



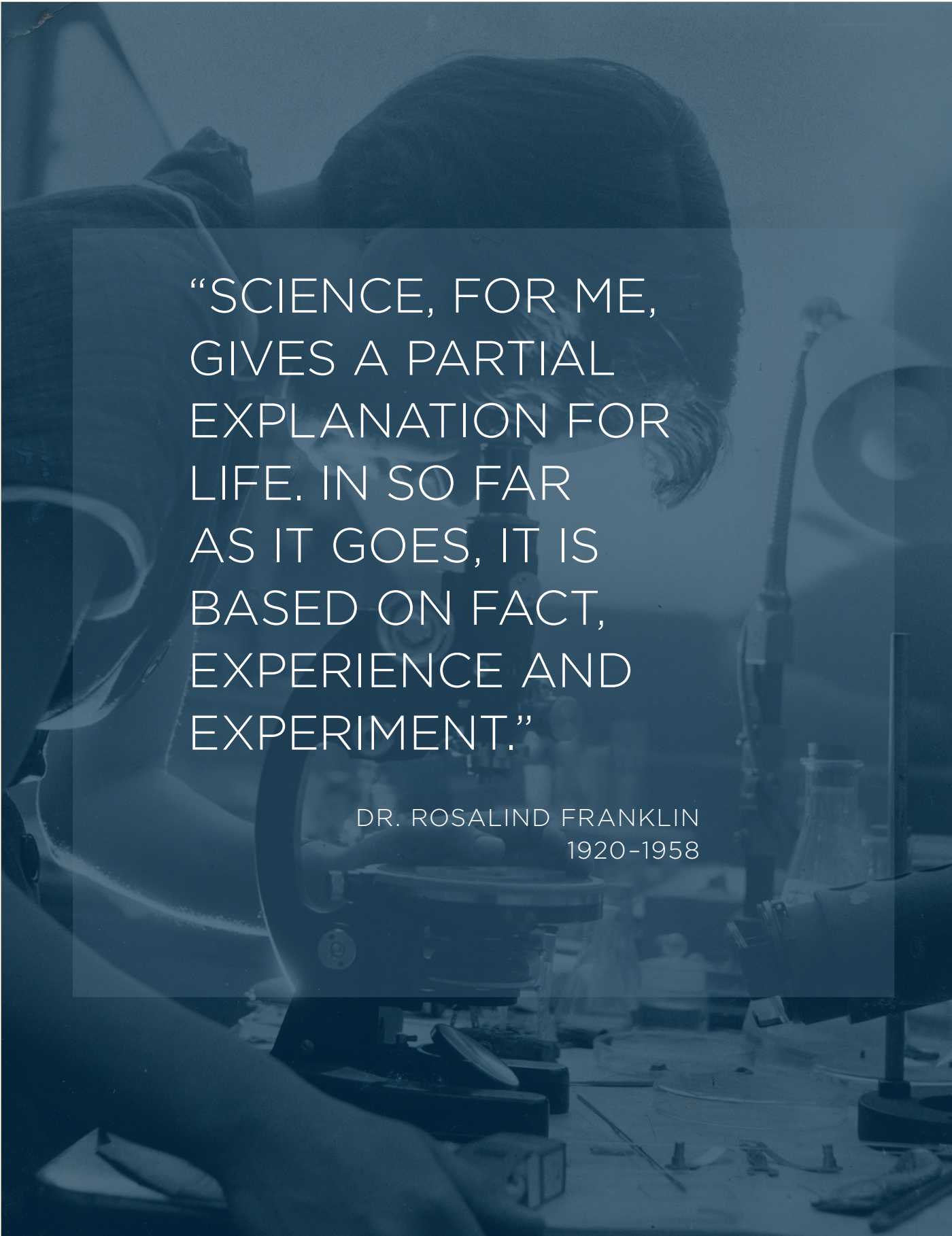
ROSALIND FRANKLIN
UNIVERSITY
of MEDICINE AND SCIENCE

COLLEGE OF PHARMACY



RESEARCH AND SCHOLARSHIP REPORT

July 1, 2017–June 30, 2018



“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

2,121 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, Rosalind Franklin University of Medicine and Science carries on her 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

Civility · Diversity · Excellence · Innovation · Integrity · Scholarship · Teamwork



