





Letter from the Chair

Paul Khavari, MD, PhD
Carl J. Herzog Professor and Chair

Dear Colleagues and Friends,

On behalf of the Department of Dermatology, I am pleased to convey our very best wishes for the winter holiday season.

2022 began with the Omicron variant surge, the largest yet of the entire COVID-19 pandemic. Deployment of vaccines, anti-viral antibodies, and SARS-CoV-2 protease inhibitors combined with acquisition of at least some forms of immunity by the majority of persons in our country have changed the prospects for the 2022-2023 winter season. The pandemic, however, continues to evolve and to impact our communities in numerous ways. In spite of this, the dedicated efforts of our faculty, staff, and trainees have helped our Department to continue to make substantial progress in each of its core missions of Education, Research, and Patient Care.

In our Educational mission, our Residency Program welcomed Dr. Betsy Bailey as our new Program Director. Dr. Bailey served as Associate Program Director for a number of years in concert with Dr. Bernice Kwong, Dr. David Fiorentino, and Dr. Derek Chu, each of whom continues their valuable service in that role. Dr. Bailey succeeds Dr. Kristin Nord, who completed a decade of service as Director marked by incredible progress for the Program. Under Dr. Nord's exemplary leadership, the Residency Program expanded from 16 approved positions to 28, an unprecedented 75% growth, which was accompanied by consistent annual recruitment of exceptional cohorts of young colleagues who represent the future of our specialty. Over the past year, the residents in our training program benefited by the continuity of leadership excellence during the transition. They continued to display tremendous adaptability as they settled into new hybrid models of virtual-in person patient care while we welcomed an outstanding new class of eight new first year residents, each of whom started their training in this new care delivery and teaching environment. Substantial numbers of Stanford medical students continued to choose Dermatology over the past year, reflecting the outstanding work of dedicated faculty mentors and advisors in the Department, including Dr. Joanna Badger, Dr. Jennifer Chen, Dr. Matthew Lewis, Dr. Joyce Teng, Dr. Silvina Pugliese, Dr. Annie Marqueling, Dr. Sumaira Aasi, and Dr. Gina Kwon. Record numbers of Ph.D. students, postdoctoral scientists and clinical fellows continue to train in the Department. The success of these large cohorts of extraordinarily dedicated and talented young colleagues are helping reach our Department's goal to have a positive long-term impact on our field by training the next generation of leaders.

In our Research mission, the Department has continued to lead the field across all metrics. Epidermolysis Bullosa translational effort led by Dr. Peter Marinkovich and Dr. Jean Tang showed positive benefits in phase III clinical trial in humans, setting the stage for the first approved genetic treatments for this devastating skin disease. Our other translational programs continue to apply the latest scientific advances to patient care, including those centered in the new Stanford Skin Innovation and Interventional Research Group (SIIRG), led by Dr. Albert Chiou, the Multidisciplinary Cutaneous and T-cell Lymphoma Program (MCTLP) led by Dr. Youn Kim, the autoimmune skin disease program led by Dr. David Fiorentino, the Pigmented Lesion and Melanoma Program led by Dr. Susan Swetter, and nonmelanoma skin cancer translational efforts led by Dr. Anne Chang and Dr. Kavita Sarin. Population health research efforts, including those led by Dr. Eleni Linos, continue to make positive impacts on public health not only in skin disease but also across medicine.





Letter from the Chair

Continued...

Pediatric dermatology faculty, led by Dr. Joyce Teng, continue to make positive advances in understanding and treating an array of congenital skin conditions. Basic research efforts in the Department, led by Dr. Tony Oro, Dr. Kevin Wang, Dr. Cari Lee, and Dr. Howard Chang, continue to lead the nation in NIH funding and high impact published scholarship. Dr. Oro was elected to the National Academy of Medicine, among the highest career honors that any physician scientist can receive. All these research efforts and achievements are embodied in an array of clinical trials based, many based on scientific discoveries made in the Department, which continue to show positive impacts in transforming care of a large spectrum of skin disorders.

Patient care efforts have included continued successful expansion of multiple subspecialty programs designed to serve patients with an array of challenging skin disorders throughout the Bay Area and globally. Dr. Sumaira Aasi, in her role as Director of Dermatologic Surgery, continues to lead the most highly awarded outpatient program throughout Stanford Healthcare in concert with Dr. Nour Kibbi and our newest surgical division faculty member who arrived this fall, Dr. Kelsey Hirotsu. Dr. Kerri Rieger, our Director of Dermatopathology, and Dr. Roberto Novoa have continued to enhance Dermatopathology services with the help of Dr. Ryanne Brown. Dr. Susan Swetter, Director of Stanford's Cutaneous Oncology efforts, has continued to lead cancer services in Dermatology, including Stanford's Program in Supportive Dermato-Oncology (SDO) led by Dr. Bernice Kwong. Finally, under the outstanding leadership of Dr. Justin Ko, further efforts continue to build momentum in applying new models of care and in making Stanford Dermatology care more accessible to our community throughout the Bay Area by transforming clinical practice models to engineer optimal models of hybrid care. To continue efforts to promote physician wellness and sustainability in all our clinical care efforts, the Department welcomed Dr. Jennifer Yeh as our new Wellness Director. Dr. Yeh succeeds Dr. Zakia Rahman, who effectively led Wellness efforts for the Department before and through the pandemic and who set the stage for the next phase of efforts in supporting the well-being of our faculty.

In additional positive developments, the 13th Annual Faculty Retreat was held on September, 2022, in person for the first time since the pandemic started. Faculty came together to work on issues important to the Department's continued success, with an emphasis on enhancing our Education, Research, and Patient Care missions. The Retreat was the culmination of months of advanced work by Task Forces led by Dr. Golara Honari, Dr. Gordon Bae, and Dr. Gina Kwon. These Task Forces helped chart the path forward for this year's plans for Department growth and improvement, with a number of additional initiatives now either underway or already completed. Plans are already in place for next year's retreat in September 2023.

The fall of 2022 has also seen outstanding new faculty join the Department, including Dr. Sierra Centkowski, Dr. Audris Chiang, Dr. Grace Cho, Dr. Kelsey Hirotsu, Dr. Sindhu Narala, Dr. Erica Wang, and Dr. Marten Winge. The Department also welcomed back Dr. Jennifer Lai to the faculty. This extraordinarily capable group of new faculty sustain the Department's continued growth and are adding tremendous new sub-specialty breadth and depth.

