*70th Annual*

Montagna Symposium on the Biology of Skin

**Visualizing the Future of Skin Biology and Dermatology**

Oct. 19-23, 2023

**Program Chair and Symposium Co-Director:**

Dennis Roop, Ph.D. *(Colorado)*

**Symposium Co-Director:**

Sancy Leachman, M.D., Ph.D. *(OHSU)*

**Symposium Co-organizers:**

Stuart Yuspa, M.D. *(NIH)*

Thomas Krieg, M.D., Ph.D. *(University Hospital of Cologne)*

Sabine Werner, Ph.D. *(ETH Zurich)*

Salishan Coastal Lodge

7760 North Highway 101

Gleneden Beach, OR, USA 97388

**Conference Program**

|  |  |
| --- | --- |
| **Thursday, Oct 19** | |
| 4:00 p.m. - 7:00 p.m. | Arrival and Check-in |
| 6:00 p.m. – 7:00 p.m. | Welcome and introductory comments **Sancy Leachman, M.D., Ph.D.** (OHSU)and **Dennis Roop, Ph.D.** (Colorado)  Dinner Buffet (Council House) |
| 7:15 p.m. – 8:15 p.m. | **Keynote (in Long House): Joe Gray,** **Ph.D.** (OHSU) *“Rethinking precision cancer treatment for advanced cancers - a systems biomedicine approach”* |

|  |  |
| --- | --- |
| **Friday, Oct 20** | |
| 7:00 a.m. – 8:00 a.m. | Breakfast |
| 8:00 a.m. – 8:15 a.m. | Introductory Remarks  **Dennis Roop, Ph.D.** (Colorado) **and Sancy Leachman, M.D. Ph.D.** (OHSU) |
| 8:15 a.m. – 8:25 a.m. | **Session 1: Advances in skin cancer research and therapy** Session Moderator: **Stuart Yuspa, M.D. (NIH)** |
| 8:25 a.m. – 8:55 a.m. | **Allan Balmain, Ph.D. (UCSF)** *“Squamous cancer, pre-cancer, insights on tumor promotion.”* |
| 8:55 a.m. – 9:05 a.m. | Discussion |
| 9:05 a.m. – 9:35 a.m. | **Andrzej Dlugosz, M.D. (Michigan)**  *“Cell fate reprogramming to drive Merkel cell carcinoma development in mice”* |
| 9:35 a.m. – 9:45 a.m. | Discussion |
| 9:45 a.m. – 10:15 a.m. | **Sergey Nikolaev, M.D. (Gustave Roussey, Paris)** *“Basal Cell Carcinoma (From functional genomics to the mechanisms of treatment resistance)”* |
| 10:15 a.m. – 10:25 a.m. | Discussion |
| 10:25 a.m. – 10:35 a.m. | Break |
| 10:35 a.m. – 11:05 a.m. | **Brigitte Widemann, M.D. (NIH)**  *“Current understanding of pathogenesis and treatment of Neurofibromatosis 1 related peripheral nerve sheath tumors”* |
| 11:05 a.m. – 11:15 a.m. | Discussion |
| 11:15 a.m. – 11:45 a.m. | **Stephanie Goff, M.D. (NIH)**  *“Cell-based immunotherapy for melanoma”* |
| 11:45 a.m. – 11:55 a.m. | Discussion |
| 11:55 a.m. – 12:10 p.m. | **Paolo Vignali, Ph.D. (University of Pittsburgh)** *“Hypoxia within melanoma tumors promotes an unappreciated suppressor function in exhausted T cells and limits antitumor immunity”* |