**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.



ROSALIND FRANKLIN
UNIVERSITY
of MEDICINE AND SCIENCE

COLLEGE OF PHARMACY

The College of Pharmacy (COP) is the newest college at RFUMS and 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 RFUMS, 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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ROSALIND FRANKLIN
UNIVERSITY
of MEDICINE AND SCIENCE

INTRODUCTION





Progress is not possible without new knowledge. It is expected that our faculty (and many of our students) will participate in the search for new knowledge, whether that search is carried out in a laboratory, a clinical setting or a classroom. This booklet documents the research and scholarship achievements of the College of Pharmacy during the past academic year (July 1, 2017 - June 30, 2018). In these pages you will find the peer-reviewed scientific publications, books, book chapters, reviews, presentations at scientific meetings and research grant accomplishments of our faculty and students. We also list the nationally prominent speakers who have visited RFU as speakers in our Haim G. and Jane Graumann Nagirner Weinstein endowed seminar series.

Throughout this document, we use **bold** text to indicate College of Pharmacy contributors, and an asterisk* to indicate student, resident and postdoctoral contributors.

We are once again proud to share with you the research and scholarship contributions of our college.

D. Eric Walters, PhD

Associate Dean for Research

Marc S. Abel, PhD

Dean, 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.

Danielle M. Candelario, S.H. Lee, R. Durie, T.K. Nguyen, P. Greenberg and J. Louie. Impact of a centralized interdisciplinary discharge unit on readmission rates and transitional care services in high risk patients. *J Contemporary Pharm Practice*, 2018; 65(2):19-25.

S. Dresden, K. Allen and **Abbie Lyden**. Common medication management approaches for older adults in the ED. *Clin Geriatr Med*, 2018; 34(3):415-433.

E.M. Gilbert, N.J. Rhodes, M.M. McLaughlin, **Jessica M. Cottreau**, M.H. Scheetz, M. Postelnick and **Viktorija O. Barr**. Analysis of an infectious diseases pharmacist on call pager program to inform educational efforts. *J Pharm Technol*, 2017; 33(4):146-150.

K.A. Grice, **Renukadevi Patil**, A. Ghosh, J.D. Paner, M.A. Guerrero, E.J.M. Camacho, P.S. Cao, A.H. Niyazi, **Sitwat Zainab***, R.D. Sommer, G. Waris and **Shivaputra A. Patil**. Understanding the structure and reactivity of the C-S linkage in biologically active 5-arylthio-5H-chromenopyridines. *New J Chem*, 2018; 42:1151-1158.

V. Kandathil, R.B. Dateer, B.S. Sasidhar, **Shivaputra A. Patil** and S.A. Patil. Green Synthesis of Palladium Nanoparticles: Applications in aryl halide cyanation and Miyaura cross-coupling reaction under ligand free conditions. *Catalysis Lett*, 2018; 148(6):1562-1578.

V. Kandathil, B.D. Fahlman, B.S. Sasidhar, **Shivaputra A. Patil** and S.A. Patil. A convenient, efficient and reusable N-heterocyclic carbene-palladium(II) based catalyst supported on magnetite for Suzuki-Miyaura and Mizoroki-Heck cross-coupling reactions. *New J Chem*, 2017; 41:9531-9545.

V. Kandathil, T.S. Koley, K. Manjunatha, R.B. Dateer, R.S. Keri, B.S. Sasidhar, **Shivaputra A. Patil** and S.A. Patil. A new magnetically recyclable heterogeneous palladium(II) as a green catalyst for Suzuki-Miyaura cross-coupling and reduction of nitroarenes in aqueous medium at room temperature. *Inorg Chim Acta*, 2018; 478:195-210.

Sean P. Kane and E. Cohen. Life-threatening idiopathic reaction to hydrochlorothiazide treated with veno-venous extracorporeal membrane oxygenation. *Perfusion*, 2018; 33(4):320-322.

K. Manjunatha, T.S. Koley, V. Kandathil, R.B. Dateer, G. Balakrishna, B.S. Sasidhar, **Shivaputra A. Patil** and S.A. Patil. Magnetic nanoparticle tethered Schiff base-palladium(II): Highly active and reusable heterogeneous catalyst for Suzuki-Miyaura cross-coupling and reduction of nitroarenes in aqueous medium at room temperature. *Appl Organomet Chem*, 2018; 32(4):e4266.