Looking to the future, the mission of the Department will remain focused, as it has been for past decades, on leadership in training leaders of our specialty, in discovering new knowledge for the well-being of humanity, and in patient care in an environment that fosters creativity, excellence and synergy. The support of our entire community of faculty, alumni, patients, and friends is instrumental in providing the creativity and resources needed in this effort to support trainees, young faculty, patient care advances and innovative research. I welcome your support and suggestions to enhance these endeavors and thank you for your efforts as part of the Stanford Dermatology community.

With best wishes for a happy holiday season and New Year,

Paul Khavari, MD, PhD

Carl J. Herzog Professor and Chairperson





Department Overview

72

FACULTY MEMBERS
View Online

26

RESIDENTS

View Online

26

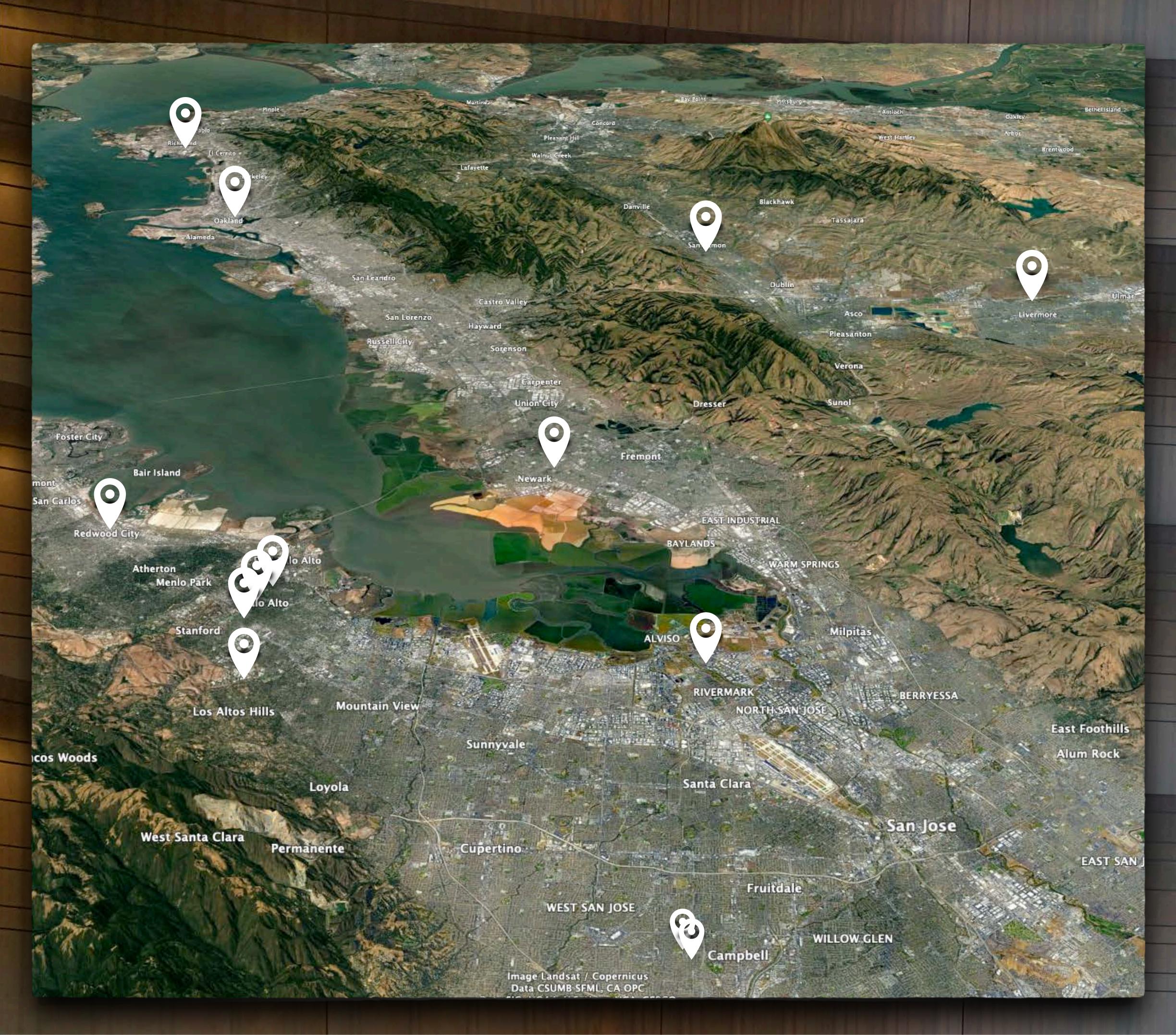
CLINIC LOCATIONS

View Online

23

SUBSPECIALTIES

View Online









Faculty Dedicated to Excellence



Dr. Sumaira Aasi

Dr. Shehla Admani



Dr. Maria Aleshin



Dr. Mina Ally



Dr. Amrita Arora



Dr. Joanna Badger



Dr. Gordon Bae



Dr. Betsy Bailey



Dr. Ryanne Brown



Dr. Sierra Centkowski



Dr. Anne Chang



Dr. Howard Chang



Dr. Jennifer Chen



Dr. Richard Chen



Dr. Audris Chiang



Dr. Albert Chiou



Dr. Grace Cho



Dr. Derek Chu



Dr. Lorinda Chung



Dr. Roxana Daneshjou



Dr. Matt Dizon



Dr. Meghan Dickman



Dr. David Fiorentino



Dr. Kelsey Hirotsu



Dr. Golara Honari



Dr. Michael Khodadoust



Dr. Vista Khosravi



Dr. Phuong Khuu



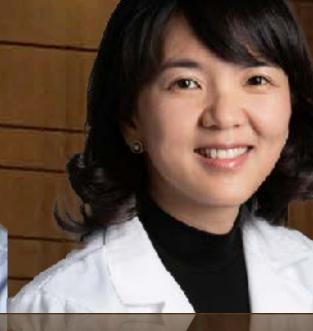
Dr. Nour Kibbi



Dr. Youn-Hee Kim



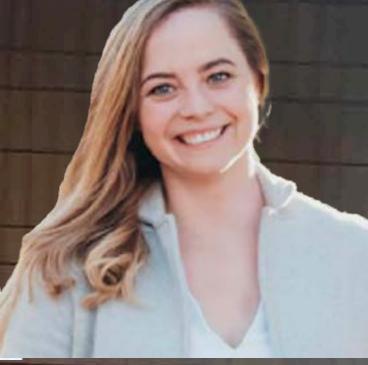
Dr. Justin Ko



Dr. Gina Kwon



Dr. Bernice Kwong Dr. Jennifer Lai



Dr. Hayley Leatham







Dr. David Wong

Dr. Jennifer Yeh

Dr. Caely Yanikoglu

Dr. John Yost



Dr. Wen-Kai Weng Dr. Marten Winge

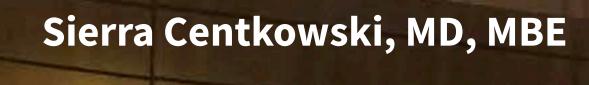
Dr. Lisa Zaba

Dr. Kevin Wang





New Faculty



Education and Training
Residency: Stanford
Medical Degree.: UPenn

Clinical Interests
General dermatology
Online profile



Education and Training
Residency: Stanford
Medical Degree: UC Irvine

Clinical Interests
General dermatology
Online profile



Education and Training
Residency: Stanford
Medical Degree: Stanford

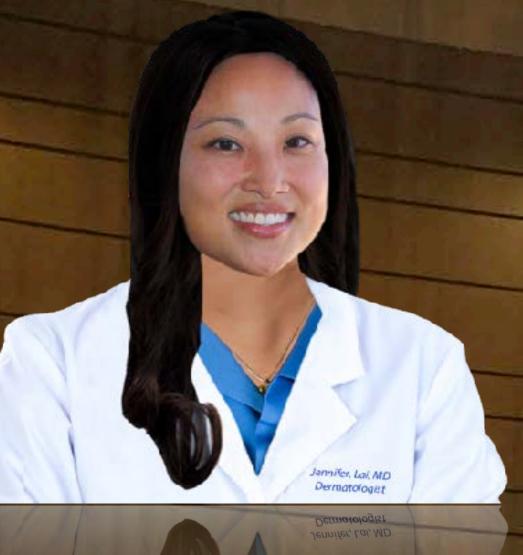
Clinical Interests
General dermatology
Online profile



Residency: Stanford
Medical Degree: Stanford

Clinical Interests

Mohs and Dermatologic Surgery



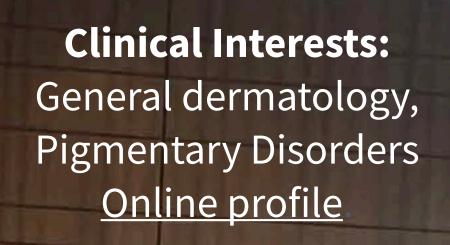
Jennifer Lai, MD, MPP

Education and Training
Residency: Stanford
Medical Degree: USC Keck

Clinical Interests
General dermatology
Online profile



Education and Training
Residency: University of Texas
Medical Degree:
UC San Diego





Residency: Stanford

Medical Degree:
University of Hawaii

Clinical Interests
General dermatology
Online profile



Stanford HEALTH CARE

Marten Winge, MD, PhD

Education and Training
Residency: Stanford
Ph.D.: Karolinska Institute
Medical Degree: Karolinska
Institute