| 12:10 p.m. – 12:25 p.m. | **Stephanie Holtorf (The Hormel Institute - University of Minnesota)** *“Identification of bone marrow-derived epithelial cells that may contribute to developing chronic cutaneous neoplasms in mice.”* |
| 12:25 p.m. – 1:15 p.m. | Lunch  Pfizer Product Theater |
| 1:15 p.m. – 1:20 p.m. | **Session 2: *Tissue Repair and Fibrosis***  Session Moderator: **Thomas Krieg, M.D. (Cologne)** |
| 1:20 p.m. – 1:50 p.m. | **Thomas Krieg, M.D. (Cologne)**  *“Regulation of Fibroblast Activities - Implications for Tissue Repair and Fibrosis”* |
| 1:50 p.m. – 2:00 p.m. | Discussion |
| 2:00 p.m. – 2:30 p.m. | **Maksim Plikus, Ph.D. (UC Irvine)** *“Cell – Cell Communication in Skin Wound Healing”* |
| 2:30 p.m. – 2:40 p.m. | Discussion |
| 2:40 p.m. – 3:10 p.m. | **Michael Longaker, M.D. (Stanford)**  *“Fibroblasts subsets, and the identification of specific signatures and their involvement in scar formation"* |
| 3:10 p.m. – 3:20 p.m. | Discussion |
| 3:20 p.m. – 3:30 p.m. | Break |
| 3:30 p.m. – 4:00 p.m. | **Sabine Eming, M.D. (Cologne)**  *“Macrophage subsets and the role of reparative macrophages in remodeling the extracellular matrix"* |
| 4:00 p.m. – 4:10 p.m. | Discussion |
| 4:10 p.m. – 4:40 p.m. | **Alexander Marneros, M.D., Ph.D. (Harvard)** *“Aplasia cutis pathogenesis reveals mechanisms regulating skin formation and tissue fibrosis”* |
| 4:40 p.m. – 4.50 p.m. | Discussion |
| 4:50 p.m. – 5:20 p.m. | **Peter Marinkovich, M.D. (Stanford)** *“Bench to bedside development of the first FDA approved gene therapy for dystrophic epidermolysis bullosa”* |
| 5:20 p.m. – 5:30 p.m. | Discussion |
| 5:30 p.m. – 5:45 p.m. | **Suneeti Madhavan (Case Western)** *“WNT signaling activation causes early decline of de novo lipogenesis leading to lipid depleted dermal adipocytes”* |
| 5:45 p.m. – 6:00 p.m. | **Ian Odell, M.D., Ph.D. (Yale)** *“IL-6 Trans-Signaling in a Humanized Mouse Model of Scleroderma”* |
| 6:00 p.m. – 7:00 p.m. | **Dinner (Council House)**  **Awards Presentation**   * Society of Investigative Dermatology Eugene M. Farber Travel Awards for Young Investigators * Japanese Society for Investigative Dermatology Travel Award * Taiwanese Society for Investigative Dermatology (TSID) Award * European Society for Dermatological Research: ESDR Travel Award * Director’s Award for Diversity |
| 7:00 p.m. – 9:00 p.m. | **Poster Reception**  (*Dessert and wine tasting in Long House)* |

