From: <u>biochem_universe-request@lists.colorado.edu</u> on behalf of <u>biochem_universe</u> (Ashley Sullivan)

To: <u>biochem_universe@lists.colorado.edu</u>

Subject: Department of Biochemistry Newsletter for November

Date: Friday, November 4, 2022 12:15:45 PM

University of Colorado Boulder Department of Biochemistry

Biochemistry Graduate Newsletter

FRIDAY November 4, 2022



This newsletter is unofficial and run by graduate students. We hope it comes in handy!

Since we're only able to include the publications, achievements, and new departmental colleagues we know about, these lists may be incomplete. Please <u>send us a tip</u> if you have an event, opportunity, or piece of news you'd like to see featured in our next newsletter.

We are looking for new additions to the newsletter team. If you have any interest in science communication or want experience writing HTML, reach out to Rosie Garris (rosanna.garris@colorado.edu)

News & Announcements

Remember to vote on or by November 8th!

The Nov. 8th deadline is coming up for mail-in and drop-box ballots. In-person voting also occurs Nov. 8th. <u>Click here</u> for Boulder County drop-box and voting locations.

Feel free to use the newsletter as a virtual version of the JSCBB bulletin boards. If you have any information you'd like to share with the department, please <u>let us know</u>.

Upcoming Events

Research Discussions

Biophysics Supergroup

4-5:15 pm, JSCBB A115

November 14, Figueroa & Taatjes Labs

Followed by Pizza and Refreshments

Signaling & Cellular Regulation

Mondays 4 - 5:30 pm, JSCBB B115

November 7: Jack Gugel (Leinwand Lab) & Mitchell Leih (Odorizzi Lab)

November 28: Eric Sawyer (Voeltz Lab) & Tim Hoffman (Spencer Lab)

Electron Microscopy Users Supergroup

The EM Users meeting is open to all who are interested. Presentation topics include methods and current EM research going on in the CU Boulder EM community.

Usually takes place the last Wednesday of the month at noon.

Email Alli Schier (Allison.Schier@colorado.edu) to be added to the email list.

Biochemistry Seminars

Dr. Ralph Kleiner

- November 9, 2022 | 3:30pm-4:45pm | In-person/A115 Butcher Auditorium
- Lab Website: Kleiner Lab
- Synopsis: The Kleiner lab's goal is to understanding cellular homeostasis and RNA modifications/molecular mechanisms using synthetic oligonucleotide and nucleoside chemistry, RNA-protein biochemistry, chemoproteomics, quantitative cellular imaging, and next-generation nucleic acid sequencing. The lab uses chemoproteomic profiling of RNA modification 'reader' proteins, nucleoside probes for studying cellular RNA metabolism and localization, as well as having developed a method for RNAmediated activity-based protein profiling (RNABPP).
- Host: Deborah Wuttke

Dr. Manu Prakash

- November 16, 2022 | 3:30pm-4:45pm | In-person/A115 Butcher Auditorium
- Lab Website: Prakash Lab
- Synopsis: The Prakash lab has four main areas of focus: genetic self assembly, development of low cost scientific instruments, and biological physics. The first of these is studying genetic self-assembly and creating models to better understand how genetic code generates the shape and form of organisms. The second area of focus is the development of low-cost scientific instruments for resource constrained areas in the field of global health. The lab is also studying the connection between organisms and the laws of physics that control their functions.

Host: Vignesh Kasinath

Dr. Cynthia Wolberger

- November 30, 2022 | 3:30pm-4:45pm | In-person/A115 Butcher Auditorium
- Lab Website: Wolberger Lab
- Synopsis: The Wolberger lab is researching the role of ubiquitination in regulating transcription and the DNA damage response as well as how cross-talk between ubiquitination and other post-translational modifications regulates chromatin activity. They use a combination of x-ray crystallography, cryo-EM, and a variety of biophysical and biochemical approaches to gain insights into the fundamental mechanisms underlying these processes.
- Host: Vignesh Kasinath

Information regarding Biochem seminars can be found on the department <u>events</u> <u>page!</u>

Publications and Achievements

Publications

Leah Damon, Palmer Lab

<u>"Single molecule microscopy to profile the effect of zinc status on transcription factor dynamics"</u>, Scientific Reports.

In this paper, Leah uses single molecule microscopy to track the dynamics of transcription factors in response to perturbations of cellular zinc. Her work shows that the 11-zinc finger chromatin remodeling factor CTCF exhibits altered dynamics, consistent with decreased DNA binding, when cellular zinc levels decrease.

Science Buffs

<u>"Tu Youyou's Antimalarial Drug Discovery: From Ancient Text to Clinical Trials"</u> by Hannah Edstrom

From space missions to minuscule microbes, Science Buffs is a graduate student-run STEM blog covering research at the University of Colorado Boulder and beyond. We are committed to making science more accessible to the general public and helping students and postdocs grow as writers. Learn more about us and getting involved at https://sciencebuffs.org/.

Updates from the Faculty Liason Council

Thanks to all who came out for the Halloween Social Hour and congratulations to the costume contest winners! FLC will continue to host social hours throughout the year, so look out for the flyers. The next scheduled FLC meeting is scheduled for Friday, December 9th at noon (more information will be posted in Slack closer to the date).

As always, the department anonymous suggestion box can be found <u>here</u>.

Updates from P2P

Exploring Career Paths (Alumni Networking Event):

P2P is hosting Biochemistry alumni on November 9th from 5:30–7:30 pm MT on Zoom. This event focuses on exposing current students to potential career paths after graduation. We currently have alumni attending that have worked inside academic or national labs, worked in industry on the research side, and worked in industry on the administrative side. Alumni are still signing up for the event and we still hope to see medical device liaisons, consultants, attorneys, policy advisors, advocates, and scientific writers. Join us!

