

**2009 Salivary Glands and Exocrine Secretion Gordon Research Conference
Final Program**

SUNDAY

4:00 pm - 8:00 pm	Arrival and Check-in (Office Closed 6:00 pm - 7:00 pm)
6:00 pm	Dinner
7:30 pm - 7:40 pm	Welcome / Introductory Comments by GRC Site Staff
7:40 pm - 9:30 pm	Molecular Mechanisms of Fluid and Protein Secretion
	Discussion Leader: Masataka Murakami (NIPS, Okasaki, Japan)
7:40 pm - 8:20 pm	David Cook (University of Sydney) "Electrolyte transport in exocrine glands after 25 years of patch-clamping and the current- loop model"
8:20 pm - 8:35 pm	Discussion
8:35 pm - 9:15 pm	Tom Martin (University of Wisconsin) "The final steps in granule exocytosis"
9:15 pm - 9:30 pm	Discussion

MONDAY

7:30 am - 8:30 am	Breakfast
9:00 am - 12:30 pm	Fluid and Electrolyte Transport
9:00 am - 9:05 am	Discussion Leader: Jim Melvin (University of Rochester) "Introduction"
9:05 am - 9:40 am	Ted Begenisich (University of Rochester) "The Molecular Mechanism of the Interaction Between Ca-activated K Channels in Salivary Glands"
9:40 am - 9:55 am	Discussion
9:55 am - 10:35 am	Coffee Break / Group Photo
10:35 am - 11:10 am	Criss Hartzell (Emory University) "Physiology and regulation of bestrophin channels"
11:10 am - 11:25 am	Discussion
11:25 am - 12:00 pm	Min Goo Lee (Yonsei University, Seoul Korea) "Regulation of epithelial bicarbonate transport by intracellular chloride-sensitive mechanisms"
12:00 pm - 12:15 pm	Discussion
12:15 pm - 12:25 pm	Irina Grichtchenko (University of Colorado, Denver) "Important roles of electrogenic (NBCe1) and electroneutral (NBCn1) Na ⁺ /HCO ₃ ⁻ cotransporters in acinar cell secretion"
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
6:00 pm	Dinner
7:30 pm - 9:30 pm	Signal Transduction in Exocrine Gland Function
7:30 pm - 7:35 pm	Discussion Leader: Shumel Muallem (UT Southwestern) "Introduction"

7:35 pm - 8:05 pm	Michael Nathanson (Yale University) "Talking to yourself - regulation of epithelial secretion by autocrine ATP signals"
8:05 pm - 8:15 pm	Discussion
8:15 pm - 8:45 pm	Jason Bruce (Manchester University, UK) "Oxidant-mediated regulation of the PMCA in pancreatic acinar cells"
8:45 pm - 8:55 pm	Discussion
8:55 pm - 9:20 pm	Roberto Weigert (NIDCR) "Novel approaches to study the dynamics of endocytosis and exocytosis in the salivary glands of live rodents by using intravital two-photon microscopy"
9:20 pm - 9:30 pm	Discussion

TUESDAY

7:30 am - 8:30 am	Breakfast
9:00 am - 12:30 pm	Exocrine Secretions
9:00 am - 9:05 am	Discussion Leader: Maria A. Kukuruzinska (Boston University) "Introduction"
9:05 am - 9:35 am	Daniel Malamud (New York University) "Antiviral activities in human saliva"
9:35 am - 9:45 am	Discussion
9:45 am - 10:05 am	Sungano Mharakura (The Malaria Institute at Macha, Choma, Zambia) "Using human saliva to detect <i>Plasmodium falciparum</i> malaria infection: how real is it?"
10:05 am - 10:15 am	Discussion
10:15 am - 10:40 am	Coffee Break
10:40 am - 11:15 am	Gordon Laurie (University of Virginia) "Dynamic Off/On Switch for Selective Exocrine Regulation in the Lacrimal Gland"
11:15 am - 11:25 am	Discussion
11:25 am - 12:00 pm	Eva Helmerhorst (Boston University) "Proteolysis in Oral Fluid: A new Paradigm of Salivary Protein Structure and Function"
12:00 pm - 12:10 pm	Discussion
12:10 pm - 12:20 pm	Maria Edman (University of Southern California) "Changes in the tear fluid protein profiles in mice lacking either Rab3D or polymeric Immunoglobulin Receptor"
12:20 pm - 12:25 pm	Discussion
12:30 pm	Lunch
1:30 pm - 4:00 pm	Free Time
4:00 pm - 6:00 pm	Poster Session
6:00 pm	Dinner
7:30 pm - 9:30 pm	Exocytosis
7:30 pm - 7:35 pm	Discussion Leader: John Williams (University of Michigan) "Introduction"
7:35 pm - 8:05 pm	Sarah Hamm-Alvarez (University of Southern California) "Rab27 and Myo5 isoforms in lacrimal gland secretory vesicle exocytosis"
8:05 pm - 8:15 pm	Discussion
8:15 pm - 8:45 pm	Guy Groblewski (University of Wisconsin)

