

Week of March 28 - April 5, 2025

Announcements, Shoutouts, and Accolades

Recap - ASDRP Research Expo & Symposium on March 22, 2025



Last weekend, we welcomed over a thousand guests at the Gary G. Gillmor Family Academic Center at Mission College for our bi-annual research symposium and expo, featuring nearly four dozen oral presentations and nearly a hundred research posters from our students.

THANK YOU to all of our parent volunteers who helped make this event possible.



Sahar Jahanikia (front row, middle in white blazer) with her team of researchers who participated in the March 22, 2025 Expo!

The Research Symposium & Expo showcases the students' novel results to their peers, parents, community, and friends. Importantly, these scientific projects conducted by students are original research with cutting-edge results, completed on \$10M+ worth of donated research equipment with highly qualified research mentors, and are not traditional "science lab" projects whose results are known. This event is a premier opportunity for student researchers to be exposed to genuine research, scholarship, peer review, scientific reading and writing, and scientific presentation at a young age before college. At the completion of the Symposium, the students will be able to leverage their own published works in demonstrating their competitive advantage as they prepare to matriculate to



college. We invite you to join us in the beginning of a wonderful journey for these young scientists. Please come, view research posters, ask the students questions, listen to oral presentations, support these great kids, celebrate their accomplishments, and have fun!



The event is held at <u>Mission College</u> in Santa Clara. Mission College continues to be an incredible partner and allows the ASDRP community to utilize the <u>Gillmor Center</u>. The Gillmor Center is **118,000 square foot** three-story interdisciplinary classroom facility. A big thank you to <u>Dr. Omar Murillo</u>, <u>Clement Lam</u>, and <u>Brian Shively</u> who make our partnership with Mission College possible. We look forward to our next public event, "Blitz Talks", which will be held on Zoom in May.

New Publication Preprint from the Njoo Lab

Earlier this week, students from the Njoo lab published a new paper on BioRXiv, "Synthetic derivatives of vinpocetine as antiproliferative agents" in which the team disclosed the chemical synthesis of two analogs of vinpocetine, a vinca alkaloid with neuroprotective and anticancer activity. Mihira Gutti (Irvington), Jennifer Luo (Carlmont), Arshia Desarkar (Saratoga), Mirabelle Feng (Harker), and Flora Xie (California) and juniors Melanie Tsui (Lynbrook), Stella Yang (Harker), and Selina Xi (Valley Christian), and alumni Udbhav Avadhani (Leigh / now UCLA), Shloka Raghavan (Amador Valley / now Santa Clara), Elena Brierley-Green (Palo Alto High / now UCLA) and Erika Yu (Amador Valley / now UCSD). Read the preprint at this link: https://www.biorxiv.org/content/10.1101/2025.03.15.643482v1.abstract

Research 101 is back in full swing

This weekend is our 9th week of running this semester's rendition of Research 101, our foundation course for first semester students. After a brief hiatus last week due to expo, we are back in full swing; this morning, Prof. Clinton Cunha gave students their ninth lesson on principles of technical and scientific writing.

Parents, Families and Friends of ASDRP can Donate - Any Time

Thank you to all of our families who helped us raise close to \$75,000 in only 4 months this past fall. Our goal for 2025 is to double that and reach \$150,000. Your generosity has a direct impact on student researchers and ASDRP's on campus and remote research teams. Many of our families utilize corporate matching benefits - thank you!

Financial donations can be made directly through our donation PayPal page. Options for one time and recurring donations are available. All donations are tax deductible and you can request that your donation be applied towards a specific laboratory. Check out donations webpage: www.asdrp.org/donations. If you need assistance, please contact David Linnevers @ david.linnevers@asdrp.org for more information.