D.M. McCarthy, D.M. Courtney, P.M. Lank, K.A. Cameron, A.M. Russell, L.M. Curtis, K.A. Kim, S.M. Walton, E. Montague, **Abbie Lyden**, S.J. Gravenor, and M.S. Wolf. Electronic medication complete communication strategy for opioid prescriptions in the emergency department: Rationale and design for a three-arm provider randomized trial. *Contemp Clinical Trials*, 2017; 59:22-29.

I.R. McGrane and **Michael D. Shuman**. Mirtazapine therapy for posttraumatic stress disorder: Implications of alpha-adrenergic pharmacology on the startle response. *Harv Rev Psychiatry*, 2018; 26(1):36-41.

M.M. McLaughlin, A. Galal, **Viktorija O. Barr**, S.H. Sutton, N. Patel, M. Porntiwa, C. Richardson and V. Stosor. Switch to atovaquone and subsequent re-challenge with TMP/SMX in a kidney transplant population. *Transplant Infect Dis*, 2017; 19(6):e12769.

Renukadevi Patil, A. Kulshrestha, A. Tikoo, S. Fleetwood, G. Katara, B. Kolli, W. Seibel, A. Gilman-Sachs, **Shivaputra Patil**, and K.D. Beaman. Identification of novel bisbenzimidazole derivatives as anticancer vacuolar (H⁺)-ATPase inhibitors. *Molecules*, 2017; 22(9):1559.

S.A. Patil, **Renukadevi Patil** and **Shivaputra A. Patil**. Recent developments in biological activities of indanones. *Eur J Med Chem*, 2017; 138:182-198.

V. Patil, E. Barragan, **Shivaputra A. Patil**, S.A. Patil and A. Bugarin. A practical method, NaOCl-mediated, to prepare thiabendazoles via intramolecular amination reaction. *Tet Lett*, 2017; 58(35):3474-3477.

V.V. Soriano, E.P. Tesoro and **Sean P. Kane**. Characterization of free phenytoin concentrations in end-stage renal disease using the winter-tozer equation. *Ann Pharmacother*, 2017; 51(8):669-674.

S.K. Swaminathan, **Kristen M. Ahlschwede**, V. Sarma, G.L. Curran, R.S. Omtri, T. Decklever, V.J. Lowe, J.F. Poduslo and K.K. Kandimalla. Insulin differentially affects the distribution kinetics of amyloid beta 40 and 42 in plasma and brain. *J Cerebral Blood Flow Metab*, 2018; 38(5):1-15.

E. Zdyb, D.M. Courtney, S. Malik, M. Schmidt and **Abbie Lyden**. Impact of discharge anticoagulation education by emergency department pharmacists at a tertiary academic medical center. *J Emerg Med*, 2017; 53(6):896-903.



ABSTRACTS AND PRESENTATIONS

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.

K. Caruso and **Abbie L. Lyden**. Ketamine for pain in the emergency department. Great Lakes Residency Conference, West Lafayette, IN. April 2018.

G. Elliott, M. Postelnick, D. Martin, **Viktorija O. Barr**, M. Malczynski, D. Aljefri, S. Sutton, T. Zembower and C. Qi. Impact of accelerate pheno system on time to antimicrobial stewardship intervention in patients with gram-negative blood stream infections. ID Week, San Diego, CA. October 2017.

S.M.L. Furbish, **Michael D. Shuman** and G.C. Gettys. Investigation of the risk of substance use disorders with co-prescribed stimulants and selective serotonin reuptake inhibitors (SSRI). Poster presented at: College of Psychiatric and Neurologic Pharmacists (CPNP) 2018 annual meeting, Indianapolis, IN. April 2018.

K.A. Grice, **Renukadevi Patil**, A. Ghosh, J.D. Panera, M.A. Guerrero, E.J.M. Camacho, P.S. Cao, A.H. Niazi, **Sitwat Zainab***, R.D. Sommer, G. Waris and Shivaputra Patil. Understanding the structure and reactivity of the C-S linkage in biologically active 5-arylthio-5H-chromenopyridines. 255th American Chemical Society National Meeting & Exposition, New Orleans, LA. March 18-22, 2018.

