

EPITHELIAL DIFFERENTIATION & KERATINIZATION

July 29 - August 3, 2007
Bryant University
Smithfield, RI

Chair:
G. Paolo Dotto

Vice Chair:
Pierre A. Coulombe

CONTRIBUTORS
National Institutes Of Health
Genentech, Inc.
Cell Press
The Company Of Biologists Limited
Bio Rad Laboratories
Qiagen, Inc.

SUNDAY

2:00 pm - 11:00 pm

6:00 PM

7:30 pm - 7:40 pm

7:40 pm - 7:45 pm

7:45 pm - 9:30 pm

7:45 pm - 8:10 pm

8:10 pm - 8:20 pm

8:20 pm - 8:45 pm

8:45 pm - 8:55 pm

8:55 pm - 9:20 pm

9:20 pm - 9:30 pm

MONDAY

7:30 am - 8:30 am

8:30 AM

9:00 am - 12:30 pm

Arrival and Check-in

Dinner

Welcome / Introductory Comments by GRC Site Staff

Welcome: G. Paolo Dotto (Dept. of Biochemistry, U. of Lausanne, Switzerland, and Mass. Gen. Hosp., Charlestown, MA)

GLOBAL APPROACHES

Discussion Leader: Elaine Fuchs (Howard Hughes Medical Institute, The Rockefeller University, New York)

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"Multifaceted approaches to unraveling skin morphogenesis"

Discussion

Stuart L. Schreiber (Howard Hughes Medical Institute, Harvard University, Cambridge, MA)

"Small Molecules and Disease Biology"

Discussion

Norbert Perrimon (Department of Genetics, Harvard Medical School, Howard Hughes Medical Institute, Boston)

"Functional genomic approaches to tissues formation"

Discussion

Breakfast

Group Photo

DEVELOPMENT AND CANCER

	Discussion Leader: Fiona Watt (Cambridge Research Institute, Cambridge, UK) Co-Leaders: Shadmehr Demehri (Washington University, St Louis) and Rehan Villani (University of Queensland, AU)
9:00 am - 9:20 am	Yosef Yarden (Department of Biological Regulation, The Weizmann Institute of Science, Rehovot, Israel) "EGFR and HER2: network biology in normal and malignant epithelia"
9:20 pm - 9:30 am	Discussion
9:30 am - 9:50 am	Paul A. Khavari (Stanford University School of Medicine, Stanford) "Ras/MAPK Signaling in Epithelial Homeostasis and Neoplasia"
9:50 am - 10:00 am	Discussion
10:00 am - 10:20 am	Anna Mandinova (Cutaneous Biology Research Center, Massachusetts General Hospital, Charlestown) "EGFR - Notch - p53: an integrated switch for differentiation in keratinocytes and squamous cell carcinomas"
10:20 am - 10:30 am	Discussion
10:30 am - 11:00 am	Coffee Break
11:00 am - 11:20 am	Fiona Watt (Cambridge Research Institute, Cambridge, UK) "Contribution of stem cells and differentiated cells to epidermal tumour formation"
11:20 am - 11:30 am	Discussion
11:30 am - 11:50 am	Andrzej A. Dlugosz (Department of Dermatology and Comprehensive Cancer Center, University of Michigan) "Hedgehog signaling in tumor initiation and maintenance"
11:50 am - 12:00 pm	Discussion
12:00 pm - 12:20 pm	Allan Balmain (Cancer Research Institute, San Francisco) "The Genetics of Mouse Skin Tumor susceptibility"
12:20 pm - 12:30 pm	Discussion
12:30 PM	Lunch
1:30 pm - 4:00 pm	Free Time
4:00 pm - 6:00 pm	Poster Session (Group A)
6:00 PM	Dinner
7:30 pm - 9:30 pm	STEM CELLS Discussion Leader: George Cotsarelis (University of Pennsylvania Hair and Scalp Clinic, Philadelphia) Co-Leader: Valerie Horsley (Rockefeller University, NY) George Cotsarelis (University of Pennsylvania Hair and Scalp Clinic, Philadelphia) "Hair Follicle Stem Cells and Wound Healing: What's the Connection"
7:30 pm - 7:50 pm	Discussion
7:50 pm - 8:00 pm	Daniel Aberdam (Faculty of Medicine, Nice, France) "A multipotent ectodermal cell population derived from human embryonic stem cells"
8:00 pm - 8:20 pm	

