

June 2, 2025

Vol. 6 Issue 10

MSB NEWS

Monthly Newsletter



Department of

Molecular and Systems Biology

Geisel School of Medicine at Dartmouth

Let's stay connected...



MSB is starting off June with a bang, with two highly accomplished scientists presenting their recent work in the final Discovery Science seminar of the season and the Munck-Pfefferkorn Prize Lecture. We also welcome new MCB and IND PhD students to the department and celebrate our successful undergraduate and graduate trainees who are graduating this month.



PhD students joining MSB labs

Emily Dueñas Cornell du Houx (IND) Walker lab
Ahmed Hassan (MCB) Bosco lab
Qian Hui Tan (MCB) McKenna lab (co-mentor Curiel)
Sophie Trafton (MCB) Wang lab (co-mentor Kettenbach)

GEISEL CALENDAR



SUBMIT CONTENT



MSB CALENDAR



DISCOVERY SCIENCE SEMINAR SERIES

Discovery Science Seminar

“Organization of the genome in 3D and 4D by architectural proteins: Pushing the boundaries using AI and developmental genetics”

Elissa Lei, PhD

Senior Investigator
National Institute of Diabetes
and Digestive and Kidney



Monday, June 2, 2025

12:00pm-1:00pm
Remsen 512

Hosts: Gio Bosco, Ph.D.
Allan Gullledge, Ph.D.

For more information contact:
Discovery.Science@dartmouth.edu



MUNCK-PFEFFERKORN PRIZE LECTURE



Dartmouth
GEISEL SCHOOL OF
MEDICINE

Munck-Pfefferkorn Prize Lecture



Phil Newmark, PhD

HHMI Investigator

Burnell R. Roberts Chair in Regenerative Biology
Morgridge Institute for Research

Professor

Department of Cell and Regenerative Biology
University of Wisconsin-Madison

From planarians to parasites: germ cells, stem cells, and developmental plasticity in flatworms

June 5, 2025

1 p.m.

Chilcott Auditorium



Hosts: Gio Bosco and Marnie Halpern

The endowed Munck-Pfefferkorn Prize Lecture is named in honor of two luminaries from Dartmouth's medical school: the late Elmer Pfefferkorn, PhD, Emeritus Professor of Microbiology and Immunology, and the late Allan Munck, PhD, Emeritus Professor of Physiology and Neurobiology. Both are regarded as outstanding scientists, teachers, and mentors, who inspired generations of researchers and physicians. Donations from many grateful protégés enabled the creation of the annual Munck-Pfefferkorn Prize Lecture, which invites highly acclaimed scientists to lecture at the Geisel School of Medicine at Dartmouth. Additionally, the guest lecturer is invited to name a junior scientist, anywhere in the world, to receive a \$3,000 unrestricted grant to help support research or travel to a scientific meeting.

KUDOS

Congratulations to Lauren Walker for receiving a Hitchcock Foundation Pilot Research Grant for her project on "Target-Selectivity of Motor Axon Regeneration of Adult Zebrafish."

Kudos to post-doc Adrianna Milton (Halpern lab) on being selected for the Summer Program in Neuroscience, Excellence, and Success (SPINES) at the Marine Biological Laboratory in Woods Hole, MA.

Congratulations to Dartmouth undergrads Michael Humphreys and Rishab Sanjeev who were accepted to the James O. Freedman Presidential Scholar program for 2025-2026 to undertake research projects in the Halpern lab.

A manuscript from the Ahmed, Wang, and Kettenbach labs and others based on work by MSB PhD students Kai Yuan, Nod Bunnag, Andrew McCray has been accepted for publication in Nature Communications: Kassel S, Yuan K, et al., The TRIP12 E3 Ligase Induces SWI/SNF Component BRG1-Beta-catenin Interaction to Promote Wnt Signaling. This work reveals a ubiquitin-directed mechanism that targets a chromatin remodeling complex to regulate signal pathway-directed transcription. Congratulations everyone!

A big thanks to all of the speakers at the 4th Annual MSB Research Symposium!



- Nod Bunnag – Ahmed and Kettenbach Labs
- Lizzy Stevenson – Dunlap Lab
- Dr. Isobel Bowles – Orellana Lab
- Olivia Palmer – Goods Lab
- Dr. Shannon Paquette – Kasper Lab
- Dr. Aman Aberra – Gullledge Lab

Thank you to Gio Bosco for hosting the symposium, and to Jim Haber from Brandeis University for serving as the keynote speaker.



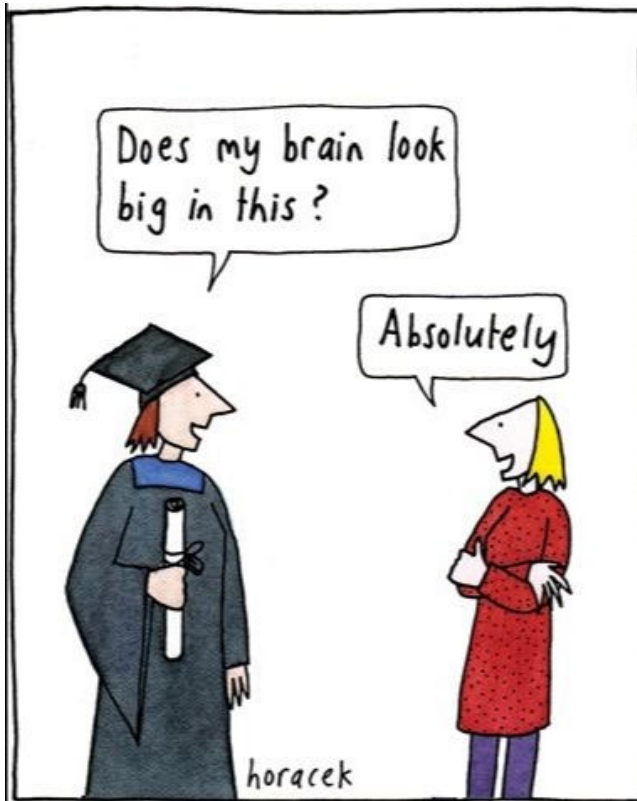
Huge congrats to Shunya
Kaneko(Orellana lab) and his wife!
And a warm welcome to little Sakura
Sophie Kaneko!

