



ROSALIND FRANKLIN
UNIVERSITY
of MEDICINE AND SCIENCE

COLLEGE OF PHARMACY



RESEARCH AND SCHOLARSHIP REPORT

July 1, 2022 - June 30, 2023

“SCIENCE, FOR ME,
GIVES A PARTIAL
EXPLANATION FOR
LIFE. IN SO FAR
AS IT GOES, IT IS
BASED ON FACT,
EXPERIENCE AND
EXPERIMENT.”

DR. ROSALIND FRANKLIN
1920-1958

1,940 STUDENTS
30+ ACADEMIC PROGRAMS
1 UNIVERSITY

ACADEMIC ACHIEVEMENT IS IN OUR DNA

Rosalind Franklin University of Medicine and Science (RFU) is named for Dr. Rosalind Franklin, the pioneering British researcher who captured “Photograph 51” of the “B” form of DNA in 1952 while at King’s College London. This photograph revealed the structure of DNA, the key to understanding how the blueprint for every living thing is passed down from generation to generation.

Today, RFU carries on Dr. Franklin’s legacy of inquiry, diligence and academic excellence. Formed in 1912 as the Chicago Hospital-College of Medicine, the university is a national leader in interprofessional medical and healthcare education.

OUR MISSION

The mission of Rosalind Franklin University of Medicine and Science is **to serve humanity through the interprofessional education of health and biomedical professionals and the discovery of knowledge dedicated to improving wellness**. Today, the university is shaping the future of health care through rigorous education, pioneering biomedical research and innovative community service.

OUR VISION

The vision of Rosalind Franklin University of Medicine and Science is **to be the premier interprofessional health sciences university**. Sharing our accomplishments and contributing to the evidence base for science, interprofessional education and practice will help build a safer, more responsive, coordinated system of patient care, prevention and wellness.

OUR VALUES

Collaboration · Excellence · Innovation · Integrity · Justice · Respect · Scholarship



ROSALIND FRANKLIN
UNIVERSITY
of MEDICINE AND SCIENCE

THE ROSALIND FRANKLIN UNIVERSITY DIFFERENCE

INTERPROFESSIONAL EDUCATION

At Rosalind Franklin University of Medicine and Science, we believe in breaking down academic barriers. We take an interprofessional approach to education, so our students learn from and work with peers in other specializations from the beginning of their time here.

That’s especially important, as healthcare teams play an increasingly vital role in medicine. At RFU, we prepare students for the future by integrating collaboration and teamwork into education. Having more than 30 graduate health professions and science programs in one university creates great opportunities to do that.

Additionally, each first-year student in our clinical programs takes the Foundations for Interprofessional Practice course during the fall quarter. This class, which acts as the foundation for an integrated interprofessional education experience, brings students from all academic programs together to learn from one another, get oriented to the culture of health care and start interacting in small, interprofessional teams.



COLLEGE OF PHARMACY

The College of Pharmacy (COP) graduated its first class in 2015. The program focuses on exciting opportunities in a variety of career paths, including community pharmacy, health systems, industry, academia and public health.

As with other schools at RFU, interprofessional education separates the College of Pharmacy from other pharmacy programs. The rapid change in delivery of care is helping to drive the expansion of pharmacy’s scope of practice. From the first day, our students attend classes with peers studying other disciplines and they learn from them along with the faculty.

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INTRODUCTION



This annual report documents the research and scholarship accomplishments of the faculty and students of the College of Pharmacy during the past academic year. The discovery, dissemination, and implementation of new knowledge is a core component of the College's mission. Through a variety of research experiences, including the summer research program, we are also preparing students as the next generation of scholars. Research and scholarship activities in the college cover a wide range of topics, including foundational sciences, clinical sciences, and the scholarship of teaching and learning. Beginning this we are proud to specifically identify research and scholarship involving diversity, equity, inclusion and justice. We look forward to building on these accomplishments with the implementation of our Research Pathway of Distinction available to students this year.



