

ANNOUNCEMENTS

2025 CU DRC Pilot and Feasibility Awards

We are delighted to announce the **2025 CU DRC Pilot and Feasibility (P&F) Awards**. This program is a cornerstone of our efforts to recruit and train promising diabetes research scientists and accelerate their research programs in diabetes and its complications.

Key Dates:

- + **Letter of Intent (LOI) due:** Tuesday, February 18, 2025, 5:00 pm MST
- + **Full Application due:** Tuesday, March 18, 2025, 5:00 pm MST

Letter of Intent Submission: click [here](#). Upon submission, applicants will receive a confirmation email with a unique link to submit their full application at a later date.

Applicants should also plan to attend one of three informational Zoom sessions:

- + Meeting 1, February 25, 3:30 pm to 4:30 pm (Click [here](#) to register)
- + Meeting 2, February 27, 11 am to 12 pm (Click [here](#) to register)
- + Meeting 3, March 3, 3 pm to 4 pm (Click [here](#) to register)

Program Highlights:

- + **Funding:** Up to \$50,000 per year for one year, with the possibility of a second year contingent on progress
- + **Eligibility:** Open to both early career investigators and established investigators new to diabetes research

Click [here](#) to find the details of the awards, including the required documents, and eligibility criteria.

We encourage you to share this opportunity within your network. We look forward to receiving your applications soon.

UPCOMING EVENTS

2025 CU DRC Diabetes Day

March 21, 2025



As part of its commitment to advancing diabetes research and fostering collaboration, the CU DRC proudly hosts its Annual Diabetes Day Symposium. This event serves as a cornerstone in the diabetes research community, bringing together scientists, clinicians, and students from across the campus and beyond.

This year's keynote speaker is **Dr. Teresa P. DiLorenzo**, Professor in the Department of Microbiology & Immunology at Albert Einstein College of Medicine. Dr. DiLorenzo's research focuses on autoimmune diseases, immunopathogenesis of type 1 diabetes, humanized disease models, and immunomodulatory therapies. The event will feature many other local expert speakers and short talks selected from the abstracts. The event also includes a poster competition, providing a platform for sharing cutting-edge research and fostering collaboration.

When: Friday, March 21, 2025, 8 am to 4 pm

Where: Nighthorse Campbell Native Health Building (M24), Shore Family Forum (110)

Registration: click [here](#). **[Deadline:** March 20, 2025. Thank you for registering to help us with the F&B logistics]

Join us for this informative and engaging day dedicated to advancing diabetes research and promoting scientific exchange.

Call for Abstract for CU DRC Diabetes Day: We invite you to participate in our poster competition. Abstracts are now being accepted with a submission deadline of February 21, 2025, 5 PM. Posters will be displayed at the event, and awards will be given to top posters. Additionally, 2-4 abstracts will be selected for oral presentations during the sessions to recognize outstanding work. Click [here](#) for detailed information.

To submit your abstract, please click [here](#). **(Submission deadline:** February 21, 2025, 5 PM)

This annual event brings together diabetes researchers, clinicians, and trainees to showcase recent developments in diabetes research, foster new collaborations, and increase collective knowledge about diabetes research. We look forward to your participation in this exciting event that contributes to advancing diabetes research and treatment.

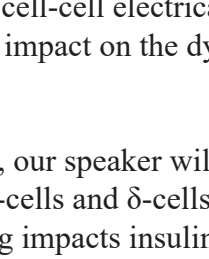
Please feel free to forward this information to anyone in your network who may be interested in participating in the competition.

Assessment of Gap Junction Communication in Human Islet Function

February 3, 2025, 12 pm to 1 pm

Barbara Davis Center (M20), Level 2, Main Conference Room 2104

Speaker: Claire H Levitt, Ph.D. Candidate, Benninger Lab, Department of Bioengineering



This presentation will explore the modulation of cell-cell electrical coupling among insulin-producing β -cells and somatostatin-producing δ -cell and investigate its impact on the dynamics of both insulin and somatostatin release in the human islet.

Using an innovative human 'pseudo-islet' model, our speaker will discuss:

- + The extent of electrical coupling between β -cells and δ -cells in healthy islets
- + How modulating cell-cell electrical coupling impacts insulin and somatostatin release dynamics
- + The potential implications of disrupted electrical communication in diabetes pathogenesis

This research provides crucial insights into islet cell interactions and offers new perspectives on diabetes development. Understanding how electrical communication influences β and δ -cell activity in the islet is essential for identifying the underlying mechanisms of diabetes pathogenesis and developing potential drug targets for diabetes prevention. Please join us for this innovative exploration of islet biology research.