V. Kandathil, S. Patil and **Shivaputra Patil**. Biosynthesized palladium nanoparticles mediated by black pepper extract as highly efficient and reusable nanocatalyst in aryl halide cyanation and Hiyama cross-coupling reactions under ligand free conditions. 255th American Chemical Society National Meeting & Exposition, New Orleans, LA. March 18-22, 2018.

S. Kohlhaas, **Michael Shuman** and R. Hieber. Pharmacogenetic testing in a veteran population: Impact on clinical decision-making and patient outcomes. Poster presented at: College of Psychiatric and Neurologic Pharmacists (CPNP) 2018 annual meeting, Indianapolis, IN. April 2018.

A. Kraljevic, C. D'Agostino, C. Kane, **Kathleen Cunningham**, A. Shetty and C. Richardson. The incidence of polyomavirus-BK and cytomegalovirus infections in renal transplant recipients following rituximab administration. American Transplant Congress, Seattle, WA. June 2018.

B. Lee, **Abbie Lyden** and L. Ellinger. Concomitant use of opioids and benzodiazepines and the impact on opioid-related emergency department visits. Great Lakes Residency Conference, West Lafayette, IN. April 2018.

D.M. McCarthy, **Abbie L. Lyden**, S. Gravenor, M. Eifler, A.M. Russell, E. Montague, D.A. Patel, S. Hur, L.M. Curtis, and M.S. Wolf. Implementation fidelity of a health-literacy based opioid safe prescribing intervention. International Conference on Communication in Healthcare, Baltimore, MD. October 2017.

J. Micheletto, D. Martin, M. Postelnick, M. Patel, N.J. Rhodes, M. Scheetz, **Viktorija O. Barr**, and A.E. Gross. Comparative nephrotoxicity of aminoglycosides and polymyxins during the treatment of multidrug-resistant gram-negative infections. ID Week, San Diego, CA. October 2017.

Suzanne T. Molino, Paul M. Stranges, Susan C. Bleasdale, Nancy L. Shapiro, Katie J. Suda and Alan E. Gross. Evaluation of Antibiotic Prescribing for Acute Respiratory Tract Infections in the Ambulatory Care Setting. Infectious Diseases Society of America, ID Week, San Diego, CA. October 4-8, 2017.

Renukadevi Patil, B. Kumar, K. Beaman, G. Waris, and **Shivaputra Patil**. Novel bisbenzimidazoles as anticancer vacuolar (H⁺)-ATPase inhibitors. Great Lakes Chapter American Society for Pharmacology and Experimental Therapeutics. Loyola University Stritch School of Medicine, Maywood, IL. June 22, 2018.

S.A. Patil, V. Patil, **Renukadevi Patil**, K. Beaman and **Shivaputra Patil**. Identification of novel 5,6-dimethoxy indan-1-one derivatives as antiviral agents. 254th American Chemical Society National Meeting & Exposition, Washington, DC. August 20-24, 2017.

Ateequr Rahman, Rahul Deshmukh and Yelena Sahakian*. Economic impact of caregiving for dementia patients. Business and Health Administration Annual International meeting, Chicago, IL. April 2018.

