

# Week of January 19 - 26, 2025

# Announcements, Shoutouts, and Accolades

# Announcing the launch of Research 201

Our long awaited second-semester course is finally here! All students who joined ASDRP in the last two terms (Summer 2024 & Autumn 2024 admits) who have successfully passed Research 101, are required to take Research 201 this spring, which will be co-taught by our department heads Dr. Larry McMahan, Dr. John Wang, and Dr. Edward Njoo. The purpose of Research 201 is to provide the next advancement in our students' training in bridging the gap between the introduction to research from R101 to deploying practical skills in preparing literature reviews, research plans, and goal-oriented executables.

# **Colloquium Starts Next Week!**

After a brief hiatus for the holiday break, we are excited to bring back colloquium in full swing next week! Please join us on Tuesday, January 21 @ 7:00 PM on Zoom for the first colloquium of the year: "Synthesis, characterization, and paramagnetic properties of novel 5-substituted cytosine complexes of copper (II)" given by Abhinav Chalasani (MSJHS '26) and Harahng Lee (TKA '25) from the Njoo lab. <u>Join us on Zoom here!</u>

# Dharmale Lab presents at IEEE ICCE, Win Best Session Presentation

This past week, <u>Prof. Dharmale and students</u> presented a record three papers at this year's <u>IEEE ICCE</u> <u>conference in Las Vegas, NV</u>, winning high honors and bringing back an award for outstanding presentations in their respective sessions. Check out their three papers, <u>"Enhancing Autism Spectrum Disorder Recognition</u> <u>in EEG Data through Filtering-Driven CNN Approach"</u>, "Automated Recognition of Autism Spectrum Disorder from EEG Signals Using a CNN-LSTM Hybrid Model" and <u>"Exploration of New Models to Enhance Treadmill</u> <u>Usage and Analyze Optimal Use Cases for All Age Groups</u>".

# Njoo Lab publishes latest preprint on BioRXiv in Medicinal Chemistry

On Monday, <u>the Njoo Lab's latest paper</u>, which is now in peer review, has been posted <u>online on BioRXiv</u>, wherein the group reports a brief communication on the structure-activity relationship of synthetic arylsulfonamides as anticancer agents that modulate the Wnt1/β-catenin pathway, using a variety of biochemical approaches including flow cytometry and a luciferase-based reporter assay to study the potency and mechanism of their compounds. This project was led by Mihira Gutti (Irvington '25), Jennifer Luo (Carlmont '25), Vihaan Sharma (Irvington '26), Emilia Lee (Carlmont '26), Arshia Desarkar (Saratoga '25), Rushika Raval (Irvington '26), Augustus Soedarmono (Paly '26), and Joy Zhu (BASIS '27). Check out the full paper <u>online HERE (DOI:doi.org/10.1101/2025.01.11.632297)</u>, or listen to the <u>AI-generated summary on ScienceCast HERE</u>.

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# Our thoughts are with those affected by the Southern California Fires

We express our concern for our fellow Californians affected by the recent wildfires in Southern California, recognizing the incredible destructive force that natural disasters such as this can have on our livelihoods, communities, and society. Our hearts and minds go out for those directly and indirectly affected by the Palisades Fire, Eaton Fire, Hurst Fire, and Kenneth Fire, which includes several families of the ASDRP community, as well as several alumni who now live or study in the Los Angeles area.

# **New Financial Aid Application Process Streamlines Aid**

From day one, a core mission at ASDRP has been to make research affordable, and thanks to our generous donors and several individual and corporate sponsors, we have been able to offer a record number of financial aid awards in the 2024 calendar year. This year, we are excited to unveil a new Financial Aid Application process online at <u>www.asdrp.org/financial-aid</u> to make it simple to upload need-based financial aid requests. This spring, we have newly granted dozens of eligible students at ASDRP full scholarships. We strongly encourage families who are single income households, or who may find it difficult to afford ASDRP, to apply for Financial Aid, and we thank you all for your patience as we roll out this new process. If you have any questions about eligibility for ASDRP's financial aid process, or if you wish to <u>donate</u> towards this fund, we encourage you to contact the Admin team.

# **ASDRP Welcomes Mr. Edward Chavez, Facilities and Operations Specialist**

We are so excited to welcome Mr. Edward Chavez on our operations team! Mr. Chavez is a new hire this year, who now works directly with the laboratory operations leadership to manage our campus, assist with donation sorting, and maintain a safe and fun environment for our student researchers to thrive. Edward Chavez comes to ASDRP with over a decade of experience in operations, facilities, and hospitality, including his former role in production at Tesla. Welcome, Edward Chavez! (Our Chemistry department lead, Edward Njoo, is also very happy there are now two Edwards in town!)

#### On the Horizon: Upcoming Events

#### Saturday, January 18, 2025 @ 10:00 AM - 4:00 PM

#### New Student (Spring 2025) Orientation @ Mission College

Our new admits for the Spring of 2025 will be formally onboarded this Saturday! Welcome to the newest students in our research community. Laboratory Operations will be closed for students until after 4 PM.

#### Saturday, January 18, 2025 @ 8:00 PM - 9:30 PM

**Spring School Year Seminar: The Logic of Chemical Synthesis (Dr. Njoo) @ Seminar Room** *This seminar meets on Saturday nights, with a focus on retrosynthetic analysis, strategies in atomand step-economical total synthesis of natural products, and mechanistic study of named reactions.* 

# Sunday, January 19, 2025 @ 3:00 PM - 5:00 PM Njoo Lab Recruitment Session @ Campus (In person only)

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Open event for transfer or new students interested in joining the Njoo group (www.njoolab.org).