Scott Hanes, PharmD

Interim Dean, *College of Pharmacy*

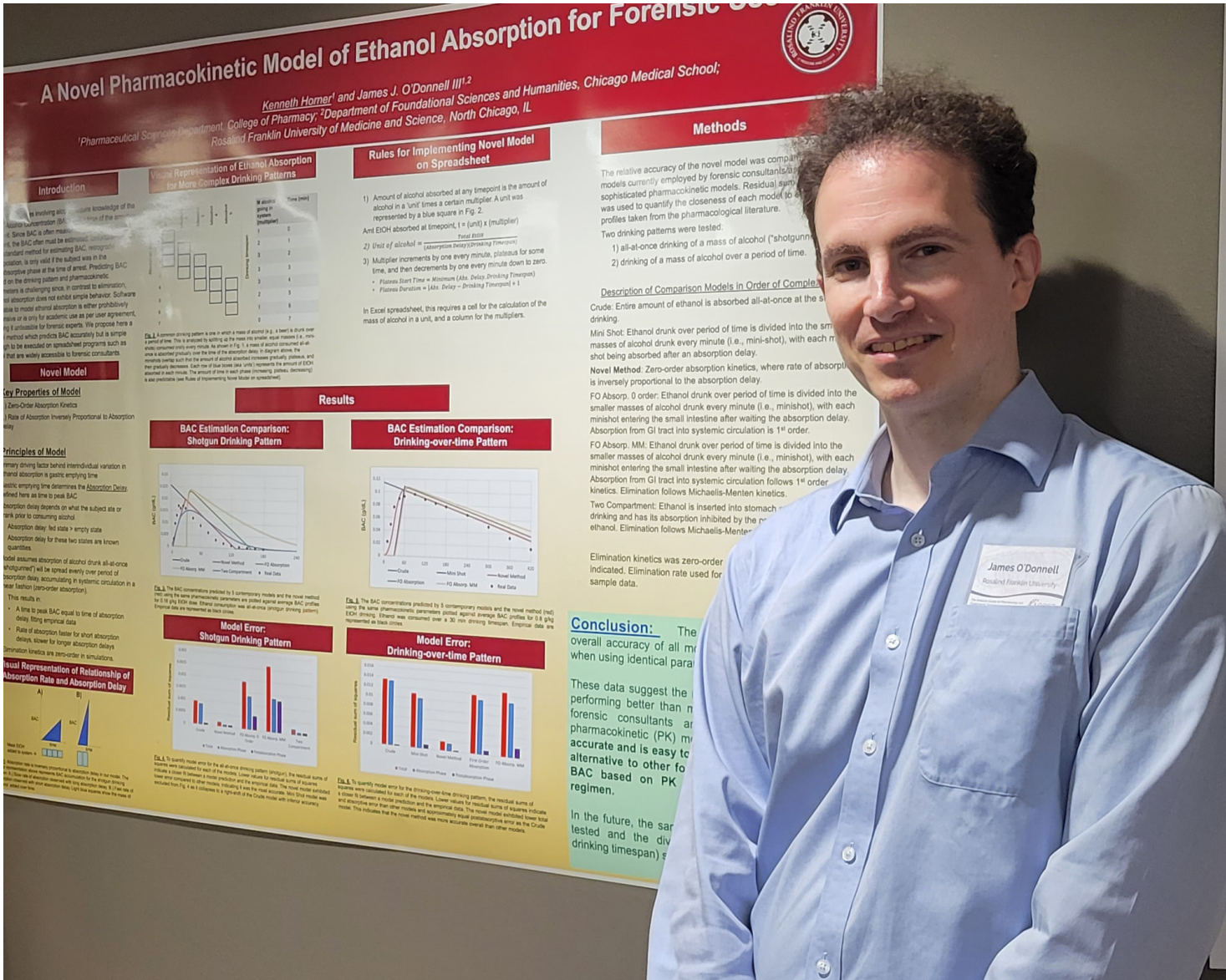
It gives me great pleasure to present the annual research report for the College of Pharmacy. This year brings high-quality and thought-provoking research from the College faculty and students. I hope this publication provides you with insights into the interprofessional, healthcare disparity interventions, and innovative scientific research being conducted at the College. This publication includes information of all the research achievements of the College in various formats including research publications, poster/abstract presentations at local, national and international meetings, and grants. I am grateful for everyone who participated in the research and am proud of their achievements.



Ateequr Rahman, MBA, PhD

Professor and Director of Research

College of Pharmacy



PEER-REVIEWED PROFESSIONAL PUBLICATIONS

When research and scholarship efforts produce interesting and important results, the scholar submits these results for publication in scholarly journals. But before the results can be published, they must undergo rigorous review by other experts in the field. Peer-reviewed publications have met the standards set by these experts. The following list of peer-reviewed publications represents significant efforts from College of Pharmacy faculty and students.

Rahman A, Toutche M*, Shukla D*, Herrebout L*, Alwan A*, Schwartzwald J*, Sutherland E* and Cukovic L*. Health care disparities in emergency department visits for mental health disorders. World J Adv Res Rev. 2023;18(02): 408–414. doi: 10.30574/wjarr.2023.18.2.0822.**

Rahman A, Krzyzewski K*, Ramirez Corchado N*, and Cukovic L*. Assessment of National Trauma Trends for Motor Vehicle Accidents. J Med - Clin Res Rev. 2023; 7(5): 1-4.

Cukovic L*, Sutherland E*, Fuentes D*, **Rahman A**. An Evaluation of Outpatient Pediatric Asthma Prescribing Patterns in the United States. International Journal of Science and Research Archive (IJSRA), May 31, 2023.

Jaeger BC, Chen L, Foti K, Hardy ST, Bress AP, **Kane SP**, Huang L, Herrick JS, Derington CG, Poudel B, Christenson A, Colantonio LD, Muntner P. Hypertension Statistics for US Adults: An Open-Source Web Application for Analysis and Visualization of National Health and Nutrition Examination Survey Data. Hypertension. 2023;80(6):1311-1320. doi: 10.1161/HYPERTENSIONAHA.123.20900.

Oshman L, Biszewski M, Carlock F, Radz M, **Neu R**, Billings LK. Effect of a Type 2 Diabetes-Focused Visit Improvement Initiative on Therapeutic Inertia and Glycemic Control in Primary Care. Clin Diabetes. 2023 Spring;41(2):296-300. doi: 10.2337/cd22-0024. Epub 2022 Nov 9.**

Bunting SR*, Calabrese SK, Spigner ST, Goetz TG, Morrison SD, Zucker SM, Ritchie TD, **Garber SS, Batteson T: Evaluating Medical Students' Views of the Complexity of Sexual Minority Patients and Implications for Care. LGBT Health. 2022;9(5):348-358. doi: 10.1089/lgbt.2021.0023.