Clinical Interests
General dermatology
Online profile





New MCTLP Members

The Stanford Multidisciplinary Cutaneous and T-cell Lymphoma team offers expert treatment for patients with cutaneous or systemic T-cell lymphomas. (<u>Website</u>)



Dr. Erica Wang

Clinical Assistant Professor of Dermatology and Member of Stanford's Multidisciplinary Cutaneous and T-Cell Lymphoma Program

Dr. Erica Wang joined our multidisciplinary program in 2022 after completing her dermatology residency training at Stanford. Prior to her residency, Dr. Wang served as a clinical research fellow in our MCTLP under the mentorship of Drs. Youn Kim and Michael Khodadoust.

Dr. Erica Wang was born and raised in Hawaii. Her first experience with CTCL was with her general dermatology mentor in Hawaii caring for a patient with Sezary Syndrome. It just so happened, the gentleman being cared for in Hawaii was also a patient of Dr. Youn Kim. This was Dr. Wang's first introduction to the disease and to the broadly reaching impact by Stanford's multidisciplinary group.

What she calls her "full circle moment" came when, Dr. Wang got to spend a year working as a cutaneous lymphoma fellow with Dr. Kim, Dr. Khodadoust and the MCTLP team.

During her fellowship and residency, she has helped to present unique findings of Stanford's next-generation sequencing panel (Heme STAMP) at the Society of Investigative Dermatology (SID) and the international 4th World Congress of Cutaneous Lymphoma. Her interests in CTCL research include applying molecular data to better characterize the diseases and provide personalized medicine through targeted therapies for these rare lymphomas.



Dr. Jennifer Wang

Clinical Assistant Professor of Dermatology and Member of Stanford's Multidisciplinary Cutaneous and T-Cell Lymphoma Program

Dr. Wang joined our multidisciplinary CL program in 2021 and serves as Director of the Cutaneous Oncology Tumor Board at Stanford Cancer Center.

Dr. Jennifer Wang is a California native and Stanford "lifer". She completed an undergraduate degree in biology, her medical degree, dermatology residency, and a dermatopathology fellowship all at Stanford University School of Medicine.

Dr. Wang was first exposed to CTCL as a resident rotating through Dr. Youn Kim's clinic. She was fascinated by the diverse clinical and pathologic presentations of the disease, and impressed to witness what a powerful impact a multidisciplinary approach can have in treating a rare and challenging condition.

As a dermatopathology fellow, Dr. Wang helped to characterize mogamulizumab-associated rash, a major side effect that can affect patient and provider's decisions to continue with this treatment. She presented Stanford's findings at the 4th World Congress of Cutaneous Lymphoma in 2020, with subsequent publications in major medical journals. Currently Dr. Wang is building on this important work and hoping to dive deeper into other areas of CTCL research to better understand how molecular and pathological features can help physician-scientists better diagnose, characterize, and treat the disease.









