



**Jefferson**  
Thomas Jefferson University

JEFFERSON COLLEGE *of* PHARMACY

# Annual Report 2018 2019

# JEFFERSON COLLEGE OF PHARMACY

## Mission Statement

The mission of the Jefferson College of Pharmacy is to prepare our students for careers in the profession of pharmacy. Through the provision of a learner-centered, interdisciplinary curriculum, our students will develop the requisite knowledge, skills and attitudes to provide excellent patient-centered and population-based care. Consistent with the mission of Thomas Jefferson University, we strive to develop in our students a sense of social, personal and professional responsibility.

## Vision Statement

The Jefferson College of Pharmacy (JCP) will consistently demonstrate its ability to provide a superb environment that fosters collaborative relationships with healthcare practitioners and scientists that result in the advancement of patient care and safety, educational methodologies and research. It will be recognized as a premier organization that advances the profession of pharmacy through our graduates and our faculty.

- Our graduates will be recognized for their ability to provide outstanding patient-centered and population-based care; leadership skills; cultural competency; social responsibility; and commitment to maintaining professional competence throughout their careers.
- Our faculty will be recognized for their strong commitment to the advancement of pharmacy and graduate education, patient care and research; leadership in the professional societies and educational organizations; and strong commitment to the improvement of our community through service initiatives.

## Core Values

We are committed to:

- maintaining a culture that fosters integrity, respect, social responsibility, diversity and compassion;
- a learner-centered educational environment that recognizes the importance of lifelong learning;
- meeting the diverse needs of and fostering positive morale among our students, faculty and staff;
- preparing and encouraging our students to pursue postgraduate education and training programs;
- the continued professional development and mentoring of our students, faculty and staff;
- the development of leadership skills among students, faculty and staff;
- a research-rich environment that stimulates the advancement of science, patient care and safety, and educational effectiveness;
- maintaining an ongoing assessment program that results in the continuous improvement of our educational program, research endeavors and infrastructure in an effort to maintain/support our mission and vision.



# MESSAGE FROM THE DEAN

## **Rebecca S. Finley, PharmD, MS, FASHP**

Founding Dean, Jefferson College of Pharmacy  
*2018 Harvey A. K. Whitney Award Recipient,  
American Society of Health System Pharmacists*

I am very proud to share with you the 2018 – 2019 Annual Report of the Jefferson College of Pharmacy. Our students, faculty, staff and alumni continue to excel and we are very proud to share their collective accomplishments. JCP student pharmacists and faculty continue to engage in a wide range of activities that impact our community and our campus and collaborate with others both within and beyond Thomas Jefferson University to tackle challenges in drug discovery and development, disparities in health care access and quality and other complex societal issues including the opioid crisis.

In the fall of 2018 we were excited to welcome the Doctor of Pharmacy Class of 2022 – our 11th class since our founding in 2008. Former Jeffersonian, Dr. Peter Vlasses, Executive Director of the Accreditation Council for Pharmacy Education, was the Keynote Speaker for our annual White Coat Ceremony. Dr. Vlasses, a former Jeffersonian, reflected on the accomplishments of our profession and shared his vision for future practitioners and inspired our student pharmacists and their guests.

Dr. Gerald Meyer, Director of Experiential Education since the founding of JCP and formerly Assistant Director of Pharmacy for Thomas Jefferson University Hospitals for more than 30 years, retired in June of 2018. Gerry had a tremendous impact on the shape of our College and Doctor of Pharmacy program that will be recognized for years to come and we will be forever indebted to his dedication, insight and leadership. We were extremely excited to welcome Dr. Dominique Fields as our new Director of Experiential Education in April of 2019.

It has also been an exciting year for Thomas Jefferson University as we approached the final steps of integration with our Jefferson East Falls campus – the former Philadelphia University. The merger of our two very different universities has opened the door to many new academic and service opportunities for students from both campuses and created unique and exciting scholarly opportunities for our faculties. In addition, for the very first time, Thomas Jefferson University has NCAA sports – go Jefferson Rams!

## **Rebecca S. Finley, PharmD, MS, FASHP**

Founding Dean and Professor

## 2018–2019 YEAR IN REVIEW

### Rho Chi Society Induction

Classes of 2019 and 2020 | September 20, 2018

#### Dr. Elena M. Umland

*Chapter Advisor, Associate Dean for Academic Affairs,  
Professor Department of Pharmacy Practice*

John Ahn  
Hina Anwar  
Aja Badgeley  
Clint Borja  
Mi Bui  
Amanda Cline

Shayne Coleman  
Jessica Cunningham  
Roy Kim  
Nicole Leshko  
Chelsea Mandell  
Rachel Marone

Thu Oanh Nguyen  
Jaclyn O'Connor  
Stephanie Quist  
Jessica Spangler  
Brandi Steady  
Shannan Street

#### Keynote Speaker

Mr. Daniel Ashby, BS Pharm, MS, DSc (Hon), FASHP

Mr. Ashby is the Vice President and Chief Pharmacy Officer for The Johns Hopkins Health System, Clinical Professor at the University of Maryland and Adjunct Professor at the Notre Dame of Maryland University School of Pharmacy. He is the 2010 recipient of the ASHP Distinguished Leadership Award in Health-System Pharmacy Practice that recognizes individuals who have achieved excellence in health-system pharmacy practice leadership. Mr. Ashby is the 2011 recipient of the Harvey A.K. Whitney Lecture Award, ASHP's highest honor, and in 2013 he also received the B. Olive Cole Honorary Alumnus award from the University of Maryland.



## White Coat Ceremony

Class of 2022 | October 28, 2018

Farah Ahmed	Arden Gewirtz	Marissa Mauro
Zahra Alkazaz	Teja Ghanta	Ngan Nguyen
Jillian Baltz	Emily Gilbert	Destin Nufable
Rachel Bartholomew	Adrianna Goodin	Jason Oliver
Connor Becker	Melissa Gregorio	Chan Pack
Courtney Bergey	Sogand Hafezi Birgani	Millie Park
Catherine Bobenich	Miranda Hetrick	Cat-Trinh Phan
Derrick Bond	Shahana Islam	Nicole Pillarella
Mikaela Buntz	Zachary Kalikow	David Scott
Stephanie Cadley	Shawn Kendig	Christopher Sheridan
Guanhui Chen	Stephanie Kolaski	Merwah Shinwari
Henry Cheung	Caitlin Komm	Meredith Stoeckl
Jessica Clancy	Diana Koval	Nisha Surti
Brett Coper	Madison Leap	Daniel Sweitzer
Michael Do	Sonia Limaye	Brian Teed
Ngan Duong	Elaina Lioudis	Elma Telushi
Kevin Ferry	Sandra Lyle	Shodiyakhon Toshkhujaeva
Matthew Freidel	Katelyn MacDonald	Matthew Turnipseed
Tiffany Gardner	Jordan Mak	Ciara Walshe
Derin George	Serena Mang	Alexander Wolanin
Jennifer Gerhart	Francis Marino	

### Keynote Speaker

Peter H. Vlasses, PharmD, DSc (Hon), FCCP

Peter H. Vlasses, PharmD, DSc (Hon), FCCP is the Executive Director of Accreditation Council for Pharmacy Education (ACPE), a position he has held since August, 1999. Dr. Vlasses is a Founding Member, Fellow and Past-President of the American College of Clinical Pharmacy (ACCP). He serves on the clinical advisory council for the National Center for Interprofessional Practice and Education. His awards include the Russell R. Miller Award from ACCP; the ASPA Cynthia Davenport Award; and an Honorary Doctor of Science degree from Mercer University, Atlanta, GA.



