

AUGUST 27 – 29, 2025

**24TH
COLORADO
IMMUNOLOGY &
MICROBIOLOGY
CONFERENCE**

The Steamboat Grand

**STEAMBOAT SPRINGS,
COLORADO**

WELCOME

The Department of Immunology and Microbiology at the University of Colorado School of Medicine welcomes you to the 24th Annual Colorado Immunology and Microbiology Conference (CIMC)!

This conference is held at one of several locations in the Rocky Mountains and brings together more than 250 scientists from multiple regional institutions for the purpose of education and exchange of ideas in the fields of immunology, microbiology, and cancer research.

The immunology and microbiology community in Colorado and the greater Rocky Mountain region enjoys a very rich tradition of scientific discovery dating from more than half a century ago. However, Immunologists and Microbiologists in Colorado are distributed amongst several affiliated institutions along the front-range of the Rockies, and other institutions are even further afield. The lack of proximity presents an obstacle to achieving optimal collaborative research productivity and effective teaching amongst immunologists in the region.

We instituted the annual Colorado Immunology and Microbiology Conference in 2000 with the goal of overcoming this obstacle and improving teaching and research interactions amongst regional immunologists and microbiologists. This meeting provides networking opportunities for trainees to interact with senior faculty and scientists.

The CIMC has fostered the development of thriving inter-institutional programs in cancer immunology, diabetes, autoimmunity, respiratory immunology, microbiology, and inflammation for 24 years.



Department of Immunology
and Microbiology

SCHOOL OF MEDICINE

UNIVERSITY OF COLORADO **ANSCHUTZ MEDICAL CAMPUS**

SCHEDULE AT A GLANCE

WEDNESDAY, AUGUST 27, 2025

3:00 PM - 4:00 PM

THE PIXIE CAMPBELL KEYNOTE PRESENTATION

Dr. Jessica Hamerman

5:00 - 6:30 PM

Poster and Vendor Session - Part 1

THURSDAY, AUGUST 28, 2025

8:30 AM - 10:30 AM

Session 1 | Bugs on the Menu: Feeding Pathogens, Fueling Immunity, and Fending Off Phages

11:00 AM - 12:00 PM

Session 2 | Cancer: From Symbiotic to Synthetic Biology

12:00 PM - 1:00 PM

THE SCHAACK AND STONEHOUSE KEYNOTE PRESENTATION

Dr. Jennifer Bomberger

5:00 - 7:00 PM

Poster and Vendor Session - Part 2

FRIDAY, AUGUST 29, 2025

8:30 AM - 10:30 AM

Session 3 | To Inflammasomes two through Inflammations and Beyond: Molecular, Cellular, and Inter-Cellular Mechanisms of Inflammation

11:00 AM - 12:00 PM

Session 4 | I&M Trainee Showcase Session

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Funding for this conference was made possible [in part] by 1R13AI179153-03 from the National Institute of Allergy and Infectious Diseases. The views expressed in written conference materials or publications and by speakers and moderators do not necessarily reflect the official policies of the Department of Health and Human Services; nor does mention of trade names, commercial practices, or organizations imply endorsement by the U.S. Government.

THE PIXIE CAMPBELL KEYNOTE PRESENTATION

Each year, the CIMC strives to honor Dr. Priscilla “Pixie” Campbell by inviting a leading female immunologist to speak. Dr. Campbell was an immunologist who served on the faculty and as Immunology Program Director at National Jewish Health. Before her passing in 1998, she made many contributions to research in cellular immunology. You can read more about her life [here](https://tinyurl.com/PixieCampbell). tinyurl.com/PixieCampbell



PRISCILLA “PIXIE” CAMPBELL

PHOTOGRAPH BY BARRY SILVERSTEIN
From Journal of Leukocyte Biology
Volume 64, July 1998

THE 24TH COLORADO IMMUNOLOGY AND MICROBIOLOGY CONFERENCE **PIXIE CAMPBELL KEYNOTE SPEAKER**



DR. JESSICA HAMERMAN

Director of Academic Affairs/Member
Center for Fundamental Immunology
Benaroya Research Institute/Affiliate Professor
Department of Immunology
University of Washington

SESSION 1 SPEAKERS



Siddharth Krishnamurthy, PhD

Assistant Professor
Department of Immunology and Microbiology
School of Medicine | University of Colorado



Breck Duerkop, PhD

Associate Professor
Department of Immunology and Microbiology
School of Medicine | University of Colorado



