



*CU Anschutz MSTP  
3rd Annual Retreat Program*

February 24, 2021 - 9AM-3PM



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# Retreat Schedule

Time	Session	Zoom Link
8:50-9AM	Opening remarks	<a href="https://ucdenver.zoom.us/j/92960687414">https://ucdenver.zoom.us/j/92960687414</a>
9AM-9:30AM	State of the program address Cara Wilson, MD	<a href="https://ucdenver.zoom.us/j/92960687414">https://ucdenver.zoom.us/j/92960687414</a>
9:30-10:30AM	Student oral abstract presentations 9:30-9:45 Connor Hughes 9:45-10:00 Sarah Zych 10:00-10:15 Jacqueline Turner 10:15-10:30 Michael Nash	<a href="https://ucdenver.zoom.us/j/92960687414">https://ucdenver.zoom.us/j/92960687414</a>
10:30-10:45AM	1 minute student lightning talks Laurel Darragh Juan Santiago-Moreno Brigit High Austin Jolly Taylor Soderborg Meghan Kellett Kelsey Kines	<a href="https://ucdenver.zoom.us/j/92960687414">https://ucdenver.zoom.us/j/92960687414</a>
10:45-11AM	Break	N/A
11:00-11:40AM	Student poster session	<i>Various, please see poster abstracts for links</i>
11:40-12:10PM	Lunch	N/A
12:10 - 1:10PM	Keynote address Cheryl Keech, MD, PhD	<a href="https://ucdenver.zoom.us/j/92960687414">https://ucdenver.zoom.us/j/92960687414</a>
1:15-2:15PM	Student oral abstract presentations 1:15-1:30 Brian Lloyd 1:30-1:45 Lily Nguyen 1:45-2:00 Dylan Calame 2:00-2:15 Ruth Wang	<a href="https://ucdenver.zoom.us/j/92960687414">https://ucdenver.zoom.us/j/92960687414</a>
2:15-2:30PM	Break	N/A
2:30-3:30PM	Breakout sessions <b>Session A:</b> 2:30-3:00 Yoo Jung Kim, Scientific Communication 3:00-3:30 Taylor Soderborg and Brian Harry, MD PhD, Career Panel  <b>Session B:</b> 2:30-3:00 Eli Cahan, Scientific Communication 3:00-3:30 Thomas Vogler and Kristi Kuhn, MD, PhD	Session A: <a href="https://ucdenver.zoom.us/j/96285697509">https://ucdenver.zoom.us/j/96285697509</a> Session B: <a href="https://ucdenver.zoom.us/j/92703683886">https://ucdenver.zoom.us/j/92703683886</a>
3:30-3:45PM	Retreat wrap-up and awards	<a href="https://ucdenver.zoom.us/j/92960687414">https://ucdenver.zoom.us/j/92960687414</a>

4:00-6:00PM	Optional Post-Retreat Mixer	<a href="https://ucdenver.zoom.us/j/98777570868">https://ucdenver.zoom.us/j/98777570868</a>

# Student Oral Presentations

Please vote for your favorite student oral presentation! Recognition will be given to the winners at the end of the retreat.

Link for voting: <https://forms.gle/S9jJwyTDmBkqhADcA>

**Investigating the role of Eya3 in the regulation of NF- $\kappa$ B signaling and tumor progression in TNBC**

Connor Hughes

Ford Lab, MSTP Class of 2016

**Differential modulation of dopamine and GABA co-release in the striatum**

Sarah Zych

Ford Lab, MSTP Class of 2015

**Lipid rewiring of adaptive immunity through regulation of CD8 T cell metabolism**

Jacqueline Turner

Torres Lab, MSTP Class of 2018

**Maternal western-style diet drives metabolic programming in hematopoietic stem & progenitor cells and macrophage and confers a pro-fibrotic liver response in non-human primates**

