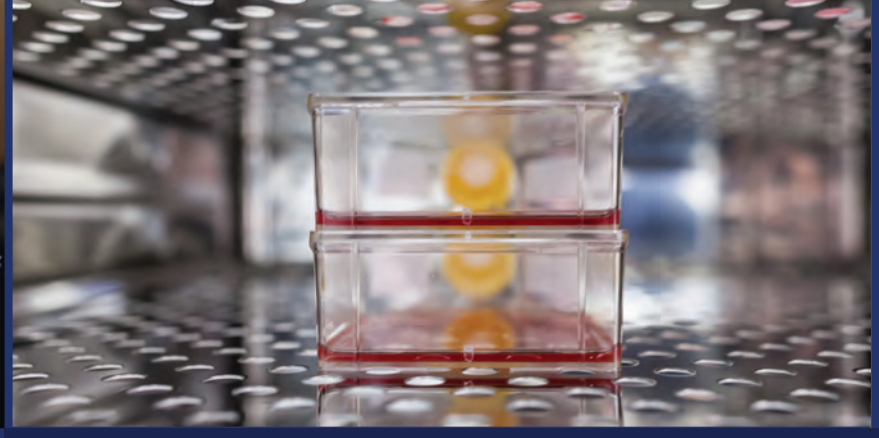

15 Years and Rising

Celebrating the 15th Anniversary of the Department of Dermatology

University of Wisconsin–Madison

2017

Department Leadership

Chair
Gary S. Wood, MD

Vice Chair for Clinical Affairs
Daniel D. Bennett, MD
Eric Berg, MD (2002-2016)

Vice Chair for Dermatopathology
B. Jack Longley, MD

Vice Chair for Education
William Augenbaugh, MD
George Reizner, MD (2001-2006)

Vice Chair for Research
Hasan Mukhtar, PhD

Associate Vice Chair for Research
Nihal Ahmad, PhD

Director of Dermatologic Surgery
Juliet L. Aylward, MD
Stephen N. Snow, MD (2004-2012)

Director of Dermatology Consult Service
Tom Keenan, MD, PhD

Director of Pediatric Dermatology
Lisa M. Arkin, MD

Director of Quality Improvement
Margo Reeder, MD

Chief of Dermatology at the VA
William Augenbaugh, MD

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Photography: John Maniaci, UW Health Communications; Todd Brown,Chris Frazee, John Wingren, Media Solutions; Jonathan Bartnik, Department of Dermatology. Empire Photography.

Chair's Introduction

Gary S. Wood, MD

Welcome to the **15 Year Anniversary Report of the Department of Dermatology**. We have come a long way since our inception on July 1, 2002. Our growth and development has been truly multidimensional, reflecting our diverse missions of excellence in clinical care, education, research and administration. Distributed at several sites across campus and the greater Madison area, we have risen to become one of the premier dermatology programs in the nation. During the past 15 years, our faculty, staff, space, training programs, clinical services, research funding and endowments have all steadily expanded and diversified. Detailed elsewhere in this report, these accomplishments include:

- 10-fold growth in clinical charges productivity
- 5-fold growth in dermatopathology volume
- 4-fold growth in faculty size
- 2.5-fold growth in residents/fellows
- Endowment supporting 7 professorships and 2 lectureships
- One of the nation's outstanding skin biology research programs

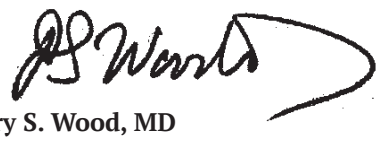
Our achievements have not occurred in isolation. We are indebted to our colleagues in other departments and to the leadership of our medical school, UW Health and the VA for their enthusiastic support. Furthermore, as health care evolves at the national level, all of us in the UW system face new challenges as we continue to move forward together. Locally, as we emerge from a period of reorganization and consolidation, it becomes increasingly important to align and coordinate our resources in an interdisciplinary fashion to further our goals of productivity in research, innovation in education and leadership as a destination for remarkable health care.

What is Dermatology doing specifically to advance these important goals? Plenty. We have worked tirelessly and creatively to leverage our impact on multiple medical center missions by aligning with other components of our system to achieve our collective goals.

We have worked closely with the medical school, the VA, the Carbone Comprehensive Cancer Center and the Institute for Clinical and Translational Research to build one of the top dermatology research programs in the nation. Our researchers are funded by the NIH, VA, Department of Defense, UW and multiple private foundations. Our department is home to one of only six Skin Disease Research Centers funded by the NIH. This places us in the company of Harvard, Columbia and Penn. We have used this Center to provide core lab services, to host eminent visiting professors, and to create an interdisciplinary faculty of more than 50 from multiple UW departments and schools who have significantly expanded skin disease research on campus. Our faculty train many postdoctoral research fellows and belong to several interdisciplinary programs through which we have produced up to five PhD graduates in a single year.

In clinical education, we have more than doubled the size of our residency/fellowship programs to increase the future dermatology workforce, and we provide leadership for key aspects of the medical student curriculum. We have expanded our clinical faculty in order to offer a wide range of subspecialty dermatology programs provided with a commitment to addressing health care disparities. Metrics indicate that we are among the most efficient users of clinical resources within UW Health. In order to deliver optimally coordinated care, we have established a service agreement with our colleagues in primary care. Many of our subspecialty faculty interact closely with their counterparts in internal medicine, pediatrics, pathology, surgery, ophthalmology, radiation oncology and gynecology. Several faculty are members of the Carbone Comprehensive Cancer Center and contribute to its clinical and research missions to combat melanoma, non-melanoma skin cancer and lymphoma involving the skin. Additional faculty also serve in key leadership roles within our clinical enterprise.

As we all move forward together to face the evolving challenges of American academic medicine, we in the Department of Dermatology plan to maintain our philosophy of alignment and collaboration to help sustain the ability of our dynamic academic medical center to remain greater than the sum of its parts. In this way, we work to achieve the full potential of the Wisconsin Idea to benefit the people of our state, nation and world.



Gary S. Wood, MD
Johnson Professor and Founding Chair

Clinical Diversification and Alignment

Dan Bennett, MD

"The Department of Dermatology serves the needs of our community and those of an academic, world-class tertiary referral center. Since its founding in 2002, the department has added many faculty members and several clinical sites and greatly expanded access to care for patients with skin disease, eventually seeing about a seven-fold increase in patient visits over 15 years. The University of Wisconsin has been long recognized internationally as the home of "Mohs Surgery," a technique for curing difficult-to-treat skin cancers, but we now also are known for specialized expertise in cutaneous lymphomas, contact and occupational dermatitis, quality improvement, disorders of the nail, psychocutaneous diseases, integrative (alternative) medicine, complex medical dermatology, and pediatric dermatology, among others. We look forward to a future rich with additional growth and innovation as we always seek to improve care for our patients."

Dan Bennett, MD
Vice Chair for Clinical Affairs

Lauren Craddock, MD

J. Klint Peebles, MD

Complex Medical Dermatology

We collaborate with peer departments to diagnose and treat patients with severe skin diseases and systemic diseases that manifest in the skin. We work in both the outpatient and inpatient settings.

Outpatient Complex Medical Dermatology

We have multiple faculty with specialized expertise in the management of complex skin disease, including blistering diseases, lupus erythematosus, and other autoimmune diseases. While many patients with advanced disease are cared for in specialty clinics, others with less severe variants are managed in general dermatology clinics at all of our sites.

Dermatology Consult Service

Our Dermatology Consult Service cares for patients admitted to UW Health-affiliated hospitals with severe skin disease or skin involvement related to their systemic disease or a complication of treatment. A select team of medical dermatologists led by **Dr. Tom Keenan** has responsibility for the Dermatology Consult Service in order to provide highly specialized services to hospitalized patients. Other team members include **Drs. Lauren Craddock and J. Klint Peebles**.

Tom Keenan, MD, PhD

Transplantation Dermatology

Solid organ transplant recipients are at an increased risk for skin cancer, a complication of their required immunosuppressive therapy. **Dr. Erin Vanness**, who operates our dedicated transplant dermatology clinic, works directly with the UW Transplant Center to provide dermatological care for these patients. Additional care is provided by our Mohs surgeons, general dermatologists, and advanced practice providers.

Erin Vanness, MD


Rachel Kornik, MD


Alex Means, MD


Ladan Mostaghimi, MD

Bridging Gaps: Addressing Health Care Disparities

The Department of Dermatology places a high priority on meeting the needs of our community, including vulnerable or historically underserved populations.

Women's Health – **Dr. Rachel Kornik** has established a gynecologic dermatology practice, with an emphasis on vulvar skin diseases. She regularly collaborates with gynecologists to manage patients with complex genital skin disease in addition to teaching residents and students.

LGBTQ – **Dr. J. Klint Peebles** is recognized as a local and national leader in advocating for gender and sexual minority healthcare and cultural competency. **Dr. Peebles'** clinic is designed to meet the specific needs of LGBTQ patients. He will continue his research and quality improvement work addressing disparities in care that affect this population.

Native American – **Dr. Alex Means,** who recently completed a dermatoepidemiology fellowship, has experience in caring for underserved rural communities in Malawi in southern Africa and among the Navajo in Arizona. As a teacher and physician, he works to improve Native Americans' access to dermatologic health care locally and regionally.

Pediatric Dermatology – As the understanding, diagnosis, and treatment of skin cancers and inflammatory diseases in adults has advanced significantly in recent years, treatment of these same conditions in children has lagged behind by about five years, according to **Dr. Lisa Arkin, Director of Pediatric Dermatology**. She is prioritizing clinical trials of novel therapies authorized by the FDA for adults to help bring pediatric dermatology standards of care in line with the broader advances in dermatologic medicine.

Psychocutaneous Medicine – Trained in psychiatry and dermatology, **Dr. Ladan Mostaghimi** specializes in the connections between the mind and the skin. **Dr. Mostaghimi** brings a holistic approach to dermatology and helps individuals experiencing emotional distress or sleep problems due to their skin conditions, as well as individuals whose skin conditions are aggravated by stress or other mental health factors. UW Health is among only a handful of academic medical centers in the nation offering this service.

Prisoner Clinic – The national inmate population often lacks equitable access to health care. The University of Wisconsin is the primary specialty care provider for inmates housed by the Wisconsin Department of Corrections. **Dr. Dan Bennett** works with residents and nursing staff to treat incarcerated patients, who often have rare and advanced skin diseases.

Free MeDIC Clinic – Our second-year residents run the Free MeDIC Dermatology Clinic, in which they and medical student volunteers treat underserved, under-insured, and uninsured patients who wouldn't otherwise have access to health care. Not only is it an essential service for the community, it teaches trainees how to manage patients effectively with limited resources.

Clinical growth since 2002

Tripling of faculty size

10-fold **growth** in clinical productivity

7-fold **growth** in patient volume

5-fold **growth** in dermatopathology volume

Margo Reeder, MD

Quality Improvement

Dr. Margo Reeder, **Director of Quality Improvement**, is dedicated to creating a culture of practice improvement in Dermatology. For **Dr. Reeder**, this means getting input and support from all members of the clinical practice, from physicians and nurses to medical assistants and schedulers, and encouraging faculty and staff to be constantly looking for ways to improve our clinical practice.

