THE DEPARTMENT OF DERMATOLOGY & CUTANEOUS SURGERY

Presents:

THE 2ND ANNUAL
CELIA & SAMUEL RESNIK RESEARCH DAY

Saturday, June 2, 2018
8:30 a.m. - 6:00 p.m.

Shalala Student Center | Coral Gables Campus
The Department of Dermatology and Cutaneous Surgery is hosting its second annual Celia & Samuel Resnik Research Day on June 2, 2018. The event will take place at the newly renovated Shalala Student Center at the Coral Gables Campus from 8:30 a.m. to 6:00 p.m. and will feature presentations by our Department’s faculty, residents and fellows. Scientific poster presentations will be a key component of the event.

Department Research Background

Research at the Department of Dermatology & Cutaneous Surgery at the University of Miami Miller School Of Medicine consists of multidisciplinary basic, translational and clinical research groups. Our research efforts integrate basic science, preclinical studies, drug development, clinical and epidemiologic research.

These efforts provide a unique environment in which basic science discovery can be tested in multitude pre-clinical animal models (including primary human; murine and porcine), developed into potential therapy and tested in clinical trials. The research areas represented in our research base include aging, inflammation, microbiology, genomics, pharmacology, biochemistry, cell and stem cell biology, biochemistry and bacteriology as well as clinical areas of research in cutaneous disorders that may be associated with biology/pathology of the eye, gastro-intestinal tract, diabetes, cancer and paralysis, to name a few.

Although research expertise includes general skin disorders our major areas of interests are biology, pathology and treatment of wound healing, skin cancer, itch, inflammation and skin infection as well as a wide spectrum of hair disorders. Our goal is to utilize cutting edge technologies to advance science of skin biology and bring new discoveries from bench to patients at the bedside.
AGENDA

The Second Annual Research Day
Saturday, June 2, 2018
Shalala Student Center Coral Gables Campus

7:30-8:30  Breakfast
8:30-8:40  Welcome and opening remarks
8:40-9:55  SESSION 1: Introducing Our Researchers
   Barbara Bedogni, PhD: Targeting ECM processing to overcome BRAFI resistance
   Hideki Mochizuki, PhD: The cerebral mechanisms of itch and scratch
   Luis Rodriguez-Menocal, MD: Hypertrophic Burn Scars Modulation in a Porcine Model through Laser and Stem Cells as therapy
   Ivan Jozic, PhD: Caveolin-1 regulates keratinocyte migration and re-epithelialization by orchestrating signaling events from plasma membrane mediated by glucocorticoids and EGF
   Ralf Paus, MD: Cicatricial alopecia as a model stem cell disease
9:55-10:25  Morning Break + poster viewing
10:25-11:40  SESSION 2: Faculty Presentations
   Irena Pastar, PhD: Staphylococcal Wound Infections: Perforin-2 and Beyond
   Joaquin Jimenez, MD: Statins in Alopecia Areata
   Jie Li, MD, PhD: The role of laminins in melanoma progression
   Tasuku Akiyama, PhD: Amygdala Function in Itch
   Tongyu Cao Wikramanayake, PhD: Using a Mouse Model to Understand Inflammatory Skin Disorders
   Robert Kirsner, MD, PhD: A Walk In The Park? Movement and Chronic Wounds
11:00-12:00  Lunch
12:00-1:00  SESSION 3: Short Talks Fellows/Trainees
   Kristen Sanders: Optogenetic Activation of Emotional Itch Circuit
   Andrew Sawaya: Pleotropic cutaneous effects of statins: unique selectivity in enhancing migration while suppressing proliferation
   Jordan Rosen: Non-histaminergic itch mediators elevated in the skin of human scabies patients and porcine model of scabies
1:00-1:30  SESSION 4: Residents Research Presentations
   Marina Li, MD: TNF-alpha expression in the cardiovascular system of psoriasis patients
   Andrew Dorizas, MD: A Randomized, Blinded, Single-Centered, Placebo-Controlled Trial of Once Daily Dapsone 7.5% Gel in the Treatment of Inflammatory Acne Vulgaris
   Scott Lindsey, MD: Effect of Omnibus light-emitting diode on wound healing following lower extremity surgical wounds left to heal by secondary intention
   Jeffrey McBride, MD, PhD: The role of extracellular vesicles as potential biomarkers and therapeutics in dermatology
   Farhaan Hafeez, MD: Pain and itch mediators in cutaneous neoplasms
   Olivera Stojeadinovic, MD: Gamma delta T cells in Chronic Wounds and Skin Repair
1:50-2:50  Afternoon Break + poster viewing
2:50-3:20  SESSION 5: Pearls from Posters Selected Short Oral Talks
   Ali Rajabi-Estarabadi: Use of Optical Coherence Tomography in Patch Testing
   Evan Darwin: Analysis of Insurance Claims Data to Examine Risk Factors for Venous Leg Ulceration
   Marquese Noel-McCormick: Study the therapeutic effects of clay nanoparticles in melanoma growth and metastasis in animal model
   Andrea Da Fonseca Ferreira: Of Mice and Men: Comparative Genomics of db/db Mouse Wound Model with Human Acute and Chronic Wounds
   Charles Marusak: BRAFV600E inhibitor sensitization through MMP14 knockdown in melanoma
   Patrick Zito: A no-cut approach to treating basal cell carcinoma
   Preetha Kamath: Treat to Target: Personalized Psoriasis Therapy
   Jose Jaller: Evaluation of Donor Site Pain Following Fractional Autologous Full-Thickness Skin Grafting
3:20-4:00  SESSION 6: Graduation Ceremony for Research Fellows
4:00-4:30  Cocktail Reception (and poster discussion)
The Department of Dermatology and Cutaneous Surgery would like to acknowledge the following benefactors for their generous early educational support of this meeting.