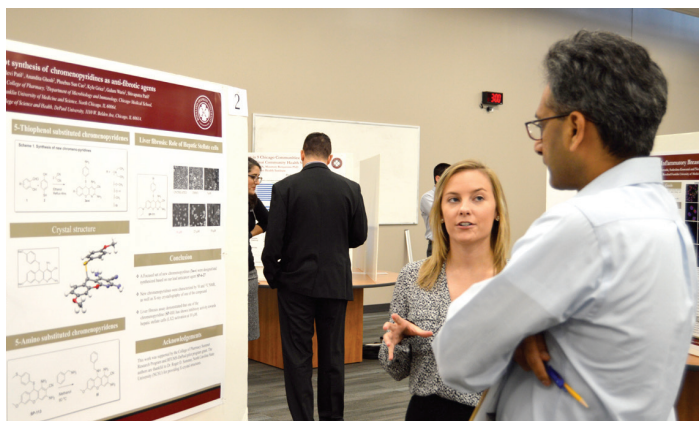
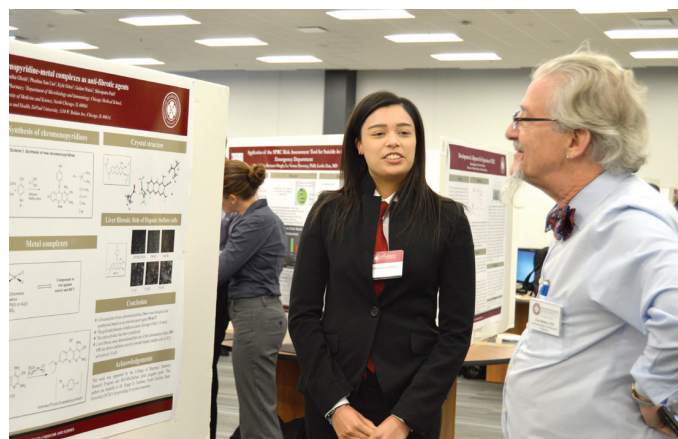
Jolee Rosenkranz, Janeen Winnike, Lisa Michener, David Harrison and Marc S. Abel. A novel "C3" approach to assess the key elements in standards 3 and 4. American Association of Colleges of Pharmacy (AACP) Annual Meeting, Nashville, TN. July 2017.

V. Sarma, S. Swaminathan, **Kristen Ahlschwede**, G. Curran, R. Omtri, K. Kalari and K. Kandimalla. Alzheimer's disease amyloid-beta peptides impair insulin transport across the blood-brain barrier and trigger brain insulin resistance. American Association of Pharmaceutical Scientists Annual Meeting, San Diego, CA. November 2017.

J. Schulte, C. Richardson, **Kathleen Cunningham**, C. D'Agostino, C. Kane and V. Stosor. Basiliximab induction in HIV-positive renal transplant recipients compared to an HIV-negative cohort. American Transplant Congress, Seattle, WA. June 2018.

N. Sharda, R. Omtri, **Kristen Jaruszewski [Ahlschwede]**, S. Swaminathan, G. Curran, K. Thompson, V. Lowe, K. Kalari, J. Poduslo, and K. Kandimalla. Kinetics of amyloid beta proteins traffic at the blood brain barrier in Alzheimer's disease. American Association of Pharmaceutical Scientists Annual Meeting, San Diego, CA. November 2017.

S. Swaminathan, **Kristen Ahlschwede**, V. Sarma, G. Curran, R. Omtri, T. Decklever, V. Lowe, J. Poduslo and K. Kandimalla. Insulin differentially affects the distribution kinetics of amyloid-beta 40 and 42 in plasma and brain. American Association of Pharmaceutical Scientists Annual Meeting, San Diego, CA. November 2017.



PRESENTATIONS WITHIN THE UNIVERSITY

Mark Abadines*, Daniel Dickson*, Alexandria Henry*, Bradley Cannon, Jolee Rosenkranz, K. Rynn and Lisa Michener. Attitude Assessment of a Longitudinal Advanced Pharmacy Practice Experience Continuation. Summer Research Poster Session, October 18, 2017, RFUMS, North Chicago, IL.

Dalia A. Aguilar*. Interprofessional Approach in Improving Patient Safety Utilizing Guardrails Editor Software. All School Research Consortium (ASRC), March 21, 2018, Poster Presentation, RFUMS, North Chicago, IL.

Shayda Ashraf*, P. Kallio, K. Schneider, and K. O'Mara. Using a Provider-driven, Patient-focused Evaluation Tool to Assess Mobile Health Apps. Summer Research Poster Session, October 18, 2017, RFUMS, North Chicago, IL.

Shayda Ashraf*, Nancy Nguyen*, H. Willarson, K. Schneider, K. O'Mara and P. Kallio. Efficacy of m-Health Apps: A Survey of Health Care Provider and Consumer Knowledge and Confidence in App Selection. Summer Research Poster Session, October 18, 2017, RFUMS, North Chicago, IL.

Afwaj Binhusein*, M. Yenjerla and John K. Buolamwini. Development of a new fluorescence assay to measure Sodium-Dependent Nucleoside Uptake in PK15-hCNT3 pig cells. Summer Research Poster Session, October 18, 2017, RFUMS, North Chicago, IL; All School Research Consortium (ASRC), March 21, 2018, Poster Presentation, RFUMS, North Chicago, IL.