Bunting SR*, Morris S, Chael J, Feinstein BA, Hazra A, **Garber SS. Knowledge of human papillomavirus vaccination: A multi-institution, cross-sectional study of allopathic and osteopathic medical students. PLoS One. 2023;18(1):e0280287. Published 2023 Jan 11. doi: 10.1371/journal.pone.0280287.

Bunting SR*, Feinstein BA, **Bertram C, Hazra A, Sheth NK, **Garber SS**. Effects of knowledge and implicit biases on pharmacy students' decision-making regarding pre-exposure prophylaxis for HIV prevention: A vignette-based experimental study. Curr Pharm Teach Learn. 2023;15(2):139-148. doi: 10.1016/j.cptl.2023.02.019.

Tamzin J. Batteson, Marianne G. Chirica*, Kelli S. Fox, Jan Froehlich, **Sarah S. Garber, Carol Lambdin-Pattavina, Sally A. McCormack Tutt, Leslie Ochs, Kira Rodriguez, Nancy Jo Ross, Lori Thuente: Utilizing video simulation in interprofessional education to teach IPEC competencies and

social determinants of health: A universal IPE teaching tool, Journal of Interprofessional Education & Practice, Volume 31, 2023, ISSN 2405-4526, doi: 10.1016/j.xjep.2023.100617.

Ahlschwede, K.M., Ofori, E., Andey, T., Osei, A., Somberg, J.C*. Formulation, characterization, and the diuretic effects of a new intravenous metolazone emulsion. Drug Research. 2022 July; 72(6), 299-305. doi: 10.1055/a-1813-9489.

Patil SA, Kandathil V*, Sobha A*, Somappa SB*, Feldman MR, Bugarin A, Patil SA. Comprehensive Review on Medicinal Applications of Coumarin-Derived Imine-Metal Complexes. Molecules. 2022, Molecules. 2022 Aug 16;27(16):5220. doi: 10.3390/molecules27165220.**

Patil SA, Patil SA, Ble-González EA, * Isbel SR*, Hampton SM, Bugarin A. Carbazole Derivatives as Potential Antimicrobial Agents. Molecules. 2022 Oct 4;27(19):6575. doi: 10.3390/molecules27196575.**

Patil SA, Nesaragi AR*, Rodríguez-Berrios RR*, Hampton SM, Bugarin A, Patil SA. Coumarin Triazoles as Potential Antimicrobial Agents. Antibiotics (Basel). 2023 Jan 12; 12(1):160. doi: 10.3390/antibiotics12010160.**

Deokar H, Deokar M, **Buolamwini JK**. Integration of fingerprint-based similarity searching and kernel-based partial least squares analysis to predict inhibitory activity against CSK, HER2, JAK1, JAK2, and JAK3. Mol Divers. 2023 Jan 17. doi: 10.1007/s11030-022-10596-1.

Bold = College of Pharmacy contributors,
* = Student, resident and postdoctoral contributors,
^ = Interprofessional items



ABSTRACTS AND PRESENTATIONS AT EXTERNAL MEETINGS

An important aspect of the sharing of new knowledge is the presentation of that knowledge in oral or poster format. This happens at regional, national and international conferences and in the form of invited seminars. The College of Pharmacy has produced an impressive list of such presentations, listed here.

Kosson D, Krause C, **Rosenkranz J, Patel K**. The Effectiveness of a Voluntary, Pre-arrest Drug Diversion Program in Lake County, IL. Presented at: VA Research Week, May 2023, North Chicago, IL.

Rahman A, Sutherland E*, Cukovic L*, Fuentes D*. An Evaluation of Outpatient Pediatric Asthma Prescribing Patterns in the United States. Poster Presented at: ASHP Midyear Clinical Meeting; December 4-8, 2022, Las Vegas, Nevada.

Rahman A, Cukovic L*, Alwan A*, Chabo A*, Krzyzewski K*. Impact of COVID-19 on the Academic Performance of Graduate Healthcare Students. Poster Presented at: ASHP Midyear Clinical Meeting; December 4-8, 2022, Las Vegas, Nevada.

Rahman A, Mehmood S*, Toutche M*, Herrebout L*, Schwartzwald J*. Health Care Disparities in Emergency Room Visits for Mental Health Disorders. Poster Presented at: ASHP Midyear Clinical Meeting; December 4-8, 2022, Las Vegas, Nevada.***

Rahman A, Krzyzewski K*, Corchado NR*, Abolarin Z* Rico A* Mehmood S*. Assessment of National Trauma Trends for Motor Vehicle Accidents. Poster Presented at: ASHP Midyear Clinical Meeting; December 4-8, 2022, Las Vegas, Nevada

Rahman A, Younis A*, Fuentes D*, Abolarin Z*, Schmit G*, Patel A*. Opioid Antagonist Utilization Patterns in U.S. Emergency Department Visits. Poster Presented at: ASHP Midyear Clinical Meeting; December 4-8, 2022, Las Vegas, Nevada

Neu R, Bachenheimer B, Philips J, Khoshaba M*, Fakhouri L*, Fulton A. Evaluation of Intravenous Regular Insulin Use and Subsequent Hypoglycemia During Treatment of Hyperkalemia in a Large Multi-Site Hospital System. Poster presented at: 2022 ASHP Midyear Clinical Meeting and Exhibition; December, 2022; Las Vegas, NV

Wateski M*, Kane C, **Cunningham K**. Evaluation of an Initial Starting Dose of Tacrolimus After Simultaneous Kidney-Pancreas Transplant. Poster Presented at: ASHP Midyear Clinical Meeting; December, 2022, Las Vegas, NV.