Dr. Reeder is also collaborating with UW Health's Office of Quality, Safety, and Improvement to identify clinical measures to track and improve patient care as well as the efficiency of care. For example, the department has implemented a system that allows tracking of melanoma patients to ensure appropriate follow-up and care. Improvements like these allow us to provide timely and high-quality care for our patients.

Public Outreach

Beyond providing treatment and preventive advice in a clinical setting, Dermatology works to educate the public on how to care for their skin, and to help the clinical and research communities advance their skills and understanding of dermatologic conditions.

Drs. Apple Bodemer and **Lisa Arkin** frequently appear on local news channels to give advice on the do's and don'ts of skin and hair care, and help viewers understand basic skin conditions (like dry skin and sunburn) to keep their skin healthy. **Dr. Bodemer** has appeared on Wisconsin Public Radio, and regularly contributes to articles on UW Health's website and popular publications advising on skin care. **Dr. Arkin** frequently authors web articles and UW Health blog posts to advise parents on caring for their children's skin.

Dermatology Grand Rounds are open to the local medical community. They are attended regularly by outside physicians and advanced practice professionals from local practices and health systems.

The **UW Skin Disease Research Center Seminar Series** brings world-class researchers to campus. Lectures are open to the entire UW research community and attract a broad audience, from students to faculty from a wide array of departments.

Multiple Dermatology faculty hold leadership roles in local, regional, national and international professional organizations. They actively advocate for patients and physicians by influencing policy and through events like Doctor's Advocacy Day at the Wisconsin State Capitol and the American Academy of Dermatology Legislative Conference in Washington, D.C. They are also involved in local efforts to educate physicians, advanced practice professionals, nurses, and other health care professionals in the care of patients with skin disease.

Drs. Bennett and Peebles at Doctor Day 2017
with Dr. Rachel Bennett of Family Medicine

Grand rounds

Subspecialty Excellence

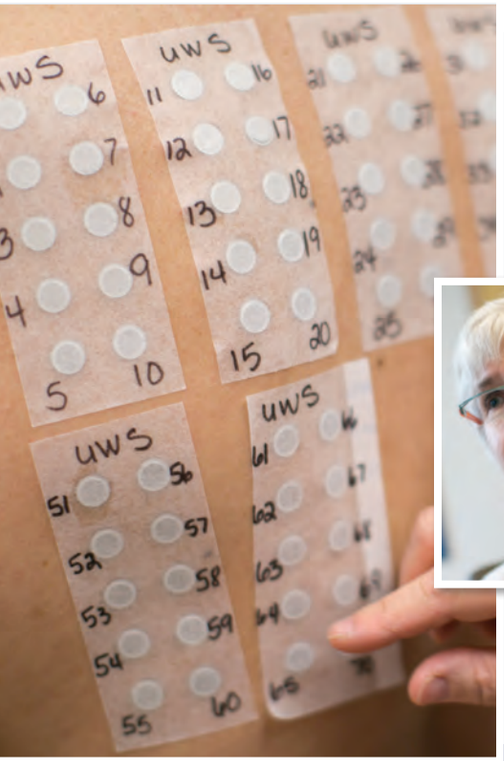
Our faculty practice in multiple subspecialties. Some of our subspecialists are the only practitioners of their kind in the state of Wisconsin; some are international leaders in their fields.

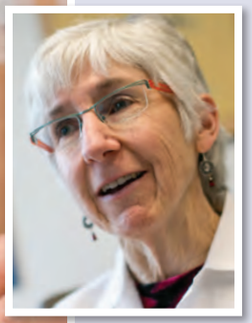
Cutaneous Lymphoma – Our Cutaneous Lymphoma Clinic opened 17 years ago, when internationally recognized clinician and researcher **Dr. Gary S. Wood** joined the faculty; fellow physician-scientist **Dr. Stefan Schieke** was recruited more recently. Both have active research programs aimed at improving our understanding of the causes of cutaneous lymphomas and related skin diseases and developing new treatments. **Drs. Wood** and **Schieke** see patients from throughout the region and collaborate with other UW Health departments involved in the care of cutaneous lymphoma patients, such as Human Oncology and Hematology.

Stefan Schieke, MD

Integrative Dermatology - **Dr. Apple Bodemer** is passionate about incorporating the knowledge she acquired from her training in Integrative Medicine into her traditional dermatology background. **Dr. Bodemer** works to provide a wider range of treatment options for patients seeking alternative approaches or who may have experienced undesirable side-effects from more traditional treatments. To do so, she uses therapies from a variety of healing practices with a focus on those grounded in evidence and with the least potential for harm.

Apple Bodemer, MD





Rita Lloyd, MD

Allergic Contact Dermatitis – Contact dermatitis is a skin rash induced when certain substances contact the skin and can be both severe and debilitating. Other than back injury, it is the most common cause of lost worker productivity in the US. Many patients suffering from allergic contact dermatitis also have significant diseases of the respiratory tract, necessitating close collaboration among dermatologists, allergists, pulmonologists, and occupational medicine specialists.

Drs. Rita Lloyd and **Margo Reeder** provide care to these patients in our department. The most common causes of contact dermatitis tend to vary over time. For example, as the use of essential oils increases— in ointments, aromatherapies, soaps, and other products— so do allergic skin reactions to them. "Essential oils don't have an inherently higher rate of reaction than other allergens," explains **Dr. Lloyd**, who has been treating patients in the Allergic Contact Dermatitis Clinic for over twenty years, "but because their rate of use is increasing, the rate of related reactions has likewise increased." In response to this problem, **Drs. Lloyd** and **Reeder**, both prominent members and leaders of the American Contact Dermatitis Society, have started compiling testing kits specific to essential oils and their constituent chemicals to improve testing nationwide.

73%
growth
in number of patients
patch tested since 2010

Allergic Contact Dermatitis Clinic
has more than
500
allergens available for testing

Pediatric Dermatology – "Skin disease is unique because it's inherently visible—seen by everyone—and can create stigma. We want every child to grow up feeling as good as possible on the inside as well as the outside."

Lisa Muchard, MD

Dr. Lisa M. Arkin, Director of Pediatric Dermatology, is Madison's only fellowship-trained pediatric dermatologist. She has a focus on childhood rheumatological disorders such as lupus and morphea. Building on the pediatric dermatology work of **Dr. Lisa Muchard** and **Jennifer DuRocher, NP**, **Dr. Arkin** sees patients at One South Park and the American Family Children's Hospital. She is an investigator for a variety of clinical trials. As Director, she has emphasized the collaborative aspects of pediatric dermatology, working with pediatric rheumatology, radiology, and primary care pediatrics to manage and treat complex systemic diseases in children. In such an interdisciplinary field, different clinicians may focus on different aspects of a disease. As a result, **Dr. Arkin** works to standardize terminology and share treatment best practices among departments.

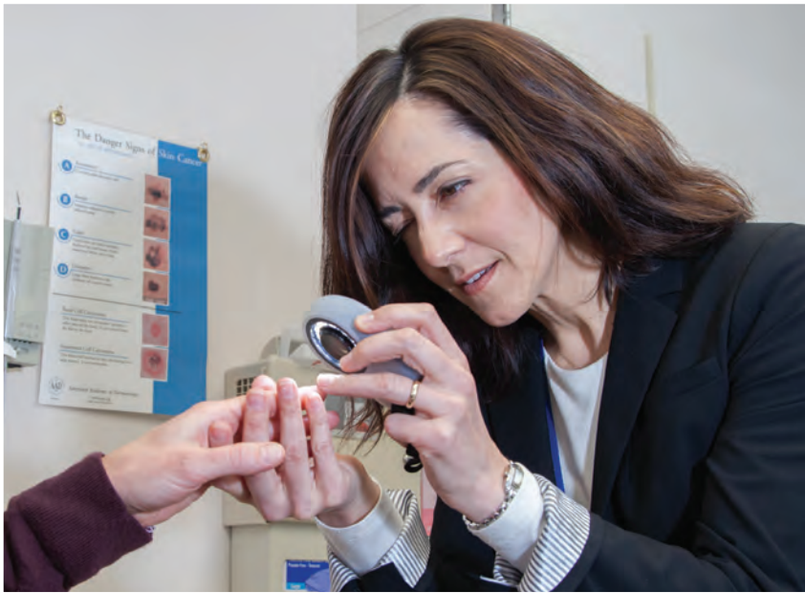
Lisa M Arkin, MD

Skin disease is unique because it's inherently visible—seen by everyone—and can create stigma. We want every child to grow up feeling as good as possible on the inside as well as the outside.

– Lisa Arkin, MD

Geriatric Dermatology – Approximately 30% of general dermatology patients are age 65 or older, and this proportion is expected to increase. Geriatric patients often have multiple comorbidities, numerous medications, and unique psychosocial circumstances that require care coordination and a holistic perspective, yet no standardized geriatric dermatology training exists. **Dr. Justin Endo** is a dermatologist and medical education researcher who is addressing these emerging healthcare needs.

Nail Disorders Clinic – Nail biopsies are both rare and clinically necessary, as visual signs of disease can be similar among nail disorders. These biopsies are often assigned to a single pathologist who then develops expertise in reviewing them. Five years ago, we took the next step, and tied the microscopic diagnosis to the clinical exam by having a single physician do both—dermatopathologist **Dr. Molly Hinshaw**. As the clinician in the exam room and the pathologist in the lab, she has a full view of the patient's condition, and can more easily make the correct diagnosis, prescribe treatment, and when needed consult with colleagues in podiatry, plastic surgery or other specialties. **Dr. Hinshaw's** nail clinic is one of only two in the US run by a dermatopathologist. She sees patients from the region and fields consultative questions from physicians from coast to coast.



Molly Hinshaw, MD

Advanced Practice Providers (APPs)

APPs include Nurse Practitioners and Physicians Assistants. Our highly experienced dermatology APPs play an active role in seeing new and established patients, work closely with faculty to manage care, and are viewed as leaders in their profession. APPs from other area clinics outside the department frequently attend our Dermatology Grand Rounds to learn more about the diagnosis and treatment of skin diseases. Over the past five years, **Gail Jahnke, NP,** has served as a dermatology preceptor and helped train nurse practitioner students from several area colleges.

Gail Jahnke, NP (center)

Dermatopathology

B. Jack Longley, MD

UW's Dermatopathology Lab was founded in 2002 by **Dr. B. Jack Longley, Vice Chair for Dermatopathology**. The lab has grown from processing about 3,000 cases in its first year to processing as many as 26,000 cases annually. **Dr. Longley** is joined by **Drs. Dan Bennett** and **Molly Hinshaw**, both board-certified academic Dermatologists and Dermatopathologists, who provide outstanding diagnostic service and clinical-pathologic correlation.