"D52 modulates a novel Ca²⁺-sensitive post-Golgi apical membrane trafficking pathway involved in secretion"

8:45 pm - 8:55 pm Discussion

8:55 pm - 9:20 pm **Konosuke Kumakura** (Sophia University, Japan)
"Involvement of myosin in the vesicle recruitment for exocytosis: Studies with amperometry and HRSEM"

9:20 pm - 9:30 pm Discussion

WEDNESDAY

7:30 am - 8:30 am Breakfast

9:00 am - 12:30 pm **Inflammation and Disease in Exocrine Glands**

9:00 am - 9:05 am Discussion Leader: **Darlene Dartt** (Harvard University)
"Introduction"

9:05 am - 9:35 am **Luke Dawson** (University of Liverpool)
"Salivary Acinar Cell Pathophysiology in Sjogrens Syndrome"

9:35 am - 9:45 am Discussion

9:45 am - 10:05 am **Seunghee Cha** (University of Florida)
"Salivary gland pathogenesis of Sjogren's syndrome prior to disease onset"

10:05 am - 10:15 am Discussion

10:15 am - 10:40 am Coffee Break

10:40 am - 11:10 am **Ashok Saluja** (University of Minnesota)
"New Paradigms in the Pathogenesis of Acute Pancreatitis"

11:10 am - 11:15 am Discussion

11:15 am - 11:45 am **Alexei Tepikin** (University of Liverpool)
"Visualizing pancreatic damage - cell signaling, vacuoles and mitochondria"

11:45 am - 11:55 am Discussion

11:55 am - 12:15 pm **Ana Cotrim** (NIDCR)
"Approaches to prevent and recover salivary glands from irradiation damage"

12:15 pm - 12:25 pm Discussion

12:30 pm Lunch

1:30 pm - 4:00 pm Free Time

4:00 pm - 6:00 pm Poster Session

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 **Exocrine Gland Damage and Repair**

7:30 pm - 7:35 pm Discussion Leader: **Kirsten Limesand** (University of Arizona)
"Introduction"

7:35 pm - 8:05 pm **Austin Mircheff** (University of Southern California)
"Contradictory Signals in Counterpoise Maintain the Lacrimal Gland's Immunohomeostasis . . . Usually"

8:05 pm - 8:15 pm Discussion

8:15 pm - 8:45 pm **Robert Coppes** (University of Groningen)

	"Rescue of Salivary Gland Function after Stem Cell Transplantation in Irradiated Glands"
8:45 pm - 8:55 pm	Discussion
8:55 pm - 9:20 pm	David Ann (City of Hope Medical Center) "Autophagy and Salivary Adaptive Responses"
9:20 pm - 9:30 pm	Discussion

THURSDAY

7:30 am - 8:30 am	Breakfast
9:00 am - 12:30 pm	Exocrine Gland Development
9:00 am - 9:05 am	Discussion Leader: Catherine Ovitt (University of Rochester) "Introduction"
9:05 am - 9:40 am	Deborah Andrew (Johns Hopkins University) "Regulation of secretory capacity in the <i>Drosophila</i> salivary gland"
9:40 am - 9:50 am	Discussion
9:50 am - 10:10 am	Melinda Larsen (University at Albany, SUNY) "ROCK Signaling in Salivary Gland Development and Tissue Engineering"
10:10 am - 10:20 am	Discussion
10:20 am - 10:45 am	Coffee Break
10:45 am - 11:20 am	Lee Niswander (University of Colorado, Denver) "Using imaging and gene knockdown to study the mechanisms of lung branching morphogenesis"
11:20 am - 11:30 am	Discussion
11:30 am - 12:05 pm	Andrew Ewald (University of California, San Francisco) "Cellular mechanisms of mammary branching morphogenesis revealed by correlative high resolution transmission electron microscopy and 3D time-lapse confocal microscopy"
12:05 pm - 12:15 pm	Discussion
12:15 pm - 12:25 pm	Janice Walker (Boston University) "Mechanisms of Duct Formation during SMG Branching Morphogenesis"
12:25 pm - 12:30 pm	Discussion
12:30 pm	Lunch
1:30 pm - 6:00 pm	Free Time
6:00 pm	Dinner
7:30 pm - 9:30 pm	Stem Cells and Exocrine Gland Regeneration
7:30 pm - 7:35 pm	Discussion Leader: Matthew Hoffman (NIDCR) "Introduction"
7:35 pm - 8:15 pm	Cheng-Ming Chuong (University of Southern California) "Macro-environmental regulation of ectodermal organ stem cells"
8:15 pm - 8:30 pm	Discussion
8:30 pm - 9:15 pm	Mina Bissell (Lawrence Berkeley National Laboratory) "Tissue architecture is the message: The role of extracellular matrix and organ architecture"
9:15 pm - 9:30 pm	Discussion

FRIDAY

7:30 am - 8:30 am Breakfast and Depart