TWENTIETH ANNUAL HAROLD B. AMOS SYMPOSIUM OF RYAN FELLOWS



Since 1975, the Albert J. Ryan Foundation has supported graduate education in biomedical sciences at Dartmouth College, Harvard University, and the University of Cincinnati. Each year, Dartmouth selects six Ryan Fellows from among senior

graduate students nominated for the award by their PI or graduate program. This year, two outstanding MSB graduate students were named as Ryan Fellows: Bess Jones (Kasper lab) and Andrew McCray (Wang lab). From May 29th - 31st, eighteen Ryan Fellows from all three research institutions met and shared their research at the 20th Annual Harold B. Amos Symposium of Ryan Fellows at the White Mountain Hotel and Resort in North Conway, New Hampshire. The three-day meeting included 30-minute talks by the Ryan fellows and two keynote talks from Ryan Fellow alumni (including 2002 Dartmouth graduate Dr. Keith DiPetrillo, now at Bristol Myers Squibb) who focused their talks on career development in industry and academia. A request for PI nominations for 2026 Ryan Fellows will be sent out in Fall 2025.





Purchasing at the Hanover Inn? Here's the Right Way to Pay

As a reminder to all Dartmouth credit cardholders, Dartmouth Corporate Cards and Procurement Cards (PCards) should not be used at the Hanover Inn for dining, catered events, or lodging, or at any other Dartmouth-owned or operated entity.

Why This Matters

Using a Dartmouth credit card for internal purchases, like the Hanover Inn, creates unnecessary banking fees. More importantly, it is considered non-compliant with our Business Expense Policy, PCard Policy, or Corporate Card Program.

Approved Methods for Internal Transactions

To charge internal expenses properly, please use one of the following methods:

- **Direct Charging:** Many internal providers, such as the Hanover Inn and the Computer Store, can bill departments directly via chart string.
 - **Department Charge Cards:** Ideal for Dartmouth Dining purchases. These are pre-linked to specific chart strings for accurate expense allocation.
 - **Journal Entry:** Used for reallocating costs between departments or for shared events.
-

SAVE THE DATE

THE PROUTY

Registration now open for the 44th Annual Prouty.

For additional details and to register, visit: www.theprouty.org.

RECIPE OF THE MONTH

Rabarberkage ([Rhubarb Cake](#))



CAKE

- 200 grams chopped fresh rhubarb (2-3 stalks)
- 1 1/2 tbsp granulated sugar
- 2 large eggs (room temperature)
- 200 grams (1 cup) granulated sugar
- 250 grams (~2 cups) all-purpose flour
- 1 tsp baking powder
- 1/2 tsp salt
- 1 1/2 tsp vanilla extract

- 120 ml (1/2 cup) vegetable oil
- 120 ml (1/2 cup) milk

INSTRUCTIONS

1. Preheat oven to 350 degrees F (175 degrees C).
2. Butter/oil a baking tin (we used a 9-inch round tin) and cut out a sheet of parchment paper in a circle to cover the bottom.
3. Mix together the chopped fresh rhubarb and 1.5 tbsp of granulated sugar. Let this marinate while you mix the rest of the cake batter.
4. Beat eggs and granulated sugar together until light in color and doubled or tripled in size. Use a stand mixer with a whisk attachment, or an electric hand mixer - it will be more difficult to whisk by hand, but it can be done!
5. Meanwhile, mix together dry ingredients (flour, baking powder, salt) in a separate bowl.
6. Mix together vanilla extract, milk, and oil in a liquid measuring cup to make it easier to pour.
7. Alternate adding in wet ingredients and dry ingredients, adding half of each at a time.
8. Fold into the mixture with a rubber spatula or mix on low speed in the stand mixer.
9. Add most of the chopped rhubarb and sugar to the cake batter, reserving a small amount that you will add on top. Fold the batter a few times to make sure the rhubarb is evenly distributed, but try not to overmix at this point.
10. Pour the batter into your baking tin.
11. Sprinkle the remaining rhubarb over the top of the cake. You can also sprinkle some demarara sugar for a bit of crunch, but that is totally optional!
12. Bake for 40-45 mins, or until a cake tester emerges clean from the center of the cake. (Baking time will depend on your baking tin and oven. A shallower, larger cake tin will take less time, while a smaller but deeper tin may take

longer. Glass tins also tend to take longer than dark, nonstick ones. Ovens range, so keep an eye on the cake!)

13. Remove from cake tin after about 5 minutes and let cool (we let ours cool on a wire rack). Slice and enjoy!





Our mailing address is:

Molecular and Systems Biology, Dartmouth
66 College Street
HB 7400
Hanover, NH 03755

Our email address is:

Molecular.and.Systems.Biology@Dartmouth.edu