Kelly Doran, PhD

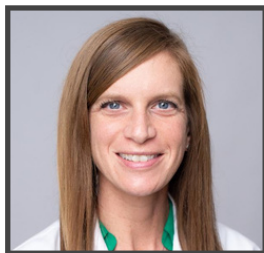
Professor
Department of Immunology and Microbiology
School of Medicine | University of Colorado



Alexandra McCubbrey, PhD

Assistant Professor
Division of Pulmonary, Critical Care & Sleep Medicine
Department of Medicine | National Jewish Health

SESSION 2 SPEAKERS



Carissa Thomas, MD, PhD, FACS

Associate Professor
Otolaryngology - Head and Neck Surgery
School of Medicine | University of Colorado



Terry Fry, MD

Professor
Pediatrics-Heme/Onc and Bone Marrow
Transplantation
School of Medicine | University of Colorado

THE SCHAACK AND STONEHOUSE KEYNOTE PRESENTATION

The microbiologist keynote speaker presents the Schaack & Stonehouse presentation, named for Dr. Jerry Schaack, a microbiologist who served on the faculty and as the Microbiology Program Director, and Dr. Martin Stonehouse a Microbiology graduate student and Postdoc, both at the University of Colorado Anschutz Medical Campus. Martin loved the Colorado outdoors and was often

found atop one of the states 14ers or snowboarding down the glaciers. Dr. Schaack's career ended with the diagnosis of early onset Alzheimer's disease and Dr. Stonehouse worked as the Campus Assistant Biosafety Officer until he passed from a fatal brain tumor.

We strive to honor their memory and contributions to our science community at each conference with this keynote presentation.



Dr. Jerry Schaack



Dr. Martin Stonehouse

THE 24TH COLORADO IMMUNOLOGY AND MICROBIOLOGY CONFERENCE **THE SCHAACK AND STONEHOUSE KEYNOTE SPEAKER**



DR. JENNIFER BOMBERGER

Phillip J. Hanlon 2nd Century Professor in
Personalized Treatments of Cystic Fibrosis
Professor of Microbiology and Immunology
Director of the Dartmouth Research Development
Program in Cystic Fibrosis
Co-director of the Dartmouth Cystic Fibrosis Center
Geisel School of Medicine at Dartmouth

SESSION 3 SPEAKERS



Derek Abbott, MD, PhD
Cecil and Ida Green Chair
Department of Immunology and Genomic
Medicine | National Jewish Health



Arianne Theiss, PhD, AGAF
Associate Professor
GI and Liver Innate Immune Program
Division of Gastroenterology & Hepatology
School of Medicine | University of Colorado



(Anna) Helena Jonsson, MD, PhD
Assistant Professor
Rheumatology | University of Colorado



Ruth J. Napier, PhD
Associate Professor
Rheumatology | University of Colorado
Rocky Mountain Regional VA Medical Center

SESSION 4 SPEAKERS



JAMES DILISIO
IMMUNOLOGY STUDENT TRAINEE
(HASKINS LAB)



AMBER NGUYEN
MICROBIOLOGY STUDENT TRAINEE
(HORSWILL LAB)



