



**ICDS  
2024**

**BOOK OF ABSTRACTS**

**APRIL 15-16, 2024  
ORLANDO, USA**

**International Conference on**

# **Dermatology & Skincare**



**HYBRID EVENT**

**📍 VENUE**

**HOLIDAY INN ORLANDO-INTERNATIONAL AIRPORT**

**ADDRESS: 5750 T.G. LEE BLVD, ORLANDO, FL 32822, UNITED STATES**

**Contact Us:**

**☎ +44 2045874848**

**📞 +44 1407380045**

**✉ [dermatology@scitechconference.com](mailto:dermatology@scitechconference.com)**

**🌐 <https://www.scitechseries.com/dermatology>**



# Table of Contents

**6**

**Welcome Message**

**7**

**Keynote Presentations**

**15**

**Oral Presentations**

**31**

**Poster Presentations**

**38**

**Accepted Abstracts**

**55**

**Supporting Journal**



Frederick H. Silver,  
Rutgers University,  
USA



Edwin D. Lephart,  
Brigham Young Uni-  
versity, USA



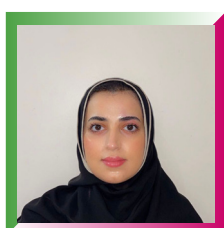
Ting Fan leung,  
The Chinese  
University of Hong  
Kong, Hong Kong



Koichi Shimizu,  
Waseda University,  
Japan



Regina Folster Holst,  
Schleswig-Holstein  
University Hospital,  
Germany



Ebtehaj Sultan  
Alshareif,  
King Fahad Medical  
City, Saudi Arabia



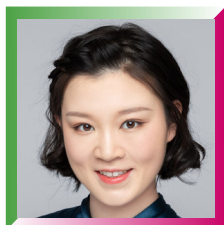
Megha Rajput,  
William Carey  
University College  
of Osteopathic  
Medicine Hatties-  
burg, USA



Emily Woolhiser,  
Kansas City Univer-  
sity, USA



Linda Liang,  
University of South-  
ern California, USA



Ying Huang,  
Shanghai Jiao Tong  
University School  
of Medicine, China



Bharti Magoo,  
Golden Touch Clin-  
ic, India



Vladimir Sanchez  
Linares,  
MINSAP, Cuba



Sunil Jaiswal,  
College of Medical  
Sciences and Teach-  
ing Hospital, India



Viral Patell,  
Ramanbhai Patel  
College of Pharma-  
cy, India



Parvin Mehdipour,  
Tehran University of  
Medical Sciences,  
Iran



Rahul Hajare,  
Sandip University,  
India



Ehsan Kamani,  
Arak university of  
medical Sciences,  
Iran



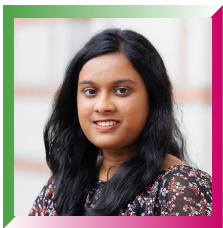
Manon Pilon,  
Derme&Co, Canada



Huda Alabdullah,  
Aleppo University  
Hospital, Syria



Kathleen Click ,  
Kansas City Univer-  
sity, USA



Sriya Kakarla,  
UT Health Houston  
McGovern Medical  
School, USA



Diamond Guy,  
University of  
Rochester Medical  
Center, USA



Hawazin Alshanti,  
King Abdulaziz  
University, Saudi  
Arabia



Rajesh Kumawat,  
Himalaya Wellness  
Company, India

---

*Thank You All*

# WELCOME MESSAGE



Ting Fan leung,

The Chinese University of  
Hong Kong, Hong Kong

On behalf of the Organizing Committee, I am very pleased to invite you to attend the International Conference on Dermatology and Skincare 2024 to be held on 15-16 April 2024 in the vibrant city of Orlando, FL, USA. The theme of this hybrid event is “Transforming Skincare via Progress in Dermatology and Cosmetology”, which covers a wide range of dermatology and cosmetology topics from cutaneous immunopathology, biomarkers to novel therapeutics. A diverse panel of speakers from academicians to clinicians in the fields of dermatologists, allergists, cosmetologists and immunologists will provide ample interactive experiences with participants to share their expertise. I also invite you to submit abstracts to share your research findings and clinical observations with other participants, and to establish professional links that can enhance your research and advance the profession. Outside the rich scientific program, you will have an excellent opportunity to enjoy private time in the city lives, theme parks and natural scenery of this beautiful city. Our scientific Committee will assure a rich and interactive conference program awaits your attendance and look forward to welcoming you!

Ting Fan leung,

A stylized, handwritten signature in black ink, consisting of a large, flowing 'T' followed by a cursive 'F' and 'L'.



# **Keynote Presentations**





Frederick H. Silver

Rutgers University, USA

## Noninvasive nondestructive comparison of pigmented and Non-Pigmented Melanomas using vibrational Optical Coherence Tomography

### Abstract:

We have developed a novel new noninvasive technique termed vibrational optical coherence tomography (VOCT) to optically image and measure the resonant frequency of cellular, blood vessel, papillary collagen, and fibrotic tissue in the skin. Preliminary results on normal skin indicate that cells, blood vessels, and papillary collagen have resonant frequencies of 50, 100, and 150 Hz, respectively. Additional resonant frequencies at 80, 130, and 250-260 Hz are seen in cancerous lesions, corresponding to cancer associated fibroblasts, new thin blood vessels and fibrotic tissue, respectively. VOCT has been used to compare skin lesions including pigmented and nonpigmented melanomas to noninvasively differentiate between these cancers based on OCT images and biophysical data. The results indicate that each of these lesions have unique physical properties and OCT images that can be used to noninvasively differentiate between pigmented lesions and different forms of melanomas. Color-coded OCT images reveal that in situ and nodular melanomas have different morphological characteristics that can be evaluated noninvasively in vivo using OCT images and resonant frequency profiles. Based on dermatopathology the clear margins of these lesions are not morphological and biophysically identical to normal skin. However, they have different properties from those of malignant melanomas. The results of this study suggest that the different subtypes of melanoma can be noninvasively evaluated via VOCT. Since VOCT data can be collected remotely over the internet, it can be used to provide critical information on skin lesions to General Practitioners in areas where Dermatologists are in short supply.

### Biography

Dr. Frederick H. Silver is a Professor of Pathology and Laboratory Medicine at Robert Wood Johnson Medical School, Rutgers, the State University of New Jersey. He did his Ph.D. in Polymer Science and Engineering at M.I.T. followed by a postdoctoral fellowship in Developmental Medicine at Mass General Hospital in Boston, MA. Dr. Silver has published over 250 peer reviewed scientific papers, 5 textbooks on biomaterials and biomedical engineering, and has over 21 patents issued and pending. He is a section editor for Biomaterials for the MDPI Journal Biomolecules. He is an inventor of vibrational optical coherence tomography.





Edwin D. Lephart

Brigham Young University, USA

## Enhancing skin Anti-Aging through healthy lifestyle factors

### Abstract:

Lifestyle health has been recognized as an evidence-based innovation that defines how everyday behaviors and routines influence the avoidance and therapy of age-related or chronic illness/conditions (e.g., cardiovascular, obesity/weight control, diabetes, stress/anxiety/depression, dementia/cognition, and certain cancers) and provides an important adjunctive component to overall health. Specifically, an approach with small changes over time can have a dramatic impact on the health and well-being of individuals not only, in general, but also can be applied to skin health. However, lifestyle health factors to improve skin well-being have not been discussed extensively and/or well promulgated. The narrative for this overview focuses on providing a summary for topic background information, but more importantly, presents four lifestyle factors that can improve dermal health [i.e., factor 1: nutrition - diet; factor 2: rest (sleep) and managing stressor; factor 3: movement/physical exercise, and factor 4: social and community associations]. The main conclusions encourage the concept that lifestyle health factors such as nutrition/diet, rest/sleep, movement/physical exercise, and community/social interactions support enhanced skin health and well-being with aging. Plus, social media interventions that aim to promote dietary, sleep and physical activity changes might be an application to improve skin health in the future.

### Biography

Edwin Lephart completed his PhD from The University of Texas Southwestern Medical Center (Dallas, Texas) and continued his research there in the department of Psychiatry. From 1994 he was a professor at Brigham Young University and the founding director of the Neuroscience Center. He has published more than 110 journal articles, 8 book chapters, presented at international scientific meetings, and currently serves on the editorial boards of *Dermatology & Therapy* and *International Journal of Molecular Sciences* while consulting for cosmetic and nutritional wellness companies. His research covers natural products (polyphenols & phytoestrogens) and holds patents worldwide on human health applications.



## Ting Fan Leung

The Chinese University of Hong Kong, Hong Kong

### Microbiome-based therapeutic and predictive strategies for Eczema in children

#### Abstract:

Microbes at different mucosal sites is a potent driver of immunological maturation. There is rich evidence on early-life evolution of gut microbiome following child birth and in particular in response to different exposome. A healthy microbiome competes with pathogens, improves nutrient metabolism, enhances gut barrier integrity and regulates immune system maturation. Dynamic interactions also exist between microbes, the immune system and food allergens that may lead to innate and adaptive tolerance, and any disruption of such 'balanced' microbiota in early-life will adversely affect health later in life. Decreased Bifidobacterium and Enterococci in dysbiotic stool microbiome from children with eczema prompts my team to design a novel probiotic formulation called SIM03 that replenished the relevant Bifidobacterium. My team has just completed a clinical trial that showed this probiotic to be useful in ameliorating eczema severity and improving quality of life of Chinese preschool children. Evidence for the importance of microbiome at other body sites is limited. Our birth cohort revealed substantial temporal variations in skin microbiota during the first 12 months. Infants with persistent eczema had lower microbial biodiversity than those with transient eczema. Our metagenomics data revealed inverse relationship between eczema severity and microbial biodiversity. Early-phase clinical trials reported that the transfer of lantibiotic-producing coagulase-negative staphylococci suppressed *Staphylococcus aureus* growth and ameliorated eczema severity. In conclusion, microbiota in stool and skin are important driver for childhood eczema. Knowledge about microbial uniqueness and compositions is employed to design novel biomarkers and targeted biotherapy for treating this highly prevalent skin disease.

#### Biography

Professor Leung graduated from The Chinese University of Hong Kong in 1992, and he received subspecialty training on Immunology and Allergy in the Hospital for Sick Children in Toronto, Ontario, Canada in 1997-1998. Professor Leung is currently a professor in Department of Paediatrics at The Chinese University of Hong Kong, and a visiting professor in the Central South University in mainland. He is Immediate Past President of Hong Kong Society for Paediatric Immunology, Allergy and Infectious Diseases. His main research interests include natural history, novel diagnostics and host-microbe interactions for allergic diseases. He published more than 410 peer-reviewed journal articles.