Abbvie • Alderaan Group, LLC, a consulting company “Mr Rice” • Dermira • eKare • Integralife • Organogenesis • Sunpharma

A special thank you to Dr. Sorrell Resnik for his generous contribution and continued support of the department.

FACULTY

Division of Research in Skin Biology and Dermatologic Sciences

The division of research consists of more than a dozen dedicated research laboratories for basic and translational research focused on various aspects of skin biology and dermatology. Importantly, each of our full time faculty members is involved in research endeavor, reflecting the culture of research that is integrated in daily practice of dermatology. The research at our Department consists of multidisciplinary basic, translational and clinical research groups. Our research efforts integrate basic science, preclinical studies, drug development, clinical and epidemiologic research, providing unique environment in which basic science discovery can be tested in multitude pre-clinical animal models (including primary human; murine and porcine), developed into potential therapy and tested in clinical trials. Our goal is to utilize cutting edge technologies to advance science of skin biology and bring new discoveries from bench to patients at the bedside.

We provide extraordinary training base for clinical, translational and basic science research. Recently, these efforts are formalized in establishment of Graduate program that provides Master Degree in Skin Biology and Dermatologic Science: [http://dermatology.med.miami.edu/master-of-science-in-skin-biology](http://dermatology.med.miami.edu/master-of-science-in-skin-biology). Many of our faculty members are members of PIBS Graduate Program and are mentoring graduate students. In addition, we currently support Research Residency Program that provides research training in two tracks: PhD-to-Residency and Residency Research Track [http://dermatology.med.miami.edu/research/research-training](http://dermatology.med.miami.edu/research/research-training).

OUR FACULTY AND THEIR RESEARCH INTERESTS

Dragana Ajdic, Ph.D.
Associate Professor
Department of Dermatology and Cutaneous Surgery
Department of Microbiology and Immunology