When: Monday, February 3, 2025, 12 pm to 1 pm

Where: Barbara Davis Center (M20), Level 2, Main Conference Room 2104 ([Map](#))

Registration: click [here](#).

Light lunch will be provided on a first come, first served basis.

Sex Differences in Macrophage Responses to Obesity & Infection

Please join us for an insightful briefing with **Dr. Kanakadurga Singer**, a distinguished expert in the field of immunology and obesity research. Dr. Singer, an Associate Professor at the University of Michigan Medical School and Associate Director of Basic Research Training and Mentoring at the Elizabeth Weiser Caswell Diabetes Institute, will present her groundbreaking work on: "Sex Differences in Macrophage Responses to Obesity and Infection." Click [here](#) for Dr. Singer's biography and publications.

When: Friday, February 7, 2025, 12 pm to 1 pm

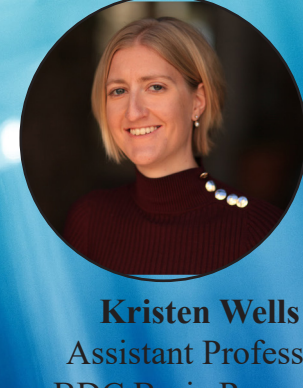
Where: Nighthorse Campbell Native Health Building (M24), Shore Family Forum (110) ([Map](#))

Registration: Click [here](#).

Light refreshments will be served in on a first come, first served basis.

Optimizing Single-Cell Long-Read Sequencing for Improved Isoform Detection in Mouse Islets

10 Feb
12-1pm



Kristen Wells
Assistant Professor
BDC Basic Research

Recent research has highlighted alterations in RNA processing as significant contributors to beta cell dysfunction in Type 1 Diabetes (T1D). To better understand the RNA splicing landscape throughout disease progression, Professor Wells is pioneering a single-cell, long-read RNA-sequencing method capable of capturing full-length transcripts before and after immune infiltration. By integrating this approach with direct RNA sequencing, her work aims to link alternative splicing events to RNA modifications, uncovering potential biomarkers and therapeutic targets for T1D.

This innovative methodology offers a more comprehensive view of the molecular mechanisms driving T1D, paving the way for advanced diagnostic and treatment strategies. Stay tuned for updates and insights from this critical work.

When: Monday, February 10, 2025, 12 pm to 1 pm

Where: Barbara Davis Center (M20), Level 2, Main Conference Room 2104 ([Map](#))

Registration: Click [here](#).

Light refreshments will be served in on a first come, first served basis.

Mechanisms of mRNA Translation Control in Pancreatic Beta Cells

Dr. Abigail Cheruiyot will unveil her research exploring the intricate molecular processes governing insulin production. Her work provides unprecedented understanding of how translation mechanisms in pancreatic beta cells contribute to diabetes development. Dr. Cheruiyot is currently serving as the Postdoctoral Fellow at Harvard's Joslin Diabetes Center. Please join us. Click [here](#) for the speaker's bio.

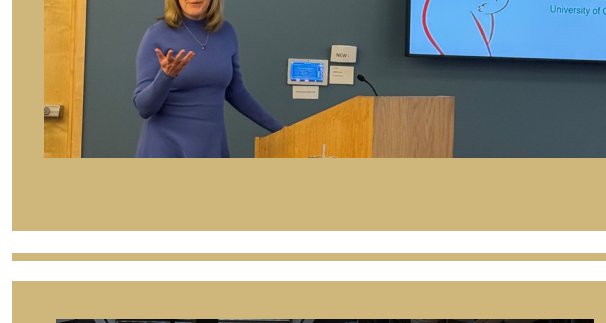
When: Friday, February 14, 2025, 12 pm to 1 pm

Where: Nighthorse Campbell Native Health Building (M24), Shore Family Forum (110) ([Map](#))

Registration: Click [here](#).

Light refreshments will be served in on a first come, first served basis.

RECENT EVENT HIGHLIGHTS



Dr. Emily Bates, Associate Professor in the Department of Pediatrics, Section of Developmental Biology at CU Denver Anschutz Medical Campus, delivered a compelling presentation on the potential long-term metabolic health implications of prenatal CBD exposure on January 27, 2025.