Sandler A*, **Lyden A**. Utilizing a Toxicology Digital Simulation Framed by the Pharmacists' Patient Care Process to Prepare Students for APPEs and Clinical Practice. Pharmacists' Patient Care Process to Prepare Students for APPEs and Clinical Practice. Presented at: ASHP Midyear Clinical Meeting; December 2022; Las Vegas, NV.

Dagenhart J*, **Kane SP, Candelario D, Patel K, Bertram C, Gavlin T**. Impact of Pre-Matriculation Withdrawals on First Year Pharmacy School Success. IPhA Annual Conference. September 2022.

Srivastava S, Patel K. Overview of Pharmacotherapy for Chronic Weight Management. Poster presented at: ADCES Annual Meeting; August 2022; Baltimore, MD.

Weinstein Z*, **Candelario DM, Alschwede A**. Reinforcing pharmaceutical calculations through an interactive immediate response learning program. Poster presented at: Association College of Clinical Pharmacy (ACCP) Annual Meeting; July 2022, Grapevine, TX.

Kane SP. Student Workload Heat Maps as a Curricular Visualization Tool. Roundtable session presentation. AACP Annual Meeting. July 2022.

Ghazal H*, Paner J*, Guerrero M*, Jordan-Zamora A*, Liu R*, Camacho EJ*, Sulaiman S*, Maya J*, Pompa C*, Magdangal J*, Sommer R, **Patil S**, Patil R, Grice KA. Examining the Synthesis, Reactivity, and Biological Activities of 5-Amino-5H-Chromenopyridines. Poster presented at: 264th American Chemical Society National Meeting & Exposition, August 21-25, 2022, Chicago, IL.

Rosendo K*, Papadatos G*, Mayor J, Buolamwini J, Kaplan R, Patil S. Anticancer activity of 5-substituted-chromenopyridines. Poster presented at: Great Lakes Chapter American Society for Pharmacology and Experimental Therapeutics. June 1 st , 2023, University of Illinois at Chicago, Chicago, IL.

Weinstein Z*, **Candelario DM, Ahlschwede K**, Teaching and Reinforcing Pharmaceutical Calculations Through an Interactive Immediate Response Learning Program (IRLP). Poster presented at the American Association of Colleges of Pharmacy Annual Conference. Grapevine, TX. July 2022.

Horner, K* and **O'Donnell III JJ**. A Novel Pharmacokinetic Model of Ethanol Absorption for Forensic Use. Poster presented at: American Society for Pharmacology and Experimental Therapeutics - Great Lakes Chapter (ASPET-GLC) Conference; June 1, 2023; Chicago, IL.

Salih R*, Collins K*, Batteson T, **Garber SS**, Eboweme I*, Bassler D*, Smock S*, Price Z*: Metacognition of Interprofessional Education: Critical Discourse Analysis of an Interprofessional Healthcare Simulation. Presented virtually at: Collaborating Across Borders (CAB) VIII; May 2023.

Cohen Konrad S, Hall K, **Garber SS**, Rodriguez K, Batteson T. The Interprofessional Team** Immersion: An Enduring and Sustainable Collaborative Learning Experience. INHWE 3rd International Congress of Health Education and Research & AoME Annual Academic Meeting INHWE/AoME 2023: Learning Together for Clinical Excellence 27-29 June 2023, Cardiff, Wales.**

Walters DE. Relational Database of Drug Functional Groups To Facilitate Teaching Medicinal Chemistry. Poster presented at: American Chemical Society, National Meeting; August 21, 2022; Chicago, IL.



EXTERNAL SEMINARS AND CONTINUING EDUCATION PRESENTATIONS



Neu R. The Golden A-B-E: Updates to the COPD GOLD Guidelines, The North Suburban Pharmacists of Chicagoland Association Meeting, Glenview, IL, Jun 15, 2023.

Angelo LB (session moderator, with Mayur Ramesh, MD, Ingi Lee, MD, MSCE, Jeffrey Lancet, MD). “Protecting Patients at High Risk of Severe COVID-19: Immunocompromised Patients.” Moderna Webinar. June 15, 2023.

Srivastava SB. Vaccine-Preventable Diseases: Strategies for Addressing Vaccine Hesitancy. Pharmacy Times Continuing Education (PTCE). Live Webinar, March, April, May, June 2023

Rubino A, **Cunningham K**, D’Agostino C, Paplaczky K, Arora R, Kleiboeker H, Prom A, Kane C. Complications of Direct Oral Anticoagulant Use in Lung Transplant Recipients on Concurrent Azole Antifungal Therapy. American Transplant Congress. San Diego, CA. June 5, 2023.

Chen M, Gard L, **Patel K**, Scott C, Schneider K, Candelario DM. Four Services Under One Roof: Communication Lessons Learned From an Interprofessional Practice at a Student-Led Free Clinic. National Academies of Practice. Washington, DC. March 31, 2023.

Angelo LB. The Pharmacist’s Role in Helping to Build COVID-19 Vaccination Confidence. Pfizer Educational Talk. APhA Annual Meeting Product Theater. Phoenix, AZ. March 25, 2023.