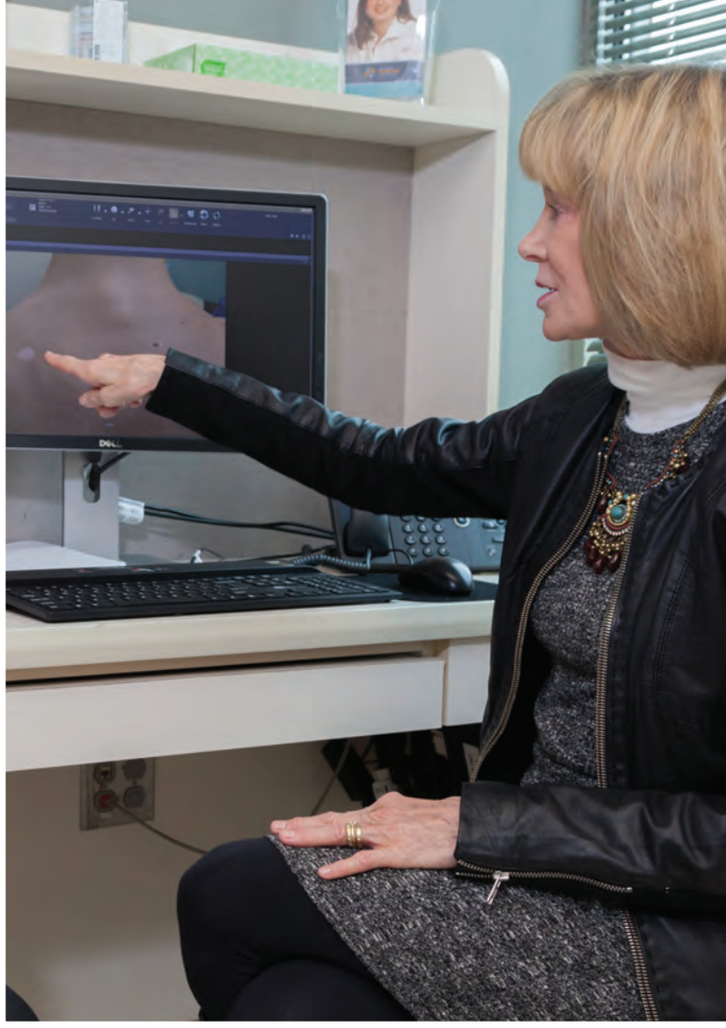
The laboratory provides direct immunofluorescence and other routine techniques and plays a critical role in the Experimental Cutaneous Pathology Core of the NIH-funded UW Skin Disease Research Center, providing researchers and care-givers access to over 250,000 archival specimens of normal and diseased skin, and state-of-the-art analysis techniques such as nucleic acid analysis and histocytometry based on multi-spectral immunofluorescence techniques.

5-fold

increase in dermatopathology case volume since 2003 when the lab was established

2-fold

increase in immunofluoresence case volume since 2010 when this testing began



Anne Rosin, MD

Teledermatology

Dr. Anne Rosin has led the development of teledermatology at the Middleton VAMC. She provides care to an expanded population of veterans through teledermatology eConsults to five regional clinics in Southern Wisconsin and Northern Illinois. We have reviewed nearly 1600 teledermatology cases since starting our federally supported program in 2014. About half of patients don't require follow-up with a dermatologist and can be managed by their primary care provider. This program has resulted in the detection of more than 20 melanomas and nearly 200 non-melanoma skin cancers.

Dr. Justin Endo has been working with **Dr. Rosin** to bring teledermatology to our UW Health patients. They have piloted both eVisits (initiated by a patient) and eConsults (initiated by a physician). We began offering UW eConsults in 2016 and receive requests on a daily basis.

Justin Endo, MD

Drs. Margo Reeder and George Reizner

Department of Veterans Affairs

Our service men and women are exposed to numerous risk factors for skin disease and skin cancer—and veterans of tours in the Middle East and Southeast Asia in particular have had sustained, prolonged exposure to the sun's powerful UV radiation, putting them at a higher risk of melanoma. Our efforts to provide them care in Madison and at regional clinics makes the Middleton VA dermatology program one of the best in the nation.

Our faculty have a tradition of proud service at the Middleton VA Medical Center, where several physicians (including **Dr. George Reizner**, left) work to offer specialty care throughout the week. The VA has also recognized the efforts of our research faculty, awarding us five VA Merit Awards and naming **Dr. Nihal Ahmad** as a Research Career Scientist—a highly competitive position. This is likely the pinnacle of VA funding for dermatology research nationally.

Mohs Surgery:

The Birthplace of Mohs Surgery Continues to Innovate

Andy Swanson, MD

UW is the home of Mohs surgery, a specialized method of removing skin cancers that combines surgical excision with immediate microscopic assessment of tissue borders to ensure complete tumor removal with the smallest possible wound. The technique is named after **Dr. Frederic Mohs**, the UW physician who developed it. Veteran histotechnologist **Mike Hetzer** worked closely with Dr. Mohs for many years and was instrumental in the formation of the American Society for Mohs Histotechnology. Currently, Mohs surgery in UW Health is performed by fellowship-trained Mohs surgeons: **Drs. Juliet Aylward (Director of Dermatologic Surgery)**, **Gloria Xu** and **Andy Swanson**. The procedure is offered at the Middleton VAMC as well. **Drs. Eric Berg** and **Will Aughenbaugh** perform some cases. They and several other faculty perform a wide variety of major and minor dermatologic surgical procedures as part of their general dermatology practices.

Juliet Aylward, MD

> **"They'll come storming in here…twenty to thirty men at a time to study this [Mohs] procedure."**
>
> – **Dr. Michael Guyer** to medical school dean **William Middleton**, 1941

2384
average
Mohs cases annually since 2012

586
average
non-melanoma skin cancer excisions annually since 2012

209
average
melanoma excisions annually since 2012

FELLOWSHIP

Dr. Frederic Mohs began training physicians at the UW Madison—dermatologists, surgeons, and others—in his new surgical technique soon after publishing his first 440 cases in 1941. Over the decades, hundreds (mostly dermatologists) were trained by Dr. Mohs and his students. Until his retirement in 1990, Dr. Mohs spent most of his academic time at UW as a faculty member in the Department of Surgery.

In 1971, the first formal Mohs Fellowship began at UW. In addition to Dr. Mohs, dermatologists **Drs. Stephen Snow** and **Paul Larson** trained many Mohs surgeons in this fellowship—including several who became leaders in dermatology. To align with national norms, the Mohs surgery program transferred into the Department of Dermatology in the mid-2000's before the fellowship was restructured into the **Procedural Dermatology Fellowship** in 2007. Now known as the **Micrographic Surgery and Dermatologic Oncology Fellowship**, this program trains one fellow annually in Mohs micrographic surgery, surgical repairs, and other specialized procedures. **Dr. Aylward** is the Fellowship Director and **Dr. Xu** is the Co-Director.

Gloria Xu, MD, PhD

RESEARCH

Bedside-to-Bench (and Back): Mohs surgeon **Dr. Gloria Xu** is leading a study of mechanisms governing the development of squamous cell carcinoma. She collects samples from her Mohs patients and supervises laboratory studies on the tissue. She hopes to apply her findings to future clinical trials.

Outcomes Research: **Drs. Xu** and **Bennett** analyzed relative accuracy rates for biopsies of lesions suspected of being skin cancer performed by Dermatology MDs, Dermatology APPs, and non-dermatology MDs. Their findings have started a national conversation on the value of a dermatologist's insight into deciding when to biopsy.

National Collaboration: **Drs. Juliet Aylward** and **Andy Swanson** recently concluded a six-month data collection contributing to a comprehensive, nationwide survey on skin cancer characteristics. Fifty institutions collaborated in this project.

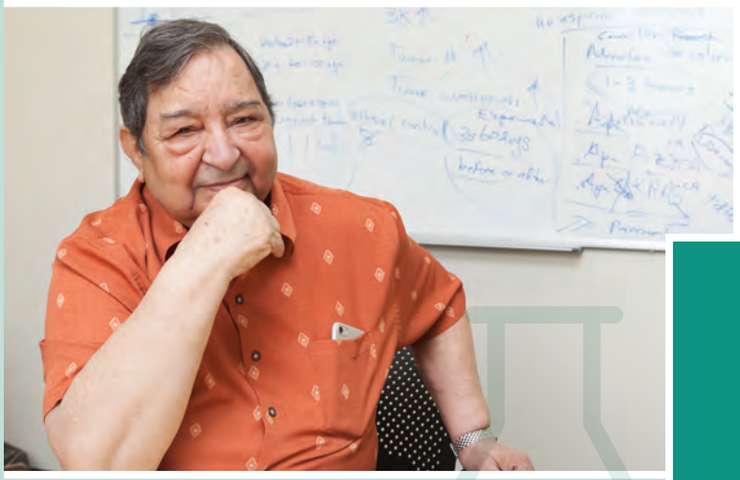
Interdisciplinary Expertise: **Dr. Gloria Xu** is a member of the prestigious National Comprehensive Cancer Network (NCCN) expert panel on Non-Melanoma Skin Cancer. Several Dermatology faculty are founding members of the UW Melanoma Tumor Board and collaborate to care for patients who often require a complex multidisciplinary approach.

Skin Cancer Research and Beyond

"Since the Department was created in 2002, we've been constantly making significant strides in research to better understand, prevent, and treat skin diseases. Two noteworthy dates stand out during my tenure as Vice Chair for Research: October 10, 2008, when we were informed that our $1.2M grant to train future leaders in skin diseases research was approved; and April 14, 2014, when we were declared to be one of six NIH-funded Skin Disease Research Centers with a grant of more than $2.5M in federal funding.

Our research faculty are leaders in the study of psoriasis, cutaneous lymphoma, melanoma and non-melanoma skin cancers, and photoaging—but that's only the beginning."

Hasan Mukhtar, PhD
Vice Chair for Research



Ranked as high as **8th** in NIH-funding among dermatology programs

Mukhtar Lab

Treating Cancer and Skin Disease with Natural Products

Dr. Hasan Mukhtar, Vice Chair for Research, has spent his career researching the cancer-preventative potential of polyphenols—the compounds that give color and anti-oxidative effects to many fruits and vegetables.

Professor Mukhtar's early research showed that green tea was an abundant source of antioxidants, and found its oral consumption or topical application useful in both treating and preventing skin cancer. His lab is now pushing the envelope in the study of pomegranate and other dietary substances for their ability to slow the aging of skin due to exposure to sunlight, and treat inflammatory diseases like psoriasis.

To investigate the mechanistic basis of these effects, the Mukhtar laboratory employs human cell-culture systems and mouse models of cancer and psoriasis. His laboratory also tests nanotechnology-based approaches to further enhance the biological effects of important food-based substances.

Professor Mukhtar's research has resulted in over 400 peer-reviewed publications, over 500 published abstracts, and was recently featured in a cover story in the Dermatology Foundation's quarterly. **Dr. Mukhtar** has grants from the NIH, DOD, UW, and private sources.