## Pennsylvania Pharmacist Association, Legislative Day

Harrisburg, PA | April 9, 2019

Legislative Day is organized by the Pennsylvania Pharmacists Association (PPA) annually. Pharmacists and student pharmacists from across the state travel to Harrisburg to educate legislators about the important issues facing pharmacy. The goal is to help PPA's legislative team advocate for pharmacy issues and the patients we serve. Eighteen JCP student pharmacists met with state Rep. Brian Sims, the representative for Philadelphia County. It was an opportunity for our student pharmacists to advocate for our community at the state level.



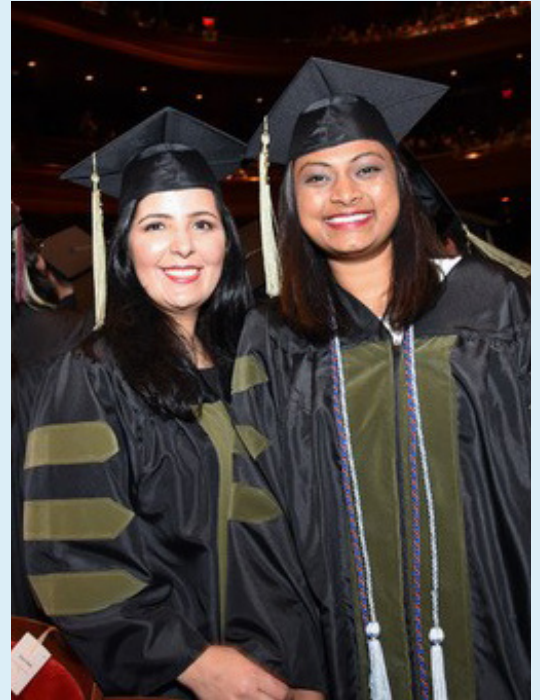
## Thomas Jefferson University Flu Fest

Dr. Roshni Emmons, JCP faculty member, helps with TJU Flu Fest. Flu Fest takes place each fall for the TJU student body. Students can receive a free flu shot, eat healthy snacks, and participate and learn about healthy life-style activities. JCP faculty have been helping administer the flu vaccine since 2015.



**Graduation**

195TH COMMENCEMENT CEREMONY  
OF THOMAS JEFFERSON UNIVERSITY  
Kimmel Center | May 21, 2019



## DOCTOR OF PHARMACY CLASS OF 2019

Sonal Agrawal  
Geeti A. Ahmadzai  
Kristeen J. Alazruei  
Amy L. Armstrong  
Jordan A. Asam  
Jennifer U. Azubuike  
Amjad I. Azzawe  
Ashley Barlow  
Brooke L. Barlow  
Nicholas M. Bertinato  
Brianna Lynn Brown  
Kevin L. Bunting, Jr.  
Pallavi Chary  
Patricia M. Churchill  
Shayne T. Coleman  
Anh-Tu Hong Dang  
Thanh Q. Dao  
Hannah L. DeCleene  
Paige J. Dennis  
Adam B. Dryden  
Huda Eldabbas  
Jose B. Fernandez, Jr.\*

Denise N. Fournier  
Gwendolyn A. Gallicio  
Ellen K. Giang  
Harleen Gill  
Nicholas Van Hastain II  
Catherine E. Hedigan  
Shu R. Huang  
Diana Huynh  
Matthew Idelson  
Hannah Larah Kafisheh  
Christina A. Karalis  
Scott Lawson  
Kelly Phuong Le  
Rosie Le  
Dasom Lee  
Dustin T. Lee  
Michelle T. Lee  
Ari Leland  
Siyuan Liu  
Tiffani Fenglin Lu  
Fiona D. Mai  
Chelsea L. Mandell

Rachel C. Marone  
Brianna M. Mattio  
Ifunanya M. Mbanefo  
Erica Mary McGovern  
Ustina A. Mikhiel  
Annie Nguyen  
Thu Nguyen  
Thu Oanh Thi Nguyen  
Casey L. O'Brien  
Jenna Catherine Oley  
Aakash B. Panchal  
Jonathan S. Park  
Tejash Patel  
Patrick Pauls  
Melanie A. Poff  
Louis J. Pontarelli  
Adriel Salgado Redondo  
Mirna R. Rezkalla  
Marc E. Roch  
Jamie Rombach  
Aleena Santana  
Kaitlin N. Sassa

Gunnar M. Sickler  
James Small  
Kyle Smith  
Andrew R. Stacy  
Francis J. Swankoski III  
Matthew L. Ta  
Nancy M. Tang  
Nicole J. Trainor  
Umut A. Turkdogan  
Avninder S. Ubhi  
Andres A. Varillas  
Zazriel B. Villamor  
Florentina Vongkingkeo  
Khoa Vu  
Ashley J. Weiner  
Si Wen  
Joan Nicole Witte  
Mi K. Wu  
\*posthumous



### Jose Fernandez

4th year JCP student pharmacist, Jose (Joey) Fernandez was tragically killed in an automobile accident on November 9, 2018. Joey was a very engaged student pharmacist with a tremendous spirit of volunteerism and infectious optimism about his future as a pharmacy leader. He touched many lives on our campus – both as a student and as a pharmacy intern at Thomas Jefferson University Hospital. Joey saw every interaction as an opportunity to connect with his peers and mentors and as a way to contribute to the mission of JCP and our University. He is deeply missed by the entire Jefferson community.

## 2019 Graduates

Twenty five of the 82 graduates of the Class of 2019 went on to post-graduate residencies and fellowships and others accepted positions in community, hospital and specialty pharmacies. In addition, other alumni from JCP began specialty residency training at a wide range of prestigious health systems.