Chen M, Gard L, **Candelario DM**, Patel K, Scott C, Schneider K. Operationalizing Interprofessionalism in Student Free Clinics: Opportunities and Challenges. Virtual Proxy Presentation: Student-Run Free Clinic Faculty Association Annual Conference; March 23, 2023.

Patel K. Kane SP. A1C You Later: A Concise Review of Continuous Glucose Monitors for the Practicing Pharmacist. HelixTalk - ACPE Approved CPE. March 14, 2023.

Patel K, Srivastava S. Obesity: Gains in a Comprehensive Treatment Approach. DuPage Pharmacist Association Meeting. Lombard, IL. November 9, 2022.

Angelo LB (with moderator Wendy L. Wright, DNP, ANP-BC, FNP-BC). COVID-19 in US Communities (Best Practices for Pharmacists). Invited Podcast Interview. MDBriefCase Best Practices Video Series. Webinar. October 21, 2022.

Angelo LB (with Katelynn M. Alexander, PharmD and Jeremy Hughes, PharmD, EdD). “Remediation: Tips for Offering a Second Chance to Demonstrate and Assess Minimum Competency.” Podium Presentation. IUPUI Assessment Institute. Indianapolis, IN. October 11, 2022.

Angelo LB (with moderator Wendy L. Wright, DNP, ANP-BC, FNP-BC and Gary S. Marshall, MD). Bivalent COVID-19 Panel Discussion. Invited Panelist. Moderna and MDBriefCase Bench2Practice Series. Webinar. October 11, 2022.

Angelo LB. Influenza Vaccine Recommendations for the 2022-2023 Season: An Update for Pharmacists. Pharmacy Times Continuing Education Webinar. October 4, 2022.

Srivastava SB, Angelo L. APhA’s Pharmacy-Based Immunization Delivery. Certificate training program. Chicago, IL, October 2022

Srivastava SB. Embracing Holistic Well-Being: You are Worth the Effort! Key Note Presentation. New Jersey Pharmacists Association Annual Meeting. Princeton, NJ, October 2022

Srivastava SB. Obesity: Gains in a Comprehensive Approach in the Patient Population. New Jersey Pharmacists Association Annual Meeting. Princeton, NJ. October 2022

Patel K, Srivastava S. A New Balancing Act – New Gains in Weight Loss Pharmacotherapy and Understanding Obesity. Illinois Pharmacist Association Annual Meeting. Springfield, IL. September 23, 2022.

Srivastava S, Patel K. Obesity and Medications. North Suburban Pharmacists of Chicagoland. Skokie, IL. September 13, 2022.

Angelo LB (with moderator John Grabenstein, RPh, PhD). On Point with Pneumococcal Vaccines: What’s New in 2022. Invited Podcast Speaker. American Pharmacists Association. Webinar. July 21, 2022.

Angelo LB (with moderator Wendy L. Wright, DNP, ANP-BC, FNP-BC and Norris C. Polk, MD). Increase Pediatric Vaccine Update. Invited Panelist. MDBriefCase Podcast . Webinar. July 7, 2022.

Patel K. 2022 Updates in the Pneumococcal Vaccine Recommendations. Virtual Presentation. Illinois Pharmacists Association Town Hall Meeting. July 6, 2022.

O’Donnell III JJ. Impact of Biologics on Wound Healing in the Oral Cavity. Seminar presented at: Lake County Dental Club; January 12, 2023; Glenview, IL.



BOOKS, BOOK CHAPTERS AND OTHER PUBLICATIONS

Srivastava SB. Empowering People with Diabetes: Role of Continuous Glucose Monitor Systems. American Journal of Lifestyle Medicine. 2023;17(3):359-364.

Chartrand R, Forte AM, Hoger JD, **Kane SP**, Kisor DF. Pharmacogenomics and Commonly Prescribed Medications. AdvanCE. October 10, 2022. advancepharmacist.com/courses/pharmacogenomics-and-commonly-prescribed-medications.

Patel K, Salama S, **Cottreau J**. Osteoporosis: A Review of Novel Agents. Orthop Nurse. 2022;41(6):428-433.

Salama S, Choudhury A, **Kane SP**. Chronic Heart Failure: A Pharmacologic Review. Orthop Nurs. 2022;41(5):363-368.

Angelo LB. Influenza vaccine technologies: what's new to fight the flu. Pharmacy Times 2022 (July): Influenza Supplement.

O'Donnell III JJ, Call GB. Drug therapy for the management of thyroid disorders. In: Osborn SI and Wecker L, eds. Brody's Human Pharmacology. 7th ed. Elsevier, Inc; In press.

O'Donnell III JJ, Call GB. Calcium regulating hormones and other agents affecting bone. In: Osborn SI and Wecker L, eds. Brody's Human Pharmacology. 7th ed. Elsevier, Inc; In press.

Call GB, **O'Donnell III JJ**. Treatment of hypothalamic and pituitary disorders. In: Osborn SI and Wecker L, eds. Brody's Human Pharmacology. 7th ed. Elsevier, Inc; In press.