Koichi Shimizu

Waseda University, Japan

## Development of a noninvasive optical technique to visualize physiological functions inside animal bodies

### Abstract:

Leveraging the deep penetration capability of near-infrared (NIR) light through the skin, we are able to noninvasively visualize the subcutaneous blood vessel structure. However, deep-seated structures suffer from severe blurring due to intense light scattering within body tissues. To address this, we have devised scattering suppression techniques enabling the acquisition of clear three-dimensional (3D) images of absorbing structures within turbid media, such as the blood vessel network inside animal bodies. In transillumination imaging, we can effectively mitigate diffusely propagated light components by selectively detecting near-axis scattered light. In addition, we can achieve superior blur reduction by employing a depth-dependent point spread function (PSF) derived from the diffusion approximation to the energy transfer equation. Moreover, this PSF facilitates deep-learning techniques, generating abundant training pairs of both unblurred and corresponding blurred images at various depths below the skin surface. Through neural networks trained on this dataset, we successfully reconstruct clear 3D images from a single blurred image, even when the depth of the absorbing structure remains unknown. Experimental validation, involving studies with both animal and human subjects, underscores the validity and versatility of our developed techniques. Expanding beyond structural imaging, we extend this methodology to functional imaging, enabling visualization of physiological changes occurring beneath the skin surface. By utilizing NIR light to measure physiological parameters like oxygen saturation within subcutaneous blood vessels, our technique becomes a valuable biomedical tool with applications in dermatology.

### Biography

Koichi Shimizu received M.S. (1976) and Ph.D. (1979) degrees, from University of Washington, Seattle, USA. He was Research Associate in University of Washington 1974-79. He was an Assistant-, an Associate- Professors, and a Professor in Hokkaido University, Sapporo, Japan in 1979-2016. He is currently a Professor Emeritus of Hokkaido University, Japan, an Invited Research Professor of Waseda University, Japan and a Professor of Xidian University, Xi'an, China. He has been engaged in the studies of biomedical engineering. He served as associate editors of IEEE Trans. ITB in 1999–2007 and Advanced Imaging from 2023. He has been a Fellow of the Electromagnetics Academy, and an editorial board member of Scientific Reports, Nature.



## Regina Folster Holst

Schleswig-Holstein University Hospital, Germany

### Pediatric Dermatology- A quiz

#### Abstract:

Pediatric dermatology is present worldwide not only by special ambulances, experts and journals, but also by congresses and training events. In childhood, there are many peculiarities that must be taken into account for diagnostic and therapeutic measurements. This means not only the cooperation of dermatologists and pediatricians, but also those with all other medical disciplines, such as human genetics, rheumatologists and ophthalmologists.

For the optimal care of the child an early classification of the skin changes is essential. The quiz includes pattern of diagnostic features, differential diagnoses and optimal therapy. Examples: eosinophilia in blood and skin of the first stage of incontinentia pigmenti or the typical trias of exudative crusted lesions located periorificially, alopecia and diarrhea in infants with acrodermatitis enteropathica.

#### Biography

Dr. Regina Folster-Holst is Professor at the Department for Dermatology, Venereology and Allergology at the Universitätsklinikum Schleswig-Holstein, Campus Kiel, Germany. She obtained her medical degree at the Christian-Albrechts-Universität, Kiel and is board certified in dermatology and allergology. She has been the president of the European Society for Pediatric Dermatology (ESPD) from May 2016-June 2018 and the president of the German Dermatology Association (DDG) for two periods (2019-2022, 2010-2013). Since 2017 she is the vice president of the European Society for Educational Crisis. She has been retired since June 2023, however she still takes care for special pediatric patients. Her scientific focuses are Pediatric Dermatology, Allergic diseases and Parasitoses, whereas the main topic is on clinical and scientific research of atopic dermatitis in early childhood. Prof. Dr. Regina Fölster-Holst has received numerous awards, such as the Hans-Karrer-Förderpreis (medical brochure for children) in 1997, the "Preis der Hensel Stiftung" (1998), the Teaching Award of the Medical Faculty of Kiel (2003), and the German scientific award for communication (2011) and the Perle-Award 2013 (Award for improvement of student teaching). Together with cooperation partners, she has just produced a musical for children with the aim of teaching children about allergies and skin diseases.



Ebtahaj Sultan Alshareif

King Fahad Medical City, Saudi Arabia

## Skin problems related to personal protective equipment and personal hygiene measures during COVID-19 pandemic among healthcare workers in Aseer Region, Saudi Arabia

### Abstract:

**Background:** Reports revealed rising levels of skin diseases secondary to protective equipment use. Healthcare providers who are working day and night during the pandemic of COVID-19 are more susceptible to the damage of the skin. There is scarce published data about the incidence of skin disorders secondary to protective equipment use during the COVID-19 pandemic and what factors are associated in Saudi Arabia.

**Aim:** Assessing the potential skin damage as a result of personal protection equipment (PPE) and intensive hygiene measures for healthcare providers during COVID-19 pandemic in Aseer region.

**Methods:** This study a cross-sectional questionnairebased study done in Aseer region from January to October 2021. Personal data and related to history of skin disease, practices toward personal protective equipment, and new skin damage was collected and analyzed. Independent ttest and chi-square test was used to determine factors associated with the incidence of new skin damage during the COVID-19 pandemic.

**Results:** Total of 214 participants was included in the study. (47.7%) of the participants reported experiencing new skin damage during the COVID-19 pandemic, while 112 (52.3%) of the participants did not. Age, having a history of chronic skin disease, and number of worn gloves layers were all significantly associated with the incidence of skin damage during COVID-19 pandemic.

**Conclusion:** The considerable rate of new skin damage during the COVID-19 pandemic makes it essential to take action and start rising awareness toward this topic among health-care workers as well as teaching them how to prevent the incidence of new skin damage.

### Biography

Dr. I.litehaj Sultun Mili is a dedicated Obstetrics and Gynecology Resident PGY2 at the Saudi Board, with a Bachelor's Degree from King Khalid University, KSA. She's published research on women's health topics, presented at international conferences, and actively volunteers in healthcare initiatives. Dr. Mili's passion lies in improving women's health outcomes through research, education, and community service.





## Megha Rajput

William Carey University College of Osteopathic  
Medicine Hattiesburg, USA

### History and Clinical Applications of Tissue Dielectric Constant

#### Abstract:

Tissue Dielectric Constant (TDC) is a vital parameter in biomedical research, offering insights into tissue properties without invasive procedures. This essay explores its evolution, physiological assessments, clinical applications, emerging uses, and future directions.

**The Description and Evolution of the Method:** TDC measures tissue electrical properties via low-level electric fields, with roots dating back to mid-20th-century studies. Recent advancements, like Mayrovitz's 2018 work on age-related skin firmness, enhance understanding.

**In Vivo Physiological Assessments:** Studies, such as Mayrovitz's 2016 research on gender differences in TDC, illustrate its varied applications. Koehler's 2019 study on post-cancer arm girth and TDC highlights its utility in tracking physiological changes.

**Clinical Assessments by Condition:** TDC aids in edema assessment, tumor differentiation, and lymphedema tracking. Mayrovitz's 2022 study on breast tumor TDC ratios exemplifies its diagnostic potential.

**Potential Emerging Applications:** New applications include head and neck lymphedema detection (Mayrovitz, 2021) and obesity-related TDC studies (Mayrovitz, 2020), expanding TDC's clinical utility.

**Recommendations for Future Research & Applications:** Standardized protocols and exploration of TDC's correlation with tissue composition in specific diseases are crucial for future advancements.

**Conclusion:** TDC, from its foundational principles to diverse clinical applications and emerging uses, holds promise for non-invasive medical diagnostics and personalized patient care.

#### Biography

Megha Rajput is a second-year medical student at William Carey University College of Osteopathic Medicine. She has been mentored in dermatology and research by Dr. Howard Maibach for the past three years. Her passions in medicine have been geared towards dermatology which led her to edit a chapter in the Handbook of Cosmetic Dermatology and present her Skin Pollutant research at the Pediatric Research Alliance Conference in Atlanta. She is originally from Houston, Texas, and values family time outside of her academic pursuits.



# **Oral Presentations**



## Emily Woolhiser

Kansas City University, USA



### Exploring the Intersection of Body Dysmorphic Disorder (BDD) and Dermatological Conditions

#### Abstract:

This comprehensive literature review examines the intricate relationship between Body Dysmorphic Disorder (BDD) and dermatological conditions, with a particular focus on those characterized by conspicuous skin irregularities such as acne vulgaris, psoriasis, and vitiligo. Highlighting the significant prevalence of BDD among individuals afflicted with these dermatological issues, our analysis seeks to illuminate the profound psychological repercussions stemming from an exaggerated preoccupation with perceived skin imperfections. Through an in-depth exploration of the psychopathology underlying BDD symptoms, we analyze the complex dynamics between skin health and mental well-being, emphasizing the disorder's impact on patients' psychological and social functioning. The paper further investigates the consequential effects of BDD on essential aspects of dermatologic treatment, including patient adherence to therapeutic regimens, overall quality of life, and the effectiveness of available treatments. In addition to presenting current therapeutic approaches, we advocate for the integration of psychodermatological interventions tailored to mitigate the dual burden of skin conditions and psychological distress. Future research directions proposed include longitudinal studies to assess the long-term effects of BDD on skin disease prognosis and psychosocial well-being, aiming to refine and optimize treatment modalities to contribute to a more holistic understanding of BDD within dermatological practice.

#### Biography

Emily Woolhiser completed her bachelor degree in Biomedical Science with a minor in History and certificate in Anatomical Sciences from University of Central Florida. She currently is a third-year medical student at Kansas City University pursuing Dermatology. Her research interests are dermatologically focused on epidemiology, public health and dermatology's intersection with infectious disease and mental health.

## Linda Liang

University of Southern California, USA



### New individualized management for gut barrier dysfunction & using food to prevent & treat skin conditions

#### Abstract:

My presentation title is “New individualized management for gut barrier dysfunction & using food to prevent & treat skin conditions”. It is part of my article that published on March 7, 2023. The title of the article is: “Food, gut barrier dysfunction, and related diseases: A new target for future individualized disease prevention and management”. Dysfunction of gut barrier is known as “leaky gut” or increased intestinal permeability and it will cause diseases in multiple areas in the body. Food and dietary supplements that may promote gut health, and food or medication that may alter gut function. The research articles from PubMed demonstrated that food plays a crucial role to cause or remedy gut dysfunction related to diseases. My experience showed wonderful results also.

#### Biography

Linda Liang is a Doctor of Occupational Therapy, and an Associate Professor at the University of Southern California in the United States. She is a mentor of Doctors and Post-Doctors. Linda was an ophthalmologist in Zhejiang University, School of Medicine in China and blends her prior knowledge and experience of occupational therapy for comprehensive evaluation and effective treatment of her patients. She developed the Low Vision Program including Homonymous Hemianopia, Normal Pressure Hydrocephalus Program, Hand Tremor and Hand Contracture Management Program, and Genital Edema/Lymphedema Management Program at the Keck Medical Center of USC. She published some articles. She invented many novel treatment programs for difficulty medical conditions. She is writing book about them.

