The 60th Anniversary

Montagna Symposium on the Biology of Skin

Advances in Science and Medicine Catalyzed by Pioneering Skin Research

October 13 – 17, 2011 Skamania Lodge, Stevenson, Washington

Program Chair Stuart H. Yuspa, MD Symposium Co-Chairs Molly Kulesz-Martin, PhD Jackie R. Bickenbach, PhD

Program

Thursday, October 13

THURSDAY EVENING

KEYNOTE SESSION

4:30 pm

Hotel check-in (front desk) and Symposium check-in (Conference Center Foyer)

6:00 pm

<u>Opening Reception</u> (Conference Center Foyer & adjacent patio)

7:00 pm

Stuart H. Yuspa, MD

Welcome and Introductions (Stevenson Ballroom)

7:15 pm

Keynote Talk:

Margaret Kripke, PhD

"Reflections on the field of photoimmunology"

Friday, October 14

FRIDAY MORNING

7:00 - 8:00 am

Breakfast (Stevenson "A")

Molly Kulesz-Martin, PhD 8:00 am

Welcome and Thanks; Announcements

8:05 am Stuart H. Yuspa, MD

Introduction and Historical Overview

Seminal Discoveries in Cancer Biology: DNA REPAIR

Session Chair: Kenneth Kraemer

8:15 am Kenneth Kraemer, MD

"DNA repair and skin cancer: Lessons learned from xeroderma pigmentosum"

8:45 am Laura Niedernhofer MD, PhD

"DNA repair protects against skin cancer and aging"

9:15 am Qingyi Wei, MD, PhD

"DNA repair and overall cancer risk"

9:45 am Amanda McCullough, PhD

"DNA repair strategies for the prevention of skin cancer"

10:15 am

Break.

Seminal Discoveries in Cancer Biology: HEDGEHOG SIGNALING

Session Chair: Andrzej Dlugosz

10:30 am Andrzej Dlugosz, MD

"Hedgehog signaling and basal cell carcinoma: Where, when and how"

11:00 am Anthony Oro, MD, PhD

"Ciliary basal body components as novel targets for hedgehog-dependent cancers"

11:30 am Silvia Buonamici, PhD

> "Antagonism of Hedgehog signalling by the small molecule Smoothened inhibitor NVP-LDE225, leads to tumor responses in advanced basal cell carcinoma and recurrent medulloblastoma"

12:00 pm Ervin Epstein, MD

"Rational therapy for BCC"

12:30 - 1:30 pm

Lunch on own (Cascade Dining Room)

FRIDAY AFTERNOON

Seminal Discoveries in Cancer Biology:

SIGNAL TRANSDUCTION & CANCER PATHOGENESIS

Session Chair: Stuart Yuspa

1:30 pm Stuart Yuspa, MD

"IL-1a is a major effector of the ras oncogenic program"

2:00 pm Mitchell Denning, PhD

"Protein kinase C delta tumor suppressor mechanisms"

2:30 pm Sarah-Jane Cozzi, PhD

"Ingenol mebutate field treatment of UVB-damaged skin removes p53 mutant patches and reduces lesion formation"

3:00 pm Frank de Gruijl, PhD

"UV overexposure ablates the epidermal basal layer, p53 mutant foci, and resets UV carcinogenesis, showing squamous cell carcinomas to be of interfollicular origin"

3:15 pm Wendy Weinberg, PhD

"Elucidating the contribution of elevated $\Delta Np63\alpha$ to squamous cancer pathogenesis"

3:30 pm **Ruth White, PhD**

"Micro RNA 9 regulates tumor initiating cell migration and invasion in squamous cell carcinomas"

3:45 pm **Christine Ho**

"Timely intervention for cancer requires knowledge of its earliest genetic aberrations"

POSTER SESSION

4:00 pm Jackie R. Bickenbach, PhD

Presentation of Society for Investigative Dermatology/Eugene M. Farber Travel Awards for Young Investigators

4:15 - 6:30 pm

Poster Reception (Stevenson "A" and Ballroom)

Poster tour for residents and clinicians led by David Norris, MD

Saturday, October 15

SATURDAY MORNING

7:00 - 8:00 am

Breakfast (Stevenson "A")

8:00 am

Announcements

KERATINS AS DETERMINANT OF HEALTH AND DISEASE

Session Chair: Pierre Coulombe

8:05 am **Pierre Coulombe, PhD**

"Keratins: Major determinants of health and disease in skin"

8:45 am Angela Christiano, PhD

"Genetic basis of inherited hair disorders"

9:15 am Maria Morasso, PhD

"Retinoic acid-dependent processes of skin barrier formation and peridermal development"

9:30 am Richard Wang, MD, PhD

"Akt-mediated regulation of autophagy and tumorigenesis through Beclin 1 phosphorylation and formation of a Beclin 1/14-3-3/type I keratin complex"

9:45 am Thomas Magin, PhD

"Keratin 1 controls innate immune responses by restricting caspase-1"

10:15 am

Break

10:30 am Sancy Leachman, MD, PhD

"Novel treatments for keratin mutations in pachyonychia congenita"

11:00 am Kathleen Green, PhD

"Where do keratin filaments attach and why?"

