



RESEARCH NEWS



NOTES FROM THE ADRGS

It is cliché to say time has gone quickly but using this newsletter to reflect on the accomplishments of the past year makes me realize all the diverse efforts that go in to making our school a great place to learn and work. From the return to in person student interviews, to the excitement of the Research Retreat, and kicking off our strategic planning - it has been wonderful year! Please join me in celebrating our graduates and our research. We look forward to more innovation and scholastic achievement in 2024!



Manisha Patel, PhD

Associate Dean of Research
and Graduate Studies



Karen Kimes, MBA, Director
of Research Administration



Isabella Jaramillo, Graduate
Program Administrator

A YEAR AT A GLANCE

One year ago, Dr. Manisha Patel was named Associate Dean for Research and Graduate Studies. In her year as ADRGS, there have been many successes. Please join her in celebrating the accomplishments of the faculty and students. And after a well-deserved break, let's keep the momentum going! We want everyone to be a part of the strategic planning process and provide input on how we can best utilize resources and serve the School in the longer term.



Karen Kimes, Manisha Patel, PhD and Isabella Jaramillo

Notable Leadership Changes Across Three Graduate Programs in 2023

Over the course of 2023, significant leadership changes have taken place across the three PhD Graduate Programs, resulting in greater diversity and an influx of new ideas.



Laura Saba, PhD

Dr. Laura Saba has been appointed as the new Program Director of the Pharmaceutical Sciences PhD Graduate Program, bringing fresh ideas and energy to the already successful program formerly led by Dr. Peter Anderson. Dr. Krishna Mallela remains as the Associate Program Director.

The Associate Program Director position for the Toxicology PhD Graduate Program previously held by Dr. James Roede has been filled by Dr. Rebecca McCullough. The program continues to thrive under the guidance of Drs. Brown and McCullough.



Rebecca McCullough, PhD



Kelly Anderson, PhD

The Pharmaceutical Outcomes Research Program will experience changes in the new year as Program Director Dr. Heather Anderson steps down after leading the program for six years. Dr. Kelly Anderson will take over as the new Program Director effective January 1, 2024.

Congratulations to all those who have been appointed to their new roles this year. We eagerly anticipate your future program successes!

Enhancing Student Experience Through Townhall Meetings

In order to gain insight into student perspectives and improve communication and information dissemination, ADRGS and Graduate Program Directors held a student townhall every semester. The primary goal of the meetings was to highlight various student resources and to promote inclusivity and wellness among students.

These meetings provided students with the opportunity to hear presentations and participate in live Q&A sessions. The townhall meetings featured speakers from student-focused resources such as Erika Freitas, Ph.D., SSPPS Assistant Dean of Equity, Diversity, and Inclusion, Carl Johnson, Assistant Vice Chancellor and Dean of Students for the Anschutz Campus, and Bruce Mandt, PhD, Director of the Postdoctoral Office and Career Development Office.



SSPPS Graduate Programs Student Spring Symposium

Each year, our student leaders organize a Spring Graduate Student Symposium highlighting their research. This year's program, held on Friday, April 21, 2023 was a huge success. The students invited Dr. Julie Moreno (Professor in Colorado State University's Environmental Toxicology program) as the keynote speaker. Dr. Moreno talked about her exciting research on a novel therapeutic approach for neurodegenerative diseases that was tested in worms to dogs and shows enormous promise for patients with neurodegenerative diseases. Several students from the Toxicology, Pharmaceutical Sciences and Pharmaceutical Outcomes programs presented outstanding short talks on their research followed by an interactive poster session and awards presentation. This year's awardee for the Platform Session was Arthur Stem. The awardees for the Poster Presentations were Samantha Crawford, Hannah Work, Lauren Rutt, Angela Reinhert, and Nicholas Mendola. A big thank you and congratulations to our incredible graduate students for this successful event.