Shohreh Ghasemi

Augusta University, USA



## Artificial Intelligence in Melanoma Prognosis: A Narrative Review

### Abstract:

Melanoma is a complex disease with various clinical and histopathological features that impact prognosis and treatment decisions. Traditional methods of melanoma prognosis involve manual examination and interpretation of clinical and histopathological data by dermatologists and pathologists. However, the subjective nature of these assessments can lead to inter-observer variability and suboptimal prognostic accuracy. AI, with its ability to analyze vast amounts of data and identify patterns, has emerged as a promising tool for improving melanoma prognosis.

**Methods:** A comprehensive literature search was conducted to identify studies that employed AI techniques for melanoma prognosis. The search included databases such as PubMed and Google Scholar, using keywords such as “artificial intelligence,” “melanoma,” and “prognosis.” Studies published between 2010 and 2022 were considered. The selected articles were critically reviewed, and relevant information was extracted.

**Results:** The review identified various AI methodologies utilized in melanoma prognosis, including machine learning algorithms, deep learning techniques, and computer vision. These techniques have been applied to diverse data sources, such as clinical images, dermoscopy images, histopathological slides, and genetic data. Studies have demonstrated the potential of AI in accurately predicting melanoma prognosis, including survival outcomes, recurrence risk, and response to therapy. AI-based prognostic models have shown comparable or even superior performance compared to traditional methods.

**Conclusion:** In conclusion, AI techniques have demonstrated great potential in improving melanoma prognosis. While challenges and limitations exist, ongoing research and collaboration can address these issues. The integration of AI into routine clinical practice has the potential to enhance prognostic accuracy, guide treatment decisions, and ultimately improve patient outcomes in melanoma.

## Biography

Shohreh Ghasemi, an Iranian oral surgeon and educator, serves as an adjunct assistant professor at Augusta University's OMFS Department. With a focus on facial cosmetic surgery, she has organized conferences, conducted extensive research, and directed IFACE Academy, fostering advancements in oral and maxillofacial surgery. Ghasemi's educational journey includes degrees from Sharjah University and Manchester University, complemented by diplomas in Laser and Skin Physics and fellowship training in facial cosmetic surgery. Her career spans roles as a practitioner, educator, and researcher, contributing to institutions like Tehran University and Augusta University. Recognized by the US State Department for her community college initiatives, Ghasemi's dedication to innovation earned her a spot among Entrepreneur magazine's top 10 cosmetic surgeons. Her influence extends globally, shaping the future of oral and maxillofacial surgery through her multifaceted contributions.

## Manon Pilon

Derme & Co, Canada



### Acne and acne rosacea from a medical-aesthetic perspective

#### Abstract:

An in-depth class on how acne evolves and the difference between acne and acne rosacea. Learn the science and how the pathogenic microbiome impact the skin. This class will help you understand Rosacea and Acne in a full 360. Learn terminology used to describe acne or rosacea. Learn effective technology, organic ingredients and protocols that can replace prescription drugs in acne, rosacea and acne rosacea care while keeping the profits for your business.

#### Biography

Manon Pilon, Renowned Author of 2 books, Speaker, International Educator and medical spa consultant, with more than 38 years of medical spa industry experience. Recognized educator, Medical Spa Owner and operator, medical aesthetician, international director of education and R & D Director for Derme&CO, Laboratoire Nelly De Vuyst, Laboratoire Europelab. Pilon conducted seminars throughout the world, educating medical specialists, medical spa management, spa and med spa owners, dermatologists and, estheticians as well many other medical professionals. She has acquired several awards for achievement in the spa and medical spa field. She is an invited guest speaker at several skin care conferences worldwide, notably in Canada, USA, Paris, London, Dubai, Tokyo, Hong Kong, Geneva, China, Taiwan, Bangkok, Dubai, Singapore, Thailand, Malaysia, Sydney and more.. Furthermore, Manon Pilon has been invited as the Master of Ceremony at several International Aesthetics, anti Aging and Med spa Conferences in the past 38 years and invited as a guest speaker conducting CME classes to several esthetic, cosmetic & plastic surgery dermatology and anti-aging meetings worldwide. Award winner in several categories of Business organizations namely "Busness Woman of the Year" by the Quebec Business woman association. Also, she acquired the Canadian Business woman award from the largest francophone business woman's network and was also nominated for the list of "Who's Who in New York" several years . Over the years, Manon Pilon has written and published several articles in recognized professional magazines and has been an invited guest on several television and radio shows. She is a true motivational speaker!

## Ying Huang

Ninth People's Hospital, Shanghai Jiao Tong University School of Medicine, China



### Quality of life and body image improvement among Chinese transgender patients before and after gender-affirming surgery

#### Abstract:

**Background:** Although the transgender population in China is very large, there are insufficient transgender-specific care and support programs. Gender-affirming surgery (GAS) and other related treatments help patients achieve self-acceptance and social adjustment. Although the benefits of GAS have been well studied in transgender adults, there are very few studies on self-image and life changes after surgery in China.

**Methods:** A retrospective study was performed between January 2016 and December 2021. Patients diagnosed with gender dysphoria consulting for GAS were invited to participate. The Perceived Discrimination Scale, the Multidimensional Body-Self Relations Questionnaire (MBSRQ), the Body Image Quality of Life Inventory (BIQLI) and general information were collected and analysed before and after the operation.

**Results:** GAS treatment decreased participants' Perceived Discrimination Scale score from  $22.90 \pm 5.68$  to  $19.52 \pm 4.19$ . The total MBSRQ and BIQLI scores were significantly higher after GAS.

**Conclusions:** Transgender patients experience less discrimination after GAS in China, and their overall quality of life and self-esteem improve.

#### Biography

Ying Huang has completed his Master degree at the age of 26 years from Tongji University and Nursing manager from Department of Plastic and Reconstruction Surgery, Ninth People's Hospital, Shanghai Jiao Tong University School of Medicine. She has published more than 5 papers in reputed journals and has been serving as a member of Chinese Plastic and Aesthetic Association.



## Bharti Magoo

Golden Touch Clinic, India



### Visible results in aesthetic medicine with multidisciplinary methods: A journey through 44 years of experience

#### Abstract:

This presentation on cosmetology and aesthetic medicine focuses on specific case studies ranging from various aesthetic cases like acne, scars and pigmentation to hair falling and thinning to breast augmentation to PRP treatments and the effectiveness of treatment as a whole rather than a sum of its parts. Looking at all aspects in the line of treatment – internal medicines, diet, external clinic treatments, consultation and lab reports, to name a few – this presentation is a glimpse into how we can essentially treat a patient both inside and out to achieve permanent results and avoid recurrence – an achievement both for the doctor and the patient. By customizing treatments according to the individual's needs, and combining different therapies we have the power of providing our patients with a beautiful, younger and healthier self with enhanced self-esteem as the end result. 45 years of experience in the field of aesthetic medicine has enabled us to design and create new treatment plans for our patients. Bearing changing needs in mind, we can thus work towards constantly updating our skills, machinery and treatment protocols with interdisciplinary methods. In this presentation, I will take you through some of the many successful cases I have worked on in these years - all of which have been achieved by practising my teachings of interdisciplinary medicine and evolving a combination of new techniques to help each individual case. As is the nature of aesthetic medicine, these are presented with before and after pictures to further illustrate the benefits of a well-rounded treatment method.

#### Biography

Dr. Bharti Magoo studied Medicine at Mumbai University, India and graduated in 1977. She studied different aspects of Aesthetic Medicine all over the world. She has since continued her private practice at Golden Touch Clinic and started presenting her cases world over since 2013. Apart from being regularly published, she has gained global recognition for her consecutive 1st place win in 2013 and 2014, and place as finalist in 2015 for The Anti-aging and Beauty Trophy in Best Clinical Case at the Aesthetic & Anti-Aging Medicine World Congress (AMWC) organized by EuroMediCom in Paris, France.



## Vladimir Sanchez Linares

University of Medical Science Sancti Spiritus,  
Cuba



### Five years Follow-up of patients with High-Risk facial basal cell carcinoma treated with interferon

#### Abstract:

**Introduction:** For basal cell carcinoma (BCC) with a high risk of recurrence not susceptible to surgery, there are few therapeutic options. The treatment of choice, as long as it is not contraindicated, is radiotherapy. HeberFERON may be one of them, but there is not enough evidence to support it.

**Objective:** To describe the evolution of patients with high-risk facial BCC treated with HeberFERON after five years of follow-up, in a context of usual medical practice.

**Methods.** Observational prospective cohort design, multicenter, in the context of usual medical practice. Patients with high-risk facial BCC not amenable to surgical treatment were included. Perilesional HeberFERON was administered for 3 weeks and patients were followed for five years. The main endpoints were cure at 16 weeks, recurrence and development of a second BCC at 5 years, and adverse events.

**Results:** 195 patients were included and one abandoned the treatment. After treatment, 143 (73.3 %) patients showed cure (complete response). Those who did not have a complete response received surgery and were declared cured. All 194 patients were followed up for 5 years, 15 (7.7 %) dropped out of follow-up. The survival analysis showed that 87.7 % (95 % CI 82.9-92.4) had the probability of being free of recurrence at 5 years and 80% (95 % CI 74.1-85.8) free of a second BCC. Adverse events were frequent but not serious and allowed the end of the treatment, highlighting fever and local reactions.

**Conclusions:** The response to treatment with HeberFERON was similar to that reported for radiotherapy in studies with similar patients. The HeberFERON can be considered among the first-line treatments for high-risk facial BCC not amenable to surgery and as treatment prior to subsequent surgery.

#### Biography

Vladimir Sánchez Linares has completed his PhD at the age of 47 years from the University Medical Sciences of Sancti Spíritus Cuba. He is the head of the skin cancer program and postgraduate professor of dermatology too, is a teacher and assistant investigator. He has over 25 publications. He is reviewer for the journal Gaceta Médica Espirituana in Sancti Spíritus Cuba

## Sunil Jaiswal

College of Medical Sciences and Teaching Hospital,  
Nepal



### Metabolic Syndrome in Patients with Lichen Planus- A Case Control

#### Abstract:

**Background:** Lichen Planus (LP) is a chronic dermatosis affecting the skin and mucous membranes.

**Objective:** To study the association of Metabolic Syndrome in patients with Lichen Planus. **Materials and Methods:** A hospital-based prospective case-control study was conducted including 75 histopathologically confirmed patients with Lichen Planus and 82 age and sex-matched controls.