Research in Dr. Ajdic’s laboratory focuses on molecular microbiology and bacterial genetics with a special emphasis on regulatory mechanisms controlling gene expression, mechanisms of pathogenesis and biofilm formation by using systems biology approaches (bioinformatics, genomics, metagenomics and transcriptomics). Dr. Ajdic’s team studies bacterial communities infecting chronic ulcers and uses high-throughput sequencing to identify and analyze chronic wound microbiota. Dr. Ajdic’s NIH funded project encompasses studies on oral biofilms, specifically Streptococcus mutans, a bacterium implicated in human dental caries. Both projects will advance our understanding of biofilms’ relevance in human health.
Dr. Akiyama's research focuses on the mechanisms of itch and pain. Chronic itch frequently accompanies different kinds of skin disorders. Dr. Akiyama's team is studying the molecular and cellular mechanisms underlying itch signaling pathways as well as the neuronal changes that occur both peripherally and centrally under the condition of chronic itch. Dr. Akiyama also focuses on brain circuits underlying itch processing. His laboratory develops and uses multiple mouse models of chronic itch, including atopic dermatitis, psoriatic itch, and post-burn itch. Additionally, Dr. Akiyama's team employs various in vitro and in vivo research approaches, including genetic tools, optogenetics, calcium imaging, neuronal tracing, molecular expression profiling, electrophysiology, and multiple behavioral assessments in mice.

Dr. Badiavas' laboratory combines basic, translational and clinical research to bring bone marrow progenitors for treatment of various cutaneous disorders including tissue regeneration and wound healing. His NIH funded research focused on using autologus stem cells in human chronic wounds, whereas his two DOD recent awards are developing laser-assisted delivery systems for burn wounds. He has been actively involved in bone marrow, dermatology and translational research for more than 20 years and was among the first to describe the trafficking and engraftment of bone marrow cells to wounded skin and the conversion of bone marrow cells to skin structures. He was the first to describe the delivery of fresh bone marrow aspirate and cultured bone marrow cells to the chronic wounds.

Dr. Bedogni studies mechanisms involved in the development and metastatic dissemination of melanoma. This is of great importance considering that the survival rate of patients with metastatic melanoma is still less than 10%. Among the interests of her research are the understanding of how key embryonic developmental pathways play a role in the pathogenesis of melanoma and what impact they have on the tumor mediated immune responses. Research in her lab has identified Notch1 and ERBB3 as two key embryonic developmental pathways involved in melanomagenesis. Her lab has designed novel anti Notch1 and anti ERBB3 selective inhibitors to test their efficacy in melanoma models of disease. Additionally, the lab has identified Notch1 as a key modulator of melanoma immunosuppression, making it an excellent target for therapies combining clinical inhibitors, such as anti PD1 and anti CTLA4 with novel Notch1 inhibitors to improve responses. Several projects are being addressed in the Bedogni lab all geared towards identifying the mechanisms that lead to melanoma development and progression as a prerequisite for the development of new, more effective, therapies.

Dr. Burdick's research and expertise focus on telehealth, specifically teledermatology, and Hansen's disease (leprosy). She has over 20 years of telehealth experience and leads UHealth’s telehealth services in the US and internationally. Dr. Burdick served on the American Telemedicine Association (ATA) Board of Directors, was the founding chair of the ATA Special Interest Group on Teledermatology, on the Telemedicine Journal and e-Health Editorial Board and chaired the development of the first ATA Practice Guidelines for Teledermatology. Dr. Burdick headed the American Academy of Dermatology (AAD) Teledermatology Task Force and spearheaded the AAD’s first position statement on telemedicine and its endorsement of ATA’s Practice Guidelines for Teledermatology. Dr. Burdick provides “store-and-forward” teledermatology consults to crew on 2 major cruise lines, patients in the UM Pediatric Mobile Clinic and Healthy Canes employee clinics. Based on her pioneering role in telehealth, Dr. Burdick was appointed to the Florida Telehealth Advisory Council and is one of the 2 Florida representatives on the Southeastern Telehealth Resource Center Advisory Board. Dr. Burdick has been Medical Director of the UM/Jackson Memorial leprosy program since 1993.