Julie Moreno, PhD



Jed Lampe, PhD and Jason Groegler



SSPPS Graduate students and faculty



Hannah Work (Pharm Sci), Angela Reinhert (Tox), Nicholas Mendola (Pharm Outcomes Research), Samantha Crawford (Pharm Sci), Lauren Rutt (Tox), Arthur Stem (Tox), Jared Brown, PhD, and Laura Saba, PhD

GRADUATE PROGRAMS

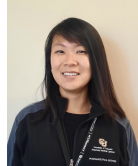
Student Successes

Pharmaceutical Sciences



Tim Kellett, LaBarbera Lab

- **Tim Kellett** had his first, first author paper published in SLAS Discovery



Anqi Li, DaiLab

- **Anqi Li** was appointed to the T32 training program “Interdisciplinary Bioengineering Research Training in Diabetes” for her engineered ZIP CAR T therapeutical study on diabetes.



Yue Li, Simberg Lab

- **Yue Li** got her perspective paper (1st author) accepted for publication in Current Opinion in Biotechnology



Alaa Radwan, Aquilante Lab

- **Alaa Radwan** is the recipient of an American Society of Clinical Pharmacology and Therapeutics (ASCPT) Presidential Trainee Award. She will receive the award at the ASCPT 2024 Annual Meeting to be held March 27-29, 2024, in Colorado Springs, CO. Her abstract has been selected for a Top Poster Ribbon.



Lauren Thompson, Joy Lab

- **Lauren Thompson** was awarded the Sheldon D. Murphy Student and Postdoctoral Endowment Award from the Society of Toxicology (SOT) Mechanisms Specialty Section this past year in Nashville, TN.



Hannah Work, Lampe Lab

- **Hannah Work** was recently appointed as an ASPET Washington fellow and also elected to the Early Career Scientist Subcommittee Member for ASPET’s Science Policy Division. She was elected to serve on the Undergraduate Outreach and Mentoring Coordinator for Women in STEM club on campus. She was also was invited to submit a manuscript for a special edition of the journal Drug Metabolism and Disposition entitled “Innovations, Opportunities and Challenges for Predicting Alteration in Drug Metabolizing Enzymes and Transporters Activity in Specific Populations”.

- **Jason Groegler** received a fantastic (fundable) score on his F31 application

GRADUATE PROGRAMS

Student Successes

Toxicology



Paige Anton, McCullough Lab



Daniel Foster, Redente Lab



Rama Kant, Agarwal Lab



Chanapa Mann, Brown Lab



Courtney McGinnis, Fritz Lab



Lauren Rutt, McCullough Lab



Arthur Stem, Brown Lab



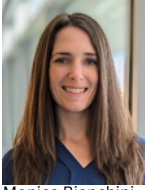
Shannon Twardy, McCullough Lab

- **Paige Anton** has Chaired the Gordon Research Seminar (GRS) on Alcohol-Induced End Organ Diseases. She has given a platform presentations at the Gordon Research Conference on Alcohol-Induced End Organ Diseases and Mountain West Society for Toxicology. In addition, Paige has presented a poster at the Keystone Symposium for Immunity and Aging in Whistler, BC Canada.
- **Daniel Foster** has completed the NCATS TL1 Fellowship and has been awarded the NHLBI F31 Fellowship. He was selected as the national PhD representative for the NCATS TL1/T32 program. He presented a poster at the American Thoracic Society International Conference. He also presented a talk at the Association for Clinical and Translational Science Annual Meeting, Kauvar Symposium, and the Mountain West Society of Toxicology.
- **Rama Kant** attended Society of Toxicology (SOT2023) meeting in Nashville, TN and presented a poster and contributed to five first and second author publications in *Toxicology and Applied Pharmacology*, *Free Radical Biology and Medicine*, *Experimental Eye Research*, *Journal of Pharmacology and Experimental Therapeutics*.
- **Chanapa Mann** co-authored her first manuscript in *Ecotoxicology and Environmental Safety*.
- **Courtney McGinnis** displayed her leadership skills by being the WiSTEM Officer: Mentorship Coordinator for Undergrad and Graduate Students and the Junior Graduate Student Representative for Mountain West Society of Toxicology. She received 4 travel awards to attend multiple conferences spanning from Denver to Uruguay to present posters/talks/oral presentations on her research. She has completed her NCATS fellowship and has been awarded an NIAAA F31 fellowship.
- **Lauren Rutt** was the Student Representative (Co-Rep with Arthur Stem) for the Toxicology PhD program. She has completed the T32 Training Program and has been awarded the NIAAA F31 Fellowship. She has presented posters at the Gordon Research Conference (GRC) on Alcohol-Induced End Organ Diseases in Ventura, CA; Mountain West Society of Toxicology in Denver, CO; and Alcohol and Immunity Research Interest Group (AIRIG) in Denver, CO and has received 2 travel awards.
- **Arthur Stem** was the Student Representative (Co-Rep with Lauren Rutt) for the Toxicology PhD program. He was published as an author or first author in 2 publications. He attended the Society of Toxicology (SOT) conference in Nashville, TN, where he won three awards. He presented posters/talks/oral presentations on his research at the Mountain West Society of Toxicology (MWSOT) in Aurora, CO and the British Occupational Hygiene Society (BOHS) in Manchester, UK.
- **Shannon Twardy** was accepted as a top 20% finalist for the Research Society on Alcohol for their small grant awards. She is a first author on a primary watch article published in *Environmental Toxicology and Pharmacology*. She presented posters at the Gordon Research Conference on Alcohol-induced End Organ Diseases in Ventura, CA, Mountain West Society of Toxicology in Denver, CO and the Alcohol and Immunity Research Interest Group Meeting in Denver, CO.