O'Donnell JT, **O'Donnell III JJ**, Patel GP, Splawski JA, eds. O'Donnell's Drug Injury. 5th Ed. Tucson, AZ: Lawyers & Judges Publishing Company, Inc.; In press.**

O'Donnell III JJ., O'Donnell JT, Juettner V. General principles of pharmacology. In: O'Donnell JT, O'Donnell III JJ, Patel GP, Splawski JA, eds. O'Donnell's Drug Injury. 5th Ed. Tucson, AZ: Lawyers & Judges Publishing Company, Inc.; In press. (reprint from previous edition) **

O'Donnell JT, **O'Donnell III JJ**. Adverse drug reactions: allergic focus. In: O'Donnell JT, O'Donnell III JJ, Patel GP, Splawski JA, eds. O'Donnell's Drug Injury. 5th Ed. Tucson, AZ: Lawyers & Judges Publishing Company, Inc.; In press. **

O'Donnell III JJ., O'Donnell JT. Drug induced falls. In: O'Donnell JT, O'Donnell III JJ, Patel GP, Splawski JA, eds. O'Donnell's Drug Injury. 5th Ed. Tucson, AZ: Lawyers & Judges Publishing Company, Inc.; In press.**

O'Donnell JT, **O'Donnell III JJ.**, Marks DH, Danese P. Drug induced liver disease. In: O'Donnell JT, O'Donnell III JJ, Patel GP, Splawski JA, eds. O'Donnell's Drug Injury. 5th Ed. Tucson, AZ: Lawyers & Judges Publishing Company, Inc.; In press.**

Splawski JA, O'Donnell JT, **O'Donnell III JJ**. Dangers of opioids. In: O'Donnell JT, O'Donnell III JJ, Patel GP, Splawski JA, eds. O'Donnell's Drug Injury. 5th Ed. Tucson, AZ: Lawyers & Judges Publishing Company, Inc.; In press.**

10 Parran D, O'Donnell JT, **O'Donnell III JJ**. Fetal drug exposure. In: O'Donnell JT, O'Donnell III JJ, Patel GP, Splawski JA, eds. O'Donnell's Drug Injury. 5th Ed. Tucson, AZ: Lawyers & Judges Publishing Company, Inc.; In press.**

O'Donnell JT, **O'Donnell III JJ**. Medication errors. In: O'Donnell JT, O'Donnell III JJ, Patel GP, Splawski JA, eds. O'Donnell's Drug Injury. 5th Ed. Tucson, AZ: Lawyers & Judges Publishing Company, Inc.; In press.**

O'Donnell JT, **O'Donnell III JJ.**, Tedford SE. Anticoagulants: therapeutics, risks, and toxicities. In: O'Donnell JT, O'Donnell III JJ, Patel GP, Splawski JA, eds. O'Donnell's Drug Injury. 5th Ed. Tucson, AZ: Lawyers & Judges Publishing Company, Inc.; In press.**

O'Donnell JT, **O'Donnell III JJ**. Pharmacist malpractice and liability. In: O'Donnell JT, O'Donnell III JJ, Patel GP, Splawski JA, eds. O'Donnell's Drug Injury. 5th Ed. Tucson, AZ: Lawyers & Judges Publishing Company, Inc.; In press.**

O'Donnell JT, **O'Donnell III JJ**. Alcohol. In: O'Donnell JT, O'Donnell III JJ, Patel GP, Splawski JA, eds. O'Donnell's Drug Injury. 5th Ed. Tucson, AZ: Lawyers & Judges Publishing Company, Inc.; In press.**

Tedford SE, O'Donnell JT, **O'Donnell III JJ**, Bederka JP. Marijuana: pharmacology, toxicology, and forensic issues. In: O'Donnell JT, O'Donnell III JJ, Patel GP, Splawski JA, eds. O'Donnell's Drug Injury. 5th Ed. Tucson, AZ: Lawyers & Judges Publishing Company, Inc.; In press.**

O'Donnell JT, **O'Donnell III JJ**, Vaughn W. Involuntary intoxication. In: O'Donnell JT, O'Donnell III JJ, Patel GP, Splawski JA, eds. O'Donnell's Drug Injury. 5th Ed. Tucson, AZ: Lawyers & Judges Publishing Company, Inc.; In press.**

O'Donnell III JJ, O'Donnell JT, ImobergSted A. Forensic drug testing. In: O'Donnell JT, O'Donnell III JJ, Patel GP, Splawski JA, eds. O'Donnell's Drug Injury. 5th Ed. Tucson, AZ: Lawyers & Judges Publishing Company, Inc.; In press.**

Bold = College of Pharmacy contributors
* College of Pharmacy students
** Significant interprofessional component
*** Area of diversity or inclusion in education, research, or clinical practice

GRANTS

Research and scholarship takes many forms and it often requires significant resources. Success in competition for research funding can provide such resources and further the discovery of new knowledge.

The following list highlights such successes by College of Pharmacy faculty:

Buolamwini, John K, R21 AI170551-01A1 (NIAID/NIH) Grant Period: 8/2022-7/2023

Harrison, David, Elizabeth Shafernich Coulson Award for Innovation in Teaching and Learning (RFUMS)

Khyati Patel, Jolee Rosenkranz, A Way Out 2.0 - Program Evaluation, Bureau of Justice Assistance

(**Bold** = College of Pharmacy contributors)

ACHIEVEMENT AWARDS

The College of Pharmacy Outstanding Achievement in Research Award. Each year, just prior to Commencement, an award is presented to one (or two) graduating College of Pharmacy student(s) for Outstanding Achievement in Research. This year the award was presented to **Dr. Lejla Cukovic**.

