

Week of April 19-26, 2025

Announcements, Shoutouts, and Accolades

BLITZ Talks coming up on Tuesday, May 6, 2025 from 7:00-9:00 PM

ASDRP holds our online Research Symposium, via zoom, where we feature over 60 student researchers presenting their latest finds and success. Presentations are featured across all of our research laboratories. Student Researchers - registration is open. Register HERE. Deadline to register is April 30, 2025 and the presentation schedule will be posted on the BLITZ talks website on May 1, 2025.



New Publication in Springer Nature Discover Chemistry from Pazzi and Njoo Lab

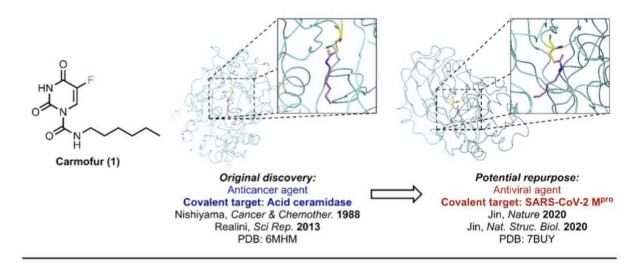
Earlier this week, students from the <u>Pazzi Lab</u> and <u>Njoo Lab</u> collectively got their <u>publication online in Springer</u>

<u>Nature's Discover Chemistry Journal, where the team reported the synthesis and biological evaluation of a series of analogs of the small molecule Carmofur</u>, which was initially developed decades ago as a treatment for colorectal cancer, but was recently discovered by to be a potent covalent inhibitor for the main protease of the SARS-CoV-2 coronavirus. Enabled by <u>an earlier study by the Njoo lab published in Canadian J. Chem (Wang, et al.</u>

<u>2023</u>), the team synthesized a library of diverse analogs of carmofur with different side chains, and found that some compounds were far more potent at inhibiting the main protease of the coronavirus compared to carmofur. Uniquely, the

Pazzi lab team identified that a dodecyl urethane analog of carmofur, with a 12-carbon long tail, induces potent membrane rupture of giant unilamellar vesicles (GUV's). Read the full paper here: https://link.springer.com/article/10.1007/s44371-025-00144-9

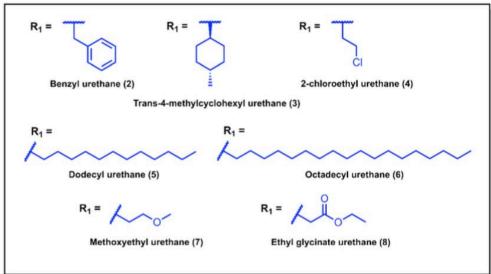
A)



B) This Work:



Urethane Series



Single Atom substitution Series

ASDRP Students present at the West Coast Biological Sciences Undergraduate Research Conference (WCBSURC) at CSU San Marcos

Last week, students from the Njoo Lab, Pazzi Lab, and Cunha Lab presented their research at the West Coast Biological Sciences Undergraduate Research Conference (WCBSURC), joining several thousand undergraduates and featuring hundreds of posters and oral presentations, held this year at the California State University, San Marcos. Congratulations to Jay McChesney (Dougherty Valley '26), Sanika Vaidya (Lynbrook '26), Shreya Somani (Lynbrook '26), Stella Yang (Harker '26), Flora Xie (California '25), Anca Stefan (Cambrian '26), Ieva Chepurna (San Mateo '26), Jessica Parvin (Leigh '26), Elizabeth Lin (TKA '26), Selina Xi (Valley Christian '26), Vihaan Sharma (Irvington '26), Abhinav Chalasani (MSJHS '26), Hengrui Chen (TKA '25), Alyssa Chia (TKA '26), Caroline Chen (Crystal Springs '27), and Sripathy Sadagopan (American '26).



Akl Lab Publishes IEEE Paper on Chaos Dynamics

This week, students from Dr. Marx Akl's lab published their latest conference proceeding in *IEEE 2025 17th International Conference on Bioinformatics and Biomedical Technology (ICBBT)*, titled "A Time-Step-Based Neural Network Framework for Modeling Chaotic Dynamics in Multi-Pendulum and Biological Systems". Congratulations to Vasista Ramachandruni (Milpitas '25), Sai Hruday Reddy Nara (Leigh '26), Geo Lalu (Milpitas '26), Sabrina Yang (Presentation '25), Prashanth Prabhala (Irvington '26), Mohit Ramesh Kumar (Amador Valley '25), Aarjav Jain (Milpitas '27), Pratham Mehta (Amador Valley '26), Hankyu Koo (Bellarmine '26), and Jason Damonte (California '25). Read more online here: https://doi.org/10.5281/zenodo.15243481

Happy Easter Weekend!

For those of you who celebrate Easter, ASDRP wishes you and your family a meaningful Easter Weekend! Laboratory and campus operations will be on a late start (opening at 12:30 PM) on Saturday and Sunday in observance of Easter.

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

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]

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

Tuesday, April 22 @ 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 Chemistry. Biochemistry & Physics

"Progress towards the total synthesis of Sporovexin A"

Dr. Edward Njoo's Lab Presenters: Jay McChesney, Cherine Zhou, Anca Stephan, Dr. Edward Njoo

Department of Computer Science & Engineering

"QCY - Using machine learning to diagnose spinal defects, injuries and illnesses."

<u>Dr. Larry McMahan's Lab</u> Presenters: Alyssa Chou, Bashkar Kabbara

Wednesday, April 23 @ 6:30 - 7:15 PM

Bi-Weekly ASDRP Parents Fireside Chat

Join us on Zoom at 6:30 PM for our bi-weekly Zoom with ASDRP Parents! https://us06web.zoom.us/i/86088443622?pwd=mlwoEOGlvm1LPOKUaXa8X1nCbeiBJ9.1

Saturday, April 26 @ 6:30 - 7:15 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.

Saturday, May 3 @ 10:00 - Noon

ASDRP Spring 2025 Parent Coffee & Behind The Scenes at ASDRP.

Parents - check your email for the invitation and RSVP form. We look forward to seeing you all on campus!

Tuesday, May 6 @ 7:00 - 9:00 PM

ASDRP Spring 2025 BLITZ Talks via Zoom

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Researchers - registration is open. <u>Register HERE</u>. **Deadline to register is April 30, 2025 and the presentation schedule will be posted on the BLITZ talks website on May 1, 2025.**



End Note

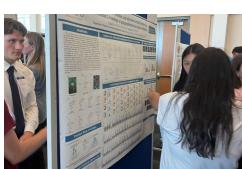
Talking Research across the State and the Country...

NCUR with the Cunha Lab; West Coast Biological Sciences Undergraduate Research Conference with the Njoo Lab, Pazzi Lab and Cunha Lab; Harker School Research Symposium presenters from the Pazzi Lab and Njoo Lab; Visiting Santa Clara University with the Starostina Lab (Materials Science & Engineering).









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