Sumaira Aasi, MD
Clinical Professor of Dermatology

American College of Mohs Surgery Distinguished Service Award for 2022 Elected Vice-President for the American College of Mohs Surgery



Howard Chang, MD, PhD
Professor of Dermatology

Cancer Grand Challenge award \$100 million to four research teams

(Forbes story)

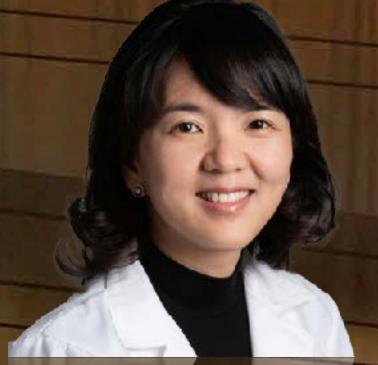


Golara Honari, MD
Clinical Associate Professor of Dermatology
Biodesign Faculty Fellowship Extension award



Carolyn Lee, MD, PhD
Assistant Professor of Dermatology

Harrington Scholar-Innovator Award, Harrington Discovery Institute



Gina Kwon, MD and Marlyanne Pol-Rodriguez, MD Clinical Assistant Professor and Clinical Associate Professor

Early Clinical Engagement (ECE) Course Preceptor Recognition AY 2021-2022



Zakia Rahman, MD, FAAD Clinical Professor of Dermatology

Annual Luminary Laser Lecturer: 40th Annual Meeting Florida Society of Dermatologic Surgeons.

Cool Laser Cases for Hot Sunny Climates: Maximizing Safety & Efficacy. October 2021.

Appointment to the American Society for Laser Medicine and Surgery (ASLMS) Inclusion,

Diversity, Equity, and Accessibility (IDEA) Committee



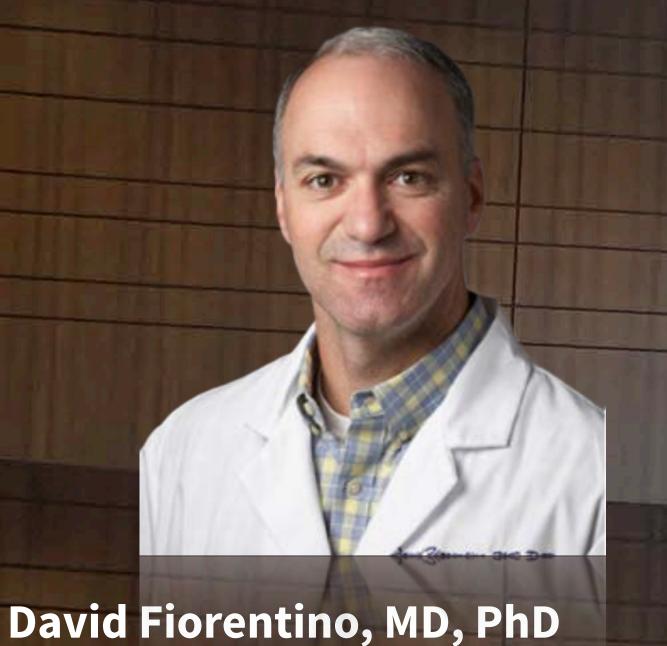


Major Discoveries

Stanford Dermatology Faculty are regionally and nationally recognized for their research, clinical expertise and teaching.



Howard Chang, MD, PhD
Professor of Dermatology
Scientist discover deadly DNA circles in cancer
(Read story)



Immune responses to CCAR1 and other dermatomyositis autoantigens are associated with attenuated cancer emergence. David F Fiorentino, Christopher A Mecoli, Matthew C Rosen, Lorinda S Chung, Lisa Christopher-Stine, Antony Rosen, Livia Casciola-Rosen. J Clin Invest, 2022 Jan 18;132(2).



Assistant Professor of Dermatology

MAB21L4 Deficiency Drives Squamous Cell Carcinoma via
Activation of RET. Srivastava A, Tommasi C, Sessions D, Mah A,
Bencomo T, Garcia JM, Jiang T, Lee M, Shen JY, Seow LW, Nguyen A,
Rajapakshe K, Coarfa C, Tsai KY, Lopez-Pajares V, Lee CS.



Clinical Professor of Dermatology
Annual Luminary Laser Lecturer: 40th Annual Meeting
Florida Society of Dermatologic Surgeons. Cool Laser Cases
for Hot Sunny Climates: Maximizing Safety & Efficacy.
October 2021.







The Department of Dermatology is proud to celebrate Dr. Kristin Nord's tenure of 10 years as the Residency's Program Director, during which time she has significantly advanced our program in both size and quality of educational experience. Under Dr. Nord's leadership, our ACGME approved positions grew from 16 to 28, and Dr. Nord helped to secure hospital funding for an additional 7 residents, making our program one of the largest in the nation. More importantly, Dr. Nord left her impact our program through her lasting contributions in the areas of mentorship, synergy and resident wellness.

In her role as program director, Dr. Nord enhanced the quality and broadened the scope of mentorship in our department by redesigning the core mentorship program for our residency, and supporting the creation of new educational programs in collaboration with the Training Leaders Task Force. These include the Dermatology Interest Group (now led by Dr. Joanna Badger), which has informed, inspired and supported numerous Stanford medical students applying in dermatology, and the Clinical Scholars Track (co-supported by APD Dr. David Fiorentino and now led by Dr. Jean Tang and Dr. Lisa Zaba), which has supported residents interested in academic careers to pursue skills and opportunities in research and teaching during their clinical training.

Dr. Nord also promoted synergy and inclusiveness around the departmental pillar of education through the committees and new educational opportunities that she initiated. She created the Residency Advisory Committee to foster communication and collaboration between rotation site directors and program directors on residency-wide policies and initiatives, and brought together the Residency Redesign Committee to engage faculty in building a framework for our recruitment process based on collectively determined departmental core values. In addition, Dr. Nord inspired and supported the creation of several unique and enduring educational opportunities for our trainees, including the annual Resident Case Symposium (led by APD Dr. Derek Chu), the biannual Morbidity and Mortality Conference series (now led by APD Dr. Bernice Kwong) and a significant expansion of our elective opportunities over the last decade, including a formalized process to support global health electives and cultural competency elective (both led by our current PD, Dr. Betsy Bailey), and a unique industry-based elective.

Finally, Dr. Nord has emphasized the importance of wellbeing and connectedness within our residency, and our department, over the last decade. She personally welcomed each resident and their families to her home, and brought faculty and residents together in social settings. In addition, she created a Resident Wellness Committee to assess needs and engage residents in wellness initiatives. Most recently, Dr. Nord helped our education leadership team and residents navigate many obstacles and changes during the pandemic, including the transition to virtual didactics, interviews and online recruitment.

In her 12 years as APD and PD, Dr. Nord has touched the lives of nearly 100 residents, by helping them navigate not only successful completion of residency training, but also ABD certification, fellowship matches, and job transitions. The Stanford Department of Dermatology is very grateful for Dr. Nord's sustained and thoughtful leadership, and also for the personal care and attention that she provided to each member of our residency community during this time.





Election to the National Academy of Medicine



Congratulations to Dr. Anthony
Oro on his election to the
National Academy of Medicine.
This is among the very highest
honors any scientist can
receive.