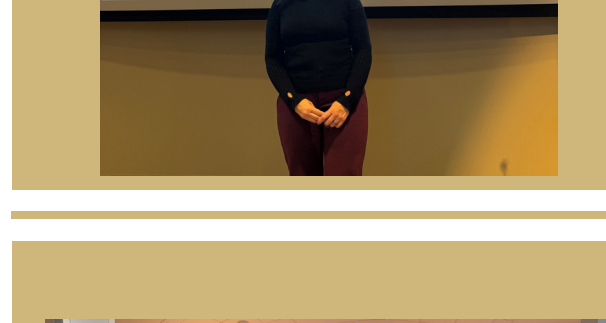
Her research explored critical insights into:

- + Potential risks of prenatal CBD exposure
- + Metabolic health consequences
- + Diabetes susceptibility in offspring



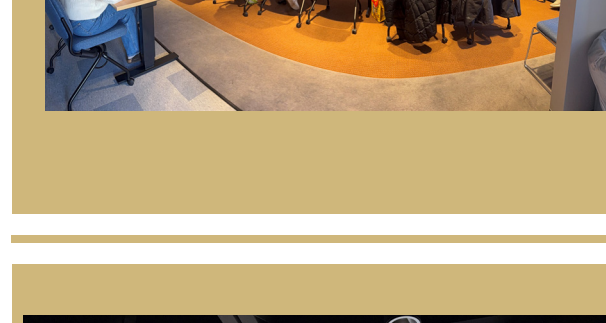
On January 24, 2025, the CU Diabetes Research Center welcomed Dr. Justin Brumbaugh, a distinguished Assistant Professor and Boettcher Investigator from the University of Colorado, Boulder.

Dr. Brumbaugh's compelling presentation, "Above the Genome: Post-transcriptional Mechanisms that Guide Stem Cell Biology," provided groundbreaking perspectives on cellular research. We extend our gratitude to Dr. Brumbaugh for sharing his expertise and contributing to the scientific dialogue.



CU DRC hosted Dr. Danielle Hessler Jones, Professor and Vice Chair for Research in the Department of Family and Community Medicine at the University of California, San Francisco, on January 17, 2025, for its weekly DRC Speaker Series.

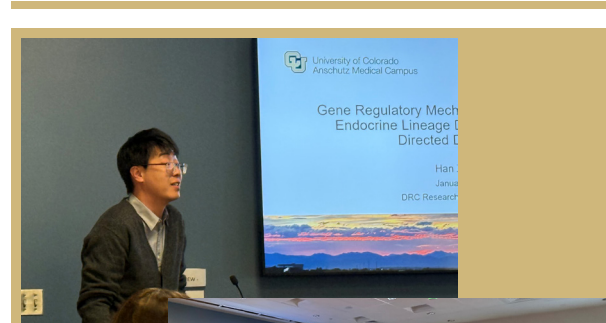
Dr. Hessler Jones shared insights on Diabetes Distress (DD) including: definition of DD, assessment of DD, prevalence, impact, and addressing DD. The event provided valuable insights into this important aspect of diabetes care, reflecting Dr. Hessler Jones's expertise in the field of diabetes-related emotional and social interventions.



On January 13, CU DRC hosted Carissa Birznieceks, PhD Student from the Benninger Lab, to present her research findings on the Role of Pancreatic Delta-Cell Gap Junction Coupling in Hormone Secretion and Glucose Homeostasis. Carissa discussed how disruption of pancreatic delta cell gap junction coupling may impact counterregulatory hormone secretion in the pancreas under conditions of low and high glucose, and possible implications for dysregulated somatostatin secretion in diabetes.



CU Diabetes Research Center thanks Dr. Sally Kent, Associate Professor of Medicine at the Diabetes Center of Excellence, University of Massachusetts Chan Medical School, for sharing her insightful research on islet-infiltrating CD8 T Cells in Human Type 1 Diabetes. The event took place on January 10, 2025, at the CU Anschutz Medical Campus.



On January 6, 2025, the CU DRC hosted Dr. Han Zhu as part of its Research in Progress (RIP) seminar series. Dr. Zhu, an Assistant Professor in the Department of Pediatrics, Section of Developmental Biology at the Barbara Davis Center for Diabetes, presented on "Gene Regulatory Mechanisms in Pancreatic Islet Endocrine Lineage Decision During In Vitro Directed Differentiation."

Following the talk, attendees engaged in an interactive Q&A session, fostering discussions on the potential applications of this research in developing novel therapeutic and prevention strategies for type 1 diabetes.