## Employment

Independent Community and Chain Pharmacies  
Specialty Pharmacy  
Hospital Pharmacy

## Post Graduate Residencies

**66%** *JCP Match Rate for those participating in the ASHP  
Post Graduate Year Match*

**69%** *National Match Rate*

### Graduate Year Match

Thomas Jefferson University Hospital, Philadelphia, PA (3)  
Albert Einstein Medical Center, Philadelphia, PA  
Christiana Care Health System, Christiana, DE (3)  
Community Medical Center, Toms River, NJ  
Guthrie Robert Packer Hospital, Sayre, PA (2)  
Inspira Medical Center, Vineland, NJ  
MedStar Washington Hospital Center, Washington, DC  
Option Care, Plymouth Meeting, PA  
Our Lady of Lourdes Medical Center, Camden, NJ  
Paoli Hospital, Paoli, PA  
Penn Presbyterian Medical Center, Philadelphia, PA (2)  
Penn State Milton S. Hershey Medical Center, Hershey, PA  
PerformRx Managed Care, Philadelphia, PA  
Shore Medical Center, Somers Point, NJ  
Swedish Medical Center, Seattle, WA  
University of Kentucky Healthcare, Lexington, KY  
University of Maryland Medical Center, Baltimore, MD  
Wilkes-Barre VA Medical Center, Wilkes-Barre, PA  
Yale New Haven Hospital, New Haven, CT

## Fellowships

Medical Affairs Fellowship, Alkermes, Boston, MA

## Class of 2019 Graduation Awards

### A Celebration Honoring the Jefferson College of Pharmacy Doctor of Pharmacy Class of 2019 May 20, 2019

#### 2019 Award Recipients

##### **James B. Erdmann, PhD Student Award**

For Excellence in Interprofessional  
Education and Collaborative Practice

**Huda Eldabbas**

**Mirna Romany Rezkalla**

##### **Health System Pharmacy Practice**

In recognition of demonstrating excellence in  
customer service, collaboration, commitment, and  
respect within health-system pharmacy

**Geeti A. Ahmadzai**

*Awarded by Thomas Jefferson University  
Hospital Department of Pharmacy*

##### **Student Society of Health System Pharmacy**

For service to SSHP

**Andrew Ryan Stacy**

##### **Mylan Excellence in Pharmacy Award**

For high personal motivation and unique ability to  
communicate drug information

**Brooke L. Barlow**

##### **Annual Leadership**

In recognition of leadership contributions to the  
Jefferson College of Pharmacy and the profession of  
pharmacy

**Huda Eldabbas**

##### **Sustained Leadership**

In recognition of sustained leadership contributions  
to the Jefferson College of Pharmacy and the  
profession of pharmacy

**Erica M. McGovern**

##### **Professionalism Award**

In recognition of demonstrating a sustained  
high level of professionalism and for serving  
as a role model to your fellow colleagues

**Mirna Romany Rezkalla**

##### **Community Service Award**

In recognition of the many charitable contributions  
made while a Student Pharmacist at the Jefferson  
College of Pharmacy

**Jennifer U. Azubuike**

##### **Research Achievement Award**

In recognition of research contributions  
to the profession of pharmacy

**Kaitlin Nicole Sassa**

##### **TJU Achievement Award for Student Life**

For outstanding School and University  
contributions to student life

**Jose Benito Fernandez, Jr.**

##### **Pennsylvania Pharmacists Association (PPA)**

##### **Outstanding Pharmacy Student Award**

For service to PPA

**Jose Benito Fernandez, Jr.**

##### **American Pharmacists Association**

ASP Chapter Recognition Certificate

**Jose Benito Fernandez, Jr.**

##### **Excellence in Pharmacy Practice Awards**

Recognizes students who demonstrate a high  
degree of ethics, passion, and excellence in the  
provision of patient care

**Geeti A. Ahmadzai**

**Kristeen J. Alazruei**

**Ashley Barlow**

**Brooke L. Barlow**

**Brianna Lynn Brown**

**Shayne T. Coleman**

**Adam B. Dryden**

**Harleen Gill**

**Nicholas Van Hastain II**

**Christina A. Karalis**

**Kelly Phuong Le**

**Chelsea L. Mandell**

**Rachel C. Marone**

**Patrick Pauls**

**Marc E. Roch**

**Aleena Santana**

**Nancy M. Tang**

**Khoa Vu**

# JEFFERSON COLLEGE OF PHARMACY EXPERIENTIAL EDUCATION

## JCP Welcomes New Director of Experiential Education

### Advanced Pharmacy Practice Experiences Distribution Elective



**Dominique Fields, PharmD, BCPS**, joined the Jefferson College of Pharmacy on April 1, 2019 as Director of Experiential Education. Dominique earned both her BS in Pharmacy and Doctor of Pharmacy at the Philadelphia College of Pharmacy. Dominique has nearly 25 years of experience in pharmacy practice, with the majority of this time being spent in hospital pharmacy practice and administration. She began her career as a Clinical Pharmacist at the William Kessler Memorial Hospital in Hammonton, NJ. After 5 years in that position, she became the Director of Pharmacy Services, spending nearly 10 years in this role.

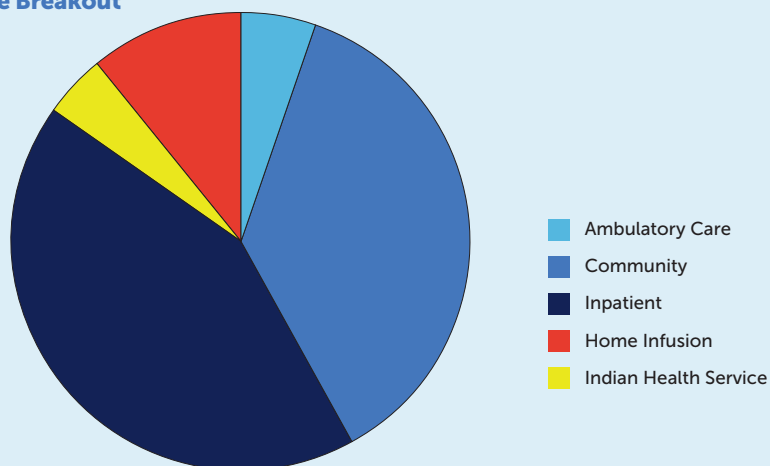
Dominique subsequently became a pharmacist at the AtlantiCare Regional Medical Center (ARMC) in Galloway, NJ and was then promoted to the positions of Pharmacy Clinical Coordinator and Student Program Coordinator. As the Pharmacy Clinical Coordinator, Dominique's numerous responsibilities included maintaining competency and participating in a variety of clinical programs (e.g. pharmacokinetic monitoring, anticoagulation management), providing staff education and competency validation, coordinating monthly clinical staff conferences, providing drug information, and serving on a number of committees throughout the health system. She also served as preceptor for numerous residents of ARMC's PGY1 Pharmacy Practice Residency Program.

In her role as Student Program Coordinator at ARMC, Dominique facilitated the growth of the experiential program at ARMC. In addition to serving as a preceptor for pharmacy students, Dominique has overseen the Department of Pharmacy's Advanced Pharmacy Practice Experience program, including maintaining current affiliation agreements with the schools/colleges of pharmacy, developing the student/preceptor schedules, ensuring completion of student onboarding requirements, providing mentorship to students and preceptors and conducting the new student orientation program.