**Results:** Majority (30.6%) of the patients belonged to the age group 31-40 years. The mean age of patients with Lichen Planus was  $46.13 \pm 14.9$  years. Female predominance (69.3%) was observed in our study. Patients with classic Lichen Planus (54.6%) were predominantly observed. Metabolic Syndrome was significantly prevalent in Lichen Planus patients than in controls (32% versus 13.4%,  $p=0.005$ , OR 3.037) and was significantly associated with morphology (only oral mucosal involvement, 61.5%,  $p=0.027$ , OR 3.9), severity (severe LP, 58.6%,  $p<0.001$ , OR 7.79), and duration of the disease ( $> 6$  months, 55.5%,  $p=0.001$ , OR 5.42). Metabolic Syndrome was predominant in females (71%) and in the fourth decade (37.5%). Systolic and Diastolic Blood Pressure values ( $>130/85$  mm of Hg), Serum Triglycerides ( $>150$  mg/dl), and Low-Density Lipoprotein ( $>130$  mg/dl) were significantly elevated, and High Density Lipoprotein ( $<40$  mg/dl) was significantly low in LP than in controls ( $p<0.05$ ).

**Conclusion:** The study showed a significant association of Metabolic Syndrome in patients with Lichen Planus. Thus, patients with Lichen Planus need to be screened to avoid complications associated with Metabolic Syndrome i.e. Diabetes Mellitus, Cardiovascular Disease, colorectal cancer, and stroke.

#### Biography

Dr. Sunil Jaiswal is a third-year dermatology resident at the College of Medical Sciences and Teaching Hospital, Bharatpur, Nepal affiliated with Kathmandu University. He was awarded the Chief of the Army Staff Award for Excellent Performance in Integrated Basic Medical Science during MBBS in 2014 and the Best Oral Award Paper Presenter at the 17th Annual Conference of Society of Dermatologists, Venereologists, and Leprologists of Nepal, 2023. Dr. Jaiswal has published 7 articles in the field of dermatology so far and participated in 2 international conferences as a speaker. He has a special interest in dermatopathology, hair disorders, immunobullous disorders, and Hansen's Disease.

## Viral Patel

Ramanbhai Patel College of Pharmacy,  
India



### Nanocrystal: A novel approach to overcome skin barriers for improved topical drug delivery

#### Abstract:

Skin is an important route of drug delivery for the treatment of various dermatological conditions. The advent of nanotechnology is paving the roadmaps for topical drug delivery by providing sustained release as well as maintaining a localized effect, outweighing the toxicity concern. The topic highlighted the morphology of skin, its barrier nature as well as drug- penetration pathways after topical application of formulations. The existing methods to improve topical drug delivery, by infringing or permeating the skin barriers, are discussed. This context concretes the foundation to accentuate the need for the development of nanocrystal-based topical formulation. The mechanism of drug release, immediate as well as sustained release, after topical administration of drug nanocrystals is also elaborated. The special emphasis is given on the breakthrough achieved, in topical drug delivery using drug nanocrystals, so far in the plethora of literature, patents, and products, under clinical trial as well as in the market. The current research on nanocrystals for topical drug delivery is highlighting the breakthroughs achieved so far. The output of these research envisages that topical nanocrystals-based formulations can be a novel strategy for the drugs which are facing solubility, bioavailability and toxicity concerns.

#### Biography

Dr. Viral Patel has completed her PhD from Nirma University, Ahmedabad, India. She is a formulation scientist enthusiastic in learning and gaining expertise in the field formulation and development specifically novel drug delivery systems and injectable dosage forms (simple and complex products). Always keen to take up challenging research/ projects and to work on them with utmost dedication is her passion. She has more than 11 scientific paper published in reputed journal along with 4 book chapters published to her credit. Currently she is an editor of book and has worked as topic editor for journals like frontiers in pharmacology. She is serving as reviewer and editorial member for reputed journals. On research front, she is recipient of many research grants funded by government of India.

## Vladimir Sanchez Linares

University of Medical Science Sancti Spiritus,  
Cuba



### Liquid nitrogen in the treatment of patients with alopecia areata of the scalp

#### Abstract:

**Introduction:** The use of cryotherapy with liquid nitrogen in the treatment of alopecia areata of the scalp produces an initial vasoconstriction and then local vasodilatation during the thaw that causes deep massaging in the area of application, and the vessels dilate around the hair follicles area, increasing blood flow which leads to hair regrowth and influencing as immunomodulator.

**Objective:** To evaluate the results of the application of cryotherapy with liquid nitrogen in patients with alopecia areata of the scalp.

**Methods:** An observational, descriptive and longitudinal study was carried out at the City Center Community Clinic, in Sancti Spíritus, Cuba, from January 2018 to February 2021. The main variables were plaque repopulation and the presence of adverse events. The sample was made up of 32 patients.

**Results:** The female sex predominated in 62.15%, the average age was 23.5 years, and the most frequent clinical form was multifocal in 56.2%. At the end of the treatment, 75% of the patients repopulated the alopecic plaques and pruritus was the principal adverse event in 12.5% of the cases.

**Conclusions:** The response to treatment was favorable in most of the subjects treated with cryotherapy, when repopulating the plaque, totally or partially. Liquid nitrogen cryotherapy proved to be effective and safe in most of the patients treated.

#### Biography

Vladimir Sánchez Linares has completed his PhD at the age of 47 years from the University Medical Sciences of Sancti Spíritus Cuba. He is the head of the skin cancer program and postgraduate professor of dermatology too, is a teacher and assistant investigator. He has over 25 publications. He is reviewer for the journal Gaceta Médica Espirituana in Sancti Spíritus Cuba

## Parvin Mehdipour

Tehran University of Medical Sciences Iran, Iran



### Dermatoglyphics' patterns, as the hidden natural gift to improve the patient's capability: Bridging exploration of ridges to the Neuro-Science

#### Abstract:

The natural patterned skin of the hands and feet reflect an original, unique personalized ID. The initial supports of Dermatoglyphics to the biological anthropology and population Genetics have been referred to Cummins, 1931; Boyed, 1940; Rife, 1954; Cummins and Midlo, 1961; Neel et al. 1964; Niswander, 1966). However, definition of Dermatoglyphics has been created in the Ancient Greek, which includes derma (skin), and glyph, "Carving." Based on the focal scientific and medical aims, it also, called finger prints with focal destinations including the hands' fingers' tip and palms; and the feet's fingers. Dermatoglyphics is derived from Ancient Greek, derma, "skin", and glyph, "carving", is the scientific exploring of fingerprints, lines, mounts and shapes of hands, as distinct from the "superficially similar pseudoscience of palmistry." Partial characteristics of the infants' dermatoglyphics is available in (Liver disorders in infants, 1979). Definition of the finger dermatoglyphics varies in different fields, including Medicine and Science. Description of dermatoglyphics also varies in the affected infants with control, even with same ethnic/racial groups by emphasizing on the higher total ridge count, higher frequency of whorl pattern on the 4th and 5th fingers, and the diverse mode of palmar Axial Triradius (T-angle). Natural patterned skin of the hands and feet reflects an extraordinary, unique and the personalized ID, with its critical role in life and beyond. Light Music therapy leads to: Improving the life quality of the patients with chromosomal aberrations, simply by the light music which corresponds with 40 Hz in gamma sensory stimulation therapy: 1) The balanced mode of brain channels in the patients with Down syndrome, diagnosed with trisomy of chromosome 21 and presence of semian crease on the both hands; 2) Flexibility according to the nature of the moments; 3) Cure the sad moments; 3) Improve the immune system; 4) standardize and up-grade the brain channels' activity'; and 6) improve and standardize the interaction between brain channels. By considering the nature of abnormal patterns on the fingertips, including Arch; ulnar loop, radial double loop, simple whorl; and double core whorl. The following complementary points are provided: -As the warning or hopeful messages, data could be applied as the aim for further and prompt action by aiming to prevent, correct and upgrade the psychological disturbances of the patients with chromosomal aberrations, including balanced and imbalanced. -Suggestive



points as the complementary application in the patients with chromosomal aberration (s) including numerical (trisomy, monosomy) and /or structural such as deletion, balanced and imbalanced translocation, and ring chromosome are required. The control data of the fingertips and palm, for each population is required for further comparative study. Aims include: 1) prognosis, 2) prediction, 3) repairing/recovery of the target disturbed characteristic (s) by psychologists and psychotherapists; and 4) Relying on Neuro-science by exploring the brain channels, through Light Music based therapy.

## Biography

Parvin Mehdipour has focused on Cancer-Genetics in her academic/research life through 34 years in Tehran University of Medical Sciences. She inspired by puzzling the road maps of Cancer Genetics/Cell Biology. She had scientific links with DKFZ/,Institutes of Human-Genetics ' ,Humboldt/berlin,/,Dresden-/ Manchester-University'. She performed her PhD thesis on leukemia at Department of Genetics-Royal Liverpool hospital. She was exploring on cancer evolution/hypotheses and biomarkers. Her achievements included early detection through Circulating-Tumor-Cells in cancer journey and circulating neural cells in Alzheimer disease; innovating modeling of the metastatic cancer/personalized cancer managements. She cooperates as reviewer and associate editor in the International journals. She edited 5 books by Springer-Nature. She has unmasked the novel single cell based therapy for different types of the neoplastic disorders including cancer. Her interests: painting, writing and nutrigenomics.

## Rahul Hajare

School of Pharmaceutical Sciences, Sandip  
University Nashik



### Pattern and Outcome Dermatological Admissions

#### Abstract:

Dermatology is primarily an outpatient clinical and surgical subspecialty, but a substantial number of patients need inpatient care for adequate management. In recent years, there is a rise in the number of inpatient dermatological admissions and an increase in spending. Rarely, skin disease can be fatal. To analyse the disease patterns and clinical outcomes of dermatological patients admitted on the medical wards. This study involves a retrospective analysis of the admission records of consecutive inpatients with a dermatological diagnosis admitted from January 2020 to July 2024. The data obtained were statistically analysed with emphasis on the patient's demographic profile, clinical diagnosis, final outcome, and duration of admission. A total of 100 patients were admitted into our centre during this time. Females outnumbered males with a male:female ratio of 1:2:2. Infections (53 patients, 74%) inflammatory causes, drug reactions and cutaneous manifestation of internal disease had 3 patients each (4.4%). A patient was classed as idiopathic (1.5%).

#### Biography

Professor Rahul Hajare obtained his PhD from University of Vinayaka Mission Research Foundation. He joined KLE University Bangalore. He served as a group leader at Pune University, The USA before joining Hindu University of America, where he has been full professor for several years. He has served on several professional panels and editorial boards and is recipient of many awards. He is post-doctoral fellow of Renowned Scientist and High Official Respected Dr. Ramesh Paranjape National AIDS Research Institute Indian Council of Medical Research.



## Huda Alabdullah

Aleppo University Hospital, Syria



### Dermatologists role in detecting Gender-Based violence

#### Abstract:

Gender-based violence (GBV) is a pervasive global health issue with profound physical and psychological repercussions for survivors.