Michael Nash

Wesolowski Lab, MSTP Class of 2016

**Examining the role of neurexins in the nanoscale organization of synapses**

Brian Lloyd

Aoto Lab, MSTP Class of 2017

**Epigenetic therapy re-sensitizes ovarian cancer to PARPi treatment and re-activates transposable elements**

Lily Nguyen

Bitler Lab, MSTP Class of 2017

**Learning and anticipatory control of forelimb reach kinematics by Purkinje cells in the cerebellum**

Dylan Calame

Person Lab, MSTP Class of 2015

**Microbiota-derived butyrate is an endogenous regulator of hypoxia-inducible factor (HIF)**

Ruth Wang

Colgan Lab, MSTP Class of 2014

# Student Lightning Talks

Please vote for your favorite student oral presentation! Recognition will be given to the winners at the end of the retreat.

Link for voting: <https://forms.gle/S9jJwyTDmBkqhADcA>

**Systemic immunity mediates tumor regression in murine HPV negative oral squamous cell carcinoma**

Laurel Darragh

Karam Lab, MSTP Class of 2017

**Interlaminar dynamics of color representation in V1**

Juan Santiago-Moreno

Denman Lab, MSTP Class of 2018

**Absence of P2X2 Purinergic Receptors in Human Taste Bud Innervation**

Brigit High

Finger Lab, MSTP Class of 2016

**HDAC9 and Brg1 are implicated in pathological vascular remodeling**

Austin Jolly

Weiser-Evans Lab, MSTP Class of 2016

**Resource Allocation in the SARS-CoV-2 Pandemic: A Case-Based Approach to Training for Implementation of Crisis Standards of Care**

Taylor Soderborg

Denver Health Incident Command Center, MSTP Class of 2012

**Nuclear FAK promotes growth and survival in thyroid cancer**

Meghan Kellett

Schweppe Lab, MSTP Class of 2016

**The role of SEMA7A in breast cancer after pregnancy over the age of 30**

Kelsey Kines

Lyons Lab, MSTP Class of 2018



# Keynote Speakers

## Dr. Cheryl Keech, MD, PhD



Cheryl Keech, M.D., Ph.D, Chief Medical Officer and Executive VP of Clinical Research at ILiAD Biotechnologies. Dr. Keech brings more than 25 years of experience as a clinician, research scientist, and medical director for both Pharma and contract research organizations with extensive experience in infectious disease vaccines. She is a board certified and licensed internal medicine physician, with a PhD in biochemistry and molecular biology. In addition to spending her early career as a practicing internist with a clinical appointment at the Indiana University School of Medicine, Dr. Keech has held senior medical director positions at Eli Lilly and GSK (Biologics) and was the Global Clinical/Regulatory Director for Access and Delivery at the NGO PATH. In her most recent prior position as Executive Medical Director at PPD, she led clinical strategy to support vaccine candidate advancement for multiple manufacturers as well as provided leadership to the vaccine operational hub. Dr. Keech received her medical degree from the Indiana School of Medicine and her PhD from the University of Colorado Health Sciences Center.

## Dr. Cara Wilson, MD



Cara Wilson, MD is a Professor of Medicine in the Division of Infectious Diseases at University of Colorado at Denver and holds a secondary appointment in the Department of Immunology and Microbiology. She is the director of the Medical Scientist Training Program at the University of Colorado. She received her medical degree from the University of Virginia School of Medicine and completed her residency training in Internal Medicine at Johns Hopkins Hospital. She subsequently completed Infectious Diseases fellowship training at Massachusetts General Hospital. Her laboratory studies the human immune response to HIV-1 infection and the factors that drive HIV-1 pathogenesis, particularly in intestinal mucosal tissue. Her most recent studies have focused on understanding the complex interactions between virus, gut commensal bacteria, and intestinal immune cells that contribute to mucosal and systemic inflammation during HIV-1 infection. She also extensive experience in designing and implementing HIV clinical trials through her involvement in the national AIDS Clinical Trials Group (ACTG), with an emphasis on studies of HIV-associated immune activation and immune-based vaccines and therapies.