Glenn Chanitthikul*, Marshall Lee*, Phuong-Quyen Duong*, Yelena Sahakian*, Mickey Hathuc*, Kalindi Patel*, Drew Bailey*, Rahul Deshmukh and Ateequr Rahman. Evaluating Disease Knowledge and Risk Perception in CVD through Health Education. Summer Research Poster Session, October 18, 2017, RFUMS, North Chicago, IL; All School Research Consortium (ASRC), March 21, 2018, Poster Presentation, RFUMS, North Chicago, IL.

Kyle Decker* and D. Eric Walters. Potential Mechanisms for Non-nutritive Sweetener Induced Metabolic Deviances: Satiety Hormone Secretion and Alterations in the Gut Microbiota. Summer Research Poster Session, October 18, 2017, RFUMS, North Chicago, IL.

Bridget Fleming*, Soyoung Chang*, Kristy Shanahan and John K. Buolamwini. hTERT Incorporation into Yeast Cells. Summer Research Poster Session, October 18, 2017, RFUMS, North Chicago, IL; All School Research Consortium (ASRC), March 21, 2018, Poster Presentation, RFUMS, North Chicago, IL.

Nancy Nguyen*, Shayda Ashraf*, M. Essman, V. Monroig, E. Swanson, H. Willarson, K. O'Mara and P. Kallio. Identification of Patient-Specific Barriers and Provider Needs in m-Health App Design: Medication Adherence and Compliance. Summer

Research Poster Session, October 18, 2017, RFUMS, North Chicago, IL; All School Research Consortium (ASRC), March 21, 2018, Student Research Talk (N.N.) and Poster Presentation, RFUMS, North Chicago, IL.

Taylor L. Page*, Jayna Sharma*, Frank L. Hughes, Kristen Ahlschwede and Danielle M. Candelario. Pharmacy Student Interest in Computer-Assisted Learning (CAL) for a Pharmaceutical Calculations Course. Summer Research Poster Session, October 18, 2017, RFUMS, North Chicago, IL; All School Research Consortium (ASRC), March 21, 2018, Poster Presentation, RFUMS, North Chicago, IL.

Ateequr Rahman, Yelena Sahakian* and Rahul Deshmukh. Economic Impact of Caregiving for Dementia Patients. All School Research Consortium (ASRC), March 21, 2018, Student Research Talk and Poster Presentation, RFUMS, North Chicago, IL.

Zainab Sandozi*, Priyanka Reddy* and D. Eric Walters. Sweeteners and Leptin Signaling: Comprehensive Literature Review. Summer Research Poster Session, October 18, 2017, RFUMS, North Chicago, IL.

Jayna Sharma*, Taylor Page*, Frank L. Hughes, Danielle M. Candelario and Kristen Ahlschwede. Design and Rationale for Implementing Computer-Assisted Learning (CAL) in a Pharmaceutical Calculations Course. Summer Research Poster Session, October 18, 2017, RFUMS, North Chicago, IL; All School Research Consortium (ASRC), March 21, 2018, Poster Presentation, RFUMS, North Chicago, IL.

Todd J. Smith*, Hemantkumar Deokar*, Shivaputra Patil and D. Eric Walters. Application of Computational Chemistry Methods in Identifying Potential Jumonji Demethylase Inhibitors. Summer Research Poster Session, October 18, 2017, RFUMS, North Chicago, IL; All School Research Consortium (ASRC), March 21, 2018, Poster Presentation, RFUMS, North Chicago, IL.

Kaitlyn M. Woodman*, K.E. Young, S. Flaherty and J.M. Reynolds. Toll-Like Receptor 2 Dependent Signaling of Low Molecular Weight Hyaluronan Upregulates T-Helper 17 Differentiation and Promotes the Expression of Hyaluronidase 2. All School Research Consortium (ASRC), March 21, 2018, Student Research Talk and Poster Presentation, RFUMS, North Chicago, IL.

Sitwat Zainab*, A. Ghosh, Renukadevi Patil, K. Grice, G. Waris and Shivaputra Patil. Synthesis and Anti-fibrotic Activity of New Chromenopyridines. Summer Research Poster Session, October 18, 2017, RFUMS, North Chicago, IL.