Tony's landmark scientific contributions in identifying Hedgehog signaling in cancer and his work in epigenomic plasticity, along with his major advances in clinical translation of pluripotent stem cell technology to human use are being recognized in this election as are his outstanding leadership in service, mentorship, and teaching. Tony's achievements have been truly exceptional and Tony is one of only 3 American Dermatologists elected to the National Academy over the past decade-plus.

Learn More





Residency Program Update



Our residency program is not only one of the largest dermatology programs in the country, but also one of the top in clinical training.

Learn More

On July 1, 2022, our residency program welcomed eight extraordinary new first year residents: Dr. Christina Bax (Perelman School of Medicine at the University of Pennsylvania), Dr. Tram Bui (Harvard Medical School), Dr. James Kilgour (Cardiff University), Dr. Christine Lin (Texas Tech University), Dr. Qisi (Mary) Sun (Yale University Medical School), Dr. Nicole Urman (Stanford University School of Medicine), Dr. Lindsey Voller (University of Minnesota Medical School), and Dr. Catherine (Cat) Wang (University of Southern California Keck School of Medicine). In addition to our first years, our program also welcomed PGY2 resident: Dr. Julie Ramseier (Yale University School of Medicine). They have hit the ground running, and it has been so fun welcoming them to our teams.

We continue to embrace the benefits of "Zoom world" to create virtual platforms for our educational activities. It is so exciting to see many of our alumni virtually at departmental Grand Rounds, and we were thrilled to be able to again invite our alumni community to the annual Resident Case Symposium this year. Virtual platforms have continued to create new ways of connecting in our recruitment process as well. We hosted our second annual "Diversity First Look" webinar event open to all residency program applicants. The event showcased the work in our department and across Stanford in fostering diversity, equity and inclusion. In aligning with the Association of American Medical Colleges (AAMC) we have decided to again conduct our residency interviews virtually via Zoom, which allows us to reduce both the cost and carbon footprint of the recruitment process for our applicants.





We have also enjoyed being able to bring back some of our traditional in-person social events as a community this past year. We again hosted our annual "End of Year Celebration" in person at the beautiful outdoor space of the Los Altos History Museum. It was a truly special event to celebrate our graduating residents: Dr. Derek Beaulieu (MOHS Fellowship at University of Texas Southwestern Medical Center in Dallas), Dr. Sierra Centkowski (Stanford Dermatology Clinical Assistant Professor), Dr. Audris Chang (Stanford Dermatology Clinical Scholar), Dr. Grace Cho (Stanford Dermatology Clinical Assistant Professor), Dr. Lauren (Nikki) Larrabure (Sutter Health Soquel), Dr. Lucy Liu (Stanford Children's Health, Pediatric Dermatology Fellow), Dr. Jannett Nguyen (PHI Health Dr. Elizabeth (Liz) Wang (Sutter Health Palo Alto), Dr. Erica Wang (Stanford Dermatology Clinical Assistant Professor), and Dr. Carl Gustaf (Marten) Winge (Stanford Clinical Instructor). We enjoyed welcoming our new residents this August with our annual welcome picnic, hosted at Fleishman Picnic, and our residents bonded during this year's annual resident retreat with whale watching in Santa Cruz.

We reflect on 2022 as a year in which we could begin to bring back in-person gatherings with more appreciation than ever for the importance of our community, while also being glad for the ways that Zoom allows us to be connected even from afar. We are so grateful for the support of our Stanford Dermatology family, which allows us to continue to provide the resources and opportunities to support the education and well-being of the next generation of Stanford Dermatology residents.

Resident Highlight





Our resident QI project, "Operation Waste Reduction: Decreasing Skin Biopsy Tray Waste," written by Paige Wheaton Wolstencroft, MD, MS, PGY-3, was spotlighted with the American Academy of Dermatology/Climate ERG!

Read Online





Cutaneous Oncology Update

Pro

Susan Swetter, MD
Professor of Dermatology

Stanford Cutaneous Oncology - Skin Cancer Program

The Cutaneous Oncology Program at the Stanford Cancer Institute, led by Professor of Dermatology and Director of the Pigmented Lesion and Melanoma Program Dr. Susan Swetter, promotes novel research and treatment for the spectrum of skin cancer types, including melanoma and atypical melanocytic neoplasms (both adult and pediatric), high-risk and solid organ transplant-associated squamous cell carcinoma, advanced basal cell carcinoma (i.e., keratinocyte carcinomas), Merkel cell carcinoma and other solid-tumor cutaneous malignancies. Cutaneous Oncology skin cancer and Supportive Dermato-Oncology clinics are held in the Stanford Cancer Center in Palo Alto (CCPA), at 900 Blake Wilbur Drive, 3rd floor (BW-3) and the Cancer Center South Bay (CCSB) in San Jose. The Cutaneous Oncology Program has expanded to include dermatology services in Redwood City (RWC) and East Bay sites (Emeryville and Livermore/Danville/San Ramon/ Castro Valley), and surgical oncology services at Stanford Health Care Tri-Valley in Pleasanton

New Faculty updates:

Former Stanford Cutaneous Lymphoma fellow and dermatology resident Dr. Erica Wang (Clinical Assistant Professor) recently joined the Cutaneous Oncology faculty, focusing both on pigmented lesion/melanoma and cutaneous lymphoma. She has joined Drs. Swetter, Dr. Justin Ko (Clinical Professor), and Dr. Jennifer Boldrick (Adjunct Clinical Asst Professor) as part of our PLMC team at CCPA.

Dr. Kelsey Hirotsu (Clinical Assistant Professor) has joined Dr. Sumaira Aasi (Clinical Professor) and Nour Kibbi (Clinical Asst Professor) in the Mohs & /Dermatology Surgery Program in RWC. She has also expanded our medical and surgical dermatologic care for patients in the East Bay to the new Stanford Castro Valley campus.

In early 2023, Dr. Allison Betof Warner (Assistant Professor of Medicine/Medical Oncology) will join our program as Director of Melanoma Medical Oncology and Leader of the Melanoma Clinical Research Group. Dr. Betof completed her Internal Medicine residency at Massachusetts General Hospital (Harvard University) and Medical Oncology Fellowship at Memorial Sloan Kettering Cancer Center, where she has been on the faculty since 2019. Dr. Betof's research explores how modulations in tumor microenvironment affect

immunotherapy. She is the principal investigator of several trials focusing on immunotherapy-refractory melanoma and is internationally recognized for her expertise in brain/CNS metastasis and the use of novel cellular therapies. In addition to her leadership of the advanced melanoma program, Dr. Betof will serve as the Director of Solid Tumor Cellular Therapy at Stanford and will co-direct the Pigmented Lesion & Melanoma Program with Dr. Swetter.