11:30 am **Holger Schlüter, PhD**

"Wif-1 and epidermal stem cell regulation in human skin"

11:45 am **Arup K. Indra, PhD**

"Transcription factor Ctip2/Bcl11b is a dynamic regulator of keratinocyte proliferation and differentiation by integrating EGFR and Notch signaling in the developing epidermis"

12:00 pm **Tom Misteli, PhD**

"Nuclear lamins and aging"

12:30 pm

Lunch on own

SATURDAY AFTERNOON

Afternoon free. Outing carpools gather outside Conference Center entrance.

SATURDAY EVENING

6:00 pm

Banquet Dinner (Stevenson Ballroom)

Stephen I. Katz, MD, PhD

Director, National Institute of Arthritis and Musculoskeletal & Skin Diseases

"From Here to There"

Sunday, October 16

SUNDAY MORNING

7:00 - 8:00 am

Breakfast (Stevenson "A")

8:00 am

Announcements

IDENTITY, CHARACTERIZATION AND APPLICATION OF SKIN STEM CELLS

Session	Chair:	Dennis	Roo	p

8:05 am	Fiona Watt, DPhil		
	"Reciprocal signalling between epidermal stem cells and cells in the niche"		
8:45 am	Yann Barrandon, PhD		
	"Microenvironmental control of stem cell behavior"		
9:15 am	Ying Xiao, PhD		
	"A perivascular reservoir of stem cells in mouse hair follicle"		
9:30 am	Krysztof Kobielak, MD, PhD		
	"Integration of molecular network between BMP and WNT signaling in hair follicle stem cells regulation"		
9:45 am	Dennis Roop, PhD		
	"Testing the therapeutic potential of induced pluripotent stem cells for inherited skin blistering diseases"		
10:15 am			
Break			
10:30 am	Jakub Tolar, MD, PhD		
	"Can bone marrow cells cure cutaneous diseases?"		
11:00 am	Yosef Refaeli, PhD		
	"Generating a universal donor blood stem cell line"		
11:30 am	Petra Boukamp, PhD		
	"TGFβ/Smad signaling does not regulate stem cell quiescence but has a decisive function in tissue homeostasis and terminal epidermal differentiation"		
11:45 am	Ian Mackenzie, PhD		
	"Stem cell heterogeneity in cutaneous squamous cell carcinoma"		
12:00 pm	Michele De Luca, MD		
	"Limbal stem-cell therapy and long-term corneal regeneration"		

12:30 – 1:30 pm

Lunch on own (River Rock Lounge)

SUNDAY AFTERNOON

TRANSPLANTATION, IMMUNOSUPPRESSION AND TOLERANCE

Session Chair: Stephen I. Katz

1:30 pm **Stephen I. Katz, MD, PhD**

"Introduction & historical overview: Skin, the birthplace of transplantation

immunology"

1:45 pm Kathryn Wood, DPhil

"Regulatory T cell-induced prevention of human skin allograft rejection"

2:15 pm Richard Presland, PhD

"Proteomic profiling of saliva from patients with chronic graft-versus-host disease"

2:30 pm Jane Yoo, MD

"Cd103-deficient mice demonstrate increased susceptibility to both spontaneous

and induced skin inflammation"

2:45 pm **Stephen I. Katz, MD, PhD**

"Mechanisms underlying the development of tolerance"

3:15 pm

Break

3:30 pm Sarah Arron, MD, PhD

"Cutaneous squamous cell carcinoma in organ transplant recipients: Infection and

inflammation"

4:00 pm Shay Soker, PhD

"Bioengineering of solid organs for transplantation"

4:30 pm *Keynote to the Future:*

Allan Balmain, PhD

"Skin networks as a window into mechanisms of human disease"

SUNDAY EVENING (Columbia Gorge Interpretive Center)

6:00 pm

Museum visit

6:45 pm

Potlatch Buffet Dinner

Monday, October 17

7:30 - 8:30 am

Breakfast (Stevenson "A")

8:45 am

Airport bus loading (outside conference center entrance)

9:00 am

Airport bus departs