EXTERNAL SEMINAR AND CONTINUING EDUCATION PRESENTATIONS

Lauren B. Angelo. National Faculty Presenter. APhA's Delivering Medication Therapy Management Services Faculty Training Program. Marshall Ketchum University, Fullerton, CA. February 26, 2018.

Lauren B. Angelo. National Faculty Presenter. APhA's Pharmacy-Based Immunization Delivery Faculty Training Program. Florida Pharmacists Association, Orlando, FL, July 12, 2017; Chicago State University, Chicago, IL, December 12, 2017; Purdue University, Indianapolis, IN, June 26, 2018.

Lauren B. Angelo. Update in Immunization Practices. CPE Presentation. DuPage County Pharmacists Association Meeting. Oak Brook, IL. November 2017.

Lauren B. Angelo and A. Welch. Expert reviewer, mdBriefCase, Inc. Seasonal Influenza Immunization: Strategies for Older Adults. Online CPE Program. October 2017.

Viktorija O. Barr. Drug Interactions, The Antimicrobial Version. ICHP (North Suburban Pharmacists Division). North Chicago, IL. April 2018.

Viktorija O. Barr. Probiotics: Their Role in Medicine Today. ICHP Champions Webinar. January 2018.

Jessica M. Cottreau. American College of Clinical Pharmacists Updates in Therapeutics. Jacksonville, FL. February 2018.

Jessica M. Cottreau. On the Horizon and in Your Backyard: Updates in Infectious Diseases. Northern Illinois Society of Health-System Pharmacists. Oak Brook, IL. October 2017.

A. Daly, G. Jennings and **Sneha Baxi Srivastava.** A Holistic Prescription to Address Obesity. AADE Diabetes Symposium. Bloomington, IL. November 2017.

Khyati Patel. Advancing Ambulatory Care: One Pharmacist at a Time. PSW 2018 Educational Conference. Madison, WI. April 2018.

Khyati Patel. Medication Practices and Complementary and Alternative Medicine Use in Asian Individuals with Diabetes. APAMSA Conference. North Chicago, IL. February 2018.

Michael D. Shuman. A Sudden Drop: Prazosin and the 2017 VA/DoD PTSD guidelines. Grand rounds lecture presented at: Captain James A. Lovell Federal Health Care Center, North Chicago, IL. June 7, 2018.

Sneha Baxi Srivastava. The Cardiovascular Benefits for Antihyperglycemic Medications. Directions in Pharmacy Meeting. Nashville, TN; Anaheim, CA; New Brunswick, NJ, and Chicago, IL. April-May 2018.



BOOKS, BOOK CHAPTERS AND OTHER PUBLICATIONS

Lauren B. Angelo. *Immunization Handbook for Pharmacists. 4th edition.* Washington, DC: American Pharmacists Association; 2018.

Jessica M. Cottreau. Cardiovascular Infections. In: *Updates in Therapeutics: Infectious Diseases Preparatory Review Course*, 2018 Edition. American College of Clinical Pharmacy; 2018.

K. Harter, C. Geier and **Sneha Baxi Srivastava.** Substance Use in Pregnancy. *ACSAP Women's and Men's Care*. American College of Clinical Pharmacy; 2018.

F. McLaughlin, J. Henn and **Danielle M. Candelario.** Reduce readmissions and improve transitional care services. *American Nurse Today*. 2017; 12(12):44-46.

L. Prasad-Reddy and **Sneha Baxi Srivastava.** Testosterone: Therapeutic Application and Controversies in Therapy. *ACSAP Women's and Men's Care*, American College of Clinical Pharmacy; 2018.

A. Shah, D. Gandhi, **Sneha Baxi Srivastava**, K. Shah, and R. Mansukhani. Heart failure: A class review of pharmacotherapy. *P&T* 2017; 42(7):464-472.

Sneha Baxi Srivastava and D. Patel. Reaching out: A pharmacist's curriculum to optimize insulin therapy through patient engagement and management—patient cases. *Pharmacy Times*, 2017.



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:

Kristen Ahlschwede and **Rahul Deshmukh**. Development and characterization of a novel lipid emulsion formulation. Academic Pharmaceuticals Inc., 6/15/2017 - 12/15/2017.