8:20 pm - 8:30 pm	Discussion
8:30 pm - 8:50 pm	Sendurai Mani (Whitehead Institute for Biomedical Research, Cambridge, Mass) "The epithelial-mesenchymal transition generates cells with stem-like properties"
8:50 pm - 9:00 pm	Discussion
9:00 pm - 9:20 pm	Weimin Zhong (Dept of Molecular, Cellular & Developmental Biology, Yale University, New Haven) "Asymmetric Cell Division and Stem-Cell Homeostasis"
9:20 pm - 9:30 pm	Discussion
TUESDAY	
7:30 am - 8:30 am	Breakfast
9:00 am - 12:30 pm	TRANSCRIPTION
	Discussion Leader: Dennis R. Roop (Department of Dermatology, University of Colorado, Aurora) Co-Leader: Mike Fessing (University of Bradford, UK) Myles Brown (Division of Molecular and Cellular Oncology, Dana-Farber Cancer Institute, Boston) "Deciphering the Enhancer Code"
9:00 am - 9:20 am	Discussion
9:20 am - 9:30 am	Howard Y. Chang (Stanford University School of Medicine, Stanford)
9:30 am - 9:50 am	"Programming positional identities by long noncoding RNAs"
9:50 am - 10:00 am	Discussion
10:00 am - 10:20 am	Stephen Blacklow (Harvard Medical School, Boston) "Structural and Biochemical Studies of Notch Transcription Complexes"
10:20 am - 10:30 am	Discussion
10:30 am - 11:00 am	Coffee Break
11:10 am - 11:20 am	Raphael Kopan (Department of Molecular Biology and Pharmacology, Washington University, St Louis) "Non cell-autonomous responses to loss of Notch signaling in the skin impact follicular size and animal survival"
11:20 am - 11:30 am	Discussion
11:30 am - 11:50 am	Dennis R. Roop (Department of Dermatology, University of Colorado, Aurora) "p63 regulates key target genes required for epidermal morphogenesis"
11:50 am - 12:00 pm	Discussion
12:00 pm - 12:20 pm	Walter Wahli (Center of Integrative Genomics, University of Lausanne, Switzerland) "Role of PPAR- β in tissue repair"
12:00 pm - 12:30 pm	Discussion
12:30 PM	Lunch
1:30 pm - 4:00 pm	Free Time
4:00 pm - 6:00 pm	Poster Session (Group A)
6:00 PM	Dinner
7:30 pm - 9:30 pm	ISSUE RISING SESSION I

	Discussion Leaders: Vladimir Bothckarev (Boston University) and Caterina Missero (Center for Genetic Engineering, Naples, Italy)
7:30 pm - 7:40 pm	Vladimir Bothckarev (Boston University, Boston, MA, & U. of Bradford, Bradford, UK)
	"Global microarray analysis of follicular and glandular types of epidermal differentiation: A role for BMP signaling in suppressing trans-differentiation of the foot pad epidermis towards folliculogenesis"
7:40 pm - 7:45 pm	Discussion
7:45 pm - 7:55 pm	Caterina Missero (Center for Genetic Engineering, Naples, Italy)
	"p63 regulates commitment to the keratinocyte cell lineage via a BMP-dependent pathway"
7:55 pm - 8:00 pm	Discussion
8:00 pm - 8:10 pm	Masatake Osawa (Cutaneous Biology Research Center, Massachusetts General Hospital, Charlestown)
	"Notch signaling mediates both differentiation and undifferentiation program in suprabasal keratinocytes"
8:10 pm - 8:15 pm	Discussion
8:15 pm - 8:25 pm	Beatrice Howard (Institute for Cancer Research, London, UK)
	"Neuregulin3 alters cell fate in the epidermis and mammary gland"
8:25 pm - 8:30 pm	Discussion
8:30 pm - 8:40 pm	Philip Jones (MRC Cancer Cell Unit, Cambridge, UK)
	"A single type of progenitor cells maintains normal epidermis: cell kinetic and spatial implications"
8:40 pm - 8:45 pm	Discussion
8:45 pm - 8:55 pm	Jackie Bickenbach (Cell Biology Dept., Iowa U.)
	"Harnessing and directing the multipotency of epidermal stem cells"
8:55 pm - 9:00 pm	Discussion
9:00 pm - 9:10 pm	Rebecca Morris (Columbia University, NY)
	"Skin tumor formation from hair follicle bulge keratinocytes in Krt1-15CrePR1;R26R mice"
9:10 pm - 9:15 pm	Discussion
9:15 pm - 9:25 pm	Yinling Hu (MD Anderson U., Smithville, TX)
	"IKK α in postnatal skin development and skin tumor development in mice"
9:25 pm - 9:30 pm	Discussion
WEDNESDAY	
7:30 am - 8:30 am	Breakfast
9:00 am - 12:30 pm	DIFFERENTIATION AND SIGNALING
	Discussion Leader: Pierre A. Coulombe (Johns Hopkins University School of Medicine, Baltimore)
	Co-Leader: Xunwei Wu (Harvard Medical School)
	Daniel Constam (ISREC - Swiss Federal Institute of Technology, Lausanne, Switzerland)
9:00 am - 9:20 am	

