

DIABETES & METABOLISM RESEARCH CENTER



Tuesday, May 10, 2022

Quarterly update from the DMRC

Colleagues,

Congratulations on making it through a busy spring season. While many of you may still be pushing to meet June deadlines, we invite you to **take a moment to celebrate the successes of 2021-2022**. These include:

- Welcoming **3 new investigators** into our diabetes and metabolism research community: Paul Estabrooks, Jennie Hill, and Shinduk Lee
- Hosting **50 fantastic speakers** (22 external, 28 internal) across the Seminars in Metabolism and Health Behaviors Seminar Series
- **Submitting a revised application** to become an NIH-funded diabetes research center
- Publishing over **400 articles** and receiving over **\$80M** in grant funding
- Supporting hundreds of **trainees**

We also would like to extend a warm welcome to **our new Associate Director of the DMRC, Angela Fagerlin**. Angie is Professor and Chair of the University of Utah Intermountain Healthcare Department of Population Health Sciences, and has directed the Driving Out Diabetes Initiative for the last five years. Angie will be directing the Health Behaviors Interest Group and guiding the research strategy endeavors of this group – something she has been doing informally for many years. We are pleased to work with Angie in this capacity!

Finally, we look forward to seeing many of you at the Graduate Student Rising Stars Symposium on Monday, May 16 from 9:00 AM to 5:00 PM. And please save the date for the 2022 Diabetes and Metabolism Fall Retreat on September 15, 2022!

GOOD NEWS



*Scott Summers,
PhD*

Scott Summers named Distinguished Professor in the College of Health

Scott Summers, PhD, has been awarded Distinguished Professor by the University's Office of the Sr. Vice President for Academic Affairs. It's the second such award for the College of Health and another milestone in Summers' impressive career.



*Angela Fagerlin,
PhD*

Angie Fagerlin the new Associate Director of the DMRC

Angie Fagerlin will be guiding the research strategy and enrichment activities of the Health Behaviors Interest Group.



*Cindy Berg, PhD &
JD Smith, PhD*

New T32 application on the Role of Families in Diabetes Prevention and Management

Cindy Berg and JD Smith are leading the May submission of a new application for an NIDDK T32 program on the role of families in diabetes prevention and management

UPCOMING EVENTS

- **Graduate Student Rising Stars - May 16, 9:00 AM - 5:00 PM**
 - 9:00 AM - 4:00 PM in HSEB 2680
 - 4:00 - 5:00 PM in Skaggs auditorium
 - Download a flyer [here](#)
 - **Rising Stars Postdoc Symposium – September 29th and 30th**
 - Postdocs with research of interest to the DMRC community will be presenting on **September 29**
 - Download the calendar invite [here](#)
 - **DRMC Fall Retreat – September 15 – Save the date!**
 - Download the calendar invite [here](#)
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OPPORTUNITIES

University of Utah - Washington University Diabetes Research Center Collaborative Pilot & Feasibility Awards

- The goal of this program is to develop preliminary data leading to the submission of new applicants for independent (NIH, JDRF, or ADA) research grants.
- Grants up to \$40,000 (direct costs) for one year will be awarded.
- An entire copy of the proposal must be submitted via Utah.InfoReady4.com by 5:00 PM on June 30, 2022.
- [Download the full RFA here.](#)

Consider hiring a postdoc from the Graduate Student Rising Stars Symposium

- This event will showcase promising trainees from across the country. If someone seems like a good fit for your lab, be sure to introduce yourself and share any opportunities in your research group!

In case you missed it: Collective Day of Action

- If you missed the activities on the Collective Day of Action, you can read overviews of the events [here](#). Some highlights include:
 - [How to create a more welcoming environment for new employees](#)
 - [Lean into the uncomfortable process of dissecting racism](#)
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RESEARCH HIGHLIGHTS

New Potentially Painkilling Compound Found in

Deep-Water Cone Snails

Scientists already know that the venom of cone snails, which prowl the ocean floor for a fish dinner, contains compounds that can be adapted as pharmaceuticals to treat chronic pain, diabetes and other human maladies.



But the cone snails' venom has more secrets yet to be revealed. In a new study published in [Science Advances](#), researchers including Helena Safavi-Hemami, PhD, report that a group of cone snails produces a venom compound similar to the hormone somatostatin.

While they continue to learn more about this venom compound and its possible pharmaceutical applications, the results show the wide variety of drug leads that venomous animals produce, designed and refined over millions of years. [Read full article here.](#)

Parental Control: How Genes From Mom or Dad Shape Behavior

Parenting is not the only way moms and dads impact the behavior of their offspring. Genes matter, too. And although most of our genes are inherited in pairs—one copy from each parent—moms and dads exert their genetic influence in different ways. According to new research led by scientists here at University of Utah Health, each parent has their own impact on hormones and other chemical messengers that control mood and behavior.

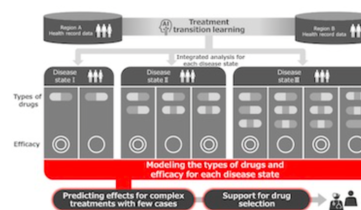


“We're really intrigued that there is this untapped area of biology that controls our decisions,” says Christopher Gregg, PhD, principal investigator. Gaining a clearer picture of the genetic factors that shape behavior is a crucial step toward developing better diagnoses and treatments for psychiatric disorders, he says. [Read the full article here.](#)

Innovative AI Technology Aids Personalized Care for Diabetes Patients Needing Complex Drug Treatment

Hitachi, Ltd. (TSE: 6501, Hitachi), University of Utah Health (U of U Health), and Regenstrief Institute, Inc.

(Regenstrief) today announced the development of an AI method to improve care for patients with type 2 diabetes mellitus who need complex treatment. One in 10 adults worldwide have been diagnosed with type 2 diabetes, but a smaller number require multiple medications to control blood glucose levels and avoid serious complications, such as loss of vision and kidney disease. [Read the full article here.](#)



Some of the results of this study are published in the peer-reviewed medical journal, *Journal of Biomedical Informatics*, in the article, [“Predicting](#)

pharmacotherapeutic outcomes for type 2 diabetes: An evaluation of three approaches to leveraging electronic health record data from multiple sources”.

Marine Snail Inspires Fast-Acting Injectable Insulin for Better Diabetes Control



For millions of people with diabetes, insulin is essential medicine. But for some ocean-dwelling predators, insulin is a weapon. With a burst of venom, a fish-hunting cone snail can drop the blood sugar of its prey so precipitously that it quickly becomes paralyzed and defenseless. That remarkable phenomenon has inspired a team of scientists to make better, fast-acting injectable insulins for people with diabetes.

“What’s really beautiful about this study is the way it spans a wide range of science, starting with the investigation of a fascinating question in animal behavior and leading to the multidisciplinary, collaborative development of a potential therapeutic,” says Chris Hill, D Phil (Biochemistry). He co-led the study with Danny Chou (Stanford) and Helen Safavi (University of Copenhagen) who are continuing a long-term collaboration after first becoming involved with this research when they were at the U. [Read the full article here.](#)

PUBLICATION HIGHLIGHTS

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