Over the three decades of research Prof. Davis has studied the efficacy of various dressings, growth factors, antimicrobial agents and physical devices on reducing bacterial loads and/or wound healing using porcine in vivo models. This data has helped facilitate the development and approval of numerous products that are on the market today. Prof. Davis was a member of the team that together with Dr. Eaglstein and Pat Mertz who established porcine wound in vivo model, and has extensive expertise in the wound microbiology, quantification of bacteria from wounds as well as the evaluation of the wound healing process using histological and molecular analysis. Prof. Davis has been instrumental in obtaining more than $22M in funding and has published more than 100 peer papers.
Joaquin Jimenez, M.D.  
Research Professor  
Department of Dermatology and Cutaneous Surgery  
Biochemistry and Molecular Biology Graduate Program  

Dr. Jimenez's research interests include hair biology and pathology, animal models of alopecia, wound healing and mechanisms of folliculogenESIS. He has a long-standing track record in working with bone marrow-derived cells, culturing and sorting them. Dr. Jimenez was the first to make the observation on the rat model of Chemotherapy-Induced Alopecia. During that work he realized the similarities between the pilosebaceous unit and the hematopoietic system. In addition, he has extensive experience in working with hematopoietic cells and fluorescent antibodies and was the first to publish on Thrombotic Thrombocytopenic Purpura and fluorescent micro-particles from endothelial cells. Dr. Jimenez's work resulted in more than 100 publications and his current research is sponsored by venture capitalists and private industry. Dr. Jimenez's research is focused on the translational aspect of dermatology, with a specific interest in non-cicatricial alopecia, particularly in chemotherapy-induced alopecia, alopecia areata, and permanent alopecia due to chemotherapy. His main area of interest is alopecia in preclinical models, taking the approach "from the bench to clinic".

Jonette E. Keri, M.D., Ph.D.  
Associate Professor  
Chief, Dermatology Services at Miami VA Hospital  

Dr. Keri, former NIH research trainee, has authored more than 40 publications in peer-reviewed journals and books. Dr. Keri's clinical research interests are focusing on developing and understanding treatments for acne, rosacea, as well as photodynamic therapy, cosmetic dermatology.  

Robert S. Kirnser, M.D., Ph.D.  
Harvey Blank Professor & Chairman  
Department of Dermatology and Cutaneous Surgery  
Professor, Department of Public Health Sciences  
Chief of Dermatology at the UMHC & JMH  
Director of Wound Clinic  

Dr. Kirnser has dual research interests: wound healing and skin cancer epidemiology. Related to wound healing, Dr. Kirnser has extensive expertise in clinical trials, clinical trial design (with a PhD in epidemiology), and treatment protocols and running multiple large programs in wound healing. Much of Dr. Kirnser's research are focused on the understanding of pathogenesis and treatment of chronic cutaneous wounds. He has also interested in skin cancer epidemiology particularly related to disparities and prevention of skin cancer, and is a member of the Cancer Center at the UMMSM. He has published more than 500 original research manuscripts, editorials, or book chapters. Dr. Kirnser has been a leader of major clinical, education, service and
research projects. As an example, he directs and organizes the largest wound healing meeting—the Symposium on Advanced Wound Care (nearly 4000 attendees) in the United States annually for the past 23 years, and directed an immensely successfully multi-organization and international wound care relief effort in Haiti.

**Hadar Lev-Tov, M.D.**  
*Assistant Professor*

Dr. Lev-Tov’s research interests focus on clinical and translational research in the area of wound healing. Dr. Lev-Tov’s interests include comparative effectiveness research of dermatological applications, the use of low-level light therapy to treat scars and other proliferative skin diseases, evaluation of diabetic foot ulcer therapies, and the use of topical beta blockers for chronic venous leg ulcers. He is specifically interested in developing strategies for prevention of venous leg ulcers, the most common and costly type of chronic leg ulcers. Additional areas of interest include rosacea and integrative dermatology.

**Jie Li, M.D., Ph.D.**  
*Associate Professor*  
*Department of Dermatology and Cutaneous Surgery*  
*Member, Sylvester Comprehensive Cancer Center*  
*Cancer Biology Graduate Program*  
*Director, Masters Program in Skin Biology and Dermatologic Sciences*

With PhD training in pathobiology and molecular medicine and clinic training in dermatology and dermatopathology, this combined background of both clinical and basic sciences serves well in the capacity as a principal investigator in dermatology research. Dr. Li’s major research interests include extracellular matrix biology, stem cell biology and angiogenesis. Dr. Li has experience in skin cancer and wound healing research, and expertise in extracellular matrix biology, angiogenesis and skin xenografting and animal models. Dr. Li’s lab uses advanced cellular and molecular biological approaches to understand pathogenesis of skin disorders, and seeks to improve skin health with genetic intervention and molecular therapeutics. Specifically, Dr. Li’s lab investigates laminin extracellular matrix, cell and matrix interaction, angiogenesis and microenvironment regulation in wound repair and tissue regeneration, aging, skin cancer early diagnosis and treatment.