GRADUATE PROGRAMS

Student Successes

Pharmaceutical Outcomes Research



Monica Bianchini

- **Monica Bianchini** attended the International Conference on Pharmacoepidemiology conference in Nova Scotia, Canada, where she had two posters accepted. She published one publication as the first author.



Nai-Chia (Sammi) Chen

- **Nai-Chia (Sammi) Chen's** poster was accepted at the international International Society of Pharmacoeconomics and Outcomes Research Conference Europe 2023 in Copenhagen, Denmark.



Mouna Dardouri

- **Mouna Dardouri's** poster was accepted at the International Society of Pharmacoeconomics and Outcomes Research Conference in Boston, MA. Podium presentation at Western Pharmacoeconomics Conference (WPEC), Los Angeles California.



Nicholas Mendola

- **Nicholas Mendola** won the Best Poster at the Western Pharmacoeconomics Conference in Los Angeles, California. He was also co-author on four publications.



Vanessa Patterson

- **Vanessa Patterson's** poster presenting her dissertation work was accepted at the international American Heart Association conference in Philadelphia, Pennsylvania. She published one article as co-author.

GRADUATE PROGRAMS

Student Successes

Pharmaceutical Sciences, MS

- 20 graduates, 11 of whom did the program entirely or partially online, including **Dana Bakdach**, a clinical pharmacist in Doha, Qatar, who worked with Drs. Peter Anderson and Kristina Brooks.
- The Cannabis Science & Medicine (7) and Clinical Pharmacokinetics & Pharmacodynamics (6) tracks produced the greatest number of graduates, with CSM students completing the most capstone papers and CPK students conducting the most thesis research projects in 2023. Three other graduates completed the Drug Discovery track while two each completed the Molecular & Systems Toxicology and Pharmaceutical Biotechnology & Drug Delivery tracks.
- **Andrew Basalla** completed the first industry-affiliated thesis project while working at KBI Biopharma with mentor and CU Pharm Sciences PhD alumnus, Dr. Brent Kendrick, perfecting a method for quantifying large molecule therapeutics by novel light-scattering methods. Andrew recently left KBI for a scientist position at Molecular Templates in Austin, TX.
- **Lindsey Foust** completed the first Cannabis Science & Medicine thesis research project thanks to an external collaboration with Front Range Biosciences, AgriSciences Labs (her employer), and Plant Health Services CEO, Dr. Tessa Albrecht, on the influence of hop latent viroid disease on plant production of cannabinoids, terpenes, and overall biomass.
- **Maria Trivino Samper** completed the first science journalism-based capstone project while publishing three articles on Cannabis Wire, an international news service on cannabis science and policy co-founded by her mentor, Alyson Martin, an adjunct journalism faculty member at Columbia University in New York.
- **Jordan Palan** completed the first capstone project on biomedical technology licensing with our colleagues in CU Innovations (Dr. Mary Tapolsky) and Dr. Melanie Joy, CU SSPPS Director of Pharmaceutical Science Innovation and Commercialization.
- The MSPS program is grateful to all of our SSPPS faculty for serving on MS Advisory and Examination Committees as well as our cross-campus and community collaborators:
 - Tessa Albrecht, PhD, CEO, Plant Health Services
 - Ron Arner, LPC – Children’s Hospital Colorado
 - Alison Bauer, PhD – Professor, CSPH
 - Kimberley Bruce, PhD – Associate Professor, Medicine-Endocrinology/Metabolism/Diabetes
 - Uwe Christians, MD, PhD – iC42 Clinical R&D Labs and Anesthesiology, SOM
 - Richard Holdman, MD, MPH – Colorado Dept, of Public Health & the Environment
 - Brent Kendrick, PhD – First Principles Biopharma
 - Alyson Martin, MS – Co-Founder & Editor, Cannabis Wire
 - J. Mark Petrash, PhD – Professor and Vice-Chair of Ophthalmology, SOM
 - Mary Tapolsky, PhD – Director of Licensing, CU Innovations