### Advanced Pharmacy Practice Experiences (APPE)

In 2018-2019, 88 students completed 582 rotations. Each student completed required rotations in hospital, community, ambulatory care and inpatient care, plus two elective selected six week rotations, see below:

**Elective Breakout**



## What JCP Preceptors say about our students

JCP preceptors perform a vital function in delivering the JCP Experiential Education. They serve as positive, dedicated role models who guide students through their Introductory Pharmacy Practice Experiences (IPPE) and Advanced Pharmacy Practice Experiences (APPE) courses. In 2018-2019, 215 preceptors engaged in this process. As part of this process, the primary preceptor collects feedback from all pharmacists regarding the student pharmacists' performance and incorporates this feedback into the student's evaluations at the end of the semester. The following are highlights of the preceptors evaluations:

Nicole was a pleasure to precept in the critical care unit. At her own request, she began the rotation by following all the patients instead of just one or two patients, which I found very impressive! Additionally, as mentioned above, Nicole was very active and engaged when on site. She formed relationships with the critical care prescribers and was a true asset to the critical care team.

Jaclyn has a strong knowledge base, paired with excellent communication skills. These skills have allowed her to function independently with little preceptor support in the ambulatory care setting.

Jessica was an amazing asset to our team. She was able to be our primary immunizer, providing hundreds of immunizations. She has an appropriate professional confidence in providing consultations to patients and is comfortable looking up information when needed. It would be an honor to have her as a colleague in the future.

## Experiential Education Highlights 2018-2019

### Annual Preceptor Development Live Continuing Education Program

On May 1, 2019, JCP hosted its sixth annual preceptor development CE program. This three-hour, live program unites all JCP preceptors for a dinner event on campus that focuses on a relevant area of interest to all of our preceptors, regardless of practice setting. This year's program was titled "Fueling Your Professional Fire: Recognizing Burnout and Igniting Resilience."

The program was attended by more than 70 preceptors from over 20 different practice sites. JCP preceptors were provided the opportunity to network, exchange ideas, interact with JCP faculty and engage in an evening of learning and professional development on an extremely relevant and timely topic.

### Alumni Serve as Preceptors

Five JCP alumni chose to "pay it forward" by serving as preceptors for first year student pharmacists in the course Healthcare Related Service-learning Introductory Pharmacy Practice Experience (IPPE): Thomas Schultz '16, Tina Zanganeh '17, Amith Shetty, '15, Frank Konzelman '13 and Michael Llewellyn '15. Under each preceptor's supervision, a group of three to four students contribute to underserved populations at various partner sites throughout Philadelphia. The alumni preceptors, who are intimately familiar with the JCP curriculum, have been a source of inspiration as they guide their student's through the course.

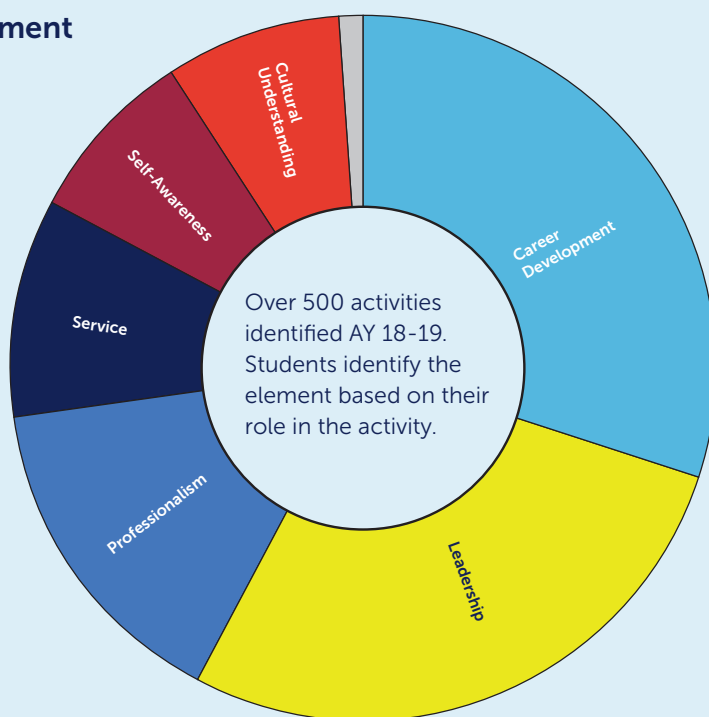
Upon completion of the experience, JCP student pharmacist Rachel Bartholomew, '22 shared, "Having weekly one-on-one interactions with patients and being able to put our classroom skills to work in a real life setting made this experience extremely valuable. Working in an interprofessional team where all member genuinely wanted to provide quality care for every patient was inspirational and motivational."

# STUDENT PHARMACIST ENRICHMENT PROGRAM (SPEP)

JCP successfully implemented the Student Pharmacist Enrichment Program (SPEP) during 2018-2019. The purpose of this program is for students to complement their curricular learning with experiences outside of the curriculum. The college selected seven elements for students to align their experiences: career development, cultural understanding, innovation/entrepreneurship, leadership, professionalism, self-awareness, and service. Jefferson provides a rich environment with a wide array

of extracurricular activities and the student professional organizations offer multiple opportunities for engagement. Each semester students share their activities and what they learned with each other in small groups that include individuals from all four class years. This aspect of the program promotes networking across classes, recognition of future opportunities, direct dialogue on what to expect and how to strategize selections.

## SPEP Activities by Element



	Career Development	Cultural Awareness	Innovation/Entrepreneurship	Leadership	Professionalism	Self Awareness	Service
Schwartz Center Rounds (healthcare provider personal issues)		X			X	X	
Leadership Live	X			X			
Sigma-Xi Research	X		X			X	
JCP Committee	X			X			X
Ambassador - JCP				X	X		X
Utah Substance Abuse Program		X			X	X	
Rho Chi Tutoring					X	X	
Legislative Day	X			X	X		X
Pharmacy Organization Membership	X			X	X		X

## JEFFERSON CENTER FOR INTERPROFESSIONAL PRACTICE & EDUCATION

The Jefferson Center for Interprofessional Practice and Education (JCIPE), under the leadership of Co-Director and JCIPE Associate Provost, Elena Umland, PharmD (Associate Dean for Academic Affairs and Professor of Pharmacy Practice in JCP) and strong faculty support by JCP faculty Amber King, PharmD, Roshni Emmons, PharmD, and Emily Scopelliti, PharmD, received Honorable Mention for the George E. Thibault, MD Nexus Award in 2019. This Award celebrates exemplary interprofessional collaboration in the United States and those who are thinking and acting differently where practice and education connect in health systems.

It recognizes two Nexus partnerships of health systems, clinics, educational institutions, and/or community organizations for extraordinary contributions to the Nexus; redesigning both healthcare education and healthcare delivery simultaneously to be better integrated and more interprofessional while demonstrating outcomes. JCIPE was recognized in the local, Single-System Implementation category, described as “meaningful integration of interprofessional education and collaborative practice in local implementation, predominantly in a single setting or local network that leverages strong education and practice partnerships.”

The JCP faculty have been integral in the continued development and delivery of JCIPE programming (Health Mentors Program, Hotspotting, TeamSAFE) to JCP students as well as the Jefferson student community at large.