**Andrea Maderal, M.D.**  
*Assistant Professor*  
*Director, Dermatology Medical Student Education*

Dr. Maderal’s research interests include autoimmune connective tissue diseases, inpatient and consultative dermatology, and wound healing. She started and runs the department’s Autoimmune Connective Tissue Disease Clinic, where she focuses on treatment of patients with complex dermatologic diseases. She is also interested in dermatology education, and is the Director of Dermatology Medical Student Education. Dr. Maderal is currently involved in research projects on inpatient dermatology consults, small vessel vasculitis and wound healing.

**Mariya Miteva, M.D.**  
*Associate Professor*

Dr. Miteva’s clinical research interests are focused on histopathology of hair diseases on transverse sections, hair loss, general dermatology and dermatopathology. Her primary objectives are centered on: 1) identifying new findings/patterns in scalp biopsies which help to increase the diagnostic yield and improve management; 2) implementing hair pathology as a mediator between the clinical practice and the bench hair research to improve understating of the pathogenesis; 3) studying the correlation between dermatoscopy findings and the corresponding pathologic patterns. Dr. Miteva has authored more than 100 peer-reviewed articles in dermatologic journals, two books, numerous book chapters and has presented her research as an invited speaker in national and international forums. She is in charge of JID monthly snapshot quiz.

**Hideki Mochizuki, Ph.D.**  
*Research Assistant Professor*

Dr. Mochizuki’s research focuses on the mechanisms of itch and scratch in humans. Specifically, the central mechanism of itch and scratch. Dr. Mochizuki has conducted human brain imaging studies to better understand the basic brain mechanisms of itch and scratch as well as pathophysiology of chronic itch and pathological scratching using a variety of imaging techniques such as functional magnetic resonance imaging (fMRI), positron emission tomography (PET), electroencephalography (EEG) and magnetoencephalography (MEG) as well as non-invasive brain stimulation devices such as transcranial direct current stimulation (tDCS). His current interests include the cerebral processing of itch perception and scratching, cerebral pathophysiology of chronic itch conditions, and the impact of stress on itch and scratch.

**Brian Morrison, M.D.**  
*Assistant Professor*  
*Assistant Director, Residency Program*

Dr. Morrison is the founder of The Skin Clinic Haiti, a charitable outreach in Port-au-Prince, Haiti. By establishing partnerships with local physicians and hospitals in Haiti, he has improved access to patient care, educated local residents and practicing physicians and raised funds to cover the cost of medical care for disadvantaged patients. Over the past year, he has developed an Oculocutaneous Albinism (OCA) clinic in conjunction with the Alba Foundation of Haiti. This outreach has provided a wealth of epidemiological data to
better understand and serve this vulnerable population Dr. Morrison is also committed to the department’s Clinical and Translational Research Unit. He is currently involved in projects on hidradenitis suppurativa and cosmetic dermatology.

Leigh Nattkemper, Ph.D.
Instructor
Co-Director, Clinical Trials Unit

Dr. Nattkemper’s research focuses on the neurobiology of itch. Specifically, the molecular and genetic components of chronic itch diseases such as atopic dermatitis, psoriasis, and neuropathic itch. Her research involves examining itch signaling pathways in the periphery and the brain, the investigation of the neuroanatomy and neurophysiology of chronic pruritus and developing novel therapeutics for itch. She is work alongside Dr. Gil Yosipovitch in developing a clinical trial program in skin innovation and itch.