10 Principal Investigators

7 Endowed Professorships

7 Research Labs

Five active
VA Merit Review Awards exceeding **$4M**,
among the best for VA dermatology research

Ahmad Lab

Applying the Rules of Skin Cancer

Epithelial cells—present throughout the body, including in the skin, colon, and prostrate—are relatively similar wherever they are found. This means that experts in skin cancer, like **Dr. Nihal Ahmad**, **Associate Vice Chair for Research**, are also finding cures for other epithelial-cell cancers.

Ahmad is collaborating with Oncologist Mark Burkard and Pathologist Wei Huang to study how genetics affect prostate cancer development. **Drs. Ahmad** and Huang are also collaborating with Dr. Kenneth Iczkowski from the Medical College of Wisconsin to study the racial disparities in prostate cancer between African American and European American men in the USA. **Dr. Ahmad's** research is funded by the NIH, VA, UW, and private sources.

Setaluri Lab

Research by **Dr. Vijay Setaluri** and his team seeks to understand how melanocytes, the pigment-producing cells in the skin, are transformed to become melanoma, an aggressive and lethal skin cancer. His lab is examining how certain genes, proteins, and molecular pathways that normally control melanocytes can instead cause uncontrolled growth of cancer, its migration, invasion of tissues, and resistance to therapy. To investigate these phenomena, **Dr. Setaluri** studies genetic models of mouse melanoma, human melanoma cell cultures and tumor tissue, all with a goal of improving diagnosis, treatment, and prognosis of melanoma. The Setaluri lab receives funds from the DOD and the VA.

Research faculty, trainees and staff

$15M
in Endowments

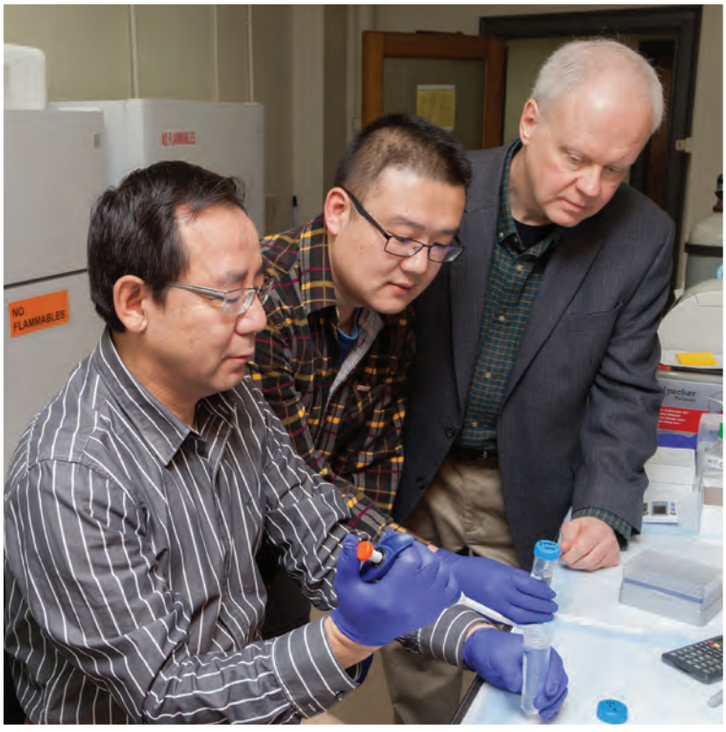
$18M
in total costs
for all active grants

$10M
total cost of current NIH grants

Wood Lab

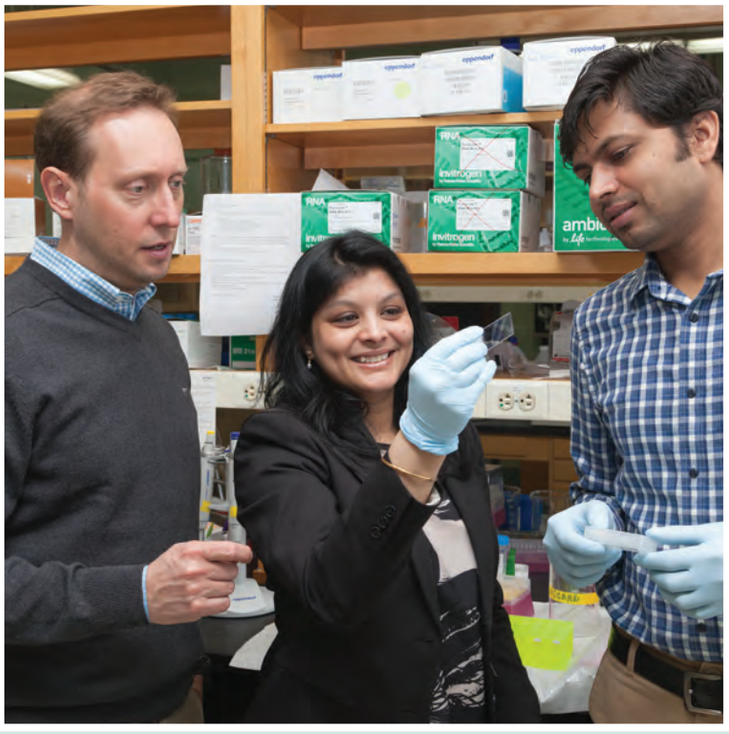
Dr. Gary S. Wood, Founding Chairman of the Department, focuses his lab's research on finding better ways to kill tumor cells, with a particular focus on cutaneous T-cell lymphoma, to complement his clinical expertise in treating patients with cutaneous lymphomas. In the laboratory, Wood delves into molecular signaling pathways to determine how under-expression and over-expression of certain genes affect the growth and longevity of cutaneous lymphoma tumor cells.

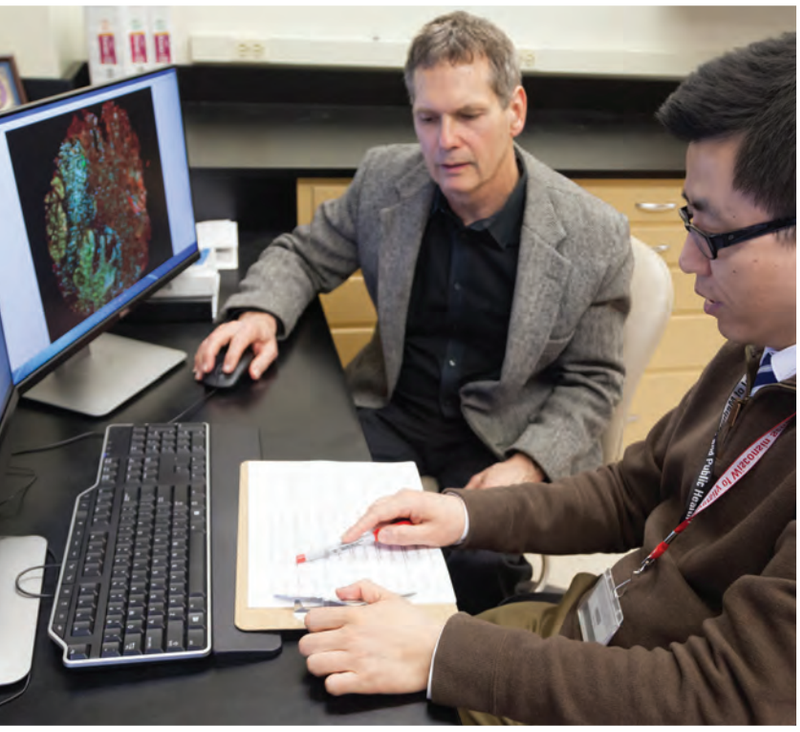
Due to **Dr. Wood's** clinical and lab experience, he is always seeking ways to develop translational research projects to improve the treatment of lymphoma patients. He is currently pursuing clinical trials of gentian violet as well as a novel form of photodynamic therapy to target lymphoma cells. In addition, he is developing novel ways to induce programmed tumor cell death that may lead one day to new types of lymphoma therapy. **Dr. Wood's** research is supported by the NIH, VA, UW, and private sources.



Schieke Lab

Does speed kill? When it comes to cutaneous T-cell lymphoma, the cells that grow slowly are the most lethal, making the answer a qualified "no." **Dr. Stefan Schieke**, who researches the proliferative dynamics of these tumors, discovered that tumor cells are more durable—and therefore more dangerous—in their slow-cycling state, but also found the lifecycle gene that tells these tumor cells when to slow down and when to die. If he can find a drug that mimics the latter signal, it might be possible to make these most malignant of tumor cells much easier to treat. **Dr. Schieke's** research is funded by the Cutaneous Lymphoma Foundation.





Longley Lab

Melanoma is the deadliest skin cancer and its occurrence is steadily increasing in the US military, especially in military veterans who served outdoors and were exposed to ultraviolet radiation for prolonged periods. Melanoma-Associated Antigen (MAGE) proteins are cancer testes antigens, a group of proteins that are normally found only in developing germ cells (testes and fetal ovary) and placenta, but are aberrantly expressed in cancers including melanoma. MAGE proteins are master transcription factors and oncogenes that contribute to cancer development and progression by activating other oncogenes and repressing tumor suppressors. Because of their limited anatomic distribution, MAGE proteins are exquisitely specific therapeutic targets. **Dr. B. Jack Longley's** laboratory is working to understand the functions of MAGE proteins in tumor development and to develop therapies that can kill MAGE-positive tumor cells while leaving normal cells unharmed. The laboratory is funded in part by a VA Merit Review Award.

A leader

in dermatology research training programs for PhD students and postdoctoral fellows

Chang Lab

Skin cancer. Cleft palate. Mohawks on mice? **Dr. Hao Chang**, studies how polarity—the alignment of cells along bodily and cellular axes—affects normal skin development and the propagation of skin cancer. Polarity is central to how cells build our bodies, and malfunctions can be serious—causing cleft palate in infants—or mild—causing permanent bad-hair days for Frizzled6-mutant mice, pictured above. **Dr. Chang** studies these mice to help determine how certain mutations to the Frizzled6 gene cause melanoma tumors to grow. **Dr. Chang's** research is funded by the UW and private sources.

A research training program with **Global Impact**

14 PhDs
earned since 2002 representing
9 graduate programs

48 Post-doctoral and **55** visiting fellows
from **24** different
countries around the world (see map)

From Junior Researchers to Principal Investigator

Associate Scientist **Dr. Imtiaz Siddiqui** (far right, standing), was awarded a grant from the American Cancer Society (ACS) to investigate resveratrol—an antioxidant naturally found in red grapes—and how it can be deployed in nanotechnology to treat prostate cancer.

Associate Scientist **Dr. Naghma Khan** (far right, seated), was awarded a grant from ACS to investigate the role of the dietary polyphenol fisetin in the management of colorectal cancer. She also researches how pomegranate might inhibit or delay the progression of lung cancer.

Assistant Scientist **Dr. Jean Christopher Chamcheu** (far left, standing), has developed a 3D skin model of psoriasis. He's received a grant from the American Skin Association and the UW SDRC to further refine and use this model in a bed-to-bench-to-bedside collaboration with dermatologists **Dr. Justin Endo** and **Dr. David Puchalsky** to study the use of natural products to treat psoriasis.