From left to right: Dr. Tracey Vause Earland, Faculty Program Lead for Hotspotting Program, JCIPE and Associate Professor, Occupational Therapy, JCRS; Dr. Elena Umland, Co-Director, JCIPE Associate Provost, Interprofessional Practice & Education Associate Dean, Academic Affairs Professor of Pharmacy Jefferson College of Pharmacy; Dr. Barbara Brant, Director, National Center for Interprofessional Practice and Education; Associate Vice President, Academic Health Center, University of Minnesota; Shoshana Sicks, Director of Curriculum and Administration, JCIPE; Aniekana Ukanna, Program Assistant, JCIPE; and Neil Geosits, Program Assistant, JCIPE

## STUDENTS

## Meet the PharmD Class of 2022

## JCP Class of 2022 Demographics

**Gender: female/male 64%/36%**

**Average age: 23 years**

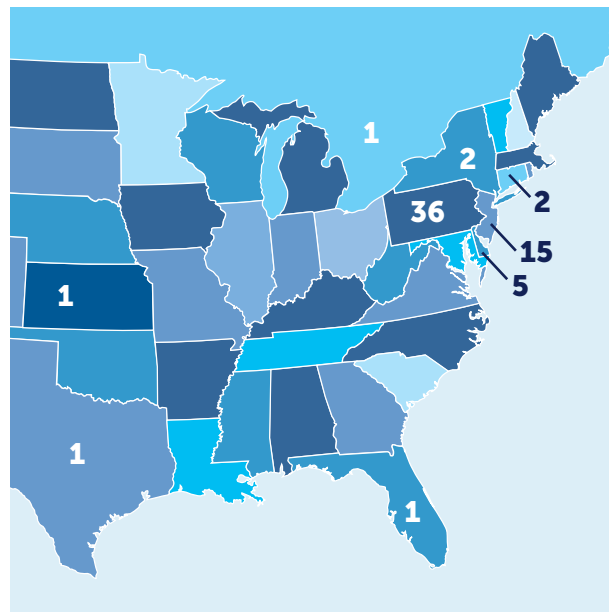
**Degree on entry:**

**BA/BS Biology**      **N = 32**

**BA/BS Chemistry N = 12**

**MS degree N = 2**

## PhD degree N = 1



## Student Awards and Recognitions

Jefferson student pharmacists have the opportunity to participate in a number of service, social and professional organizations at a local, regional and national level. In 2018-2019, three JCP students received National recognition.

## JCP National Champions

American Society Health-System Pharmacist (ASHP),  
2018 Clinical Skills Competition

### 1st Place:

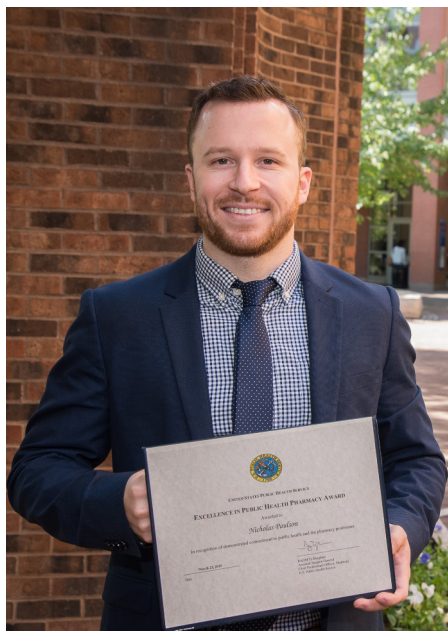
Ashley Barlow '19 & Brooke Barlow '19,  
Jefferson College of Pharmacy

The ASHP Clinical Skills Competition (CSC) is an interactive, team-based analysis of clinical scenarios for hospital and health-system pharmacists, providing pharmacy students the opportunity to enhance their skills in collaborative practice with physicians in providing direct patient care. CSC is a two-hour written assessment and oral presentation in which the student analyzes a patient case with a teammate of their choice. Each team's written recommendations are then evaluated on clinical relevance, effectiveness, comprehensiveness and practicality, as well as the clarity and logic of the oral presentation.



## Student Awards

### US Public Health Service Award, Excellence in Public Health Pharmacy Award



#### Nick Paulson '20

Every year, the United States Public Health Service (USPHS) Excellence in Public Health Pharmacy Award recognizes pharmacy students who have made significant contributions in public health. Nominees are students who have demonstrated dedication by advancing the goals of "Healthy People 2020." At JCP, Nick Paulson '20 was nominated by JCP and later selected by U.S. Public Health as a recipient of the Excellence in Public Health Pharmacy Award for his commitment to public health and pharmacy profession.

Under Nick's leadership, as American Pharmacists Association (APhA) president, forty-nine members of the community participated with JCP faculty, students and APhA chapter members in the Healthy Heart 5K and Health Fair.

According to Nick, "The Healthy Heart 5K and Health Fair was created so that student pharmacists could take an active role in the health of the community. It was so great to see that spirit continue one year after the inaugural event. It really makes the health fair interactions more meaningful given that students and patients overcome the race together. I am looking forward to seeing this event continue to benefit the Jefferson and the Philadelphia community for years to come."



## JCP Annual Student Awards Ceremony

### Celebrating the 2018–2019 Award Recipients

Tuesday, April 16, 2019

#### Community Service Awards

Ashling Cook | *Class of 2021*

Jessica Cunningham | *Class of 2020*

#### Professionalism Awards

Ciara Walshe | *Class of 2022*

Roy Kim | *Class of 2020*

#### Collegial Recognition Awards

Nicole Pillarella | *Class of 2022*

Vinh Nguyen | *Class of 2021*

Amanda Cline | *Class of 2020*

#### Annual Leadership Awards

Sara Olyaei | *Class of 2021*

Julia Kopec | *Class of 2020*

#### Research Achievement Award

Matty Zimmerman | *Class of 2021*

Taylor Carcella | *Class of 2020*

#### Excellence in Public Health Pharmacy Award

Nicholas Paulson | *Class of 2020*



## Student Activities

Thomas Jefferson University and JCP offers student pharmacist a number of service, social, and professional organizations. These activities offer students an opportunity to engage with students in other Jefferson programs while learning and developing personal awareness and skills.