Dr. Lejla Cukovic (Class of 2023) conducted research with Dr. Ateequr Rahman in the summer of the second and third year of her PharmD program. She participated in several research studies, presented her findings at national and international conferences, won awards at the college of pharmacy research presentation and the All-school Research consortium (ASRC). She published several findings in peer reviewed journals.

Previous Winners:	2015	Monal Punjabi
	2016	Andrew Ruettiger
	2017	Shannon Riley
	2018	Tiffany Chairudin
	2019	Alexandria Henry, Soyoung Chang
	2020	Yelena Sahakian
	2021	Dasha Polyarskaya
	2022	Tehreem Khaliq

CREATE YOUR IMPACT.



YOU CAN SHAPE THE FUTURE OF THE COLLEGE OF PHARMACY.

BUOYED BY YOUR SUPPORT, WE ARE:

- **Strengthening programs and partnerships:** We are teaching future healthcare professionals how to transform systems of care through our innovative curriculum, use of state-of-the-art technology and expansion of clinical affiliates and community partnerships.
- **Impacting the community:** We are committed to improving health, wellness and access to educational opportunities in underserved communities.
- **Expanding biomedical, clinical and social determinants of health research:** We are continually investing in the discovery of new treatments and therapeutics, including in the fields of neuroscience, cancer and genetic and infectious diseases.
- **Improving scholarship support:** We are decreasing the economic barriers to students' aspirations.

Together we can strengthen our healthcare workforce and advance the discovery of knowledge dedicated to improving wellness.

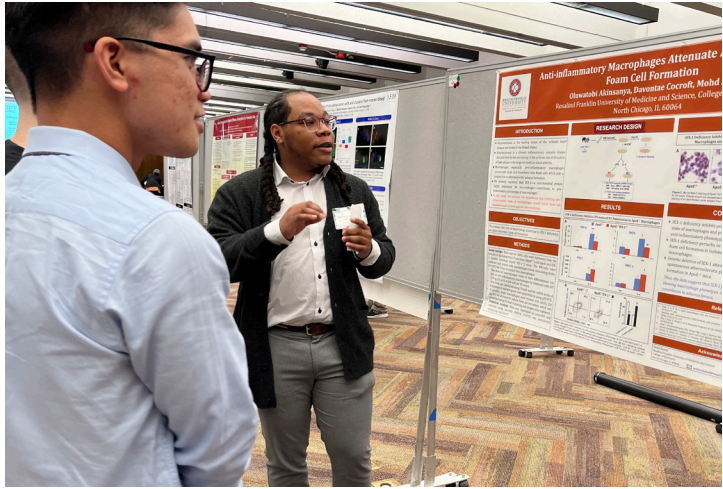
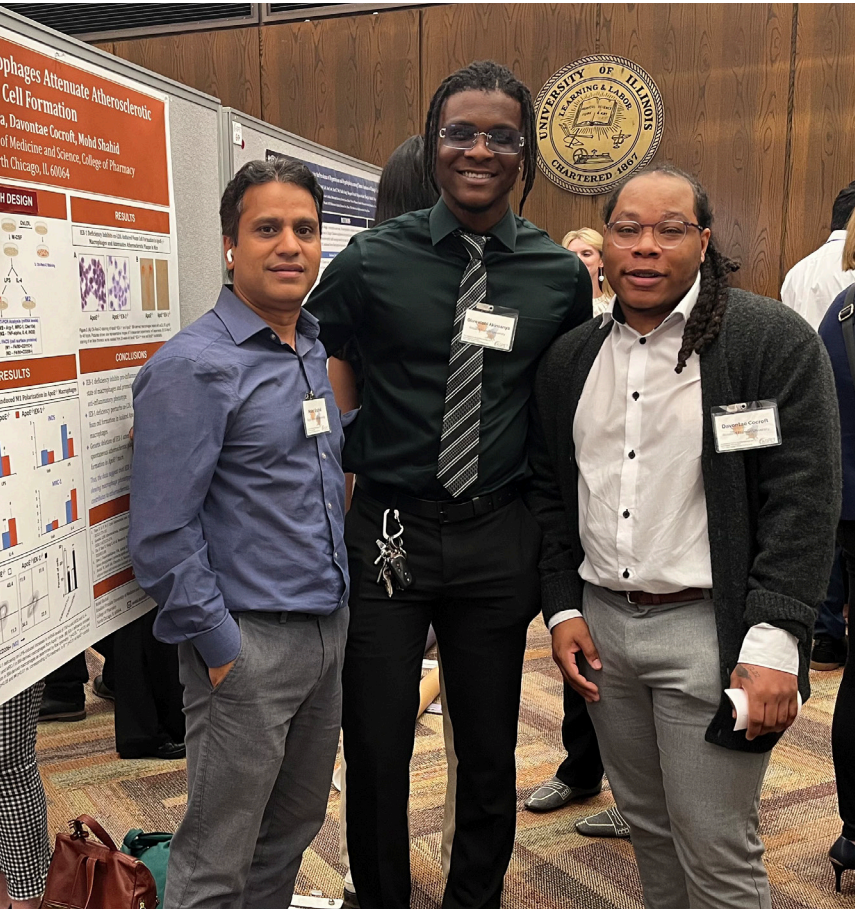
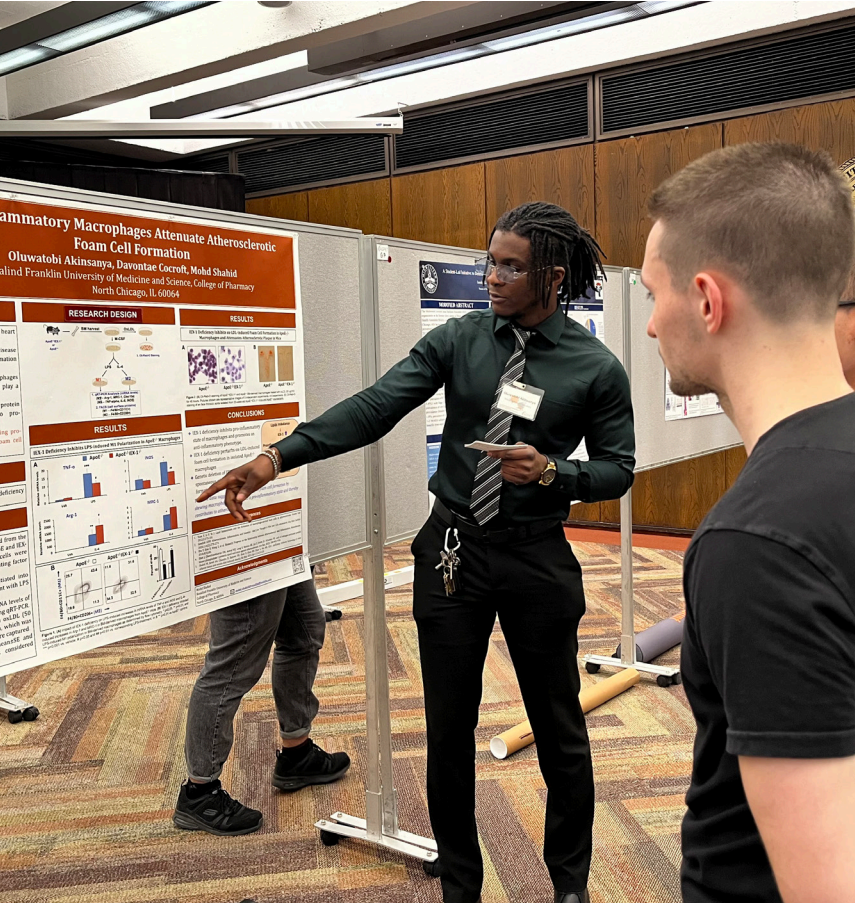
PARTNER WITH US TO MAKE AN IMPACT.