# Poster Session Abstracts

## Session A 11:00–11:20

Defining the Genome Regulatory Role of KDM3A/ETS1 in Fusion-Positive Rhabdomyosarcoma

Joseph Hsieh

<https://ucdenver.zoom.us/j/4014258484>

A neuronal substrate for monogamous reunion in nucleus accumbens

Will Sheeran

<https://cuboulder.zoom.us/j/5199377857>

Differential Expression of Slamf7 in Pulmonary Macrophages

Emily King

<https://ucdenver.zoom.us/j/94340756722>

Defining MARCO-virus interactions important for alphavirus clearance from the circulation

Frances Li

<https://ucdenver.zoom.us/j/97254860974>

Investigating neural circuits for precise target acquisition

Taylor Yamauchi

<https://ucdenver.zoom.us/j/94380170952>

Adenosine activates metabolism to enhance killing of tolerant and persister bacteria across multiple classes of antibiotics

David Kitzenberg

<https://ucdenver.zoom.us/j/9638579348>

Tau aggregates are RNA-protein assemblies that mis-localize multiple nuclear speckle components

Evan Lester

<https://cuboulder.zoom.us/j/6659223199>

ETV6 germline mutations cause HDAC3/NCOR2 mislocalization and upregulation of interferon response genes

Marlie Fisher

<https://ucdenver.zoom.us/j/97733282552>

Vimentin regulates Nod2 activity during Group B Strep infection

Ricardo Villareal

<https://ucdenver.zoom.us/j/9120738149>

Injury-mediated stiffening persistently activates muscle stem cells through YAP and TAZ mechanotransduction

Jason Silver

<https://cuboulder.zoom.us/j/5237601493>

Noncanonical Mechanism of Action of NSAIDs Through NRF2  
Activation

Brandon Hililard

<https://ucdenver.zoom.us/j/96736168336>

Friction Mechanics of Soft-on-Soft Micropillar Friction

Leah Bowen

<https://ucdenver.zoom.us/j/8294463010>

## Session B 11:20–11:40

On Macromolecular Crowding and its Effect on Cell Cycle

Bruce E. Kirkpatrick

<https://cuboulder.zoom.us/j/97373119452>

Near-Infrared Responsive Liquid Crystal Elastomers

Nathaniel Skillin

<https://cuboulder.zoom.us/j/4136701488?pwd=RWlYXNHRS9mUDdSVUZsM3hJUll1Zz09>

The bacterial metabolite indole alters intestinal dendritic cell  
function and tolerance

Brenda Seymour

<https://ucdenver.zoom.us/j/92527064361>

Investigating the local RNA transcriptome surrounding mammalian centrosomes and its function

Hei-Yong Lo

<https://ucdenver.zoom.us/j/96482949863>

The Role of BCL2 Mediated Calcium Signaling in Leukemia Stem Cell Metabolism and Function

Anagha Inguva

<https://ucdenver.zoom.us/j/93503829314>

Conditions surrounding movements alters peri-movement neural activity in human SNr

Andy Tekriwal

<https://ucdenver.zoom.us/j/6092761076>

Exploring RIG-I Activation by Self-RNA

Rachel Ancar

<https://ucdenver.zoom.us/j/95228706051>

Degrading the C9orf72 Repeat Expansion RNA

Soraya Shehata

<https://ucdenver.zoom.us/j/9220916908>

Selective functional inhibition of a tumor-derived p53 mutant by cytosolic chaperones identified using split-YFP in yeast

Ashley Denney

<https://ucdenver.zoom.us/j/98579835637>

Investigating MicroRNA-Mediated Changes in the Immunopeptidome of Metastatic Breast Cancer

Faye Camp

<https://ucdenver.zoom.us/j/7220415188?pwd=dzYzMk9Wczl2dHE1K3VpQ2s3aHp3Zz09>