9:20 am - 9:30 am	"Mechanism of Smad2/3 activation by Cripto governing cell fate in the early mouse embryo"
9:30 am - 9:50 am	Discussion Toni Oro (Stanford University, School of Medicine)
9:50 am - 10:00 am	"Hedgehog controls hair follicle regeneration through a novel dermal signaling pathway"
10:00 am - 10:20 am	Discussion Manolis Pasparakis (Department of Mouse Genetics & Inflammation, University of Cologne, Germany)
10:20 am - 10:30 am	"IKK/NF-kappaB signaling in the regulation of epidermal development and homeostasis"
10:30 am - 11:00 am	Discussion Coffee Break
11:00 am - 11:20 am	Pierre A. Coulombe (Johns Hopkins University School of Medicine, Baltimore)
11:20 am - 11:30 am	"Keratins in skin epithelia: Tinkering with translation"
11:30 am - 11:50 am	Discussion Reinhard Fässler (Department of Molecular Medicine, Martinsried, Germany)
11:50 am - 12:00 pm	"Kindler syndrome proteins in adhesion signaling"
12:00 pm - 12:20 pm	Discussion Howard P. Baden (Cutaneous Biology Research Center, Massachusetts General Hospital, Charlestown)
12:20 pm - 12:30 pm	"30 yrs of Gordon Conference and Skin Research: From the clinics to the bench and back" (Lecture in honor of Irwin Freedberg)
12:30 PM	Discussion Lunch
1:30 pm - 4:00 pm	Free Time
4:00 pm - 6:00 pm	Poster Session (Group B)
6:00 PM	Dinner
7:00 pm - 7:30 pm	Business Meeting (Nominations for the next Vice Chair; Fill out Conference Evaluation Forms; Discuss future Site & Scheduling preferences; Election of the next Vice Chair)
7:30 pm - 9:30 pm	ISSUE RISING SESSION II Discussion Leader: James Rheinwald (Harvard Medical School)
7:30 pm - 7:40 pm	Meei-Hua Lin (Washington University School of Medicine, St. Louis, MO)
7:40 pm - 7:45 pm	"Functions of Fatty Acid Transport Protein 4 in the Developing Skin"
7:45 pm - 7:55 pm	Discussion John M. Cunningham (U. of Chicago, Chicago)
7:55 pm - 8:00 pm	"Grainy head-like 2 is a pivotal regulator of epithelial-mesenchymal transition in vertebrates"
8:00 pm - 8:10 pm	Discussion Stephen M. Jane (Bone Marrow Research Laboratories, Melbourne, Australia)