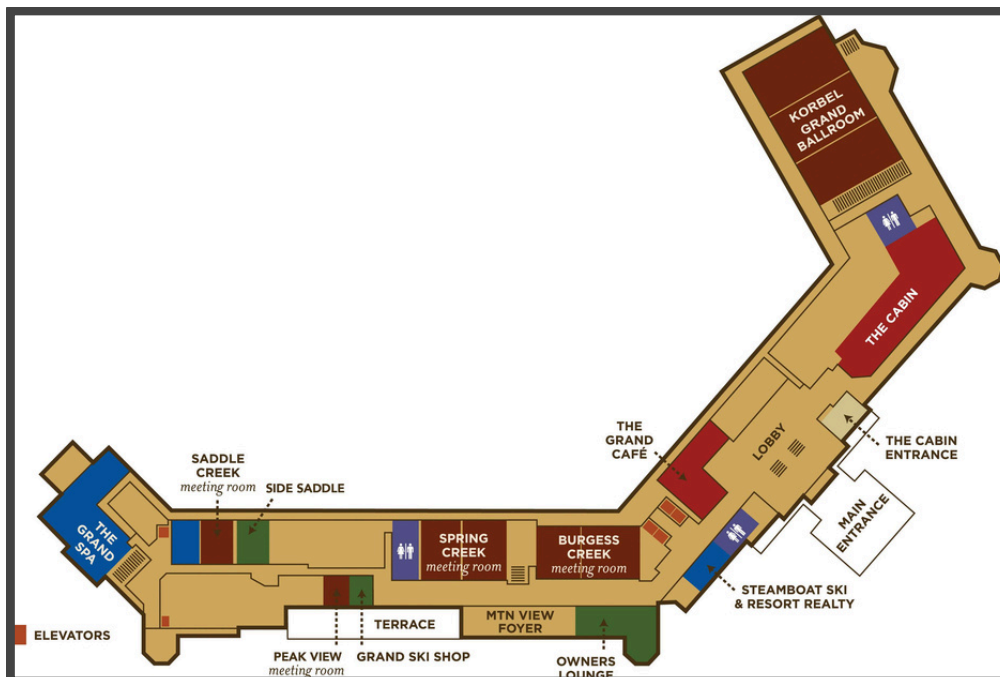
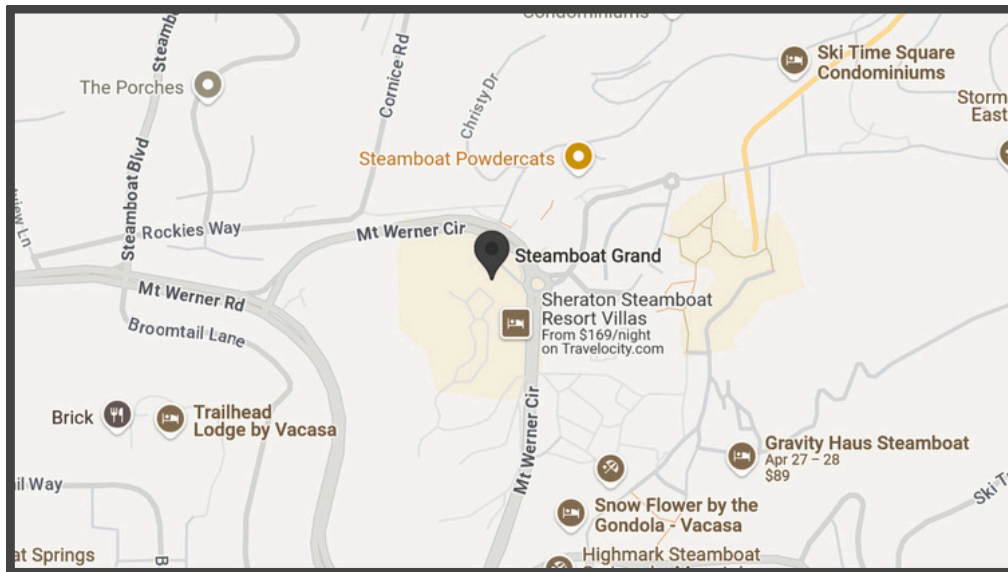
DR. FELIPE VALENCA-PEREIRA
IMMUNOLOGY POSTDOC TRAINEE
(RINCON LAB)



DR. SIVA UPPALAPATI
MICROBIOLOGY POSTDOC TRAINEE
(VAZQUES-TORRES LAB)

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STEAMBOAT SPRINGS, CO 80487**



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Immunotherapy Initiative (HI³)

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AGENDA

DAY 1.....WEDNESDAY, AUGUST 27, 2025

Time/Location	ITEM
12:00 PM Korbel III	Poster and vendor session setup* *posters must be set up by 4:45 p.m. on Wednesday, August 27, 2025
12:00 – 2:45 PM	Arrive and Register
3:00 – 4:00 PM Korbel I/II	<u>THE PIXIE CAMPBELL KEYNOTE PRESENTATION</u> (Introduced by Curtis Henry) <i>"Understanding Monocyte Differentiation During Health and Inflammatory Disease"</i> Dr. Jessica Hamerman Director of Academic Affairs/Member, Center for Fundamental Immunology, Benaroya Research Institute/Affiliate Professor, Department of Immunology, University of Washington
5:00 – 6:30 PM Korbel III	Poster and Vendor Session – Part 1
7:00 – 11:00 PM Tent	Dinner and Themed Reception 24th Annual CIMC Theme: Movie Night

MOVIE NIGHT AT CIMC

OPTIONAL: Dress in your best movie themed costume - coordinate with a buddy, your lab, or team. Sign up at the conference as a lab or group for the Costume Contest! Your group may pick a song for your entrance. **No skits or dances please due to time constraints.**