## Monday, January 20, 2025

Extended Laboratory Hours from 10:00 AM - 10:00 PM. Happy Martin Luther King, Jr. Day!

## Tuesday, January 21, 2025 @ 7:00 PM - 8:00 PM

Colloquium @ Zoom

Join us every week on Tuesday at 7 PM on Zoom for colloquium! During colloquium, we hear from several senior researchers at ASDRP across all three departments.

Zoom Link: <a href="https://us06web.zoom.us/j/83346956991?pwd=STJ1SGFUK1VtMjdNRThLKy9KdHNIZz09">https://us06web.zoom.us/j/83346956991?pwd=STJ1SGFUK1VtMjdNRThLKy9KdHNIZz09</a>

# Wednesday, January 22, 2025 @ 7:00 PM - 8:00 PM

#### Advisor Open House @ Zoom

Join us at 7:00 PM for our semesterly ASDRP-wide faculty open house. We invite parents, current, and new students to hear from faculty about what each research group is working on! **Zoom Link:** <u>https://us06web.zoom.us/j/88392447260?pwd=nXY01RzCHjbpCKn2KMQdbMJ6CEREte.1</u>

## Thursday, January 23, 2025 @ 4:30 PM - 5:30 PM

**Spring 2025 Core Training: Mass Spectrometry @ Life Sciences Seminar Room (In-person only)** For second semester or more senior students only. Core trainings can be attended after students complete all prerequisites with in-person laboratory safety training.

#### Saturday, January 25, 2025 @ 10:00 AM - 11:30 AM

**Research 101 (first semester students) launches on Zoom.** This course is mandatory for all first semester students at ASDRP. During Research 101, new students learn the foundations of general processes in research, including research ethics, finding and reading peer-reviewed literature, patent and copyright laws, and how to prepare a research presentation.

Zoom Link: https://us06web.zoom.us/j/81636222540?pwd=qak4JvabASXPpRAtk2amaAvIP6Hha7.1

# Saturday, January 25, 2025 @ 12:00 PM - 1:30 PM

**Research 201 (second and third semester students) launches - HYBRID.** This course is mandatory for all second- and third-semester students at ASDRP. Research 201 covers general, advanced topics in literature surveys, with practicals on dissecting dense research papers, scholarly writing, referencing softwares, and more.

Google Meet HYBRID: <u>https://meet.google.com/rdd-pjsg-toi</u>

## Saturday, January 25, 2025 @ 1:00 PM - 2:00 PM

# Starostina Lab Recruitment Session @ Engineering Lab (In-Person Only)

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[Link to Public ASDRP Events Calendar]

Open event for transfer or new students interested in joining Dr. Starostina's research group (<u>www.sites.google.com/asdrp.org/starostina</u>).

## Saturday, January 25, 2025 @ 3:00 PM - 5:00 PM

#### Life Sciences Student Mixer @ Campus Center Lot (In-Person Only)

Come join us at 3:00 PM for our student-faculty mixer. This event is for new students to meet faculty, and for current students to hang out, enjoy [free] food, and share their science with faculty in their department. Jointly hosted by <u>Chemistry</u> and <u>Biology</u> departments at ASDRP.

#### Saturday, January 25, 2025 @ 5:00 PM - 5:30 PM

## Brah Lab Recruitment Session @ Google Meet

Open event for transfer or new students interested in joining Dr. Brah's research group (<u>www.sites.google.com/asdrp.org/brah</u>). Please note that all internal Google Meet joining is restricted to @students.asdrp.org email domains.

Google Meet Link: <u>https://meet.google.com/crk-fprf-noz</u>

## Saturday, January 25, 2025 @ 8:00 PM - 9:30 PM

**Spring School Year Seminar: The Logic of Chemical Synthesis (Dr. Njoo) @ Seminar Room** *This seminar meets on Saturday nights, with a focus on retrosynthetic analysis, strategies in atomand step-economical total synthesis of natural products, and mechanistic study of named reactions.* 

## Sunday, January 26, 2025 @ 1:00 PM - 3:00 PM

# Computer Science, Informatics, and Engineering Mixer @ HYBRID

Come join us at 1:00 PM for our student-faculty mixer. This event is for new students to meet faculty, and for current students to hang out, enjoy [free] food, and share their science with faculty in their department. **Zoom Link:** <u>https://us06web.zoom.us/j/83038846152?pwd=bFV1879iUulaBdvLkXYQFkikqqgAzW.1</u>

#### Sunday, January 26, 2025 @ 4:00 PM - 4:30 PM

# Brah Lab Recruitment Session @ Google Meet

Open event for transfer or new students interested in joining Dr. Brah's research group (<u>www.sites.google.com/asdrp.org/brah</u>). Join us on Sunday if you can't join us on Saturday. Please note that all internal Google Meet joining is restricted to @students.asdrp.org email domains. **Google Meet Link:** <u>https://meet.google.com/crk-fprf-noz</u>

#### Monday, January 27, 2025 @ 5:30 PM - 6:30 PM

**Spring School Year Seminar: "On the Importance of Data Curation" (Prof. Robert Downing)** With the increasing public access to large datasets, it has become imperative that someone in the inbound data stream has to make decisions. This is further compounded by external attempts to import data without it being validated. **Google Meet:** <u>https://meet.google.com/tkb-cwdf-vdr</u>

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