Proposal Help Night for CORE students:

P2P is also hosting a Proposal Help Night on November 15th from 5:30–7:00 pm MT at Etai's Cafe. This event is intended to help CORE students evaluate the current draft of their proposal and improve it before final submission. Mentors and mentees, you will receive an email soon with more details. Food will be provided!

Updates from DEI

We wanted to update everyone about the new positions in DEI as we have new 3rd and 4th year representatives!

Chair: Miranda Juarros

Associate Chair: Li Yi Cheng

Peer Mentorship Coordinator: James Pratt
Outreach/SCOPE Coordinator: Chelsea Toner

• 5th yr Representative: Tom Wieser

• 3rd yr Representative: Mando Ramirez

• 4th yr Representative: Emily Kibby

We are working on putting together a document that contains information about Lab Compacts and hope to send it out soon. If you have any questions in the meantime, please feel free to contact any of us.

Post-Doc Association Events and Announcements

PAC Boulder Coffee Hour

November 7th from 10:00-11:00 am

JSCBB, East Terrace Grill

Come along and meet other postdocs over coffee, tea, and cookies at a coffee hour hosted by the Postdoctoral Association of Colorado Boulder (PAC Boulder). This week's coffee hour will be on CU East Campus.

Click "I'm interested" in this <u>calendar link</u> to have updates emailed to you.

PAC Boulder Social

November 17th from 5:30-7:30 pm

The Rayback Collective

Join your fellow postdocs for food and fun at our monthly social at the Rayback Collective. The family-friendly event will be sponsored by the Postdoctoral Association of Colorado Boulder (PAC Boulder).

Means of Communication:

Twitter: <a>@PACBoulder

Email: pac_universe@colorado.edu

Outreach and Teaching Opportunities

Updates from the Center for Teaching and Larning

If you are TAing a class in the fall, would like to earn a teaching certificate, or are simply interested in improving your teaching skills, the Center for Teaching and Learning (CTL) is here to help! Please don't hesitate to reach out to the departmental CTL Lead, Briana Aboulache (Briana.Aboulache@colorado.edu) for resources and information to help you achieve your teaching goals. If you are interested in receiving teaching announcements throughout the year, please fill out this form to receive periodic teaching-related emails. You can check out the CTL certificates here, track your certificate progress, and find all upcoming CTL workshops/events here.

Updates from SCOPE

S.C.O.P.E. is excited to launch our fall outreach event this month! We have a team of 38 volunteers spanning across multiple CU STEM departments who will be helping administer a fun microbiology experiment with 248 students at Centennial

Middle School. As our sign-ups are full for the fall, be sure to stay on the lookout for our spring outreach events as there will be many opportunities to participate.

- General Volunteer Training 11/7/22 or 11/8/22
- Volunteer Lead Training 11/09/22 or 11/10/22
- "One-day" Outreach 11/14/22 & 11/15/22

As always, check out our <u>website</u> to learn more and sign up to stay in the loop about all things S.C.O.P.E.! Also, take a look at our 'how to think like a scientist' cards in case you need help with your research projects.

How to think like a scientist:

- 1. Make an observation
- 2. Ask a question
- 3. Predict the answer
- 4. Test your prediction
- 5. Think about your results
- 6. Ask a new question!





If you have an outreach opportunity you're excited about, please <u>let us know</u> so we can share it in the next newsletter.

Department Spotlight

This is the section where we brag about something cool one of our fellow biochemists is doing outside of their research. Each month, we draw the name of one of our departmental colleagues at random to feature.



This month we're featuring Calvin Voong!

I am a fifth year graduate student in the Goodrich-Kugel lab working on investigating the binding dynamics of HMGB1 on mononucleosomes using single-molecule TIRF microscopy. My passion for the sciences and the need to work at the bench puts me on the path to pursue a career in industry, with a special interest in biotechnology and pharmaceutical characterization. In my free time, I like to make notebooks, do photography, and lift weights. Currently, I am training for a powerlifting competition that is happening in February!

Resources and Involvement Opportunities

Consolidated list of resources from the Office of Financial Aid

This comprehensive <u>list of crisis resources</u> provides free tools for dealing with wellness, health, financial hardship, and other challenges.

Incident Reporting Resources

Follow this <u>link for resources and support</u> in reporting concerns or incidents that you are aware of.

Center for Teaching and Learning (formally GTP)

To learn about CTL, visit their <u>website</u> or contact the department CTL lead <u>Chelsea Toner</u>.

Counseling & Psychiatric Services (CAPS)

CAPS offers confidential, on-campus mental health and psychiatric services for a variety of concerns such as academics, anxiety, body image, depression, relationships, substance use and more. CAPS is available for in person and telehealth (virtual) appointments from 9 a.m. to 5 p.m. Monday through Friday. All services will be held virtually through telehealth.

Services offered include counseling, psychiatry, workshops, process therapy groups, skill-based therapy groups, informal consultations, suicide prevention, eating concerns, ADHD treatment, addressing substance use, canine-assisted therapy, and virtual reality therapy.

oSTEM (Out in Science, Technology, Engineering, and Math)

To learn more about oSTEM, visit their <u>website</u> or attend their <u>weekly meetings</u> on Mondays at 6:00 pm.

Buff Pantry

CU Boulder students can pick up food from Buff Pantry on a weekly basis. Visit their website for details.



United Campus Workers

To join or get more involved in UCW, visit their website.



CU Café

To learn more or get involved in CU Café, visit their website.



Women in Science and Engineering (WiSE)

To join or get more involved with WiSE, visit their <u>website</u> or contact <u>Katelyn Long</u>.