**2018-2019 highlights include the following:**

### Leadership Live

Leadership Live is an interdisciplinary program to empower Jefferson students to be ethical leaders in their professions and communities fostering self-awareness, the value of teamwork and an understanding of living and leading in diverse contexts. The curriculum includes workshops, community service and other special events focusing on diversity, integrity, personal and professional development, leadership, team work and service. Each year Jefferson Students who participate in at least eight of the activities are recognized in a Leadership Ceremony. This year 17 JCP student pharmacists were recognized:

**Montaha Abdallah**  
**Doyinsola O. Adetunji**  
**Deanna M. Bellapigna**  
**Henry Cheung**  
**Julian R. De La Calzada**  
**Jennifer L. Gerhart**

**Rebecca E. Holmes**  
**Roy Kim**  
**Charles D. Korn**  
**Ellen T. Ly**  
**Jordan Mak**  
**Vinh Nguyen**

**Inga Rekhtman**  
**Farzana Tarannum**  
**Shodiyakhon Toshkhujaeva**  
**Monica S. Woloshin**  
**Douglas P. Zeman**



#### Meet Doyinsola O. Adetunji '20, Leadership Ambassador

Doyinsola joined Leadership Live during her P1 year. "I was not confident in my leadership abilities when I came to JCP, so I joined Leadership LIVE. Before attending this program, my definition of a leader was someone who took charge of the group, dictated the rules, and everyone followed. That definition of a leader was not who I was as a person, so I questioned my ability to be a leader. It wasn't until I went through the various workshops on topics like empathy, acts of service, and cultural sensitivity through Leadership LIVE that I recognized my ability to be a leader. My kind of leadership is actively listening to my team members and working with the strengths and weaknesses of my team members."

"Serving as a Leadership LIVE Ambassador in 2018-2019 allowed me to give back to Leadership LIVE and to actively work on my newly developed skills."

### Student Body Governance



#### Michelle Culbert '20, Student Body Governance (SBG) President 2018-2019

"I chose to run for Student Body Governance President because I thoroughly enjoyed my involvement in SBG throughout my time at JCP. This organization allowed me to meet new friends, stay connected with the college's administration, network with colleagues, and give back to the community. My experiences in SBG during my P1 and P2 years gave me the confidence to lead our student body as president during my P3 year."

My vision for SBG was to engage every student at JCP by providing opportunities that allowed members to become well-rounded student pharmacists to develop each students' academic, professional, philanthropic and social skills. Student Body Governance provided me leadership, commitment, collaboration, innovation and teamwork. During my time as president, I learned that it takes a team to make ideas into a reality and determination to be successful.

I feel that co-curricular engagement is extremely important when it comes to professional growth that being involved outside of the classroom is one of the best ways to learn about our profession, create meaningful connections and build character."

## Research

Jefferson College of Pharmacy (JCP) students who are interested in learning more about research or further developing their research skills have a variety of opportunities across their four-year period of study in the PharmD program. As a result of these research projects, each year JCP students are able to present research findings at national scientific and professional meetings and co-author articles in professional journals as noted in this 2018-2019 Annual Report, JCP Research and Scholarly Activities section.



### Meet Daniella Armah '20

"I engaged in research at JCP because I wanted an experience beyond the classroom. Being involved in research helped enhance my patience and my determination, teaching me that things don't always go as expected, and thus to stay one step ahead."



### Meet Kaitlin Sassa '19

"I chose to engage in research opportunities at JCP because the area I completed research in, HIV medications, is rapidly changing and I thought it would be a great opportunity to be a part of that change. I enjoyed being able to impact current patients as well as future patients. My experience completing research provided me with public awareness from a diverse patient population, and the ability to express my knowledge and opinions."



### Meet Arden Gewirtz '22

"I became involved in research because it seemed like a tangible way to contribute to a larger community during my time as a student. My research involved a medical device for individuals who may experience adrenal crisis, a medical emergency. Hearing the feedback from this patient population enabled me to see my research as something with impact on the real world.

Getting involved with research allowed me to increase my confidence in public speaking, as we presented at several pitch competitions and disease-related conferences. Furthermore, I was able to witness the creativity involved in the scientific process and the dedication required to bring an idea to fruition. Although this research represented a short season in my life, it helped me to appreciate the numerous steps that bring a concept to market."

# ALUMNI

## JCP Alumni Beginning Post- Graduate Year Residencies at:

Baylor University Medical Center,  
Critical Care, Dallas, TX

Hospital of the University of Pennsylvania,  
Ambulatory Care, Philadelphia, PA

Intermountain Medical Center,  
Emergency Medicine, Murray, UT

Memorial Sloan Kettering Cancer Center,  
Infectious Diseases, New York, NY

New York Presbyterian, Internal Medicine,  
New York, NY

Philadelphia College of Pharmacy/  
Cooper University Hospital, Critical Care,  
Philadelphia, PA

Rutgers University / Robert Wood Johnson  
University Hospital, Emergency Medicine,  
Piscataway, NJ

Temple University School of Pharmacy,  
Ambulatory Care, Philadelphia, PA

Temple University School of Pharmacy,  
Infectious Diseases, Philadelphia, PA

The Ohio State University Wexner Medical  
Center, Emergency Medicine, Columbus, OH

University of Arizona College of Pharmacy /  
Banner University Medical Center,  
Internal Medicine, Tucson, AZ

University of Illinois at Chicago,  
Cardiology, Chicago, IL

University of Oklahoma Health Sciences Center,  
Pediatrics, Oklahoma City, OK

WJB Dorn Veterans Affairs Medical Center,  
Ambulatory Care, Columbia, SC

Yale-New Haven Health System,  
Solid Organ Transplant, New Haven, CT

## FACULTY

### TJU Faculty Awards

Each year Thomas Jefferson University recognizes faculty from all Jefferson Colleges for exceptional accomplishments and innovation in teaching, research and discovery and service to the University, our community and professions. At the Annual Thomas Jefferson University Faculty Awards Ceremony in May, JCP faculty **Jitendra Belani, PhD, RPh, Assistant Professor of Pharmaceutical Sciences** received the TJU Outstanding Teaching Award and **Jeanette Litts, BS Pharm, RPh** received the TJU Award for Outstanding Adjunct Teaching.

Dr. Belani is an Assistant Professor in the Department of Pharmaceutical Sciences and teaches in medicinal chemistry, pharmaceuticals and also teaches organic chemistry in the Jefferson College of Life Sciences. Dr. Belani is a passionate and dedicated teacher who describes his mission as to “ignite imagination, inspire hope and instill a love of learning in his students.” He enters the classroom every day with the intent to prepare his students to tackle real life situations and become responsible and competent health care professionals. As a pharmacist and scientist he is able to help students “connect the dots” from scientific concepts to the practical applications in managing medication therapy. Students describe Dr. Belani as student-centric, enthusiastic and motivational. In addition to his teaching responsibilities, Dr. Belani oversees an active research program focused on the rational design and synthesis of novel molecules for prevention and treatment of disease.

Jeanette Litts, RPh has served as an Instructor in the JCP Pharmacy Practice Laboratory courses since the College was founded more a decade ago. Ms. Litts brings many years of both pharmacy practice and instructional experience to JCP and has assumed significant responsibility to ensure that this series of courses provide realistic practice experience, create an expectation of professionalism, and incorporate formative and summative assessments that are designed for students to readily identify areas they need to improve. Students, full-time faculty and other laboratory and simulation instructors have consistently noted that Ms. Litts is a student-centered instructor who is always prepared for the exercises and provides thorough and helpful feedback to the student learners. She effectively engages student pharmacists in the simulation and assessment activities and is able to correlate the lab activities with real-world practice and expectations for practicing pharmacists.