Professor Mukhtar with scientists and visiting fellows from his lab

UW–Madison Skin Disease Research Center

The UW SDRC is a collaborative community of scholars including 57 members from 20 departments in six Schools and seven Institutes, all studying cutaneous biology and skin diseases at the UW.

Funded by a highly competitive grant from the NIH and bolstered by School and Departmental funds, the UW SDRC leverages more than $4 million in funding to provide facilities, seminars, and seed money to a growing research community. The Center brings together junior and senior researchers from disciplines as wide-ranging as Computer Engineering, Veterinary Medicine, Classics, and multiple medical school departments to pose innovative questions about cell death and differentiation in the skin. Only five other such centers are funded nationwide (currently Harvard, Columbia, UPenn, Northwestern, and Colorado).

Gary S. Wood, MD
SDRC Director

Hasan Mukhtar, PhD
SDRC Co-Director

Our **NIH Skin Disease Research Center** grant is **one** of only **six** nationally

"March 12, 2014, when we were awarded our SDRC grant, was the most golden day in our department's history."

– Hasan Mukhtar, PhD

Seminars

The SDRC Seminar Series has hosted 25 speakers from 15 peer institutions and the UW through 2017.

Two of our guests—Maria Hordinsky, MD and Alice Pentland, MD—also discussed career development and their experiences as women in science during lunch-and-learn sessions sponsored by a competitive award from WISELI.

Angela Christiano, PhD, of Columbia University, leading researcher on alopecia, gave the keynote address at SDRC's inaugural retreat in July 2016.

Dr. Angela Christiano (center) with Drs. Hasan Mukhtar and Gloria Xu of Dermatology

Pilot & Feasibility Studies

The central goal of the SDRC is to foster skin biology- and skin disease-related research on the UW campus. The Pilot and Feasibility Studies program, led by **Nihal Ahmad, PhD**, supports explorations of innovative research in high-risk areas through a combination of our NIH/NIAMS support, funds from SMPH and our department, and through a partnership with the UW Institute for Clinical and Translational Research (ICTR).

Since 2014, the PFS program has granted 16 pilot awards for a total of $475,000 to two scientists and eleven faculty members from seven departments. The PFS program has enabled several SDRC members to secure additional multi-year extramural funding.

Nihal Ahmad, PhD
Director of Pilot and Feasibility Studies

Fifty-seven members from 20 Departments in 6 Schools and 7 Institutes, all studying cutaneous biology at the UW.

– Gary Wood, MD and Hasan Mukhtar, PhD

SDRC Executive Committee and External Advisory Board

Pilot Grant Awards

(Awards marked with an asterisk were co-funded by ICTR)

2014 Awards

"Explore the Role of RNA-binding Protein in Melanoma Prognosis and Resistance to Therapy.*" Gloria Xu, Vladimir Spiegelman, Vijay Setaluri (Department of Dermatology), KyungMann Kim (Department of Biostatistics & Medical Informatics)

"Pilot Study of DNA Microseeding to Activate Immune Rejection of Canine Melanoma.*" Zuleger CL, Kang C, Ranheim EA, Kurzman I, Macklin MD, Newton MA, Vail DM, Wolchok JD, Eriksson E, Albertini MR

"Detecting and Enumerating Circulating Melanoma Cells." Rajesh Seenivasan, Sundaram Gunasekaran (Department of Biological Systems Engineering), Vijay Setaluri (Department of Dermatology)

"Role of YB-1 in Human Squamous Cell Carcinoma." Deeba Syed (Department of Dermatology)

2015 Awards

"Role of UV Radiation in Papillomavirus-associated Skin Disease." Aayushi Uberoi, Paul Lambert (Department of Oncology)

"New Mode of Controlling Stem Cell Factor-c-Kit Signaling." Kyle Hewitt (UW Carbone Cancer Center), Emery Bresnick (Department of Cell and Regenerative Biology)

"Epigenetically Enhanced Photodynamic Therapy (ePDT): A Novel Therapy for T-cell Mediated Dermatoses Based on Cell Death and Differentiation." Katrin Salva (Department of Dermatology)

"Investigating the Evolution and Diffusion of Leprosy Using Ancient M. leprae Genomes." Jesse Dabney (Biotechnology Center), William Aylward (Department of Classical and Near Eastern Studies), Caitlin Pepperell (Department of Medicine)

2016 Awards

"Synthetic Polymers to Target Dermatophytic Fungi.*"Nancy P. Keller (Department of Medical Microbiology and Immunology), Samuel H. Gellman (Department of Chemistry), Christina M. Hull (Department of Biomolecular Chemistry)

"Characterization of Regulatory Mechanisms of MITF in Melanocytes.*" Parameswaran Ramanathan (Department of Electrical and Computer Engineering), Vijayasaradhi Setaluri (Department of Dermatology)

"Role of Immunosuppression in Papillomavirus-induced Skin Disease." Aayushi Uberoi, Paul Lambert (Department of Oncology)

"New Mode of Controlling Stem Cell Factor-c-Kit Signaling." Kyle Hewitt (UW Carbone Cancer Center), Emery Bresnick (Department of Cell and Regenerative Biology)

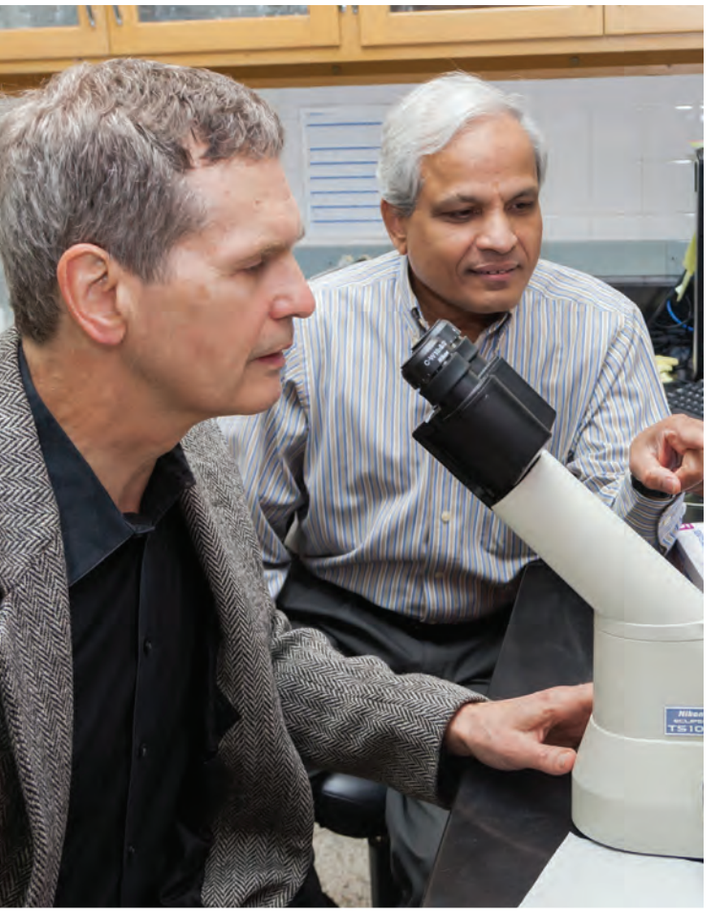
"Development and Validation of a Novel Full-thickness Three-dimensional (3D) Human Skin Equivalent Model of Psoriasis (FTRHSP)." Jean Christopher Chamcheu (Department of Dermatology)

"The Aryl Hydrocarbon Receptor in Inflammatory Skin Disorders." Christopher A. Bradfield (Department of Oncology)

"Molecular and Proteomic Signatures of Cellular Regeneration in Burn Tissue." Angela Gibson (Department of Surgery)

"Role of the slow-cycling, stem-like T-cell phenotype in early-stage cutaneous Tcell lymphoma compared to benign inflammatory skin disease." Stefan Schieke (Department of Dermatology)

Core Directors Dr. B. Jack Longley (left) and Dr. Vijay Setaluri



Gender and Minority Awareness Program

The UW SDRC provides services to cutaneous biology researchers throughout the UW and the US. The UW SDRC is dedicated to promoting gender and minority involvement in both our membership base, and in the focus of our research. Under the stewardship of Program Leader **Dr. Ladan Mostaghimi**, the Gender and Minority Awareness Program has encouraged the inclusion of women and minorities as members, resulting in women making up half of all new members joining since 2014. **Dr. Mostaghimi** applied for and won a competitive UW grant from the Women in Science and Engineering Leadership Institute for professional development for the SDRC Seminar Series.

Cell Culture Core

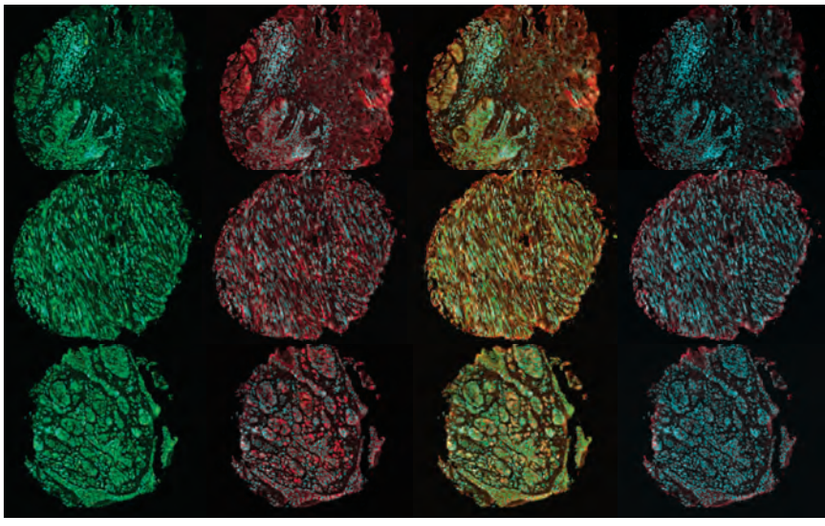
The Cell Culture Core is led by **Dr. Vijay Setaluri** and co-directed by **Drs. Sean Palecek** and **Gloria Xu**. It provides at reasonable cost a variety of quality-controlled cell cultures derived from healthy and diseased human and animal skin. It also trains investigators in the manipulation of skin cells in culture. The Core's goal is to support exploratory research into skin diseases at UW, regional institutions, and beyond.

Experimental Cutaneous Pathology Core

The Experimental Cutaneous Pathology Core helps investigators looking to analyze fresh and archival skin samples for various microscopic features and molecular characteristics relevant to their skin diseases research. All of our more than 250,000 archival samples are de-identified and covered under an approved IRB protocol, which allows investigators to conduct feasibility and proof of principle studies efficiently.

The Core offers routine histology and immunohistochemistry as well as nucleic acid isolation and analysis, and histocytometry based on state-of-the-art multispectral analysis. Investigators in need of diagnostic advice can consult with the Core's Director, dermatopathologist **Dr. B. Jack Longley**, and Co-Director, veterinary pathologist **Dr. Ruth Sullivan, VMD, PhD,** during biweekly open slide review. The Core also provides access to and training on the InForm software suite to analyze up to six microscopic sections at the tissue and cellular levels.

"Providing services to cutaneous biology researchers throughout the UW and the US."