|  |  |
| --- | --- |
| **Saturday, Oct 21** | |
| 7:00 a.m. – 8:00 a.m. | Breakfast |
| 8:00 a.m. – 8:05 a.m. | Announcements |
| 8:05 a.m. – 8:10 a.m. | **Session 3: *Keratinocyte - Immune Cell Cross-talk in Skin Inflammation*** Session Moderator: **Sabine Werner, Ph.D (ETH, Zurich)** |
| 8:10 a.m. – 8:40 a.m. | **Sara Brown, M.D. (Edinburgh)**  *“Keratinocytes are immunologically-active cells in their own right: evidence from genetic studies and primary cell culture”* |
| 8:40 a.m. – 8:50 a.m. | Discussion |
| 8:50 a.m. – 9:20 a.m. | **Michel Gilliet, M.D. (Lausanne)**  ***“****Reciprocal immune-keratinocyte interactions in the pathogenesis of psoriasis****”*** |
| 9:20 a.m. – 9:30 a.m. | Discussion |
| 9:30 a.m. – 10:00 a.m. | **Shruti Naik, Ph.D. (NYU)**  **“***Targeting immune-epithelial circuits in inflammatory skin disease"* |
| 10:00 a.m. – 10:10 a.m. | Discussion |
| 10:10 a.m. – 10:20 a.m. | Break |
| 10:20 a.m. – 10:50 a.m. | **Sabine Werner, Ph.D. (ETH, Zurich)**  *“Keratinocytes: key regulators of stromal and immune cell functions in tissue repair and cancer”* |
| 10:50 a.m. – 11:00 a.m. | Discussion |
| 11:00 a.m. – 11:15 a.m. | **Benjamin Klein, M.D. (Michigan)** ***“****Mitochondrial Z-DNA and ZBP1 Drive Autoimmune Photosensitivity****”*** |
| 11:15 a.m. – 11:30 a.m. | **Jared Simmons (UC San Diego)** *“Dermal fibroblasts have a critical role in skin immunity through responses to keratinocyte interleukin-1”* |
| 11:30 a.m. – 11:45 a.m. | **Ricardo Cibotti, Ph.D. (NIH)** *“NIH/NIAMS Funding Opportunities”* |
| 11:45 a.m. | Lunch (on your own) |
| 12:30 p.m. – 4:00 p.m. | FREE TIME / GOLF / CASCADE HIKE   * **Group Hike: Meet in the lobby at 12:30pm** * Golf and Activities: salishan.com/adventure (on your own) |
| 4:30 p.m. – 6:00 p.m. | **Round Table Discussions**  *All attendees are welcome to participate. Please sign up for your* ***top two choices (QR code on “important links” document in folders),*** *we will organize to keep the groups appropriately small, and there will be a chance to move to a new group halfway through.*   * **Joe Gray, Ph.D. (OHSU)**: “Rethinking precision cancer treatment for advanced cancers - a systems biomedicine approach” * **Sabine Eming, M.D. (Cologne):** “Learning from organisms and tissues that perfectly regenerate to improve healing.” * **Christoph T. Ellebrecht, M.D. (UPenn**): “From Zero to Lab: The First 18 Months as a PI - Challenges, Solutions, and Insights” * **Shruti Naik, Ph.D. (NYU)**: "Career Advancement. Discuss goal driven strategies that are essential for career advancement at all stages including self-advocacy, mentoring-up, networking, identifying opportunities and decision making" * **Erwin Tschachler M.D.** (JID) and **Annalisa VanHook, Ph.D.** (Science Signaling): "Current Topics in Scientific Publishing: Navigating Peer Review and Publication” * **Ricardo Cibotti, Ph.D.** and **Peter Koch, Ph.D.** (NIH/NIAMS): "How to maximize your chances to get the first R01/21 award" * **Wendy Weinberg, Ph.D.** (FDA): “FDA procedures for application and review of biological therapeutics” * **Dennis Roop, Ph.D.** (Colorado): "Academia and Industry: Pros and Cons of an Academic Postdoctoral Fellowship" * **Sancy Leachman, M.D., Ph.D.** (OHSU): “Weighing ‘the good’ of moving diagnostic tests or treatments into clinical care vs the need for more research data” |
| 6:00 p.m. – 7:30 p.m. | Dinner  **Molly Kulesz-Martin, Dennis Roop, Sancy Leachman**  *“History and Future of Montagna”* |
| 7:30 p.m. - 10:00 p.m. | **Molly Kulesz-Martin, Ph.D., Director Emeritus, Retirement Celebration** |