Dr. Amanda Kirane (Assistant Professor of Surgery/Surgical Oncology) serves as Director of Melanoma Surgical Oncology at CCPA, working closely with dermatology surgeons Drs. Aasi, Kibbi, and Hirotsu, Head and Neck surgeons (including Dr. John Sunwoo, Professor of Otolaryngology – Head & Neck Surgery), and other surgical oncologists at CCPA, CCSB, and Stanford Health Care Tri-Valley (formerly ValleyCare).

Stanford Keratinocyte Carcinoma Interdisciplinary Network (SKCIN)

We continue to expand keratinocyte carcinoma research and clinical care to fully integrate dermatology, dermatologic surgery, head/neck, and surgical/medical/radiation oncology expertise for patients with advanced cutaneous SCC, BCC and other skin cancers. This program is housed in Stanford Dermatology/RWC and led by Dr. Silvina Pugliese (Clinical Assistant Professor) and Dr. Aasi, along with skin cancer specialists Drs. Anne Lynn S. Chang (Professor) Kibbi, Hirotsu (expanding care into East Bay), Jennifer Wang (Clinical Assistant Professor), and colleagues across the Stanford Cancer Institute. Drs. J. Wang and Kibbi direct the multidisciplinary Cutaneous Oncology Tumor Board as well.

Cutaneous Oncology Program at Cancer Center South Bay Under the direction of Dr. Jennifer Wang and Dr. Lisa Zaba (Associate Professor), the Cutaneous Oncology Program at CCSB provides comprehensive med-derm and surgical oncology care for melanoma, high risk non-melanoma skin cancer and supportive dermato-oncology on a daily basis and improves access for patients living in the San Jose, Santa Cruz, Monterey, Salinas, and San Luis Obispo regions. This multidisciplinary team includes specialized melanoma/skin cancer care in Head and Neck Surgery (Dr. Fred Baik, Assistant Professor of Otolaryngology – Head and Neck Surgery), Surgical Oncology (Dr. Kim Stone, Clinical Assistant Professor of General Surgery), Cytopathology (Dr. Michael Ozawa, Clinical Assistant Professor of Pathology), and medical oncology. New patient coordinators for referrals to both CCSB and CCPA can be reached at 650-498-6000.

Ongoing Program Development

Daily Supportive Dermato-Oncology (SDO) clinics take place at BW-3 and CCSB and expanded last year to RWC and Emeryville to meet the needs of patients throughout the Bay Area. The decade-old SDO program is led by Dr. **Bernice Kwong** (Clinical Professor) and provides urgent, on-site dermatology...





...evaluation of cutaneous complications related to cancer diagnosis and treatment, allowing for improved patient quality of life and outcomes. The SDO clinics are run by Dr. Kwong, Dr. Pugliese (Redwood City), Dr. Zaba, Dr. J. Wang (CCSB), and Dr. **Jasmine Rana** (Clinical Asst Professor), who has expanded SDO services to the Emeryville campus.

Through the SDO efforts, Dr. Zaba is exploring the intersection between cancer and immunity as it pertains to cancer surveillance and various immunotherapy regimens. Dr. Pugliese continues to build a Survivorship Program to address the unique and continued dermatologic needs of patients after cancer treatment. Dr. Kwong is exploring the role of nutritional deficiency in refractory skin toxicity during cancer therapy. Dr. Rana has joined Dr. John Yost (Clinical Associate Professor) to continue to provide expert nail toxicity management for patients undergoing cancer therapy through the cancer nail disorders clinic at CCPA, and has expanded this unique care to RWC. Over the last year, Dr. Kwong, Dr. Zaba and Dr. Pugliese together with Dr. Ko have built a virtual Supportive Dermato Oncology e-consultative program to provide digital dermatologic advice to oncologists and cancer patients who have skin toxicity they notice at home, or during their oncology visits, before they present to dermatology clinic.

Dr. Zaba has grown the Merkel cell carcinoma (MCC) clinic at CCPA, working in a multi-disciplinary fashion with Dr. Sunil Reddy (Clinical Assistant Professor of Medicine/Oncology) and Dr. Michael Gensheimer (Clinical Associate Professor of Radiation Oncology). MCC frequently requires surgical excision, sentinel lymph node biopsy, adjuvant radiation, and if locally advanced or metastatic, immune-checkpoint blockade therapy. Several MCC clinical trials are in progress.

Dr. Kavita Sarin (Associate Professor) directs the Skin Cancer Genetics Clinic in the Stanford Cancer Center which is focused on the diagnosis and management of individuals with inherited skin cancer susceptibility.

Clinical and Translational Research Highlights

Stanford has a robust clinical trials portfolio in place for solid tumor cutaneous malignancies, with multiple available trials across the disease spectrum, including novel neoadjuvant approaches to shrink bulky tumors prior to surgery. For melanoma, the National Clinical Trials Network (S1801) phase II trial showed the benefit of neoadjuvant pembrolizumab before and after surgery in patients with stage III-IV high-risk melanoma compared with the standard adjuvant approach. Drs Aasi and Kibbi worked with Dr. Vasu Divi (Associate Professor Head/Neck Surgery) and Stanford medical and radiation oncology colleagues to demonstrate the benefit of neoadjuvant cemiplimab (PD-1 inhibitor) for stage II-V cSCC (NEJM, 2022). Drs. Kibbi and Aasi are investigators for a study validating gene expression profiling for aggressive cSCC.

Dr. Chang and Dr. Calvin Kuo (Professor Medicine/

Hematology) are supported by a multi-year NIH grant to grow patient skin cancers in vitro to try to predict which aggressive cancers might respond to particular therapies, including immunotherapies. Dr. Chang, Dr. Joyce Teng (Professor) and Dr. Ryanne Browne (Asst Professor, Pathology/ Dermatopathology) are investigating new pathways that can be targeted with pre-existing drugs to treat basal cell carcinoma. Dr. Chang and Dr. Zaba are also collaborating with Dr. Scott Boyd (Professor, Pathology) to study long term immunity in COVID and COVID-vaccinated patients who also have skin cancer.

Dr. Kirane is lead investigator in multi-site trials of novel intralesional therapies for cutaneous disease. Her basic and translational laboratory focuses on harnessing abscopal effect of regional therapies, targeting tumor associated macrophages in checkpoint-refractory melanoma, and emerging, label-free technologies that are promising surrogates for traditional immunoassays.