Six-color stained skin samples from the SDRC

Education

"Clinical faculty members in the Department of Dermatology are committed to excellent resident and fellow education and creating a supportive, collegial environment. Our program is designed to maximize the personal and professional growth of each trainee and to provide mentorship to help them achieve their goals for a successful career in academic or private practice settings.

Medical student education is another priority of the Department of Dermatology. From the classroom to the clinic, faculty and residents introduce students to the principles of cutaneous medicine. In clinic, students are paired with residents during clinical rotations to promote learning and mentorship of students pursuing dermatology or other residencies. Our residents serve as stellar role models for medical students.

As Program Director, it is my mission to provide the foundation for developing a successful career in dermatology, while providing sufficient flexibility to individualize resident training to meet specific career goals. I am proud of the graduates of the UW Department of Dermatology."

Will Aughenbaugh, MD
Vice Chair for Education

Our Residency Program

Our residency and fellowship training programs provide a wide range of clinical experiences, including general dermatology, pediatric dermatology, specialty clinics, dermatopathology, cutaneous surgery, teledermatology, and consultative dermatology. We also offer opportunities to explore research methodology and training. Patient encounters take place in a variety of clinical settings including University, Veterans Administration and community hospitals, and multiple outpatient clinics.

We emphasize graduated responsibility, with residents managing increasingly complex conditions over the course of their training. Residents assume primary responsibility for patient care under the supervision of an attending physician during Continuity Clinics, required one half day per week during their first year, and two half days per week in the second and third years. In their senior year, residents spend three months at the VA Hospital, where they supervise clinic operations, mentor junior residents, and assume full responsibility for patient care decisions. This leadership role helps prepare residents for independent practice.

In addition to the variety of dermatology subspecialties, residents work with our esteemed colleagues in Internal Medicine and Pediatrics during their second-year Medicine Specialty rotation. Residents participate in Oncology's Melanoma Clinic, adult and pediatric Rheumatology clinics, and adult and pediatric Allergy clinics.

As residents near completion of their program, they can take advantage of the Dermatology Scholars Program to develop a focused area of expertise. Participants are paired with a mentor and can make use of local, regional, national, and international resources to focus on a clinical subspecialty, translational research or basic science research project within the UW Health system; alternatively, they can pursue an advanced degree including Master of Public Health or Master of Business Administration.

Since 2012, **252** medical students have rotated through the Dermatology clinics

A **third** of residency graduates since 2008 have pursued academic careers

Two-fold growth of the resident-clinical fellow training program since 2002

Quality Improvement as Career Development

Each year, residents take on a targeted quality improvement project that takes 6-12 months to complete. Often these projects are linked to a resident's clinical interests, and can build on one another from year to year.

For example, new faculty member **Dr. J. Klint Peebles** (second from right at bottom) was already recognized as a national leader in advocating for LGBTQ patients as a UW resident. In his first year, **Dr. Peebles** held several seminars to educate clinical staff about the specific needs of LGBTQ patients. The following year, in a project that won the 2016 AAD Resident QI Award, **Dr. Peebles** studied the correlation between sexual history, anal warts, and anal cancer. "We still aren't asking the correct questions," he said of the sexual history questionnaires common throughout American medicine. Now, building on his previous research, he is building an Epic SmartPhrase tailored to dermatologists examining patients with anal warts that includes a comprehensive sexual history questionnaire.

"We're encouraged to find an aspect of dermatology that we are passionate about...I know that there will undoubtedly be a number of faculty willing to help me in whatever way possible to foster that passion."

– Britney Buhalog
First Year Resident

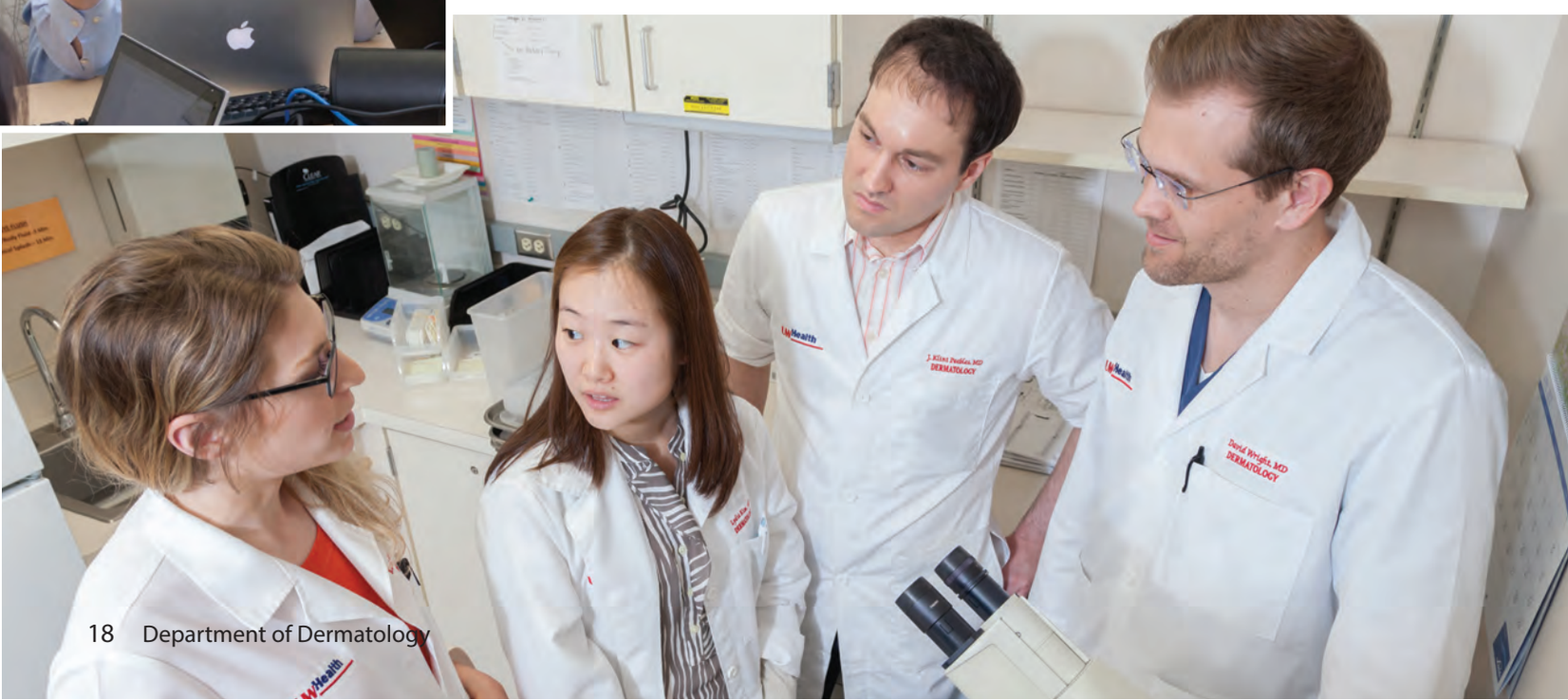
Leadership in the Medical School Transformation

Dermatology Vice Chair for Education **Dr. William Aughenbaugh** serves as the SMPH ForWard Curriculum Phase Three Director–leading development of third- and fourth-year medical student curriculum related to electives, specialty selection, acting internships, and preparation for residency.

Drs. Bob Glinert (photo left) and **Andy Swanson** are involved in developing thematic, case-based instruction for first-year medical students. Both serve as longitudinal teacher-coaches, helping medical students learn how to generate clinical questions, self-assess, and self-improve in order to become competent, independent medical professionals.

Dr. Swanson also serves as Co-Director for the new "Invaders and Defense" course, an integrated curriculum that draws on immunology, microbiology, autoimmunity, and dermatology to teach students how each of these disciplines are interrelated and can manifest in a single patient, condition, or population.

Senior residents in 2017



Dermatology Faculty and Staff
July 2017

Chair
Gary S. Wood, MD

Professors
Nihal Ahmad, PhD
Eric R. Berg, MD
Robert J. Glinert, MD
Rita Lloyd, MD
B. Jack Longley, Jr., MD
Ladan Mostaghimi, MD
Hasan Mukhtar, PhD
David R. Puchalsky, MD
George T. Reizner, MD
Anne Rosin, MD, DVM, MS
Vijayasaradhi Setaluri, PhD

Associate Professors
Will Aughenbaugh, MD
Juliet Aylward, MD
Daniel Bennett, MD
Molly Hinshaw, MD
Erin R. Vanness, MD
Yaohui (Gloria) Xu, MD, PhD

Assistant Professors
Lisa Arkin, MD
Apple Bodemer, MD
Hao Chang, PhD
Lauren Craddock, MD
Justin Endo, MD
Thomas Keenan, MD, PhD
Rachel Kornik, MD
Alex Means, MD
Lisa Muchard, MD
J. Klint Peebles, MD
Margo Reeder, MD
Stefan M. Schieke, MD
Andrew Swanson, MD

Advanced Practice Providers
Jennifer DuRocher, NP
Stephanie Faucher, NP
Megan Grow, PA
Gail Jahnke, NP
Julie Lederman, NP
Lori Oettinger, NP
LaMae Roberts, NP
Michelle Thomas, PA

Procedural Dermatology Fellow
Mariam Mafee, MD

Dermatology Residents
Hagger Ali, MD
Kate Bonnichsen, MD
Lauren Brin Hermans, MD
Brittany Buhalog, MD
Michael Christopher, MD
Shannon Detty, MD
Dan Krakora, MD
Susan Pei, MD
Bridget Shields, MD
Noor Tazudeen, MD
Nick Zajdel, MD

Volunteer Faculty
Theresa L Behrs, MD
Athena Daniolos, MD (Clinical Associate Professor)
Robert McDonald, MD (Clinical Assistant Professor)
Donald Schuster, MD (Clinical Associate Professor)
Harry Sharata, MD (Clinical Professor)
Erik Stratman, MD (Clinical Associate Professor)

Administration
Jonathan Bartnik
Diane Bock
Mike Cann
KaBao Chang
Jennifer Hanser
Michael Hetzer
Carrie Hill
David Lorman
Megan Maguire
Mary Poellinger
John Roy
Janeen Running
Hannah Strelchenko

Scientists
Vaqar Adhami, PhD
Jean Christopher Chamcheu, PhD
Naghma Khan, PhD
Minakshi Nihal, PhD
Imtiaz Siddiqui, PhD
Chandra Singh, PhD
Deeba Syed, PhD
Jianqiang Wu, MD, PhD
Tony (Zheng) Xiao, PhD

Trainees
Islam Rady Abdelaal, PhD
Numan Al-Rayyan, PhD
Saheed Afolabi, PhD
Edgardo Castro-Perez, PhD
Gagan Chhabra, PhD
Bo Dong, PhD
Hamidullah, PhD
Sushmita Roy, PhD
Lei Zhao, PhD

Graduate Students
Liz Garcia-Peterson
Ashika Jayanthy
Dareen Mikheil
Charlotte Mintie
Kirthana Prabhakar
Carlos Rodriguez
Aishwarya Krishnan

