics National Jewish Health	7:00 AM – 8:00 AM	Virtual Patient Viewing & Discussion
	National Jewish Health  Title: TBA  Location: Virtual Session	<b>December 28, 2023</b>	*No Duhring Grand Rounds this week*