On the Horizon: Upcoming Events

Saturday, March 29, 2025 @ 10:00 - 11:30 AM

Research 101, Week 9 / Module 9: "Scientific Writing", Mr. Clinton Cunha

Research 101 is mandatory for all first semester students, and covers the fundamentals of research methodology, best practices, and basic statistics and writing skills. Module 9 / Week 9, Clunton Cunha will discuss practical applications towards high quality scientific writing, which is a necessary skill towards students' later aspirations to present work in conferences or in papers. First Semester Students are required to join us at 10:00 AM PDT via Zoom.

Saturday, March 29, 2025 @ 7:00 - 8:00 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 atom- and step-economical total synthesis of natural products, and mechanistic study of named reactions. In person only, open to all students.

Tuesday, April 1, 2025 @ 7:00 - 8:30 PM

Colloquia held online via Zoom (Weekly) Colloquia Website:

www.asdrp.org/colloquia. Join us every Tuesday at 7:00 PM on Zoom for the ASDRP student researchers Colloquia. All are invited and student researchers need to attend. Zoom Link



Department of Computer Science & Engineering

"Bionic Limb Mechanisms" Subramaniam Lab. Presenters: Jaiveer Gill, Bellarmine High School '26; Ruben Varghese, Cupertino High School '26; Francesca Yang, Basis Independent Silicon Valley '27; Komal Jasuja, Weston High School '27; Anjana Nair, Foothill High School '26; Pradyun Sethupathi, James Logan High School '26; Ezra Spivak, The Shalem School '27

Department of Chemistry, Biochemistry & Physics

"Implementing eXplainable AI Techniques with the Captum Library for Interpretable CNNs in Disease Detection" Viktoriia Liu Lab. Presenters: Aayush Tarhalkar, Irvington High School '26; Adhvaith Vinothkumar, Round Rock High School '26; Advi Wehzan, Leland High School '26; Anirudh Ayyadevara, Dougherty Valley High School '25; Roshan Saxena, Monta Vista High School '27; Trisha Sallakonda, Emerald High School '28

Events schedule list is subject to change with or without notice. Please check the ASDRP website for the most up to date information.

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ASDRP is a production of Olive Children Foundation, a 501(c)(3) nonprofit organization in Fremont, California.

[Link to Public ASDRP Events Calendar]

Wednesday, April 2, 2025 @ 3:30 - 5:30 PM

Spring 2025 Core Training: Mass Spectrometry (Akira Yamamoto / Edward Njoo)

Mass spectrometry core training is open to second semester students who have completed safety training. Students will be trained in instrument use policies, as well as ASDRP's lineup of single and triple quadrupole GC-MS and LC-MS instruments. Held in person only.

Saturday, April 5, 2025 @ 9:30 - 1:00 PM

Research 101, Week 10 / Module 10: "Research Posters", Mr. Michael Amadi

Research 101 is mandatory for all first semester students, and covers the fundamentals of research methodology, best practices, and basic statistics and writing skills. Module 10 / Week 10, Michael Amadi will discuss practical applications towards developing an impactful research poster, which is a necessary skill towards students' later aspirations to present work in conferences or in papers. First Semester Students are required to join us at 10:00 AM PDT via Zoom.

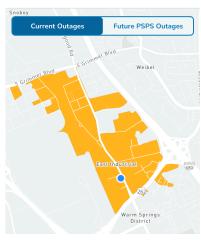


[NewsBytes]

End Note

On a busy Sunday about 2 weeks ago, our students did an outstanding job taking our lab power outage procedures very seriously. Student researcher development includes research, safety training, how to handle power outages and much more. <u>Dr. Edward Njoo</u>, <u>Akira Yamamoto</u>, David Linnevers, <u>Dr. Joey Pazzi</u>, <u>Dr. Harrison Rahn</u>, <u>Dr. Bharat Poudyal</u> and <u>Michael Amadi</u> were on site to ensure the lab was secure and our students were safe.





Below: <u>Dr. Bharat Poudyal</u> picking up and hauling supplies from <u>Biolink Depot</u> in Oakland, CA. His dedication to his student researcher development and being an active example of utilizing community resources is what makes ASDRP a special place for all students and their families.