Dermatology, as a medical specialty, plays a crucial role in recognizing and addressing child abuse cases and separating them from other similar-looking skin pathologies. Skin lesions can be the most visible sign of gender violence. Bruising, burns, lacerations, traumatic alopecia, or external genital injuries can be indicators of abuse, and can be easily identified by routine dermatologic examination. The lecture will begin by highlighting the prevalence and impact of abuse on individuals, particularly focusing on the association between abuse and dermatological manifestations. By attending this lecture, participants will gain valuable insights into the complex relationship between GBV and dermatology. They will acquire the skills and resources necessary to provide trauma-informed care, ultimately contributing to improved outcomes for GBV survivors. Keywords: abuse, gender-based violence, dermatology, multidisciplinary care, dermatological manifestations, trauma-informed care, interdisciplinary collaboration, research, policy changes, comprehensive care models.

#### Biography

Huda Alabdullah has completed her Master degree in Dermatology and Venerology at the age of 28 years from Aleppo University Hospital and postdoctoral studies from Aleppo University of Medicine. In addition to her work in dermatology, Huda is a dedicated GBV specialist. Her role with the United Nations Population Fund (UNFPA) in Sudan and Syria involved supporting the development and implementation of Standard Operating Procedures and referral pathways for all actors involved in GBV response. She played a crucial part in capacity building for health providers, training them on GBV minimum standards and clinical management of rape. Huda also provided case management training for GBV survivors and diligently followed up on their cases, ensuring they received the necessary support and care.

## Ehsan Kamani

Arak university of medical Sciences, Iran



### Application of low level laser Therapy in the adhesion of burn tissue

#### Abstract:

Lasers: (Light amplification by stimulated emission of radiation) are devices that typically generate electromagnetic radiation which are relatively uniform in wavelength, phase, and polarization, originally described by Theodore Maiman in 1960 in the form of a ruby laser. Laser is described as a source of light or radiation energy. Low Level Laser (LLL) is a special type of laser that effects on biologic systems through non-thermal means. Today, due to industrial and dangerous lives, people are more prone to high-risk burns. One of these problems after burns is the issue of adhesion of burned tissues. This tissue cannot be repaired due to the loss of the active contractile property of the tissue, except for a lower percentage, even with surgery, due to the lack of repair, this problem cannot be solved, and the patient will suffer. Therefore, all these problems can be solved by using a low-power laser with a wavelength range of 600-910 nm and a power range of 150-500 milliwatts, because due to the healing properties of the laser in nerve and muscle repair, we can play an important role in improving the adhesion of burns. performed and even after laser therapy, an excellent surgery can be performed.

#### Biography

Ehsan Kamani was born in 1994 in Arak\_Iran. I started studying and Research the use of lasers in medicine since 2014. I specialize in laser therapy for beauty, wounds and pain. The results of my medical laser research: Covid 19 treatment, chemotherapy, blood cells and neuroscience. I announce my cooperation to all researchers and scientific centers.

## Farhad Moradi

Shiraz University of Medical Sciences, Iran



### Recent advance on nanoparticles or nanomaterials with anti-multidrug resistant bacteria and anti-bacterial biofilm properties: A systematic review

#### Abstract:

**Objective:** With the wide spread of Multidrug-resistant bacteria (MDR) due to the transfer and acquisition of antibiotic resistance genes and the formation of microbial biofilm, various researchers around the world are looking for a solution to overcome these resistances. One potential strategy and the best candidate to overcome these infections is using an effective nanomaterial with anti-bacterial properties against them.

**Methods and analysis:** In this study, we overview nanomaterials with anti-MDR bacteria and anti-biofilm properties. Hence, we systematically explored biomedical databases (Web of Sciences, Google Scholar, PubMed, and Scopus) to categorize related studies about nanomaterial with anti-MDR bacteria and anti-biofilm activities from 2007 to December 2022.

**Results:** In total, forty-one studies were investigated to find antibacterial and anti-biofilm information about the nanomaterial during 2007–2022. According to the collected documents, nineteen types of nanomaterial showed putative antibacterial effects such as Cu, Ag, Au, Au/Pt, TiO<sub>2</sub>, Al<sub>2</sub>O<sub>3</sub>, ZnO, Se, CuO, Cu/Ni, Cu/Zn, Fe<sub>3</sub>O<sub>4</sub>, Au/Fe<sub>3</sub>O<sub>4</sub>, Au/Ag, Au/Pt, Graphene O, and CuS. In addition, seven types of them considered as anti-biofilm agents such as Ag, ZnO, Au/Ag, Graphene O, Cu, Fe<sub>3</sub>O<sub>4</sub>, and Au/Ag.

**Conclusion:** According to the studies, each of nanomaterial has been designed with different methods and their effects against standard strains, clinical strains, MDR strains, and bacterial biofilms have been investigated in-vitro and in-vivo conditions. In addition, nanomaterials have different destructive mechanism on bacterial structures. Various nanoparticles (NP) introduced as the best candidate to designing new drug and medical equipment preventing infectious disease outbreaks by overcome antibiotic resistance and bacterial biofilm

#### Biography

Dr. Farhad Moradi is a PhD Candidate of medical laboratory Science (Clinical Bacteriology) at the age in Department of Bacteriology, School of Medicine, Shiraz University of Medical Sciences, Shiraz, Iran.



# **Poster Presentations**

## Kathleen Click

Kansas City University, USA



### Immunogenomic Profiling of Cutaneous Manifestations in Systemic Sclerosis: Uncovering Novel Biomarkers and Therapeutic Targets

#### Abstract:

This analysis of current literature explores specific immunogenomic signatures underlying cutaneous manifestations in systemic sclerosis (SSc), a complex autoimmune disorder characterized by fibrosis, vasculopathy, and immune dysregulation. By employing integrated transcriptomic and epigenomic analyses of skin biopsies obtained from SSc patients presenting varying degrees of cutaneous involvement, researchers aim to discern dysregulated immune pathways, gene expression signatures, and epigenetic modifications correlated with disease progression and severity. Additionally, investigating the therapeutic potential of immune-modulating agents, including JAK inhibitors and immune checkpoint inhibitors, in mitigating skin fibrosis and inflammation in SSc may unlock novel avenues for personalized treatment strategies tailored to the immunogenomic profile of individual patients. Future research should focus on validating identified biomarkers, exploring the mechanistic basis of immunogenomic alterations, and translating these findings into clinical practice to optimize therapeutic outcomes and enhance the management of cutaneous manifestations in SSc.

#### Biography

Kathleen Click received a bachelor's degree in Global Health with a minor in Biological Sciences from Arizona State University. She is currently a third-year medical student at Kansas City University interested in pursuing dermatology. Her research interests include atopic disease, cutaneous oncology, and autoimmune disease.

## Sriya Kakarla

UT Health Houston McGovern Medical School, USA



### Dermatological Manifestations of IgG4-Related Disease: Insights into the Immunopathogenesis and Clinical Spectrum

#### Abstract:

This review aims to provide insights into the immunopathogenesis and clinical spectrum of dermatological manifestations in IgG4-related disease (IgG4-RD), a systemic fibroinflammatory disorder characterized by tissue infiltration of IgG4-positive plasma cells. Through comprehensive immunohistochemical analyses of skin biopsies from patients with IgG4-RD-associated cutaneous lesions, researchers endeavor to understand the role of IgG4-mediated immune responses, cytokine signaling, and fibrotic pathways in driving skin inflammation and fibrosis. Moreover, this research seeks to characterize the clinical presentation and treatment response of IgG4-RD-related dermatological manifestations to immunomodulatory therapies. Understanding the complex immunopathogenic mechanisms underlying IgG4-RD-related skin lesions may contribute to the refinement of diagnostic criteria and therapeutic strategies for managing this emerging autoimmune condition. Future research directions could include exploring novel biomarkers, identifying potential therapeutic targets, and investigating the long-term outcomes of dermatological involvement in IgG4-RD.

#### Biography

Sriya Kakarla is an incoming MS1 at the UTHealth Houston McGovern Medical School where she is interested in dermatology and internal medicine. Sriya has a vast research background with work in clinical and basic science research as well as a keen interest in public health and policy work



## Diamond Guy

University of Rochester Medical Center, USA



### Exploring the intersectionality of being deaf and black while accessing dermatological care

#### Abstract:

**Background:** In 2021, the United States (US) population was comprised of ~11.9% Non-Hispanic Black individuals and ~3.4% persons that are Deaf or hard of hearing (DHH); however, there was no sub-categorical data regarding race. This dearth of data makes it challenging to quantify the health disparities amongst Black DHH individuals in the US. This paper aims to identify trends and disparities to improve health outcomes for DHH and Black patients seeking dermatologic care.

**Methods:** This literature review utilized PubMed and Google Scholar. Keywords included Deaf or hard of hearing, Black population, health disparities, dermatology, and health outcomes. Forty articles were included due to relevance after full-text analysis.

**Results:** Health disparities within the Black and Deaf population: The literature demonstrates that racial disparities in the quality of care and outcomes exist for Black patients. Some include less preventative service utilization, disparate cardiovascular and cancer treatment interventions, less emergency department (ED) analgesia, decreased ED resource utilization, lower post-trauma survival, and 3-fold higher risk of maternal mortality and morbidity than White patients. DHH people also utilize less primary and preventative care compared to their hearing counterparts. When they do, they experience poorer treatment plan comprehension & adherence and health outcomes compared to hearing patients. DHH patients also experience delayed cancer treatment, higher rates of ED visits, obesity, mental health disorders, and intimate partner violence than hearing patients. One study found that Black DHH patients have a higher likelihood of cancer, diabetes, hypertension, and lung disease compared to Black hearing patients. Black and Black DHH patients' outcomes when seeking dermatological care: The literature reveals Black patients visit dermatologists less frequently than White patients. Black patients have lower survival rates with certain cutaneous neoplasms and poorer disease control compared to White counterparts. The literature is lacking the dermatologic care outcomes for Black DHH patients.

**Conclusion:** Shared themes impacting Black and DHH patients' care include discrimination (audism and racism), medical mistrust, disproportionate representation, low health literacy, and poor communication with clinicians. Unfortunately, the dermatological experiences of Black DHH patients are poorly documented. To minimize disparities and improve health access and outcomes for this population, clinicians must acknowledge them and partner with the community to investigate them. Financial disclosures: None to be disclosed.

## Biography

Diamond Guy is an MS3 at the University of Rochester School of Medicine and Dentistry, driven by a passion for improving healthcare accessibility in underserved communities, mirroring those in his hometown. Dedicated to translational research in skin disorders, Diamond has been actively engaged in various research projects since undergraduate studies, with several publications and regional conference presentations to his credit. Beyond research, he serves as co-dermatology clinic coordinator at UR Well and initiated DermUnity, a community outreach program focused on dermatologic health and skin cancer prevention. Diamond also participates in the Deaf Health Pathway, aiming to enhance understanding of Deaf culture and health disparities, alongside learning medical American Sign Language for future clinical endeavors.

