



Barrier Function of Mammalian Skin (GRS)

Gordon-Kenan Research Seminar

Biophysical, Biological and Clinical Insight into the Skin Barrier

August 12 - 13, 2017

Chairs

Xue Liu and James F. Clarke

Waterville Valley

56 Packard's Road

Waterville Valley, NH, US

Conference Description

The first Gordon Research Seminar on Barrier Function of Mammalian Skin is a new and special forum for graduate students, post-docs, and other scientists with similar interests to present and exchange cutting edge ideas.

The topics of this seminar will span all facets of fundamental and applied science as related to barrier function of skin. This includes barrier structure, function and disease, skin biomechanics, new approaches to overcome the skin barrier and technologies in investigating drug absorption.

This seminar provides opportunities for young investigators to pitch their work, communicate with other young pioneers and gain confidence for the following GRC conference. Furthermore, the seminar strives to provide attendees career development opportunities by including a panel session that mentors will provide key insights and advice.

Related Meeting



This GRS will be held in conjunction with the "Barrier Function of Mammalian Skin" Gordon Research Seminar (GRS). Those interested in attending both meetings must submit an application for the GRC in addition to an application for the GRS. Refer to the [associated GRC program page](#) for more information.

Conference Program

Saturday

2:00 pm - 5:00 pm	Arrival and Check-in
3:30 pm - 3:45 pm	Introductory Comments by GRC Site Staff / Welcome from the GRS Chair
3:45 pm - 4:30 pm	Barrier Function and Disease Discussion Leader: Carolina Motter Catarino (Rensselaer Polytechnic Institute, USA)
3:45 pm - 4:05 pm	Kristin Seltmann (ETH Zurich, Switzerland) "The Effect of Humidity on Skin Inflammation – Molecular Mechanisms and Relevance for the Pathogenesis of Atopic Dermatitis"
4:05 pm - 4:10 pm	Discussion
4:10 pm - 4:25 pm	Deepanjan Ghosh (Arizona State University, USA) "Laser-Activated Tissue-Integrating Sutures for Rapid Sealing of Skin Wounds"
4:25 pm - 4:30 pm	Discussion
4:30 pm - 6:00 pm	Poster Session
6:00 pm - 7:00 pm	Dinner
7:30 pm - 9:30 pm	Keynote Session: Emerging Concepts in the Pathogenesis of Atopic Dermatitis / Skin Structure and Mechanics Discussion Leaders: Martin Bernard Wolf (University of Vienna, Austria) and Stephanie Santacruz (University of British Columbia, Canada)
7:30 pm - 8:20 pm	Peter Elias (Veterans Administration Medical Center / University of California, San Francisco, USA) "Emerging Concepts in the Pathogenesis of Atopic Dermatitis"
8:20 pm - 8:30 pm	Discussion

8:30 pm - 8:50 pm	Tania Baltazar (Rensselaer Polytechnic Institute, USA) "A 3D Bioprinting Platform for the Fabrication of Human Vascularized Skin Grafts for Regenerative Medicine"
8:50 pm - 9:00 pm	Discussion
9:00 pm - 9:20 pm	Niranjana Dhandapani (Binghamton University, USA) "Moist Environments and Aging Promote Biomechanical Changes in <i>Ex-Vivo</i> Human Skin Tissue"
9:20 pm - 9:30 pm	Discussion
Sunday	
7:30 am - 8:30 am	Breakfast
9:00 am - 11:00 am	Investigation and Enhancement of Dermal Drug Delivery - Technological Approaches Discussion Leaders: Megan Kelchen (University of Iowa, USA) and James Clarke (University of Bath, United Kingdom)
9:00 am - 9:20 am	Duncan Hieu Dam (Northwestern University, USA) "Class A Scavenger Receptors Promote Uptake of Spherical Nucleic Acids in Human Skin Through a Flotillin-1 Dependent Process"
9:20 am - 9:30 am	Discussion
9:30 am - 9:50 am	Maria Alice Maciel Tabosa (University of Bath, United Kingdom) "Probing Drug Pharmacokinetics in the Skin <i>In Vivo</i> and <i>In Vitro</i> "
9:50 am - 10:00 am	Discussion
10:00 am - 10:20 am	Lisa Binder (University of Vienna, Austria) "Development of Highly Concentrated Water-in-Oil Emulsions Stabilized with a Silicone Emulsifier and Surfactant Penetration Monitoring by ATR-FTIR"
10:20 am - 10:30 am	Discussion
10:30 am - 10:50 am	Soo Hyeon Shin (University of Maryland, Baltimore, USA) "Evaluation of Level A <i>In Vitro In Vivo</i> Correlations (IVIVC) for Nicotine and Fentanyl Transdermal Delivery Systems with Transient Heat Exposure by Using Multiple Approaches"

10:50 am - 11:00 am	Discussion
11:00 am - 12:30 pm	Poster Session <i>Coffee will be served in the poster area from 11:00 am - 11:30 am</i>
12:30 pm - 1:30 pm	Lunch
1:30 pm - 2:30 pm	Mentorship Component: Scientific Career Paths Discussion Leader: Timothy Houser (cyberDERM, Inc., USA)
1:30 pm - 2:30 pm	Panel Discussion <i>Scientific Career Paths</i> <ul style="list-style-type: none"> • Gerald Kasting (University of Cincinnati, USA) • David Moore (GlaxoSmithKline, USA)
2:30 pm - 3:00 pm	Evaluation Period <i>Fill in GRS Evaluation Forms</i>
3:00 pm	Seminar Concludes

Contributors

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