John K. Buolamwini and G.E. Stutzmann, co-PIs. Novel Drug Discovery for AD targeting ryanodine calcium channels. NIH/ NIA, 8/15/2016 - 6/30/2021.

John K. Buolamwini and G.E. Stutzmann, PIs. Intracellular Ca²⁺ channels as a therapeutic target for AD drug discovery. Alzheimer's Association, 10/2015 - 9/2018.

John K. Buolamwini and G.E. Stutzmann, PIs. Drug development and optimization of compounds stabilizing ryanodine calcium channels for AD. Alzheimer's Drug Discovery Foundation, 1/2016 - 12/2018.

John K. Buolamwini and G.E. Stutzmann, PIs. Optimization of novel ryanodine receptor modulatory compounds for alzheimer's disease. NIH/STTR, 4/1/18.

Arun K. Ghosh, PI. Design & synthesis of nonpeptide protease inhibitors. **D. Eric Walters**, Co-investigator. NIH/GMS, 4/1/1996 - 8/31/2019.


D.M. McCarthy, PI. EHR-based medication complete communication (EMC2) Strategy to promote safe opioid use. **Abbie E. Lyden**, Co-investigator. AHRQ, 9/12/14 - 8/31/17.

R. Zhang, PI. Novel Small Molecule MDM2 Inhibitors for Pancreatic Cancer Therapy. **John K. Buolamwini**, Co-investigator. NIH/NCI, 8/1/14 - 2/28/19.



THE HAIM AND JANE NAGIRNER W CENTENNIAL SYMPOSIUM SERIES

2017-2018



Our seminar program is generously supported by an endowment from Haim G. Nagirner Weinstein and Jane Graumann Weinstein. Dr. Nagirner was a research scientist at the North Chicago Veterans Administration facility and a Chicago Medical School faculty member with interests in geriatric health care and pharmacy.

THURSDAY, SEPTEMBER 7, 2017

DR. KLARISSA D. JACKSON, LIPSCOMB UNIVERSITY
METABOLISM AND BIOACTIVATION OF ANTI-CANCER TYROSINE KINASE INHIBITORS BY CYTOCHROME P450 ENZYMES

MONDAY, SEPTEMBER 18, 2017

DR. RUIWEN ZHANG, UNIVERSITY OF HOUSTON
TARGETING NFAT1 AND MDM2 PATHWAYS FOR CANCER THERAPY AND PREVENTION

MONDAY, OCTOBER 16, 2017

JENNIFER TON, AUDENTES THERAPEUTICS
STARTING WITH THE PATIENT: CONSIDERATIONS FOR DEVELOPING A BIOLOGIC DRUG PRODUCT MANUFACTURING PROCESS WITH THE END IN MIND

MONDAY, NOVEMBER 20, 2017

DR. ROBERT J. DIDOMENICO, UNIVERSITY OF ILLINOIS AT CHICAGO
USING PRACTICE-BASED RESEARCH TO RESOLVE DRUG-RELATED PROBLEMS & IDENTIFY OPPORTUNITIES FOR PHARMACISTS

WEDNESDAY, JANUARY 10, 2018

DR. JOANNA E. BURDETTE, UNIVERSITY OF ILLINOIS AT CHICAGO
THE IMPORTANCE OF THE FALLOPIAN TUBE IN OVARIAN CANCER AND STRATEGIES FOR THERAPY USING A NOVEL AUTOPHAGY INHIBITOR

FRIDAY, APRIL 20, 2018

DR. ROBERT J. DEVITA, ICAHN SCHOOL OF MEDICINE AT MOUNT SINAI
SMALL MOLECULE DRUG DISCOVERY: TRANSITIONING FROM INDUSTRY TO ACADEMIA

TUESDAY, MAY 8, 2018

DR. MARC H. SCHEETZ, MIDWESTERN UNIVERSITY
CLINICAL RESEARCH: THE DEVIL IS IN THE DETAIL

EINSTEIN





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: The Innovation and Research Park, envisioned as a three-phase, three-building development, will offer, beginning with the steel and glass structure to be completed in fall of 2019, a fertile environment for collaboration and creativity among academic and industry scientists, innovators and entrepreneurs. The 100,000 square feet of laboratory and office space will increase interaction, the free exchange of ideas and a sharing of expertise and scientific tools.



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