VA Staff
Kathleen Burke, PA
Diane Flora, RN
Michael Raterman, RN

APPs: (left-to-right) Lori Oettinger, Gail Jahnke, Julie Lederman, Michelle Thomas

Department faculty, residents and advanced practice providers

Leadership:
Regional, National, and International

Dr. Wood recognizes Dr. Eric Berg for over a decade of service as Vice Chair for Clinical Operations

Nihal Ahmad, PhD
Associate Editor, *Toxicology and Applied Pharmacology*
Associate Editor, *Photochemistry and Photobiology*

Lisa Arkin, MD
Vision and Strategy Task Force, Pediatric Dermatology Research Alliance
Past Early Investigator Liaison to the Executive Committee, Pediatric Dermatology Research Alliance
Co-Chair, Systemic Lupus Erythematosus Committee, Childhood Arthritis & Rheumatology Research Alliance

Dan Bennett, MD
Chair, Expert Resource Group for Quality and Patient Safety Officers, American Academy of Dermatology
Chair, Mohs Micrographic Surgery Committee, American Academy of Dermatology
Board of Directors and Executive Committee, Wisconsin Medical Society
Chair, Leadership Forum Workgroup, American Academy of Dermatology
Past President, Dane County Medical Society

Eric Berg, MD
Fellow, American Society for Laser Medicine and Surgery
Past President, Wisconsin Dermatological Society

Justin Endo, MD
Sulzberger Institute for Dermatologic Education Committee, American Academy of Dermatology
Editorial Board, *Khon Kaen University (KKU) Research Journal (Thailand)*

Molly Hinshaw, MD
Section Editor, *JAMA Dermatology*
Board of Directors, Women's Dermatologic Society
Vice Chair, Finance Committee, American Society of Dermatopathology
Vice Chair for State Society Relations, American Academy of Dermatology
Past President, Wisconsin Dermatological Society

Rita Lloyd, MD
Secretary/Treasurer, American Contact Dermatitis Society
Chair, Investment Committee, American Contact Dermatitis Society

B. Jack Longley, MD
Associate Editor, *Journal of Investigative Dermatology*
Editorial Board, *Journal of Cutaneous Pathology*
Editorial Board, *American Journal of Dermatopathology*
Founding Member, Editorial Board, *International Journal of Clinical and Experimental Medicine*
Past Chair, Program Committee for American Society of Dermatopathology
Past Board of Directors, American Society for Dermatopathology

Hasan Mukhtar, PhD
Associate Editor, *Toxicology and Applied Pharmacology*
Associate Editor, *Photochemistry and Photobiology*
Associate Editor, *Cancer Therapy, Nutrition and Cancer, Life Sciences*
Associate Editor, *Molecular Carcinogenesis*
Associate Editor, *Cancer Letters*
Associate Editor, *Frontiers in Clinical Nutrition*

Margo Reeder, MD
Board of Directors, American Contact Dermatitis Society
Performance Measurement Task Force, American Academy of Dermatology
Board Member, Dane County Medical Society

George Reizner, MD
President, International Society of Dermatology
Treasurer-General, International Society of Dermatology
Past Associate Editor, *International Journal of Dermatology*
Board of Directors, Federation for International Dermatological Education

Erin Vanness, MD
Past Treasurer, Vice President and President, Wisconsin Dermatological Society

Vijay Setaluri, PhD
Executive Council, International Federation of Pigment Cell Societies
Editorial Consultant and Past Section Editor, *Journal of Investigative Dermatology*
Editor-in-chief of *Pigment Cell & Melanoma Research,* starting 2018

Gary S. Wood, MD
Board of Directors, American Academy of Dermatology
Secretary/Treasurer, Association of Professors of Dermatology
Board of Directors, United States Cutaneous Lymphoma Consortium
Past President, International Society for Cutaneous Lymphoma
Past President, National Association of VA Dermatologists
Past Section Editor, *Archives of Dermatology*
Past Editorial Board Member, *Journal of Investigative Dermatology*
Past Editorial Board Member, *American Journal of Dermatopathology*

Gloria Xu, MD, PhD
Non-Melanoma Skin Cancer Guidelines Panel, National Comprehensive Cancer Network
Non-Appropriate Use Criteria Committee, American Academy of Dermatology
Diagnostic Quality Control and Teaching Library Committee, American College of Mohs Surgery

Institutional Leadership:
Beyond Dermatology

Nihal Ahmad, PhD
Member, Health Sciences Institutional Review Board
Member, UW-ICTR Scientific Review Committees (SRC)
Past Member, School of Medicine and Public Health Tenure Track Promotions Committee

Lisa Arkin, MD
Co-Director, Vascular Anomalies Center, American Family Children's Hospital

Will Aughenbaugh, MD
Director, SMPH ForWard Curriculum Phase Three

Dan Bennett, MD
Compensation Development Committee

Molly Hinshaw, MD
Alternate, UW Health Medical Board

Hasan Mukhtar, PhD
Co-Leader, Cancer Prevention and Control Program, UWCCC
Search Committee for Director of the UWCCC
Search Committee for Chair of Department of Oncology

George Reizner, MD
Pharmacy and Therapeutics Committee, UW Hospital and Clinics

Anne Rosin, MD
Admissions Committee, UW School of Medicine and Public Health

Andy Swanson, MD
Co-Director, SMPH Invaders and Defense Course

Gary S. Wood, MD
Council of Chairs, UW Health
Medical Board, UW Health
Past Member, UW Health Credentials Committee
Director, NMSC DOT, UW Carbone Comprehensive Cancer Center

Our Locations

1 1 S. Park Clinic
1 S. Park St., Madison, WI 53715

20 S. Park Clinic
20 S. Park St., Madison, WI 53715

2 UW Hospital and Clinics
600 Highland Ave., Madison, WI 53792

American Family Children's Hospital
1675 Highland Ave., Madison, WI 53792

UW Carbone Cancer Center
600 Highland Ave., Madison, WI 53792

Middleton Memorial VA Hospital
2500 Overlook Terrace, Madison, WI 53705

Wisconsin Institutes for Medical Research
1111 Highland Ave, Madison WI 53705

3 Medical Science Center
1300 University Ave, Madison, WI 53704

4 West Clinic
451 Junction Road, Madison, WI 53717

5 UW Health Transformations
2349 Deming Way, Middleton, WI 53562

6 East Clinic
5249 E. Terrace Drive, Madison, WI 53718

Publication List

Selected Basic Research Publications

1. Chamcheu JC, Adhami VM, Esnault S, Sechi M, Siddiqui IA, Satyshur KA, Syed DN, Dodwad SJM, Chaves-Rodriquez MI, **Longley BJ, Wood GS, Mukhtar H**. Dual Inhibition of PI3K/Akt and mTOR by the Dietary Antioxidant, Delphinidin, Ameliorates Psoriatic Features *In Vitro* and in an Imiquimod-Induced Psoriasis-Like Disease in Mice. *Antioxidants & Redux Signaling*. 26(2):49-69, 2017.
2. Salva KA, **Reeder MJ, Lloyd R, Wood GS**. c-CBL E3 ubiquitin ligase expression increases across the spectrum of benign and malignant T-cell skin diseases. *American Journal of Dermatopathology*. Oct 31, 2016. [Epub ahead of print]
3. George J, **Ahmad N**. Mitochondrial sirtuins in cancer: Emerging roles and therapeutic potential. *Cancer Research*. 76(9): 2500-2506, 2016.
4. George J, Nihal M, Singh CK, Zhong W, Liu X, **Ahmad N**. Pro-proliferative function of mitochondrial sirtuin deacetylase SIRT3 in human melanoma. *Journal of Investigative Dermatology*. 136(4): 809-818, 2016.
5. **Chang H**, Smallwood PM, Williams J, Nathans J. Intramembrane proteolysis of astrotactins. *Journal of Biological Chemistry* 292(8):3506-3516, 2017.
6. Wu J, Salva KA, **Wood GS**. c-CBL E3 ubiquitin ligase is overexpressed in cutaneous T-cell lymphoma: its inhibition promotes activation-induced cell death. *Journal of Investigative Dermatology*. 135(3): 861-8, 2015.
7. Salva KA, **Wood GS**. Epigenetically enhanced photodynamic therapy (ePDT) is superior to conventional photodynamic therapy for inducing apoptosis in cutaneous T-cell lymphoma. *Photochemistry and Photobiology*. 91(6):1444-51, 2015.
8. Seenivasan R, Maddodi N, **Setaluri V**, Gunasekaran S. An electrochemical immunosensing method for detecting melanoma cells. *Biosensors and Bioelectronics*. 68:508-15, 2015.
9. Rodríguez CI, **Setaluri V**. Cyclic AMP (cAMP) signaling in melanocytes and melanoma. *Archives of Biochemistry Biophysics*. 563:22-7, 2014.
10. Cholewa BD, Pellitteri-Hahn MC, Scarlett CO, **Ahmad N**. Large-scale label-free comparative proteomics analysis of polo-like kinase 1 inhibition via the small-molecule inhibitor BI 6727 (volasertib) in BRAF V600E mutant melanoma cells. *Journal of Proteome Research*. 13(11):5041-5050, 2014.
11. Devi S, Markandeya Y, Maddodi N, Dhingra A, Vardi N, Balijepalli RC, **Setaluri V**. Metabotropic glutamate receptor 6 signaling enhances TRPM1 calcium channel function and increases melanin content in human melanocytes. *Pigment Cell Melanoma Research*. 26(3):348-56, 2013.
12. Kittipongdaja W, Wu X, Garner J, Liu X, Komas SM, Hwang ST, **Schieke SM**. Rapamycin suppresses tumor growth and alters the metabolic phenotype in T-Cell lymphoma. *Journal of Investigative Dermatology*. 135(9):2301-8, 2015.
13. Robson A, Shukur Z, Ally M, Kluk, Liu K, Pincus L, Sahni D, Sundram U, Subtil A, Karai L, Kempf W, **Schieke S**, Coates P. Immunocytochemical p63 expression discriminates between primary cutaneous follicle centre cell and diffuse large B-cell lymphoma-leg type, and is of the TAp63 isoform. *Histopathology*. 69(1):11-9, 2016.
14. Chamcheu JC, Chaves-Rodriquez MI, Adhami VM, Siddiqui IA, **Wood GS, Longley BJ, Mukhtar H**. Upregulation of PI3K/AKT/mTOR, FABP5 and PPARβ/δ in Human Psoriasis and Imiquimod-induced Murine Psoriasiform Dermatitis Model. *Acta Dermato-Venereologica*. 96(6):854-6, 216.
15. Meyskens FL Jr, **Mukhtar H**, Rock CL, Cuzick J, Kensler TW, Yang CS, Ramsey SD, Lippman SM, Alberts DS. Cancer Prevention: Obstacles, Challenges and the Road Ahead. *Journal of the National Cancer Institute*. 108(2), 2015.
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Administration Staff: (back row) Megan Maguire, Mary Poellinger, Janeen Running, Jennifer Hanser, Mike Hetzer, Hannah Strelchenko, Jonathan Bartnik, (front row) Michael Cann, John Roy, David Lorman