8:10 pm - 8:15 pm	"Defective wound healing in mice lacking planar cell polarity genes"
8:15 pm - 8:25 pm	Discussion James Rheinwald (Harvard Medical School, Boston)
8:25 pm - 8:30 pm	"A wound and tumor suppressor response of hypermotility and growth arrest, shared by keratinocytes and many other epithelial cell types"
8:30 pm - 8:40 pm	Discussion Carolyn R. Byrne (Barts and London, Inst. Cell and Mol. Science, London)
8:40 pm - 8:45 pm	"AKT signaling in epidermal differentiation/barrier formation, and dysregulation during carcinogenesis"
8:45 pm - 8:55 pm	Discussion Rebecca J. Richardson (Faculty of Life Sciences, Manchester, UK)
8:55 pm - 9:00 pm	"The periderm is required to prevent abnormal epithelial attachment"
9:00 pm - 9:10 pm	Discussion Juan Guinea-Viniegra (IMP, Vienna, Austria)
9:10 pm - 9:15 pm	"Epidermis-specific deletion of Jun proteins causes a TNF dependent disease"
9:15 pm - 9:25 pm	Discussion Julie A. Segre (NHGRI, NIH, Bethesda, MD)
9:25 pm - 9:30 pm	"The Skin Microbiome"
THURSDAY	Discussion
7:30 am - 8:30 am	Breakfast
9:00 am - 12:30 pm	CELL ADHESION AND MORPHOGENESIS Discussion Leader: Angela Christiano (Department of Dermatology, Columbia University, New York) Co-Leaders: Emma Delva (Emory University, Atlanta, GA) and John Lamar (Albany Medical College, Albany, NY)
9:00 am - 9:20 am	Cheng Ming Chuong (Department of Pathology, University of Southern California, Los Angeles)
9:20 am - 9:30 am	"Different strategies of integument follicle morphogenesis and regeneration"
9:30 am - 9:50 am	Discussion Sarah E. Millar (Department of Dermatology, University of Pennsylvania, Philadelphia)
9:50 am - 10:00 am	"Wnt signaling in ectodermal appendage development"
10:00 am - 10:20 am	Discussion Angela Christiano (Department of Dermatology, Columbia University, New York)
10:20 am - 10:30 am	"The unexpected consequences of P-cadherin mutations"
10:30 am - 11:00 am	Discussion Coffee Break
11:00 am - 11:20 am	Arnoud Sonnenberg (Netherlands Cancer Institute, Amsterdam)
	"The role of the integrin alpha6beta4 and plectin in the formation and breakdown of hemidesmosomes"

11:20 am - 11.30 am	Discussion
11:30 am - 11:50 am	Kathleen J. Green (Departments of Pathology & Dermatology, Northwestern University Medical School, Chicago) "Desmosome Armadillo Proteins -- In and out of Junctions"
11:50 am - 12:00 pm	Discussion
12:00 pm - 12:10 pm	Andrew P. Kowalczyk (Emory University, Atlanta, GA) "Mechanisms of Desmosome Disassembly in the Skin Disease Pemphigus Vulgaris"
12:10 pm - 12:15 pm	Discussion
12:15 pm - 12:25 pm	William G. Carter (Fred Hutchinson Cancer Research Center, Seattle, WA) "Gp140/CDCP1 responds to wounding by regulating Src Family Kinases, Rac, Tiam 1 and cell adhesion in epidermis"
12:25 pm - 12:30 pm	Discussion
12:30 PM	Lunch
1:30 pm - 4:00 pm	Free Time
4:00 pm - 6:00 pm	Poster Session (Group B)
6:00 PM	Dinner
7:30 pm - 9:30 pm	SKIN AS AN INTEGRATED ORGAN Discussion Leader: Meenhard Herlyn (Molecular and Cellular Oncogenesis Program, The Wistar Institute, Philadelphia) Co-Leader: Hisham Bazzi (Columbia University, NYC) Meenhard Herlyn (Molecular and Cellular Oncogenesis Program, The Wistar Institute, Philadelphia) "Keratinocytes control melanocytes"
7:30 pm - 7:50 pm	Discussion
7:50 pm - 8:00 pm	Lisa M. Coussens (Cancer Research Institute, University of California, San Francisco) "Regulating Vascular Homeostasis with TGFbeta Antagonists"
8:00 pm - 8:20 pm	Discussion
8:20 pm - 8:30 pm	Sabine Werner (Institute of Cell Biology, ETH Zürich, Switzerland) "Cytoprotective signaling pathways in tissue repair and skin cancer"
8:30 pm - 8:50 pm	Discussion
8:50 pm - 9:00 pm	Bruce Morgan (Cutaneous Biology Research Center, Massachusetts General Hospital, Charlestown) "Building better blondes - a novel mechanism by which the Dermal Papilla regulates pigment production"
9:00 pm - 9:10 pm	Discussion
9:10 pm - 9:15 pm	Jonathan Garlick
9:15 pm - 9:30 pm	"Perspective and Prospects, 'Rapping Up' the Meeting"
FRIDAY	
7:30 am - 8:30 am	Breakfast
9:00 AM	Depart