Anna Nichols, M.D., Ph.D.
Assistant Professor
Co-Director, Clinical Trials Unit

Dr. Nichols’ main clinical and research interests are focused on preventing nonmelanoma skin cancer and developing novel, cost-effective ways to treat tumors non-invasively. She spearheads a High-Risk Skin Cancer Clinic dedicated to serving patients at risk for multiple or aggressive nonmelanoma skin cancers, such as solid organ transplant recipients. She was recently awarded the 2018 Skin Cancer Foundation Research Grant to test the novel hypothesis that intratumoral delivery of the 9-valent human papillomavirus vaccine is an effective treatment strategy for cutaneous squamous cell carcinoma. Additionally, Dr. Nichols is the Co-Director of our department’s Clinical and Translational Research Unit where she oversees a team of research coordinators and fellows who support the department’s numerous research projects. She is currently involved in projects on skin cancer chemoprevention and treatment, inpatient and emergency department dermatology consults, psoriasis, hidradenitis suppurativa and androgenetic alopecia. She is a member of the University of Miami’s Institutional Review Board.

Keyvan Nouri, M.D.
Professor
Louis C. Skinner, Jr., M.D. Endowed Chair in Dermatology
Richard Helfman Professor of Dermatologic Surgery
Director of Mohs, Dermatologic & Laser Surgery
Director of Surgical Training

His study regarding behavioral analysis on sun safety practices for infants received national attention from the media. He has completed and performed many clinical research trials in the areas of lasers for treatment of scars, lasers for treatment of skin cancers, attempting to define the peak absorption of basal cell carcinomas, treatment of acute wounds with artificial skins and lights, etc. He has collaborated with basic scientists in the department of dermatology in a number of translational studies looking for markers in non-melanoma skin cancers. He is the author of 290 peer-reviewed scientific articles, 130 book chapters, and many other publications. Since 1999, he has been an invited speaker, moderator and presenter about 500 times at national and international meetings. He also serves in editorial roles, including editor of the Cells to Surgery Quiz Section of the Journal Investigative Dermatology, Section Editor for Dermatologic Surgery section of the International Journal of Dermatology, and the surgical advisory board for JAMA Dermatology, among others.

Irena Pastar, Ph.D.
Research Associate Professor

Dr. Pastar’s research focuses on molecular mechanisms of cutaneous infections and host-pathogen interaction in wound biofilms. She has extensive experience in molecular microbiology and cellular biology of wound healing. Dr. Pastar’s recent work has been recognized by Wound Healing Society Anita Roberts Award as the best manuscript published in 2018. Dr. Pastar is also a recipient of Brian V. Jegasothy Basic Science Research Award. Dr. Pastar is a PI on multiple industry sponsored studies focusing on wound infection and a Co-PI on NIH and DoD projects.

Ralf Paus, M.D.
Research Professor
Director, Dermatology Medicine and Science Training Program

Trained as a dermatologist in Berlin, Germany, Dr. Paus is a physician-scientist who has specialized in basic and translational hair research since his time as post-doc at Yale University. He is an internationally renowned expert in hair biology and pathology, skin neuroendocrinology, and epithelial stem cells of human skin. Following a distinguished career in clinical dermatology, Dr. Paus has fully focused on preclinical skin and hair research, first as Head of Experimental Dermatology at the University of Lübeck, Germany, then as Deputy Lead and Director of Research of The Centre for Dermatology Research, University of Manchester, UK. He also serves as Editor of Experimental Dermatology (since 2007). Since February, Dr. Paus joined the Department as Professor and Director of the Dermatology Medical Science Training Program. In his research in Miami, Dr. Paus will focus primarily on hair follicle neuroendocrinology and neurobiology, new strategies for the management of alopecia areata, scarring alopecia, and chemotherapy-induced alopecia, and on the role of skin appendages and their stem cells in wound healing.
Paolo Romanelli, M.D.
Professor, Director, Dermatopathology Fellowship