AGENDA

DAY 2.....THURSDAY, AUGUST 28, 2025

Time/Location	ITEM
7:30 – 8:30 AM Tent	Breakfast
8:30 – 10:30 AM Korbel I/II	<p><u>Session One: Bugs on the Menu: Feeding Pathogens, Fueling Immunity, and Fending Off Phages</u> Chair: Kyla Ost, Ph.D.</p> <p>Siddharth Krishnamurthy, Ph.D. <i>Nutritional and Genetic Synergy Determine Enteric Viral Tropism</i></p> <p>Kelly Doran, Ph.D. <i>Group B Streptococcus Gone Wild: Metabolic Misadventures during Diabetes</i></p> <p>Breck Duerkop, Ph.D. <i>A Plasmid Encoded Antiphage Defense System Paves the Way to the Discovery of Novel Phage-Host Interactions</i></p> <p>Alexandra McCubbrey, Ph.D. <i>Understanding the Fed State Following Macrophage Efferocytosis</i></p>
10:30 – 11:00 AM	BREAK
11:00 – 12:00 AM Korbel I/II	<p><u>Session Two: Cancer. from symbiotic to synthetic biology</u> Chair: M. Eric Kohler, MD, PhD</p> <p>Carissa Thomas, M.D., Ph.D., F.A.C.S. <i>What can the Microbiome Tell Us About Head and Neck Cancer?</i></p> <p>Terry Fry, M.D. <i>Lessons Learned From Synthetic Immunology</i></p>

AGENDA

DAY 2.....THURSDAY, AUGUST 28, 2025

Time/Location	ITEM
12:00 – 1:00 PM Korbel I/II	<u>THE SCHAACK AND STONEHOUSE KEYNOTE PRESENTATION</u> (Introduced by Sarah E. Clark, Ph.D.) <i>"Complex Communities: Decoding Microbial Interactions in the Respiratory Tract"</i> Dr. Jennifer Bomberger Philip J. Hanlon Second Century Professor in Personalized Treatments for Cystic Fibrosis, Professor of Microbiology and Immunology, Director of the Dartmouth CF Research Development Program in CF at Dartmouth Geisel School of Medicine
5:00 – 7:00 PM Korbel III	Poster and Vendor Session – Part 2
7:00 PM Tent	Dinner
7:30 PM	Poster Session Winners Announced
After Dinner Tent	*NEW* Professional Development Session – Table Discussions <u>Table discussions topics will include:</u> Dr. Beth Tamburini: <i>Maximizing time both Inside and Outside of the Lab</i> Dr. Aimee Pugh Bernard: <i>Best Practices with Scientific Communication and Branding</i> Dr. Mercedes Rincon: <i>Preparation for a Professional Life After Training</i> Dr. Andrew Getahun: <i>Navigating Being an International Student in Science</i> Dr. Michael Schurr: <i>Tips for Navigating Friction in the Workplace</i> Dr. Kelly Doran: <i>Maintaining Mental Health Hygiene as a Trainee</i>

AGENDA

DAY 3.....FRIDAY, AUGUST 29, 2025

Time/Location	ITEM
7:30 – 8:30 AM Tent	Breakfast
8:30 – 10:30 AM Korbel I/II	<p><u>Session Three: To Inflammasomes and Beyond: Molecular, Cellular, and Inter-Cellular Mechanisms of Inflammation</u> Chair: Julia Dunn, Ph.D.</p> <p>Derek Abbott, M.D., Ph.D. <i>Inflammasome Agonists – Beyond Pyroptosis</i></p> <p>Anna Helena Jonsson, M.D., Ph.D. <i>Determining the Pathogenic Effector Functions of Granzyme K⁺ CD8 T Cells Enriched in Autoimmune Diseases</i></p> <p>Arianne Theiss Ph.D., A.G.A.F. <i>Mitochondria as Influencers of Intestinal Epithelial Innate Immunity</i></p> <p>Ruth Napier, Ph.D. <i>CARD9 at the Crossroads: Fungal Defense, Autoimmune Risk, and Clinical Translation</i></p>
10:30 – 11:00 AM	BREAK I
11:00 – 12:00 PM Korbel I/II	<p><u>Session Four: I&M Trainee Showcase Session</u> Chair: Curtis Henry, Ph.D.</p> <p>James DiLisio – Immunology Student Trainee (Haskins Lab) <i>Antigen-specific immunotherapy with a CD4 neoepitope restrains CD8 T cell differentiation in islet grafts</i></p> <p>Amber Nguyen – Microbiology Student Trainee (Horswill Lab) <i>Characterization of Antimicrobial Daptides from Staphylococcus hominis and Resistance</i></p> <p>Dr. Felipe Valenca-Pereira – Immunology Postdoc Trainee (Rincon Lab) <i>The Impact of GSK3β Inactivation on Thymocyte</i></p> <p>Dr. Siva Uppalapati – Microbiology Postdoc Trainee (Vazques-Torres Lab) <i>Redox-sensing prophage terminase orchestrates Salmonella persistence by preserving genome integrity</i></p>