ROSALIND FRANKLIN
UNIVERSITY
of MEDICINE AND SCIENCE **IMPACT**

SUPPORT THE COLLEGE OF PHARMACY
by contributing online

<https://rfu.ms/impactcop>

Please consider a recurring gift, which empowers our students and faculty and funds our top priorities.





HANDS-ON FUTURES

Through experiential rotations, student pharmacists learn the possibilities their degree has to offer.

THE PERSONAL SIDE OF HEALTH CARE

The College of Pharmacy focuses on opportunities in a variety of career paths, including community pharmacy, health systems, industry, academia and public health. Individual attention in a small class size, as well as experience in a state-of-the-art patient simulation laboratory, puts students at the forefront of modern pharmacy practice.

As with other schools at RFU, interprofessional education separates the College of Pharmacy from other pharmacy programs. The rapid change in delivery of care is helping to drive the expansion of pharmacy's scope of practice. From day one, students collaborate in teams, learning about, from and with one another's profession and how, together, they each impact the future of health care.

EXCELLENT MEDICAL CARE IS THE PRODUCT OF A GREAT TEAM

We teach that patients are not only at the center of the model of care, but also an active member of that team. Students learn that outcomes improve through positive patient interactions and clear communication. During their training, students sharpen those interactions, along with critical reasoning and communication skills, in simulation labs. Our program provides immunization training and puts students in contact with actual patients early in their first quarter.

STATE-OF-THE-ART FACILITIES

The RFU 97-acre campus is home to cutting-edge technology used throughout the curriculum and even has a Department of Healthcare Simulation. Examples of advanced systems that RFU students use include:

PHARMACY SKILLS LAB: Dedicated to learning communication and technical skills needed in the pharmacy field, this new lab gives students hands-on experience in many areas of contemporary pharmacy practice such as clinic, hospital or neighborhood pharmacy.

THE EDUCATION AND EVALUATION CENTER: Students perform clinical histories and patient assessments on standardized patients within this safe, learner-centered environment.

THE SIMULATION AND SKILLS LAB: This is home to several full-body mannequin simulators that can mimic dilating pupils, breathing and circulation. These allow students to have realistic experiences on an interprofessional team in a risk-free setting.

INNOVATION AND RESEARCH PARK: Opened in Spring 2020, includes 100,000 square feet of space designed to increase interaction, a free exchange of ideas and sharing of expertise and scientific tools.



CONTACT US FOR MORE INFORMATION

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Rosalind Franklin University of Medicine and Science is regionally accredited by the Higher Learning Commission and all programs are approved by the Illinois Board of Higher Education. Rosalind Franklin University of Medicine and Science College of Pharmacy's Doctor of Pharmacy program is accredited by the Accreditation Council for Pharmacy Education, 135 South LaSalle Street, Suite 4100, Chicago, IL 60503-4810; Phone: 312-664-3575; Fax: 866-228-2631; Website: www.acpe-accredit.org.



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