|  |  |
| --- | --- |
| **Sunday, Oct 22** | |
| 7:00 a.m. – 8:00 a.m. | Breakfast |
| 8:00 a.m. – 8:05 a.m. | Announcements |
| 8:05 a.m. – 8:10 a.m. | **Session 4: *Emerging Diagnostic and Therapeutic Approaches*** Session Moderator: **Dennis Roop, Ph.D. (Colorado)** |
| 8:10 a.m. – 8:40 a.m. | **Tony Oro, M.D., Ph.D. (Stanford)** *“A Spatiotemporal and Machine-Learning Platform to Accelerate hPSC-derived Tissue Replacement”* |
| 8:40 a.m. – 8:50 a.m. | Discussion |
| 8:50 a.m. – 9:20 a.m. | **Ganna (“Anya”) Bilousova, Ph.D. (Colorado)**  *“An Autologous iPSC-based Therapy for Recessive Dystrophic Epidermolysis Bullosa Delivered via Cell Suspension”* |
| 9:20 a.m. – 9:30 a.m. | Discussion |
| 9:30 a.m. – 10:00 a.m. | **Xiao-Jing Wang, M.D., Ph.D. (UC Davis)**  *“Therapeutic effects of Smad7-based protein on dermatitis through upregulation of IL22RA2”* |
| 10:00 a.m. – 10:10 a.m. | Discussion |
| 10:10 a.m. – 10:20 a.m. | Break |
| 10:20 a.m. - 10:35 a.m. | **Martin Alphonse, Ph.D. (Johns Hopkins)** *“Inflammasome-mediated host defense against Staphylococcus aureus skin infections is mediated by neutrophil-intrinsic NLRP12 and caspase-8 signaling”* |
| 10:35 a.m. - 10:50 a.m. | **Jenna Bowman (OHSU)** *“Patient-Specific Targeting of the T-Cell Receptor Variable Region as a Therapeutic Strategy in Clonal T-Cell Diseases”* |
| 10:50 a.m. – 11:20 a.m. | **Luis Garza, M.D., Ph.D. (Johns Hopkins)** *“In human use of fibroblasts to modify skin identity"* |
| 11:20 a.m. - 11:30 a.m. | Discussion |
| 11:30 a.m. - 12:00 p.m. | **Christoph Ellebrecht, M.D. (UPenn)** *“Leveraging asymmetric cell division in CAR/CAAR T cells for optimized precision immunotherapy of pemphigus and other autoimmune conditions”* |
| 12:00 p.m. – 12:10pm. | Discussion |
| 12:10 p.m. - 1:00 p.m. | Lunch |
| 1:00 p.m. – 1:30 p.m. | **David Hyams, M.D., F.A.C.S.** *“Integrating gene expression profiling to identify patient risk in invasive melanoma and high-risk squamous cell carcinoma”* |
| 1:30 p.m. – 1:40 p.m. | Discussion |
| 1:40 p.m. – 2:10 p.m. | **David Huang, M.D., Ph.D. (OHSU)** *“Optical coherence tomography and angiography: technology development and potential applications in the skin”* |
| 2:10 p.m. – 2:20 p.m. | Discussion |
| 2:20 p.m. - 2:35 p.m. | **Favour Akinjiyan (Washington University in St. Louis)** *“Exploring DDR2’s role in CAF extracellular matrix production and tumor progression”* |
| 2:35 p.m. - 2:50 p.m. | **Meagan Branch (Mount Sinai)  “***The epigenetic control of re-epithelialization during adult skin wound healing”* |
| 2:50 p.m. – 3:50 p.m. | **Panel Discussion** *Visualizing the Future of Dermatology and Skin Biology: Industry Perspectives* |
| 4:00 p.m. – 6:15 p.m. | **Beach Campfire and Reception** *(Option to take the shuttle cars (5 minutes) to the beach or walk (10 minutes) Wine and appetizers provided (indoor venue)* |
| 6:30 p.m. - 8:00 p.m. | **Traditional Salmon Dinner at Salishan**  **Alec Furst, MD Candidate**  *Land Acknowledgment and Short Talk: “The importance of salmon to the Siletz tribe and our communities”* |

|  |  |
| --- | --- |
| **Monday Oct 23** | |
| 7:00 a.m. – 8:00 a.m. | Breakfast |
| 8:15 a.m. - 8:30 a.m. | **Bus departs for PDX Airport (boarding at 8:15 am for an on-time departure)** |
| ~11:30 a.m. | **Bus arrives at PDX Airport** |

*A special thank you to* ***National Institutes of Health*** *(R13 AR009431-56), travel award affiliate organizations (****SID Farber****,* ***ESDR****,* ***JSID****,* ***KSID****,* ***TSID****) and our conference sponsors* ***Castle Biosciences*** *(Champion),* ***LEO Foundation*** *(Champion),* ***David M.C. Ju Foundation*** *(Benefactor),* ***Janssen*** *(Benefactor),* ***Novartis*** *(Benefactor),* ***CTA Pathology*** *(Associate),* ***EltaMD*** *(Associate),* ***Knight Cancer Institute*** *(Associate),* ***Lumo Imaging*** *(Associate),* ***Orlucent*** *(Associate),* ***Science Signaling (AAAS)*** *(Associate),* ***Sklip Inc.*** *(Associate).*