### AACP Teacher of the Year

Each year, JCP invites our student pharmacists to nominate faculty for the AACP Teacher of the Year Award. In their nominations, students are asked to consider the faculty member’s student-centered teaching, innovative course development and effectiveness as a teacher. This year, **Dr. Roger Armen, Assistant Professor of Pharmaceutical Sciences**, was selected as the recipient of this award. In their letters of nomination students described Dr. Armen as dedicated, enthusiastic and inspirational – one who “unabashedly cares about educating us as students and connecting his material to how it will make us better pharmacists and professionals in the future.” Dr. Armen teaches medicinal chemistry and advanced drug metabolism in the PharmD program and has an active research program. This is the second time Dr. Armen has been honored by the JCP student pharmacists.

### University of the Sciences Young Alumnus Award

This award is bestowed annually upon an alumnus who is less than 40 years old, who shall have received his/her degree from University of the Sciences in Philadelphia within the last 15 years, and who shall have been distinguished by having contributed in an outstanding fashion to the profession, to science and/or mankind. This year, the University of Sciences presented the Young Alumnus Award to **Dr. Nicholas Leon, PharmD’07, Associate Professor of Pharmacy Practice**.

## JCP RESEARCH AND SCHOLARLY ACTIVITIES

JCP faculty and students continue to collaborate with TJU colleagues and other researchers and practitioners to design and develop novel therapeutic agents, enhance the effectiveness and safety of existing medications, improve the health of our community and advance the profession.

JCP Faculty

\*JCP Student or Alumnus

### Journal Articles and Periodicals

Agrawal M, Saraf S, Saraf S, Antimisialis SG, Chougule M, **Shoyele SA**, Alexander A. . Nose-to-brain drug delivery: An update on clinical challenges and progress towards approval of anti-Alzheimer drugs. *J Control Release*. 2018; doi:10.1016/j.jconrel.2018.05.011

Agrawal M, Saraf S, Saraf S, Antimisialis SG, Hamano N, Li SD, Chougule M, **Shoyele SA**, Gupta U, Ajazuddin, Alexander A. Recent advancements in the field of nanotechnology for the delivery of anti-Alzheimer drug in the brain region. *Expert Opin Drug Deliv*. 2018;1-29. doi: 10.1080/17425247.2018.1471058

Awale P, Lai JCK, Pashikanti S, **Bhushan A**. Valproate-Induced Rodent Model of Autism Spectrum Disorder (ASD): Immunogenic Effects and Role of Microglia. In: *Immune Aspects of Biopharmaceuticals and Nanomedicine*, Volume 3 in the series entitled Pan Stanford Series on Clinical Nanomedicine, Bawa R, Szebeni J, Webster TJ, Audette GF, eds. Singapore: Pan Stanford Publishing; 2019:753-770.

**Belani JD**. Chirality effect on cholesterol modulation of protein function. *Adv Exp Med Biol*. 2019;1115:3-19.

**Bellottie GD**, Kirwin J, Allen RA, et al. Suggested pharmacy practice laboratory activities to align with pre-APPE domains in the Doctor of Pharmacy curriculum. *Curr Pharm Teach Learn*. 2018;10:1303-1320.

Brailoiu E, \*Barlow CL, Ramirez SH, Abood ME, **Brailoiu GC**. Effects of platelet-activating factor on brain microvascular endothelial Cells. *Neuroscience*. 2018;**377**:105-113. PMID:29522856.

Brailoiu E, Chakraborty S, **Brailoiu GC**, Zhao P, Barr JL, Ilies MA, Unterwald EM, Abood ME, Taylor CW. Choline is an intracellular messenger linking extracellular stimuli to IP3-evoked Ca<sup>2+</sup> signals through sigma-1 receptors. *Cell Reports*. 2019;26(2):330-337. PMID: 30625315

**Carter KL**, Bonanni S. Role of the pharmacist in refugee health. *Am J Health Syst Pharm*. 2019;76:403-406.

Desai V, Jain A, Shaghaghi H, Summer R, Lai JCK, **Bhushan A**. Combination of biochanin A and temozolomide impairs tumor growth by modulating cell metabolism in glioblastoma multiforme. *Anticancer Research*. 2019;39(1):57-66. doi:10.21873/anticancer.13079. [PMID:30591440]

**Egras AM**, McAndrew M. Transitioning a patient with type 2 diabetes to insulin from the inpatient to outpatient setting. AADE CaseShare. American Association of Diabetes Educators. Published online in the Diabetes Educator. July 2018.

**Egras AM**, White N, Diaz V, Holsinger K. Games as a unique strategy use in diabetes shared medical appointments. *AADE in Practice*. 2019;March.

**Finley RS**. Harvey A.K. Whitney Lecture: Reflection, resilience, relationships, and gratitude. *Am J Health-System Pharm*. 2018;16:1185-90.

He J, Liu W, Ge X, Wang GC, Desai V, Wang S, Mu W, **Bhardwaj V**, Seifert E, Liu LZ, **Bhushan A**, Peiper SC, Jiang BH. Arsenic-induced metabolic shift triggered by the loss of miR-199a-5p through Sp1-dependent DNA methylation. *Toxicol Appl Pharmacol*. 2019; Jun 3:114606.

\*Kundur S, Prayag A, Selvakumar P, Nguyen H, \*McKee L, Cruz C, Srinivasan A, **Shoyele S**, **Lakshmikuttyamma A**. Synergistic anticancer action of quercetin and curcumin against triple-negative breast cancer cell lines. *J Cell Physiol*. 2019;234(7):11103-11118. doi: 10.1002/jcp.27761

Lam E, Rochani A, **Kaushal G**, Thoma B, Tanjuakio J, West F, Hirose H. Pharmacokinetics of ketamine at dissociative doses in an adult patient with refractory status asthmaticus receiving extracorporeal membrane oxygenation therapy. *Clinical Therapeutics*. 2019;PubMed PMID: 30929859

Lai JCK, Desai V, Zhang Y, **Bhushan A**, Leung SW. Cytotoxic effects of short multi-wall carbon nanotubes on pancreatic cancer cells. In Technical Proceedings of the 2019 TechConnect World Innovation Conference & Expo, *TechConnect Briefs*. 2019;397-400. Industry sector: Medical & Biotech; Topics: Biomaterials, Diagnostics & Bioimaging; ISBN: 978-0-9988782-8-7.

Lai JCK, Gao W, **Bhushan A**, Leung SW. Enhancement of effects of chitosan and nanoparticles on pancreatic cancer cells by combination treatments with the anti-cancer drug adriamycin. In Technical Proceedings of the 2019 TechConnect World Innovation Conference & Expo, *TechConnect Briefs*. 2019;401-404. Industry sector: Medical & Biotech; Topics: Biomaterials, Diagnostics & Bioimaging; ISBN: 978-0-9988782-8-7.

Magnuson A, Sattar S, **Nightingale G**, Saracino R, \*Skonecki E, Trevino KM. A practical guide to geriatric syndromes in older adults with cancer: a focus on falls, cognition, polypharmacy, and depression. *Am Soc Clin Oncol Educ Book*. 2019;39:e96-109.