CONGRATULATIONS 2023 GRADUATES

Manisha Patel, PhD, Associate Dean of Research and Graduate Studies; Raj Agarwal, PhD, Professor and Interim Chair; along with Program Directors, Laura Saba, PhD, Jared Brown, PhD, David Kroll, PhD, and Program Administrator, Isabella Jaramillo offer their sincere congratulations to the 2023 class of graduates.

Pharmaceutical Sciences PhD Program

SPRING

Lana Salah, PhD

FALL

Samantha Crawford, PhD



Toxicology PhD Program

SPRING

Lan Chen, PhD
Keegan Rogers, PhD

SUMMER

Scott Tilden, PhD

Pharmaceutical Sciences Masters Program

SPRING

Farah Abdelmawla, MS
Andrew Basalla, MS
Sophia Clune, MS
Charles Bryan Corey, MS
Jordan Palan, MS
Riley Randolph, MS
Nour Tobeh, MS
Juhi Parsana, MS
Monica Pittiglio, MS
Allison Evans, MS
Diksha Diundi, MS

SUMMER

Stephanie Bersie, MS
Dana Bakdach, MS
Marilla Gould, MS
Maya Handlesman, MS

FALL

Mansi Desai, MS
Lindsey Foust, MS
Jennifer Montgomery, MS
Maria Trivino, MS

"You've each brought such diverse perspectives to our learning community and we are delighted to contribute to your personal and professional growth."



ADRGs ADVISORY COUNCIL: UPDATE

The ADRGS Advisory Council held the latest meeting on November 10, 2023, led by Manisha Patel, PhD, Associate Dean of Research and Graduate Studies. The council consists of members from both SSPPS departments and includes Jacqui Bainbridge, David Bain, David Kroll, Heather Anderson, Jared Brown, Isabella Jaramillo, and Karen Kimes. The Council has commenced Strategic Planning for Research and Graduate Studies with the assistance of Assistant Vice Chancellor for Learning and Development, Debra Lammers.

NOTEWORTHY

- A total of 6 students between the two programs: Pharmaceutical Sciences and Toxicology have applied for F31 grants this year and 2 have been awarded so far! Congratulations and Good luck!
 - Michaela Hvizdak
 - Courtney McGinnis*
 - Daniel Foster*
 - Shannon Twardy
 - Lauren Rutt
 - Jason Groegler