## Hawazin Alshanti

King Abdulaziz University, Saudi Arabia



### Effect of hormonal imbalance on the severity of acne in adults: A Meta- Analysis

#### Abstract:

Acne vulgaris is a common skin condition that affects individuals of all ages, including adults. While its development involves multiple factors, hormonal influences are believed to play a significant role in the severity of acne lesions in adults. This meta-analysis seeks to examine and quantify the association between hormonal imbalance and the severity of acne in adult populations. A systematic review of the literature will be conducted to investigate the relationship between hormonal imbalances and adult acne. Secondly, a meta-analysis will be performed to determine the effect size of hormonal factors on the severity of adult acne. Lastly, potential sources of heterogeneity will be identified, and subgroup analyses will be conducted when applicable. The research questions guiding this study are whether there is a statistically significant relationship between hormonal imbalance and acne severity in adults, and whether specific hormonal factors, such as androgens or estrogens, have a more pronounced effect on acne severity in adults. The methods section outlines the planned approach for this study. A comprehensive literature search will be conducted using various databases, and eligibility criteria will be applied to select relevant studies. The expected results of this study include the identification of a significant association between hormonal imbalance and the severity of acne in adults. The findings of this study will be disseminated through peer-reviewed journals, conferences, and summaries for dermatologists and healthcare providers. In conclusion, by quantifying the impact of hormonal factors, this study contributes to a better understanding of the pathogenesis of adult acne.

#### Biography

Hawazin Alshanti is a final-year medical student at King Abdulaziz University. She has been actively involved in multiple research projects in the field of medicine. Hawazin's research focuses primarily on dermatology, and she has dedicated herself to investigating various aspects of skin health and diseases. Currently, Hawazin's research projects are at an exciting stage, as they are undergoing the publication process. Her findings and contributions in the field of dermatology are expected to make significant contributions to the understanding and treatment of various skin conditions.

## Rajesh Kumawat

Himalaya Wellness Company, India



### Clinical study to assess efficacy and safety of Purifying Neem Face Wash in prevention and reduction of acne in healthy adults

#### Abstract:

**Background:** Acne vulgaris is a chronic, inflammatory skin condition of pilosebaceous units. The standard treatment involves topical and oral antibiotics, retinoids, benzoyl peroxide, and other synthetic compounds, mostly associated with adverse effects. Ayurveda uses herbs containing natural phytoconstituents without any adverse effects. Neem (*Azadirachta indica*) is an excellent herbal skincare ingredient as it has antimicrobial and anti-inflammatory properties. Hence, herbal skincare products are considered nowadays.

**Aim:** To evaluate the safety and efficacy of Purifying Neem Face Wash (PNFW), an herbal skincare product in the prevention and/or reduction of mild-to-moderate acne.

**Methods:** An open-label, single-center, single-arm, four-week clinical study was conducted in two groups with subjects having either mild-to-moderate acne or oily skin and nonexistent acne. Subjects were instructed to moisten their face and apply (3ml) PNFW, followed by washing off the product and drying the face by patting. This was required to be done twice daily. Sebum level and skin hydration of both cheeks were measured via sebumeter and corneometer.

**Results:** Out of 120 study subjects, 79% and 72% showed either reduction or no new appearance of inflammatory and non-inflammatory acne lesions, from baseline to Visits 3 and 4. Skin sebum level and skin hydration showed a statistically significant decrease.

#### Biography

Dr. Rajesh Kumawat completed his MBBS in JLN Medical College, Ajmer and MD in SMS Medical College, Jaipur from University of Rajasthan, India. He has over 20 years of pharma industry experience in the clinical development space across area including Clinical Operations, Medical Writing, Project Management, pharmacovigilance and coordination with various regulatory agencies (including FDA, MHRA, DCGI) for development of modern medicine Generics, New Chemical Entities (NCE), Biosimilars & Novel formulations. He has many national and international publications related to clinical domain and also presented at several national and international conferences on Clinical Research & Clinical Development.



# **Accepted Abstracts**

# Felicia Hung

California Health Sciences University,  
USA

## And beauty blemished once: Trends of toxic chemicals found in facial and non-Facial products

### Abstract:

This study critically examines the composition of facial versus non-facial cosmetic products in California, addressing the growing public health concern for “clean beauty” and ingredient transparency. Given the global market influence of the cosmetic industry and the heightened permeability of facial skin, it’s pivotal to assess if industry practices meet the rising demand for safer products. Data from the California Safe Cosmetics Program (CSCP) spanning 2009-2019, which included 97,132 reports, was analyzed. Products were categorized into facial category (makeup, skin care, sun care) and non-facial category (bath, shaving, fragrances, hair care, coloring, nail, personal care products) groups. Statistical analysis was conducted, and findings indicate a significant difference in the occurrence of toxic chemicals, with facial category reporting higher instances (p-value of .003). Predominant chemicals in facial products were titanium dioxide, retinol (daily dosages exceeding 10,000 IU), and respirable silica, while non-facial products mostly reported titanium dioxide, co-camide, and silica.

### Biography

Felicia Hung completed her BA from University of California, Berkeley, and MPH from Yale University. She is currently a first-year medical student at California Health Science University and has published 4 papers with the National Health Institute and Yale School of Medicine.



## Long term co-culture of human adipocytes and dermal fibroblasts: a new predictive system for modelling hypodermis-dermis interactions and for screening compounds on the skin biology

### Abstract:

Human skin is composed of three layers: epidermis, dermis and hypodermis. For many years, the therapeutic strategies to improve skin health and appearance were focused on the superficial layers composed by the epidermis and dermis. However, the recent advances in adipocyte biology and cellular biotechnologies increased the interest of the subcutaneous adipose tissue, referred as hypodermis, in skin properties. Adipose cells from the hypodermis play a crucial role in the mechanical and physiological properties of the skin. The role of these cells is not limited to their capacity to fill volumes by accumulating lipids, but they also regulate the mechanical properties of the dermis thanks to their endocrine function. In this context, we have set-up a novel in vitro model allowing us to assess the bi-directional interactions between the hypodermis and the dermis, and to propose a suitable tool to screen and evaluate efficacy of new compounds to maintain skin quality. Technically, we isolated adipocytes and fibroblasts from skin tissue of human donors undergoing aesthetic or reconstructive surgery. To preserve their viability and their metabolism up to 3 weeks, the isolated adipocytes were embedded in a gel mixture to form 3D capsules and cocultivated in 96-well plates containing adherent dermal fibroblasts. The culture conditions were initially validated to maintain the biological properties of each cell type. The DIVA Skin-Caps model preserved cell viability and did not exhibit cytotoxicity after 22 days in culture while maintaining the adipocyte metabolism (adiponectin secretion and lipolytic activity). Moreover, we showed that the presence of mature adipocytes modulated over time the secretion of extracellular proteins (hyaluronic acid, fibronectin and procollagen I) and stimulated the organization of the matrix network into fibres (collagen I, elastin and fibronectin). This novel 3D co-culture system combining human mature adipocytes and skin fibroblasts provides an original and unique approach to screen active compounds and assess their impact on the bi-directional interactions between the hypodermis and the dermis. This multiparameter model allows the high throughput screening of ingredients or molecules and the evaluation of their potential efficacy on skin biology :slimming, anti-cellulite, anti-aging, and plumping effects.

# Luciana Cirillo Maluf Azevedo

ABC Faculty of Medicine University Center,  
Brazil

## A novel Brazilian technique for repositioning facial soft tissues with barbed polydioxanone threads based on the main aging vector force of rejuvenation and how to combine with fillers for a very natural rejuvenation

### Abstract:

Sharing a Brazilian technique of implanting threads for repositioning soft tissues in face based on the main facial aging vector force to reverse signs of aging and how to combine threads and fillers at the same time, giving a very natural rejuvenation.

### Biography

Luciana Maluf, MD, CEO of Clínica de Dermatologia Luciana Maluf, is a renowned dermatologist with extensive experience. She has published 17 papers in medical journals and is a respected speaker on Threads and Fillers (e.p.t.q. fillers) in Brazil at MedBeauty Company. Dr. Maluf completed a fellowship in Cosmetic Ethnic Skins at the Dermatology & Laser Center with Dr. Eliot Battle, CEO at Cultura Clinic. She is a member of several prestigious societies, including the Dermatology Brazilian Society (SBD), São Paulo Regional Society, Brazilian Society of Dermatologic Surgery (SBCD), and American Academy of Dermatology (AAD). With a decade of service at Sírio Libanes Hospital, Dr. Maluf has also served as a preceptor doctor at Faculdade de Medicina do ABC (Medical School), specializing in laser therapy, cosmiatry, and dermoscopy. She pursued specialization in Dermatology at Faculdade de Medicina do ABC from 2008 to 2011 and in General Practice at Santa Casa de Misericórdia de São Paulo from 2005 to 2007.

# Raza Khan

HCA Medical City Healthcare,  
USA

## Ultrasound in management of morphea: A comprehensive review

### Abstract:

Morphea, an autoimmune progressive disorder, can significantly impact patient well-being, yet therapeutic options, though expanding, exhibit limited efficacy. A persistent challenge in disease management revolves around monitoring disease activity and gauging treatment effectiveness. To address this, various clinical assessment tools have been devised, each with its inherent limitations. The realm of imaging in morphea has undergone noteworthy expansion, with ultrasonography (US) emerging as an efficacious and cost-effective avenue for quantifying disease activity and evaluating therapeutic outcomes. However, the evidential support for its application remains equivocal. Our aim was to explore and analyze the existing evidence concerning the utility of ultrasound in the management of morphea. We conducted a comprehensive literature review using PubMed Medline to assess evidence concerning US utility in morphea management. Sixteen total studies were included in our review. Although studies presented carry their own limitations, cumulative findings indicate the potential of ultrasound, particularly when coupled with doppler, in facilitating staging, assessing disease activity, and longitudinal assessment of therapeutic efficacy in patients with morphea.

### Biography

Dr. Raza Khan holds a Bachelor of Science in Neuroscience from the University of Rochester and earned his MD with AOA honors from the University of Oklahoma College of Medicine. Currently undertaking his transitional year at the HCA Medical City Healthcare UNT-TCU GME Program, Dr. Khan is committed to pursuing advanced training in dermatology. Collaborating with Dr. Amor Khachemoune, MD, FAAD, he is actively engaged in advancing understanding within dermatology, particularly focusing on non-invasive imaging techniques. Dr. Khan has achieved acceptance for four papers in reputable publications over the past six months.

# Sergey SuchkovMaluf Azevedo

The Russian University of Medicine & The Russian  
Academy of Natural Sciences,  
Russia

## Cancer pathology-related modeling and IT-Assisted approaches as the integrated resources for treatment decisions to prevent, to treat and to get cured skin cancer and Its complications: An expert consensus panel

### Abstract:

A new systems approach to diseased states and wellness result in a new branch in the healthcare services, namely, personalized and precision medicine (PPM). In this context, Personalized & Precision Oncology (PPO) is an innovative approach to cancer management that ensures your treatment is specifically designed and targeted to your unique form of cancer. The latter are both the science of using each patient's individual genomic landscapes – the genes that are mutated, causing the cancer to grow – to create a biomarker-based targeted therapy protocol.

