Genetic-Epigenetic Basis of Skin Diseases

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Salishan Resort, Gleneden Beach, Oregon

Program Chair
Angela M. Christiano, Ph.D.

Symposium Co-Chairs
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Posters

Mark Birch-Machin1, M. Birket3, A. Anderson1, A. Oyewole1, J. Henderson2, H. Swalwell1, and P. Manning2
1Dermatological Sciences, 2Biosensors, Institute of Cellular Medicine, Newcastle University, Newcastle upon Tyne, UK; 3Buck institute, Novato, CA
The use of nanosensors and mitochondrial DNA to investigate oxidative stress and aging in human skin

Paul E. Bowden, Tammy Easter, and Fiona Ruge
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Two dominant heterozygous mutations (p.Ser143Asn and p.Glu472Lys) in keratin 6c (K6c) identified in a three generation family with hereditary painful callosities.

Caitlin Cloud1, Ann Tomanek-Chalkley2, Susan Wiechert2, Nukhet Aykin-Burns3, and Jackie R. Bickenbach1,2,4
1Department of Pathology; 2Department of Anatomy and Cell Biology; 3Department of Radiation Oncology; 4Department of Dermatology, Carver College of Medicine, The University of Iowa, Iowa City, IA
Oxygen tension, not ROS, effects an age-related response in human keratinocytes

Elena Ezhkova1, H. Amalia Pasolli1, Nicole Stokes1, I-hsin Su2, Alexander Tarakhovsky2, and Elaine Fuchs1
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Ezh2 orchestrates gene expression for the stepwise differentiation of skin stem cells
Jayme R. Gallegos, Molly F. Kulesz-Martin  
**Department of Dermatology, Oregon Health & Science University, Portland, OR**  
**The interaction of p73 with Piasy and Trim32 E3 ligases in cancer**

Erin Gilbert, Sharon S. Glick  
**SUNY Downstate Medical Center, Brooklyn, NY**  
**Papillon-Lefevre Syndrome: A review of molecular mechanisms and a case presentation**

Géraldine Guasch, Laura Runck  
**Cincinnati Children’s Hospital Medical Center, Division of Developmental Biology, Cincinnati, OH**  
**Characterization of transitional epithelia associated with tumor formation**

Valiantsina Kazlova, Shyam Ramakrishnan, Ron Sharpe, Ken Kornman, and Leon Wilkins  
1. **Access Business Group, Buena Park, CA**  
2. **Interleukin Genetics, Inc., Waltham, MA**  
**The regulation of expression of inflammatory and connective tissue related genes in response to UV-irradiation provides basis for “personalized” skin care**

1. **University of New Mexico School of Medicine, Albuquerque, NM**  
2. **Tricore Reference Lab, Albuquerque, NM**  
3. **M.D. Anderson Cancer Center, Science Park Research Division, Smithville, TX**  
**Patterns of gene expression in cutaneous squamous cell carcinoma**

Elsa Jungman, Mikael Langner, and Howard Maibach  
**Department of Dermatology, University of California, San Francisco, San Francisco, CA**  
**Bioengineering methodology for phenotype quantification in genetic skin disease**

LaTondra Lawrence, Michael Bergel  
**Department of Biology, Texas Woman’s University, Denton, TX**  
**Chromosomal protein HMGN enhances HeLa cells survival and DNA repair rates following UV irradiation**

1. **Linus Pauling Institute, Oregon State University, Corvallis, OR**  
2. **New York Medical College, Valhalla, NY**  
3. **Penn State College of Medicine, Hershey, PA**  
**α-keto acid metabolites of organoselenium compounds inhibit histone deacetylase (HDAC) activity**
James G. Rheinwald, Fay Minty, Martin Degen, Sally Dabelsteen, Zongyou Guo, and Patricia Barron  
Department of Dermatology, Brigham and Women’s Hospital and Harvard Skin Disease Research Center, Harvard Medical School, Boston, MA  
Roles of G3 and exogenous factors in regulating basal cell marker expression and proliferative potential in stable vs. plastic human somatic epithelial cell types

Stephanie Harkey Shirley, Jing He, and Donna F. Kusewitt  
Department of Carcinogenesis, University of Texas M.D. Anderson Cancer Center, Science Park Research Division, Smithville, TX  
Regulation of Snail family transcription factors in melanoma

Mangalam Subramanian, Sheba John, Leah BeCoats, and Michael Bergel  
Department of Biology, Texas Woman’s University, Denton, TX  
HMGN1/N2 Nucleosomal Binding Proteins are involved in the NER-global genome repair subpathway by both histone acetylation-dependent and histone acetylation-independent pathways

Kathleen L. Tober1, Jonathan S. Schick1, Judy A. Riggenbach1, Jennifer M. Thomas-Ahner2, and Tatiana M. Oberyszyn1  
1The Ohio State University Department of Pathology Columbus, OH; 2Nationwide Children’s Hospital Columbus, OH  
Sex differences in UVB-induced inflammation and oxidative DNA damage

Valerie L.R.M. Verstraeten1,2, Lana A. Peckham1, Michelle Olive3, Cathy MacGillivray1, Brian C. Capell4, Francis S. Collins4, Elizabeth G. Nabel3, Colin L. Stewart5, Loren G. Fong6, Stephen G. Young6, and Jan Lammerding1  
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Farnesyltransferase inhibitor treatment causes donut-shaped nuclei

Rong Wang1, W Mohaiza Dashwood1, Christiane V. Lohr2, Kay A. Fischer2, Clifford B. Pereira3 and Roderick H. Dashwood1,4  
Linus Pauling Institute1, College of Veterinary Medicine2, Department of Statistics3, Department of Environmental and Molecular Toxicology4, Oregon State University, Corvallis, OR  
Molecular analyses of the skin tumors induced by a cooked meat heterocyclic amine carcinogen, PhIP, alternating with high-fat diet