Publication List

Selected Clinical and Educational Publications

1. **Xu YG, Aylward J, Swanson A, Spiegelman V, Vanness E, Teng J, Wood GS**. Nonmelanoma Skin Cancers: Basal Cell and Squamous Cell Carcinomas. In: Clinical Oncology 6th Ed. MD Abeloff et al. (eds.), Philadelphia, PA. *Elsevier Science* (USA), in press.
2. Kim T, Havighurst T, Kim K, Hebbring SJ, Ye Z, **Aylward J**, Keles S, **Xu YG***, **Spiegelman VS***. RNA-Binding Protein IGF2BP1 in Cutaneous Squamous Cell Carcinoma. *Journal of Investigative Dermatolog*. 137:772-775, 2017. (* senior co-authors)
3. **Mostaghimi L**. Diseases of the Skin: Psychocutaneous Medicine. *Conn's Current Therapy*, Editions 2010-2017.
4. **Mostaghimi L**. Chapter 13: Vitiligo. In: *Stress and Skin Disorders. Basic and Clinical Aspects*. 1st ed. Springer publishing. pp. 127-135, 2017.
5. **Muchard LK**. Chapter 33, Skin Disorders. In: *Pediatrics Examination and Board Review*. Peterson A, Wood K., Eds. McGraw Hill Professional; 2017.
6. **Hinshaw MA**. Non-melanocytic pigmentary disorders of the nail unit. In: *Scher and Daniels: Nails Diagnosis, Surgery and Therapy*, 4th ed. Jellinek, Rubin, Daniels, Scher, eds. Springer Science, 2016.
7. Rush PS, Shiau JM, Hibler BP, **Longley BJ**, Downs TM, **Bennett DD**. Primary cutaneous adenosquamous carcinoma of the penis: the first characterization of HPV status in this rare and diagnostically challenging entity with review of glandular carcinomas of the penis. *Journal of Cutaneous Pathology*. 43:1226-1230, 2016.
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13. **Xu Y**, **Aylward JL**, **Longley BJ**, **Hinshaw MA**, **Snow SN**. Eccrine Porocarcinoma Treated by Mohs Micrographic Surgery: Over Six-Year Follow-Up of Twelve Cases and Literature Review. *Dermatologic Surgery*. 41(6):685-92, 2015.
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16. Nault A, Zhang C, Kim K, Saha S, **Bennett DD**, Xu YG. Biopsy Use in Skin Cancer Diagnosis: Comparing Dermatology Physicians and Advanced Practice Professionals. *JAMA Dermatol*. 151: 899-902, 2015.
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Philanthropy

Generosity

In an era of tight funding, philanthropy is the key to sustaining our research and educational missions. Over the past 15 years, our faculty and staff have made it a personal mission to elevate department development efforts.

With generous donations from patients, alumni, and faculty, we've been able to advance our ground-breaking basic and translational research programs, and expand our nationally respected clinical and research training opportunities.

We are deeply grateful to all of our donors for their commitment and support. Together, we're transforming the future of dermatology and improving the lives of patients everywhere.

Endowments

- $15 Million: Current value of department endowments.
- Up from approximately $750,000 in 2002 and $9 Million in 2012.

We honor a number of UW faculty, former patients and donors through endowments that support leading-edge research on skin disease and cancer.

The Geneva F. and Sture Johnson Professorship

This endowment was a generous family gift honoring our first dermatology section chief, **Dr. Sture Johnson**. It supports leadership that enhances research, teaching, and clinical service in skin disease. Department **Chair Dr. Gary S. Wood** holds the Johnson Professorship.

Derek J. Cripps Endowment for Skin and Cancer Research

Established in 2006 to honor the 40-year career of **Dr. Derek Cripps**, our second dermatology section chief. **Dr. Cripps'** groundbreaking research on the effects of ultraviolet light on the skin led to many advances in photobiology and phorphyria. Funded by donations from alumni and current faculty, the endowment supports research on the causes, prevention, and cures of skin disease.

The Ruth Emily Walters Ratcliff Trust

The related Ratcliff trust was established through a bequest in gratitude to **Dr. Cripps**. **Dr. Vijayasaradhi Setaluri** holds the Cripps/Ratcliff Professorship.

Nelson M. Hagan, Class of 1929 Endowment

This endowment was created in 2010 through a bequest by Marjorie Hagan. The endowment currently supports research by Hagan Professors **Dr. Nihal Ahmad**, Associate Vice Chair of Research, and **Dr. Hao Chang**.

The Evan P. and Marion Helfaer Professorship of Dermatological Cancer Research

Supports the development of the department's research missions. **Dr. Hasan Mukhtar**, Vice Chair of Research, holds the Helfaer Professorship.

Frederic E. Mohs Endowment for Skin and Cancer Research

This endowment was established in 2007 in honor of **Dr. Frederic Mohs**, who pioneered and perfected micrographic surgery, a technique that is now used worldwide for the treatment of skin cancer. Funded primarily by faculty, colleagues, and grateful patients, the endowment continues Dr. Mohs' legendary research in skin cancer and skin diseases. **Dr. B. Jack Longley** is the Frederic E. Mohs Professor.

UWMF Endowment

The UWMF/UW Health consolidation in 2015 created an additional opportunity to support departmental academic missions, thereby allowing establishment of this research endowment in Dermatology. It currently helps support **Dr. Stefan Schieke**.

Lectureships

The George Reizner Lectureship

Established by dermatology faculty member **Dr. George Reizner**, this lectureship supports the keynote speaker for the Wisconsin Dermatological Society's annual meeting at UW.

The Hubert and Mary Moss Lectureship

Established by retired dermatologist **Dr. Hubert Moss**, and his wife Mary, this lectureship brings noted clinician educators and researchers to the local medical community to discuss dermatologic diseases.

Giving Opportunities

To learn more about giving opportunities in the Department of Dermatology, please:

Visit us online at
www.dermatology.wisc.edu/donate.htm

or

Contact Brad Jolin,
Vice President of Development,
Wisconsin Foundation & Alumni Association,
brad.jolin@supportuw.org, 608-206-6082.

A Brief History of Dermatology

at the University of Wisconsin–Madison

1925

Dr. Otto Foerster begins practicing dermatology at the UW.

1940

Dr. Frederic Mohs publishes first results of his now-eponymous surgical procedure: Mohs Micrographic Surgery.

1946

Division of Dermatology founded and headed by **Dr. Sture A.M. Johnson**. Dermatology Residency begins.

1971

Formal Mohs Fellowship established.

1972

Dr. Derek J. Cripps becomes Head of the Division of Dermatology.

1998

Physicians Plus and UWMF merge clinical practices.

2001

Dr. Gary S. Wood becomes Head of the Division of Dermatology.

2002

Division becomes the Department of Dermatology with **Dr. Wood** as the Founding Chair, with 10 faculty and six residents. There is subsequent growth in clinical, educational, and research programs along with the consolidation of dermatopathology and Mohs surgery into the new department and the progressive acquisition of multiple new facilities to support these initiatives.

2010

Research program ranked 8th in nation for NIH funding.

2014

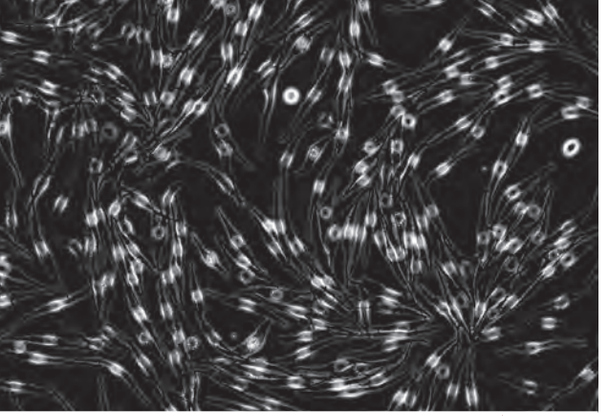
UW Dermatology awarded one of only 6 Skin Disease Research Center grants from the NIH.

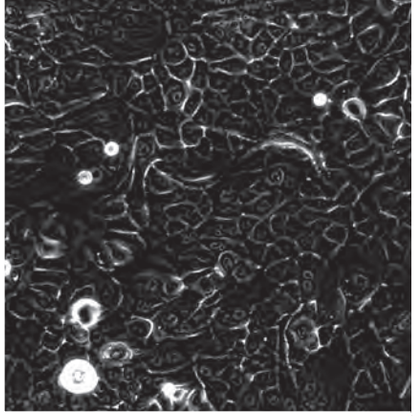
2015

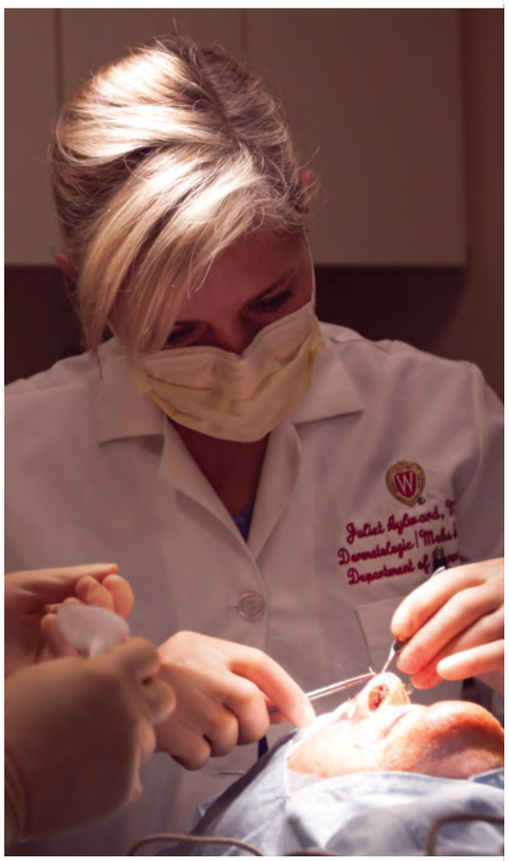
Nearly 70,000 patient visits annually at Dermatology clinics, up from 10,000 in 2002.

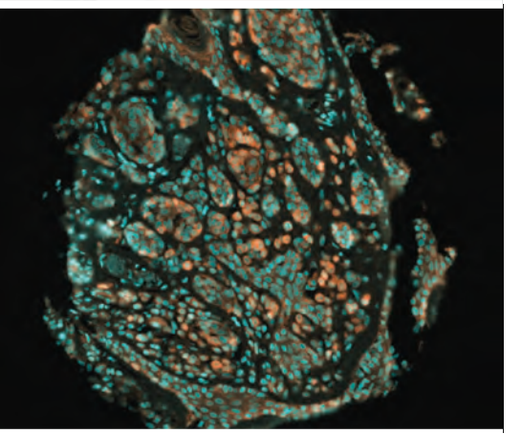
2017

Since its founding in 2002, the Department has grown to 30 faculty, 12 residents, and 1 fellow; increased clinical productivity 10-fold; become a leading center for dermatology research and training; and holds seven endowed professorships and two lectureships.









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