Additional clinical treatment and research highlights are noted below.

- Unraveling the role of genetics in skin cancer
 Dr. Kavita Sarin (Associate Professor) continues to work with
 Drs. Jean Tang (Professor), Tony Oro (Professor), Swetter, Ko,
 and Aasi to identify genetic mutations that contribute to
 increased skin cancer susceptibility in melanoma and basal
 cell carcinoma.
- Multi-center cell free tumor DNA (ctDNA) consortium Dr. Zaba is currently leading a multi-site investigational study on the use of cell free tumor DNA (ctDNA) to identify residual or recurrent MCC disease from blood samples. This blood test has the ability to identify recurrent MCC 2-3 months before it can be seen on an imaging study (PET-CT or CT) which may ultimately result in more rapid treatment of the disease. We expect that this will change the way we surveil MCC patients internationally.
- Research on immune checkpoint inhibitors and rashes Dr. Zaba also conducts translational research on immune checkpoint inhibitor skin rashes, and has recently discovered that rash histology predicts overall survival. Work is ongoing to better understand the immune mechanisms underlying this phenomenon.
- Rapid imaging mass spectrometry for improved skin cancer surgery

Dr. Aasi's and Dr. **Albert Chiou**'s (Clinical Associate Professor) collaboration with Dr. Richard Zare (Professor, Chemistry) was recently awarded the Sarafan ChEM-H Clinical Research seed grant to develop a new non-invasive imaging technique to distinguish melanoma in situ and other skin cancers from normal skin. The collaboration is applying the Zare group's renowned expertise in rapid imaging mass spectrometry techniques to identify the chemical signature of cancerous tissue...





This will improve the ability of surgeons to distinguish which portions of skin are involved with cancer and which are not, leading to faster and ultimately smaller surgeries for melanoma in situ in the future.

 Novel imaging technologies for total body mole mapping and assessment of other dermatologic conditions

Canfield Intellistudio® total body imaging is available to Stanford patients at CCPA and Stanford Dermatology/RWC for patients with atypical moles and/or increased nevus count. This state-of-art, fully-automated, total body photography is being used for nevus surveillance and other dermatologic conditions, in conjunction with the novel use of reflectance confocal microscopy for early melanoma/skin cancer detection.

- Wipe Out Melanoma California: Targeting High Risk Populations through Community Engagement Dr. Swetter leads a state-wide community outreach initiative to improve melanoma prevention and early detection in highrisk populations, along with colleagues in the Stanford Center for Population Health Sciences, Cancer Health Equity and Community Engagement, Cedars Sinai Medical Center, and academic/health system partners across California. Stanford Dermatology digital imaging/AI outreach efforts are currently aimed at reaching rural areas of the state to improve dermatologist access. The WOM-CA team's qualitative exploration of melanoma awareness and prevention practices among Latinx and Non-Latinx whites in urban and rural California was recently published in Cancer Medicine. Please encourage your melanoma patients and families to join the Melanoma Community Registry of California to engage in the WOM-CA efforts along with our partner academic institutions and health systems across the state. For more information, see: https://med.stanford.edu/cancer/community/projects/ WOM.html.
- Public Health and Social Media Messaging for Skin Cancer Supported by the NIH and the Melanoma Research Alliance, Dr. Eleni Linos (Professor), Dr. Swetter, and colleagues have leveraged online advertising and social media to deliver tailored, public health messaging to improve melanoma early detection. Recent qualitative work focused on provision of high-quality health information regarding melanoma awareness among Black Americans, as well as a national, social media-based public health campaign to reduce indoor tanning motivations in high-risk populations in an effort to reduce skin cancer incidence.

Research in Artificial Intelligence and Digital Outreach Efforts

Drs. Roberto Novoa (Clinical Associate Professor), Chiou, Ko, Swetter, and Roxana Daneshjou (Clinical Scholar) are investigating the potential impact of Al-assisted triage for lesions concerning for skin cancer through a multicenter trial

funded by the Melanoma Research Alliance and L'Oréal, and led by Drs. Novoa and Chiou. This study is one of the first to explore potential clinical applications of Al-driven triage approaches in a "real-world setting" to try to improve early diagnosis of melanoma and other skin cancers.

Dr. Daneshjou has joined the AI outreach effort to highlight the need for development of machine learning algorithms in skin of color patients and recently developed the Diverse Dermatology Images (DDI) dataset in collaboration with Drs. Chiou, Novoa, Ko, and Swetter. This dataset was publicly released through the AIMI Center at Stanford, and an analysis of AI bias using the data was recently published in Science Advances. Dr. Zaba and Dr. Daneshjou are performing research on using AI to diagnose skin cancer using confocal microscopy on patient's lesions without performing a biopsy.

Multi-center MPWG Registry Examining the Impact of COVID-19 on Melanoma Diagnosis and Treatment

Dr. Jennifer Wang and Dr. Swetter investigated the effects of the COVID-19 pandemic on melanoma stage at diagnosis, potential delays in treatment, and effects on patient outcomes. This multicenter collaborative effort among 12 academic centers showed that melanomas presented with worse prognostic features and more advanced stage during the first year of the COVID pandemic, suggesting the adverse effect of delays in diagnosis (published in J Am Acad Dermatol).

Using Virtual Reality/Augmented Reality to Teach Sun Safety to Teens

Inequity and Structural Racism Pilot Grant, Dr. Dawn Siegel (Clinical Professor) and SIIRG are collaborating with the Stanford Virtual Human Interaction Laboratory and the Stanford Center to Support Excellence in Teaching to develop a sun safety educational app for teens. The project involves skin tone-specific avatars combined with daily UV index data and skin aging modeling to visualize the face 20 years in the future with and without sun safety practices.

SUNSPORT (Stanford University Network for Sun Protection, Outreach, Research, and Teamwork) Multicenter Study in the Pac12

SUNSPORT co-directors Dr. Kristin Nord (Clinical Professor) and Dr. Hayley Leatham (Clinical Asst Professor) recently wrapped up a Pac12-based, multicenter study assessing the efficacy of video education and sunscreen provision to enhance sun safety practices in college athletes at Cal and UCLA. This pilot study will serve as a model for ongoing intercollegiate SUNSPORT efforts.







The Marvin A. Karasek Lectureship in Dermatology at Stanford was established in 2018 by a generous gift from Stanford Dermatology Faculty Member, Professor Marvin A. Karasek, with a goal to advancing progress in cutaneous biology and medicine.