Dr. Romanelli’s major research interests include Psoriasis, Hidradenitis Suppurativa, Vitiligo, Wound Pathology and Toxic Epidermal Necrolysis (TEN). A Clinical and Dermatopathology researcher with a major interest in targeted therapy, Dr. Romanelli’s daily efforts focus on understanding mechanisms and studying potential tissue Biomarkers of cutaneous diseases. He serves as a Dermatopathologist, and the Director of the ACGME accredited UM Dermatopathology Fellowship Program. He is particularly interested in studying new immunohistochemical markers for formalin-fixed, paraffin embedded skin biopsies. Dr. Romanelli has developed a Wound Pathology service that has more than 1,200 specimens derived from chronic wounds of various etiologies sent to him from more than fifty different wound centers throughout the country. He published more than 90 papers related to wound healing, and pathology of diverse skin diseases. Through skin biopsies and Immunohistochemistry his Dermatopathology efforts are focused at identifying overexpression of molecules that could be potentially targeted with tailor made treatment modalities especially in Psoriasis, Hidradenitis Suppurativa, Vitiligo, Chronic Wounds, Acne and Fillers Reactions.

Lawrence Schachner, M.D.
Professor, Former Chair, & Stiefel Laboratories Chair
Department of Dermatology and Cutaneous Surgery
Professor of Pediatrics, Director of the Division of Pediatric Dermatology

Dr. Schachner’s major research interests include childhood disorders such as atopic dermatitis, psoriasis, acne, alopecia areata and skin infections such as impetigo. He is also researching inherited childhood disorders such as epidermolysis bullosa. His research focuses on prevention, early detection, and definitive therapy for these disorders. Dr. Schachner has written more than 200 scientific publications. He is the lead author of the Schachner & Hansen textbook, Pediatric Dermatology edition I (1988), edition II (1995), edition III (2003), and edition IV (2012), as well as co-author of eight other books. In 2004, Dr. Schachner was named “Practitioner of the Year” by the Florida Society of Dermatology and Dermatologic Surgery. Dr. Schachner’s research interests have included bioengineered skin in pediatric wounds, skin infections and infestations in children, sun protection in childhood, cutaneous signs of child and sexual abuse, and new therapeutic modalities for acne, eczema, and epidermolysis bullosa. Dr. Schachner has also held several leadership positions internationally, nationally, and at the University.

Jennifer C. Tang, M.D.
Assistant Professor

Dr. Tang’s research interests are mainly in skin cancer. She is interested in the appropriate staging and management of high risk squamous cell carcinomas. In addition, the use of hedgehog inhibitors for unresectable basal cell carcinomas. She also has a background in wound healing, participating in clinical trials and translational research for chronic non-healing wounds. Her clinical practice is focused on Mohs micrographic surgery and other dermatologic procedures.

Marjana Tomic-Canic, Ph.D.
Professor, Vice Chair of Research
Department of Dermatology and Cutaneous Surgery
Director, Wound Healing and Regenerative Medicine Research Program
Molecular and Cellular Pharmacology Graduate Program
Human Genomics and Genetics Graduate Program

Dr. Tomic-Canic is skin molecular and cell biologist by training whose research focus is understanding mechanisms that control tissue repair process and its inhibition in human skin, utilizing primarily human model(s) and multiple pre-clinical models including porcine, diabetic and aging bleomycin mouse models. During past fifteen years she developed translational, multi-disciplinary collaborative program in wound healing that is focused on several areas: molecular and cellular mechanisms of wound healing and its inhibition (including epigenetic and genomic regulation); developing novel therapeutics and wound diagnostics; inflammation and infection in wound healing; aging; and multi-organ fibrosis. In the laboratory her NIH-funded work is fully integrated with stem cell biology, genomics, carcinogenesis, tissue engineering, and gene delivery.

Antonella Tosti, M.D.
Fredric Brandt Endowed Professor

Dr. Tosti is an internationally-recognized expert in hair and nail disorders and contact dermatitis as well as an invited lecturer at major international conferences, including the annual meetings of the European Academy of Dermatology and Venereology and the American Academy of Dermatology. She developed hair and scalp dermatoscopy and trained hundreds of dermatologists around the world on diagnosis and treatment of hair and nail disorders. She is author of more than 700 publications. She is the author/editor of 4 textbooks on hair disorders and 4 textbooks on nail disorders. She is an expert in patch testing for diagnosis of contact allergy. Dr. Tosti is involved in clinical research and she is presently PI for studies on treatment of hair and nail disorders at
Thank you to the speakers, presenters, research fellows, faculty, residents, our administrative team and attendees for making this day a success.