To achieve the implementation of PPM and PPO concept, it is necessary to create a fundamentally new strategy based upon the recognition of biomarkers long before the disease clinically manifests itself. And personalized tumor molecular profiles (uniting genomic and phenotypic ones), tumor disease site and other patient characteristics are then potentially used for determining optimum individualized (preventive, prophylactic, canonical and rehabilitative) therapy options to be tailored and applied for.

Each decision-maker values the impact of their decision to use PPM/PPO on their own budget and well-being, which may not necessarily be optimal for society as a whole. It would be extremely useful to compile and integrate available scientific knowledge on skin cancer-associated abnormal genes and gene products and their implications for skin cancer therapy, and thus data harvesting from different databanks for applications such as prediction and personalization of further treatment to thus provide more tailored measures for the patients resulting in improved patient outcomes, reduced adverse events, and more cost effective use of the latest health care resources including diagnostic (companion/theranostics ones), preventive and therapeutic (targeted molecular and cellular) etc. This complex and unique process provides a fairly exhaustive resource for dermatologists and oncologists to use as a PPM-driven skin cancer therapy option that is designed to be highly clinically applicable.

PPM/PPO are most likely to play a great role in cancer management and treatment. Pre-early (sub-clinical) detection and appropriate, risk-adjusted treatment is essential to ensure optimal outcomes

for patients diagnosed with skin cancers (such as melanoma and cutaneous squamous cell carcinoma). Once a patient is diagnosed, determining their risk status is particularly important, as it has major implications for treatment selection. Failure to appropriately assess patient risk can lead to either over or under-treatment, negatively impacting patient outcomes. Meanwhile, gene expression profiling (GEP) technologies designed to aid in diagnosis and risk assessment have emerged for melanoma, and many more are in development. Use of these tests can help dermatology clinicians, in early identification of patients with high-risk skin cancers who may require a more aggressive treatment approach.

Risk-stratification of cancer, traditionally performed through staging, directs optimal disease management decisions with the result of improved patient outcomes. So, PPM-driven skin cancer research and practice is an emerging approach that allows predicting responses to treatments or possible adverse events through the discovery and analysis of new predictive and/or prognostic biomarkers, reducing the gap between basic research and clinical management of the patient.

Current investigations using nanomaterial-mediated targeting of melanoma cancers are directed at augmenting drug delivery and immunomodulation of skin cancers to induce a robust anticancer response and minimize toxic effects. For instance, theranostic nanomaterials can modulate immune mechanisms toward protective, preventive, therapeutic, or diagnostic approaches for skin cancers. Those tests and treatments can be easily integrated into clinical practice to help guide treatment choices. Meanwhile, a lack of the medical guidelines has been identified by the majority of responders as the predominant barrier for adoption, indicating a need for the development of best practices and guidelines to support the implementation of PPM/PPO! So, coordination of all health care stakeholders has become more important than ever to unite dermatologists, oncologists, pathologists, and payers to work with Big Pharma and Biotech to develop products, services, and coverage policies that would improve patient outcomes and lower overall health care costs for institutions that put personalized regimens in place. This is the reason for developing global scientific, clinical, social, and educational projects in the area of PPM/PPO to elicit the content of PPM-driven skin oncology as the new branch and to stress the impact and benefits of the latter.

## Biography

Dr. Sergey V. Suchkov, MD, PhD, comes from a family of medical professionals in Astrakhan, Russia. He earned his MD in 1980 and his PhD in 1985. Dr. Suchkov held significant positions in clinical immunology and served as Secretary-in-Chief of the Editorial Board for Biomedical Science. Currently, he is a Professor at the Russian University of Medicine and holds memberships in esteemed organizations like the New York Academy of Sciences and the American Heart Association, reflecting his commitment to global medical research.

# Sergey Suchkov

The Russian University of Medicine & The  
Russian Academy of Natural Sciences,  
Russia

## Unlocking the Future of Individualized Cosmetics and Reconstructive Plastic Surgery: Concepts and Future Prospects through the Precision Medical Armamentarium Tailored to the Personalized DNA

### Abstract:

A new systems approach to diseased states and wellness result in a new branch in the healthcare services, namely, personalized and precision medicine (PPM). Since traditional approaches based on clinical (including dermatological) symptoms and signs, and a few classic biomarkers can only provide incomplete information on disease or defects-related manifestations. The move to personalized preventive, therapeutic or rehabilitative treatment would require the large-scale unbiased analysis of molecular and cellular characteristics of individuals experiencing defined skin disease conditions to identify reliable patient-specific biomarkers linking genotypes, molecular profiles, disorder or defects disorder progression and fundamental datasets and to process them computationally to identify personalized biomarkers.

Well, problems in cosmetic and plastic medicine and surgery: dozens of cosmetics and skin care products are suspected to provoke allergic reactions. Or some of the products are believed to not be suitable for skin, based either on intolerance and/or lack of efficacy. This ambiguity encourages the development of particular tools to assist in product individualization, which has thrived among cosmetic companies. Usually cosmetic companies create health, wellness and beauty products for consumers, based on its proprietary genome-, phenome- and exposome-based testing.

For instance, developed by the L'Oréal, the Perso smart skincare system is capable of providing individualized skincare solutions via a four-step process taking into account the specificities of the user's skin, local weather conditions, and the user's product preferences. According to L'Oréal, the device is also able to make custom formulas for lipstick and foundation.

L'Occitane en Provence is also betting on personalized beauty with Duolab, an innovation comprising a device, a range of capsules - including three moisturising bases and five targeted concentrates - and a skin predictive diagnostic tool. The tool assesses individually the customer's skin requirements and generates a personalized care protocol.

Amorepacific presented a 3D face mask printing system coupled with the 3D printing system developer Lincsolution. The latter uses a smartphone app to instantly measure individual users' facial dimensions and print a personalized hydrogel mask that caters to individual facial features and skin conditions.



P&G Ventures, the startup studio within Procter & Gamble, returned to CES 2020 to showcase the development of Opte Precision Skincare System. This personalized handheld inkjet printer can instantly make the appearance of skin's hyperpigmentation disappear and fade spots over time. Meanwhile, Opte's digital camera scans the skin and instantly analyzes each image using a proprietary algorithm to detect tonal imperfections not visible to the human eye. The device then precisely deposits droplets of Spot Optimizing Serum on target areas until there is a perfect color match with the surrounding skin tone.

Neutrogena relaunched their Skin360 app, eliminating the need for a separate skin analysis tool. The selfie analysis is now provided by lightning fast analysis for a broad range of skin parameters including wrinkles, fine lines, dark under-eye circles, dark spots and smoothness.

Envision a world where your face cream is tailor-made for your DNA, your hair mask knows you got highlights the last 5 years, and your serum has a better handle on your likes, your dislikes - even what you had for breakfast - than your partner. Innovators from the worlds of precision biotech and unique beauty are dreaming up those personalized beauty products right now, and they'll be in our hands soon.

To utilize PPM resources and optimize the response to targeted therapies, molecular, clinical, genetic, and epigenetic factors will need to be taken into consideration in future research trials. With the emergence of novel preventive rehabilitative safety therapies from current clinical trials, dermatologists will be able to implement them into their daily practice and switch from a generalized "one-drug-fits-all" approach to more personalized "client-specific" management.

For now, most of the companies only offer common serums, and it creates customized formulas based on a thorough evaluation of the skin including the skin at different stages of the life. As we get older or are exposed to the sun, for example, certain genes flip on - they trigger enzymes that break down collagen, causing wrinkles and sagging. But if a person-at-risk realizes that's happening on a molecular level, the one could use prescription ingredients to quiet the overactive genes and normalize the skin. The effects mentioned would be secured by the biopharma developing new precision drugs to individually upregulate and downgrade overactive or underactive genes in the skin.

And just like that, the key to truly smooth skin could be written in the client's DNA. Some companies, like HomeDNA and Skintelli, have already started recommending existing skin-care ingredients and products for users based on molecular profiling and testing. They claim to give insight into how quickly your skin cells turn over or the quality of your collagen. So, the individualized molecular profiling and analysis could also tell you what kinds of foods to eat for younger, more radiant skin.

Based on all of these measurements, you'll get targeted product recommendations (across brands) for your skin's unique needs, down to different products for specific areas of your face, skin and body as a whole.

In the wellness sphere, precision tests are also used to define slow or fast metabolizers. While genomic-based customized nutrition is already being implemented, PPM-based diets might lack sufficient evidence for full integration into the full-set cosmetic setting. The concept of PPM-based nutriogenomics is to provide accurate nutritional recommendations for an individual to obtain a

healthier lifestyle. Those advances are paving the way for the design of innovative strategies for the control of chronic diseases and obesity, in particular. PPM-based nutrition has the huge potential to maintain health and wellness, as a result of a rigorous nutrigenomic analysis whilst considering the genetic makeup of an individual. This will be made possible by large genetic biobanks that are designed to capture genetic diversity.

So, in a more distant future, the new cosmetic and nutritional brands like would create unique shampoos, conditioners, masks and personalized diets based on your individualized answers and data being harvested from your genetic passport.

The capacity to measure, capture and interpret multiple sources of data using personal devices and sensors opens up new opportunities for preventive skin monitoring, securing individualized skin care and active health management. However, the long-term nature and frequent need for ongoing monitoring of skin conditions and health state provide an opportunity to develop personalized, patient-centered care delivered through digital devices, assisted by IT technologies.

Dermatology and cosmetology require doctors to make treatment decisions based on patient self-reporting, which poses challenges including patient recall or recognition of exacerbating factors, leading to a trial-and-error approach to management and additional consultations.

Meanwhile, a lack of particular medical guidelines has been identified by the majority of responders as the predominant barrier for adoption, indicating a need for the development of best practices and guidelines to support the implementation of PPM.

Implementation of PPM requires a lot before the current model “physician-patient” could be gradually displaced by a new model “medical advisor-healthy person-at-risk”. This is the reason for developing global scientific, clinical, social, and educational projects in the area of PPM to elicit the content of the new branch.

## Biography

Dr. Sergey V. Suchkov, MD, PhD, comes from a family of medical professionals in Astrakhan, Russia. He earned his MD in 1980 and his PhD in 1985. Dr. Suchkov held significant positions in clinical immunology and served as Secretary-in-Chief of the Editorial Board for Biomedical Science. Currently, he is a Professor at the Russian University of Medicine and holds memberships in esteemed organizations like the New York Academy of Sciences and the American Heart Association, reflecting his commitment to global medical research.

# Sergey Suchkov

The Russian University of Medicine & The  
Russian Academy of Natural Sciences,  
Russia

## Personalized and Precision Medicine (PPM) through The View of Biodesign-Inspired Translational & Data-Driven Applications: An Option for Clinical Dermatologists, Skin Care Experts and Consumers to Realize the Unique Potential of Getting Personal about Skin and Skin Conditions to secure the Human Biosafety?