*Awarded

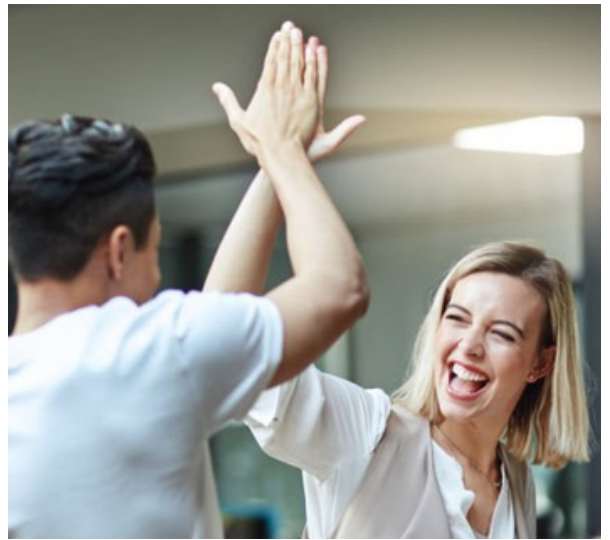


GRAD STUDENT RECRUITMENT EVENT

The first in-person Doctorate Graduate student recruitment event was held in February since the last event in 2020, with 30 students attending. The event was a great success, and both faculty members and students were pleased with the outcome. The in-person interviews allowed for a more personal and comprehensive evaluation of the candidates, and the opportunity to interact with faculty and current graduate students provided valuable insights into the program and the department. The event also gave the candidates a chance to explore the campus and surrounding area, and many expressed interest in attending the university if accepted into the program. Overall, the in-person Graduate student recruitment event was a positive experience for all involved, and we look forward to continue hosting in person recruitment events in the future .

2023-2025 SKAGGS SCHOLAR GRANT RECIPIENTS

- Dr. Kelly Anderson with Dr. Mattingly from Utah for the project titled "Predicting Operational Sustainability and Patient- and Pharmacist-level Effects for Retail Pharmacies (PROSPER)."
- Dr. Melanie Joy with Dr. Awdishu from UCSD project titled "Genetics of Drug-Induced Kidney Disease."
- Dr. Dan LaBarbera with Dr. Metcalf from Utah project titled "Development of Small Molecule Agonists for Galanin Receptors with Antiseizure Efficacy."
- Dr. Robert Page with Dr. Hernandez (UCSD) and Dr. Blackburn (Montana) for their project titled "Effect of Extreme Heat and Wildfire Smoke on Health Outcomes and Costs in Vulnerable Populations with Cardiovascular Disease in the Western US: A Geospatial Analysis."
- Dr. Phil Reigan with Dr. Natale from Montana project titled "Dual Targeting of DNA and Energy Metabolism by Anthracenyl Isoxazole Amides in Leukemia."
- Dr. Dmitri Simberg with Dr. Goel from Utah project titled "Opto-acoustic Imaging (OAI) for Understanding and Predicting Skin Toxicities of Anticancer Drugs."



The Skaggs Scholars Program, centered at the University of Colorado and funded by a generous grant from The ALSAM Foundation, is designed to stimulate collaborative research between Colorado pharmacy faculty members and faculty members at one or more of the six other Skaggs institutions.



COMING SOON

PharmASSIST

PharmASSIST is a Sharepoint website where students can access program specific information along with student resources. Expected to launch Spring 2024!

Research in Progress

Look for Research in Progress seminars - which highlight 2 to 3 of our current faculty and their research projects - to resume this Spring.

HIRs Recruitment Scholarship

Introducing the HIRs Recruitment Scholarship. The scholarship is to be awarded to an incoming accepted applicant for one of the Pharmaceutical Sciences, Toxicology and (or) Pharmaceutical Outcomes Research PhD Programs annually. The recipient will receive \$5,000.00.

Helen Gretchen Tilden Travel Award

We are grateful to receive a generous travel fund for Toxicology Graduate Students attending conferences in the spring and fall of each year.

Each winner will be awarded \$500.00 to assist with the travel costs of attending conferences.

Students are to send in their self-nominations to Isabella Jaramillo and Jared Brown no later than 3 weeks prior to the spring or fall conference they wish to attend.

Congratulations, to Scott Tilden, Paige Anton, and Courtney McGinnis our 2023 award recipients!

UPCOMING EVENTS

Graduate Student Recruitment- February
Student Spring Symposium-April
SSPPS Annual Research Retreat- August



Welcome to PharmASSIST

The PharmASSIST site is designed to ASSIST



PHD Students