2023 Lecturer - Jean Y. Tang, MD, PhD



Jean Tang, M.D., Ph.D.
Professor of Dermatology

Jean Tang, M.D., Ph.D., is a Professor of Dermatology and her research focuses on genetic skin diseases such as Basal Cell Nevus Syndrome and Epidermolysis Bullosa. She studies new ways to treat and prevent NSMC and melanoma. Dr. Tang has led or co-led the conduct and completion of 6 investigator initiated clinical trials in BCC and EB. She received her MD/PhD from Stanford (Biophysics), completed her dermatology residency at Stanford, and then went to UCSF for a 3 year post-doc in mouse genetics, while simultaneously pursuing formal coursework in biostatistics, epidemiology, and clinical trial design in the KL2 CTSI program. (Learn More)





Dr. Lisa Zaba

As the year 2022 comes to a close, it is with profound gratitude that I thank the people who have helped make this year a success, in our effort to translate scientific discovery into patient care.

I'm grateful for Bill Price and Joan Frost, the very first people to contribute to my research efforts going back a few years, taking a chance on a (then) young faculty member. One of the research efforts they help fund in an ongoing way is understanding the immune response to mRNA vaccination in patients with autoimmune disease, uncovering critical, previously not understood problems with forming a durable mRNA vaccine immune

A Note of Gratitude

response in some autoimmune diseases. This project has also been funded by a generous donation from the Rodan Family Foundation.

pay tribute to a very special patient, Mutsuyo Cox, survived by her husband Brad Cox who both helped fund ongoing research on rash patterns predicting tumor response in patients on immune therapy for cancer. Using a skin rash as a window into what the immune system is doing in a patient's tumor is a new and powerful research tool that we are validating. Mutsuyo was an incredibly kind person, and I miss her greatly. I'm thankful to Dr. Robert Marcus, emeritus Professor of Medicine, who plans to help fund our efforts to create a circulating tumor DNA test for the surveillance of Merkel Cell Carcinoma (MCC). We are leading a multi-site research initiative across 6 academic institutions to validate this MCC ctDNA blood test that identifies a recurrent MCC cancer 3-6 months before it is picked up on imaging.

A big thank you to Dan Rose for donating to the "Zaba skin lab" in the Stanford Cancer Center, where we are marrying research with patient care in the space of noninvasive imaging for skin cancer to decrease biopsies of benign lesions and improve skin cancer surveillance. In addition to confocal microscopy and full body imaging, where we will leverage pattern recognition artificial intelligence (AI) tools for diagnostic purposes, the skin lab will also have other non-invasive capabilities including microbiome swabs, pH meter, colorimeter, and tape stripping for furthering research on skin rashes from cancer therapies.

The support that patients and friends give to our department is advancing the kind of research that ultimately serves to transform the care we are able to provide. We are immensely grateful.

Wishing everyone a meaningful 2023,

Lisa Zaba, MD, PhD Associate Professor of Dermatology

A Note of Gratitude



Dr. Sumaira Aasi

The end of year is a time of gratitude and reflection, and I especially want to express my deepest thanks for the trust our patients place in us and in Stanford Medicine each and every day. It's a privilege to be a part of a world-leading academic medical center. Our patients inspire us every day to do more to advance treatment and research and improve the quality of care that we're able to provide.

Research another way we endeavor to improve patient care at Stanford. I'd like to share my thanks to many who've invested in our work this past year. It's difficult to fully articulate the treasured role that our patients play in improving care for all at Stanford Medicine, which reaches around the world to impact patients globally. Many step forward and give to fuel research across Stanford University's School of Medicine, which makes real and meaningful advances possible. As physicians we encounter many obstacles, and our patients too are frustrated by the limited options, but I am more confident than ever that we are able to make positive change together in partnership.Support from our philanthropic community is powering work on skin cancer detection in collaboration with the Zare lab in Stanford's chemistry

department that would not otherwise be possible. Collaborating with Professor Richard Zare, a pioneer in laser chemistry, and Dr. Albert Chiou in the department of dermatology, we published a study in the June 2018 Proceedings of the National Academy of Sciences. The study demonstrated the use of desorption electrospray ionization mass spectrometry imaging, or DESI-MSI, to successfully and quickly distinguish cancerous tissue from normal surrounding skin. DESI-MSI offers the potential, by literally mapping out, pixel by pixel, the presence and quantities of numerous biomolecules, to rapidly differentiate skin cancer from noncancerous cells. With the ability to differentiate in advance, our hope is that the Mohs surgeon will be able to perform the smallest possible surgery and improve patient outcomes by minimizing the size and site of treatment.

DESI-MSI also holds potential use as an adjunctive tool for preoperative tumor margin assessment in Mohs surgery, and perhaps even in determining whether surgery or biopsy would even be needed. With the support and partnership of my colleague Dr. Albert Chiou, we are attempting to validate the use of this technology for identifying melanoma in situ, which is difficult to identify using currently available tissue staining or laboratory tests.

Working with Professor Zare, we see real opportunity to revolutionize Mohs surgery. Wehave collected hundreds of tumor samples from patients in our dermatologic surgery clinic and lab analysis is underway to evaluate a new technology, mass spectrometry technology, in detecting cancerous versus non-cancerous cells and aiding in both surgical resection and diagnosis.

Stanford benefits uniquely from a community of dedicated individuals who share our passion for improving lives. We greatly appreciate the support of the community in advancing this promising research.

Sumaira Aasi, MD Clinical Professor of Dermatology

Photo: Dr. Aasi with a patient



patients and families join together to support the physicians, researchers, and caregivers. At center in row one, Lynn

Anderson, founder of the EB Medical Research Partnership, is pictured with the team she helped to cohere at Stanford. Thanks to philanthropic support, we've moved from having virtually no treatment options for patients to having a wide range of potential therapies in various stages of testing. Our physician-scientists are motivated every day by the patients and families who inspire with their remarkable spirit in the face of enormous challenges. Funds contributed empower our dedicated team to find and develop new treatments to help ease pain and suffering. Read more about EB breakthroughs, other inspiring research, and ways to get involved at this link. And contact Katharyn Israel for a personal conversation about how philanthropy can make a difference.

Your gift can be set up to support immediate research needs or to provide long-term support through the establishment of an endowment.

> For a personal conversation about how philanthropy can make a difference, please contact Katharyn Israel, MBA, in the Medical Center Development at 541.961.7826 or katharynisrael@stanford.edu.



