

May 1, 2025

Vol. 6 Issue 9

MSB NEWS

Monthly Newsletter



Department of

Molecular and Systems Biology

Geisel School of Medicine at Dartmouth

Let's stay connected...



After a lengthy wait, spring finally sprung and May brings our annual MSB Research Symposium with legendary scientist James Haber as the key-note speaker. Also, save the date of June 5th for a visit from Phil Newmark, who will be delivering the Munck-Pfefferkorn Prize Lecture. Now is also a good time to submit speaker suggestions for the Discovery Science seminar series. And don't forget – your submissions are always welcome to the MSB newsletter!

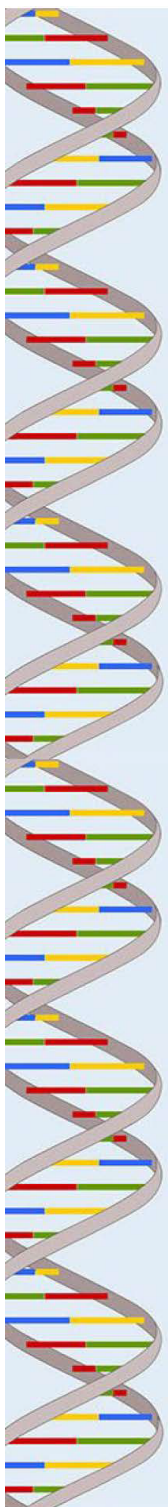
GEISEL CALENDAR

SUBMIT CONTENT

MSB CALENDAR



MSB RESEARCH SYMPOSIUM



Department of
MSB Molecular and Systems Biology
Geisel School of Medicine at Dartmouth
MSB Research Symposium

Monday, May 5, 2025

Kellogg 200

9:00 a.m. – 2:30 p.m.

LUNCH WILL BE PROVIDED

Welcome: Dr. Gio Bosco

9:00 a.m. Keynote: Dr. James Haber, Brandeis University

13 ways of looking at a black box: repairing a broken chromosome

10:00 a.m. Coffee Break

10:30 a.m. Olivia Palmer (Goods lab)

Estrogen and Progesterone Modulate Human Macrophage Function Through Transcriptional and Metabolic Shifts

11:00 a.m. Lizzy Stevenson (Dunlap lab)

Regulation of Temperature Compensation by Casein Kinase I and Casein Kinase II in the *Neurospora crassa* Circadian Clock

11:30 a.m. Nod Bunnag (Ahmed and Kettenbach labs)

PP2A-B56 regulation of Axin and its bound kinases in Wnt signaling

12 noon Dr. Aman Aberra (Gulledge lab)

Subthreshold electric fields bidirectionally modulate neurotransmission through axon polarization

12:30 p.m. LUNCH

1:30 p.m. Dr. Isobel Bowles (Orellana lab)

tRNA inhibition as a novel cancer treatment strategy

2:00 p.m. Dr. Shannon Paquette (Kasper lab), **2024 Tenney Fellow**

Identifying roles for the transcription factor Irf8 in macrophage heterogeneity and hematologic disease

Discovery Science Seminar

“Hematopoietic stem cell formation in the embryo”

Nancy Speck, PhD

Professor and Chair
Cell and Developmental Biology
University of Pennsylvania



Monday, May 12, 2025

11:30am-12:30pm
Oopik Auditorium, LSC

Host: Dionna Kasper, PhD

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



Discovery Science Seminar

“The molecular basis of inherited
Parkinson’s disease.”

Suzanne Pfeffer, PhD

Professor of Biochemistry,
Stanford University
School of Medicine



Monday May 19, 2025

12:00pm - 1:00pm
Chilcott Auditorium, Vail 120

Host: Bill Wickner, MD

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



Department of
Biochemistry and
Cell Biology



Dartmouth
GEISEL SCHOOL OF MEDICINE
DEPARTMENT OF MOLECULAR & SYSTEMS BIOLOGY

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



To Rachel Saxe, PhD of the McKenna lab and
to Somer M. Matar, PhD of the Leach lab on
their successful thesis defenses.

Congratulations to the Orellana lab on their publications!

Bowles IE, Orellana EA. Rethinking RNA Modifications: Therapeutic Strategies for Targeting Dysregulated RNA. *J Mol Biol.* 2025 Mar 7:169046. doi: 10.1016/j.jmb.2025.169046. Epub ahead of print. PMID: 40057447.

Ali RH, Orellana EA, Lee SH, Chae YC, Chen Y, Clauwaert J, Kennedy AL, Gutierrez AE, Papke DJ, Valenzuela M, Silverman B, Falzetta A, Ficarro SB, Marto JA, Fletcher CDM, Perez-Atayde A, Alcindor T, Shimamura A, Prensner JR, Gregory RI, Gutierrez A. A methyltransferase-independent role for METTL1 in tRNA aminoacylation and oncogenic transformation. *Mol Cell.* 2025 Mar 6;85(5):948-961.e11. doi: 10.1016/j.molcel.2025.01.003. Epub 2025 Jan 31. PMID: 39892392.

WELLNESS AT DARTMOUTH

MINDFUL MAY

Dartmouth's Mindful May inspires Courageous Action and Wellbeing

Across the nation, May is recognized as Mental Health Awareness Month—an invitation to explore practices that support optimal health and nurture the roots of wellbeing. This May, join your Dartmouth community for a month of inspiring events, classes, and activities designed to nurture self-care, deepen connections, and support a mindful path to wellness.

[Discover what's happening in May and beyond](#)—many of these offerings are available year-round!

RESOURCES@WORK

[Resources@Work](#) provides weekly onsite resource navigation offering guidance, education, and support for employees with a variety of needs related to financial, social, and emotional stability.

Resources@Work can assist with:

- Housing
- Childcare
- Transportation
- Fuel Assistance
- Domestic Violence
- Substance Misuse
- Tax Preparation
- Access to food
- Utilities
- and much more!

53rd ANNUAL DARTMOUTH POWWWOW

Join the Native and Indigenous community at the student-run 53rd Annual [Powwow](#) on Saturday, May 10th, 2025 held on The Green, with Grand Entry at 12pm.



All pcard receipts should be sent to Pcards.MolecularandSystemsBiology@Dartmouth.edu with the name of the vendor and amount in the subject line and the chart string (aka the account) in the email.



SAVE THE DATES

THE PROUTY

Registration now open for the 44th Annual Prouty.

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

MSB RETREAT 2025



SAVE THE DATE

MSB RETREAT

SEPTEMBER 29-30, 2025

Sugarbush Resort

Warren, VT



THE SURRENDERED MOM



RECIPE OF THE MONTH

Fiddleheads - A Delicious Spring [Delicacy](#)

Equipment

- Large Skillet

Ingredients

- 1 pound fiddleheads
- 2 tablespoons olive oil
- ¼ teaspoon salt
- ¼ teaspoon black pepper

Notes & Flavor Variations

For extra flavor, consider adding one or more of the following while sautéing:

- ¼ teaspoon garlic powder or 1 clove minced garlic
- 1 tablespoon fresh lemon juice
- 1 tablespoon balsamic vinegar

Instructions

Rinse the fiddleheads well and trim off the ends.

Place them in a large skillet and cover with water.

Cover and simmer for 10 minutes.

Place them in a colander and drain.

Return to the skillet and add olive oil, salt, and pepper.

Sauté for about 5 minutes, until tender and lightly browned.

- ¼ teaspoon cayenne pepper
- A dash of red pepper flakes



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