### Abstract:

A new systems approach to diseased states and wellness result in a new branch in the healthcare services, namely, personalized and precision medicine (PPM). Since traditional approaches based on clinical (including dermatological) symptoms and a few classic (canonical) indicators can only provide incomplete information on disease manifestations. So, to achieve the implementation of PPM concept, it is necessary to create a fundamentally new strategy based upon the subclinical recognition of biomarkers, which are, in turn, an integral part of PPM and are defined as indicators of normal or pathological biological processes.

The move to personalized treatment first requires the large-scale unbiased analysis of genomic and molecular characteristics of individuals experiencing defined skin disease conditions to identify reliable patient-specific biomarkers linking genotypes, molecular profiles/endotypes, disease progression and IT-processed and mined "OMICS" data and to process them computationally to identify precision biomarkers and potential targets to construct targeted therapies. DermTech, a leader in PPM-driven dermatology, enabled by a non-invasive skin genomics platform, focused on non-invasive precision dermatology approaches. And the DermTech Smart Sticker™ can be used for biomarker analysis of RNA, DNA, protein, and microbiome, and predict and track responses to therapeutic intervention.

PPM-driven dermatology uses individualized dermatologic disease-directed targeted therapy for the management of dermatoses and for the evaluation and therapy of cutaneous malignancies.

One more inflammatory condition is psoriasis with a background of polygenic inheritance. Some genetic markers have been applied in this disease prediction, clinical diagnosis, treatment, and new drug development, which could further explain the pathogenesis of psoriasis and promote the development of PPM-related tools to get the disease treated and cured. To date, genetic studies have identified >80 susceptibility loci for psoriasis and provided mechanistic insights into its pathogenesis. The American Academy of Dermatology (AAD) and National Psoriasis Foundation (NPF) joints official guidelines on the treatment of psoriasis with biologic agents reference the utility of biomarker use in efficient treatment.

In atopic dermatitis (AD), serum thymus and activation regulated chemokine (TARC) is considered

to be the superior biomarker for assessing disease severity. Identifying patients by their specific phenotype and endotype of AD, along with their individual biomarkers, and using this information to treat them in a targeted fashion, may not only help more effectively treat patients with AD, but it may potentially help identify risk for this inflammatory disease in susceptible individuals (persons-at-risk) and help avoid the development of AD in the first place. The two most promising substance groups for preventive, prophylactic and therapeutic treatments are biodrugs and Janus kinase inhibitors. The latter including biologics and small molecules have created an unprecedented potential for PPM-driven dermatology and opened up the constructive discussion referring to the complex nature of AD.

Eczema poses a significant burden on both healthcare resources and patients' quality of life. Modifying environmental risk factors or exposure plays a substantial role in managing the disease.

With the advances in hair research, the powerful tools of PPM-driven innovative technologies, we have the robust scientific data and tools to adapt the concept of PPM to the practice of trichiatry. And the trichiatriest must participate with the other medical disciplines in the diagnosis and treatment of all types of hair problems as they may relate to systemic disease. And thus the databases pertaining to the development and efficacy of PPM must be analyzed and be used to form the basis of PPM-based trichiatry.

PPM can be used in the treatment of skin cancer as current melanoma therapy utilizes biomarkers for more effective diagnosis and treatment. With credible and systemic biomarker models, more PPM-based diagnosis and assessment would be achieved and patients would be more likely to be cured and have a higher quality of life. Nevertheless, the progression of biomarkers in, for instance, skin carcinoma is still stymied by some factors including a complexity of the carcinoma molecular profiles and thus the biomarker panels. However, multi-molecular biomarker panels integrating the information (predictor) into one predictive model significantly improve diagnostic accuracy and enhance the predictive power in skin carcinomas. In this context, there is a need to focus on tumor heterogeneity and homogeneity, whilst providing an understanding of biomarker discovery and application for PPM of oral squamous cell carcinoma.

Advances in computational and analytical approaches combined with the increasing amounts of healthcare data offer enormous potential for PPM-driven dermatology. The collection and integration of the diverse data sources can be facilitated through the use of digital health technology, whilst constructing the datasets and databanks. Overall, PPM-driven and data-driven dermatology has the potential to provide a more comprehensive understanding of skin conditions at the individual level and improve patient outcomes.

Implementation of PPM requires a lot before the current model "physician-patient" could be gradually displaced by a new model "medical advisor-healthy person-at-risk". This is the reason for developing global scientific, clinical, social, and educational projects in the area of PPM to elicit the content of the new branch.

## Biography

Dr. Sergey V. Suchkov, MD, PhD, comes from a family of medical professionals in Astrakhan, Russia. He earned his MD in 1980 and his PhD in 1985. Dr. Suchkov held significant positions in clinical immunology and served as Secretary-in-Chief of the Editorial Board for Biomedical Science. Currently, he is a Professor at the Russian University of Medicine and holds memberships in esteemed organizations like the New York Academy of Sciences and the American Heart Association, reflecting his commitment to global medical research.

# Steven Latta

Florida International University Herbert  
Wertheim College of Medicine,  
USA

## Rapidly Growing Giant Basal Cell Carcinoma Adjacent to a Verruciform Squamous Cell Carcinoma in an HIV+ Patient

### Abstract:

Basal cell carcinoma (BCC) and cutaneous squamous cell carcinomas (SCC) are the most common cancers worldwide. BCC and cutaneous SCC share risk factors, including UV radiation exposure and immunosuppression such as HIV. Awareness among patients and providers regarding the aggressive nature of skin cancer in HIV populations may be lacking. Comprehensive management, including surgical excision and adjuvant radiation therapy, may be necessary for aggressive non-melanoma skin cancers. Here we present the case of a Veteran with an extensive past medical history who presents with unusually aggressive non-melanoma skin cancer, despite regular dermatologic care. This case underscores the importance of recognizing and addressing skin cancer risk in HIV patients with multiple risk factors

**Case Description.** A 76-year-old male presented with a persistent ulcerated lesion on his left arm, noticed 10 months earlier post fall, failing to heal despite antibiotic ointment application. Examination revealed a large fungating mass on the distal forearm and a smaller lesion with poorly defined borders proximal to it. Patient history is pertinent for Agent Orange exposure, polysubstance use disorder, HIV, and Hepatitis C. He is currently compliant to HAART (last CD4 615) and is on ledipasvir/sofosbuvir therapy. Significant sun exposure in youth, military service, with minimal sun protection, reports the lesion rapidly grew over the past year. Punch biopsy confirmed malignancies: distal lesion as nodular ulcerated basal cell carcinoma (BCC) and proximal lesion as verrucous squamous cell carcinoma (SCC). Surgical excision involved a multi-disciplinary team; SCC had histologically confirmed free margins; BCC, classified as giant, had margins < 1 mm from the deep margin, necessitating additional radiation therapy. Lesion dimensions: SCC - 4 x 4 x 1.2 cm; BCC - 6.3 x 5 x 1.5 cm. Post-surgical management included wound vacuum sealant application, with plans for skin grafting and outpatient radiation therapy

The occurrence of two separate and distinct cutaneous malignancies in close proximity, with significant size, etiology, and aggressive growth, is unusual in the literature, contrasting with more common reports of combinations like basal cell carcinoma and malignant melanoma. Multiple risk factors including significant UV radiation exposure, HIV infection, polysubstance use disorder, and Agent Orange exposure contribute to the unique features of this case, each warranting further discussion in relation to similar cases in the literature. People living with HIV infection increase the lifetime risk for cutaneous malignancy, though less attention is paid to risks beyond Kaposi sarcoma. Agent Orange exposure has been associated with various health conditions, including cancers like bladder cancer and chronic

B-cell leukemias, but its link to non-melanoma skin cancers remains uncertain. Treatment options for basal cell carcinoma and cutaneous squamous cell carcinoma vary, with surgical excision being the standard approach, though alternatives like 5-FU and cryotherapy considered based on tumor characteristics and risk factors . Patient education and awareness regarding sun protection measures, regular skin screenings, and early detection of skin cancer are crucial for reducing the burden of cutaneous malignancies in high-risk populations like HIV patients. Further studies are warranted to determine the relationship between HIV infection, immune status, and environmental exposures such as Agent Orange .Comprehensive risk assessments are vital in managing complex cutaneous malignancies, tailoring treatment strategies for better outcomes. Collaboration among healthcare providers, researchers, and patient advocacy groups is vital for advancing dermatologic oncology and improving access to high-quality care.

## Biography

Steven Latta completed his BS in Health Sciences from the University of Central Florida in 2021. He continued his education at the Florida International University Herbert Wertheim College of Medicine where he is currently pursuing his MD. He is the current Editor-In-Chief of the Florida Medical Student Research Journal



# Steven Latta

Florida International University Herbert  
Wertheim College of Medicine,  
USA

## Cannabinoids for the Treatment of Hair, Scalp, and Skin Disorders: A Systematic Review

### Abstract:

Cannabinoid products have been studied in the treatment of various dermatologic conditions. We searched PubMed/MEDLINE for articles published before 1 February 2023 that described the use of cannabinoids in the management of hair, scalp, and skin conditions, identifying 18 original articles that encompassed 1090 patients who used various forms of cannabinoid products. Where specified, topical cannabidiol (CBD) was the most commonly utilized treatment (64.3%, 173/269), followed by oral dronabinol (14.4%, 39/269), oral lenabasum (14.1%, 38/269), and oral hempseed oil (5.9%, 16/269). Using the GRADE approach, we found moderate-quality evidence supporting the efficacy of cannabinoid products in managing atopic dermatitis, dermatomyositis, psoriasis, and systemic sclerosis and moderate-quality evidence supporting a lack of efficacy in treating trichotillomania. There was low to very low-quality evidence supporting the efficacy of cannabinoid products in managing alopecia areata, epidermolysis bullosa, hyperhidrosis, seborrheic dermatitis, and pruritus. Our findings suggest that cannabinoids may have efficacy in managing symptoms of certain inflammatory dermatologic conditions. However, the evidence is still limited, and there is no standardized dosage or route of administration for these products. Large randomized controlled trials and further studies with standardized treatment regimens are necessary to better understand the safety and efficacy of cannabinoids

### Biography

Steven Latta completed his BS in Health Sciences from the University of Central Florida in 2021. He continued his education at the Florida International University Herbert Wertheim College of Medicine where he is currently pursuing his MD. He is the current Editor-In-Chief of the Florida Medical Student Research Journal.

# Supporting Journal

## Journal of Skin Health and Cosmetics

<https://www.scitechjournals.com/journal-of-skin-health-and-cosmetics>





*We wish to engage  
with you again...*

**Upcoming Conference**

**May 08-09, 2025  
Boston, USA**

**2<sup>nd</sup> International Conference on  
Dermatology &  
Skincare**

Please scan the QR Code for more details



ScitechSeries

Scitechseries Publishing Limited  
71-75 Shelton street, Covent Garden,  
London, WC2H 9JQ  
Phone: +44-2045874848  
Email: [info@scitechseries.com](mailto:info@scitechseries.com)