Mandel C, **Belani JD**. [H-Naphtho[1,8-de]-1,3,2-diazaborine,2,3-dihydro-] The Electronic Encyclopedia of Reagents for Organic Synthesis **2019**. John Wiley & Sons, Hoboken, NJ, USA.

**Nightingale G**, Schwartz R, Kachur E, Dixon BN, Cote C, \*Barlow A, \*Barlow B, Medina P. Clinical pharmacology of oncology agents in older adults: A comprehensive review of how chronologic and functional age can influence treatment-related effects. *J Geriatr Oncol* 2019;10:4-30.

**Nightingale G**, Pizzi LT, \*Barlow A, \*Barlow B, \*Jacisin T, \*McGuire M, Swartz K, Chapman A. The prevalence of major drug-drug interactions in older adults with cancer and the role of clinical decision support software. *J Geriatr Oncol*. 2018;9:526-33.

Perepelyuk M, Sacko K, Thangavel K, **Shoyele SA**. Evaluation of MUC1-aptamer functionalized hybrid nanoparticles for targeted delivery of miRNA-29b to nonsmall cell lung cancer. *Mol. Pharmaceutics*. 2018;15: 985-993.

**Schafer JJ**, Prioli KM, Harris LF, \*Cannon-Dang E, Marthol MM, McRae J, McCoy M, Pizzi LT. Exploring beliefs about pneumococcal vaccination in a predominantly older African American population: the pharmacists' pneumonia prevention program (PPPP). *Ethnicity and Health* 2018; 1-15. doi: 10.1080/13557858.2018.1514450. [Epub ahead of print]

Shin Y, Kokate R, Desai V, **Bhushan A, Kaushal G**. D-cycloserine nasal formulation development for anxiety disorders by using polymeric gels. *Drug Discov & Ther*, 2018;12(3): 142-153. PubMed PMID: 29998995

Thangavel C, Perepelyuk M, Boopathi E, Liu Y, Polischak S, Deshpande DA, Rafiq K, Dicker AP, Knudsen KE, **Shoyele SA**, Den RB. Improvement in therapeutic efficacy and reduction in cellular toxicity: introduction of a novel anti-PSMA-conjugated hybrid antiandrogen nanoparticle. *Mol. Pharmaceutics*. 2018;doi: 10.1021/acs.molpharmaceut.7b01024

Thangavel C, Boopathi E, Liu Y, McNair C, Haber A, Perepelyuk M, Bhardwaj A, Addya S, Ertel A, **Shoyele S**, Birbe R, Salvino JM, Dicker AP, Knudsen KE, Den RB. Therapeutic challenge with a CDK 4/6 inhibitor induces an RB-dependent SMAC mediated apoptotic response in non-small cell lung cancer. *Clin Cancer Res*. 2018;doi: 10.1158/1078-0432.CCR-17-2074. [Epub ahead of print] PMID: 29311118

## Book Chapters

Brooks AM, **Sanoski C**, **Hajjar ER**, Overholser BR. *NAPLEX Prep 2018*. New York, NY: Kaplan Publishing; 2018.

Grover AB, Patel-Shori NM, Andres JL, **Mayer DC**, Stassinis M. Chronic conditions and medication response. In: O'Connell MB, Smith JA, eds. *Women's Health across the Lifespan*. 2<sup>nd</sup> ed. New York, NY: McGraw Hill; 2018.

**Schafer JJ**, Sherman EM, Gill TK, Birney J. Understanding and managing antineoplastic and antiretroviral therapy. In: Hardy WD, ed. *The American Academy of HIV Medicine Fundamentals of HIV Medicine*. New York, NY: Oxford University Press; 2019.

Short WR, **Schafer JJ**. Antiretroviral Therapy in Pregnant Women. In: Hardy WD, ed. *The American Academy of HIV Medicine Fundamentals of HIV Medicine*. New York, NY: Oxford University Press; 2019.

## Invited Presentations at Local, State, National or International Meetings

Turner KM, Frueh J, **King AE**, Negrete MJ. Student Hotspotting: A Community-Based Learning Lab with Medically and Socially Complex Patient Populations. American Association of Colleges of Pharmacy Annual Meeting. Boston, Massachusetts. July 2018.

**Schafer JJ**. HIV Treatment, Prevention, Access and Advocacy. A webinar presentation for the Southeast AIDS Education and Training Center and the American College of Clinical Pharmacy HIV Practice and Research Network. August 2018.

**Patel R**. Models to Improve Treatment of Opioid Use Disorder. Substance Abuse and Mental Health Services Administration/Interprofessional Education Collaborative Interprofessional Summit on Enhancing Addiction Education across the Health Professions. Washington, DC. August 2018.

**Nightingale G**. Opportunities in Scholarship: A Focus on Foundational Grants. A webinar presentation for the Pharmacy Practice Section of the American Association for Colleges of Pharmacy. September 2018.

**Patel R.** Do you SBIRT? Version 2.0. Pennsylvania Pharmacists Association Annual Meeting. Lancaster, Pennsylvania. October 2018.

Forstater AF, **King AE.** Creating an Interactive TeamSTEPPS Course (Preconference Workshop). Jefferson Center for Interprofessional Practice and Education: Interprofessional Care for the 21<sup>st</sup> Century Conference. Philadelphia, Pennsylvania. October 2018.

**Hajjar EH.** Pharmacokinetic Considerations with Aging. American College of Clinical Pharmacy Global Conference on Clinical Pharmacy, Seattle, Washington. October 2018.

**King AE,** Herge AE, Fitzgerald M, Nixon-Cave K, Hunter L. Keep Calm and Try Something New. Jefferson Center for Interprofessional Practice and Education: Interprofessional Care for the 21<sup>st</sup> Century Conference. Philadelphia, Pennsylvania. October 2018.

**Mayer DC, Joseph A.** Tips for Successfully Orchestrating your Clinical and Teaching Responsibilities: Precepting our Future Generation of Pharmacists. Pennsylvania Pharmacists Association Annual Meeting. Lancaster, Pennsylvania. October 2018.

**Nace AM.** Posting Professionally: Leveraging Social Media Responsibly. American Society of Health-System Pharmacists National Pharmacy Preceptors Conference. Dallas, Texas. October 2018.

**Hajjar EH.** De-Prescribing in the LTC Setting. Pennsylvania Society for Post-Acute and Long-Term Care Medicine Annual Meeting, Hershey, Pennsylvania. November 2018.

Patel SH, **King AE,** \*Girone G, \*Lenzi K. Early Management of Acute Ischemic Stroke. Pennsylvania Society of Health-System Pharmacists Annual Meeting. King of Prussia, Pennsylvania. November 2018.

**Leon N.** A Network of Pennsylvania Pharmacists Reaching Patients Where They Are: Early Implementation of a Partnership with a Managed Care Organization. American Public Health Association Annual Meeting and Expo. San Diego, California. November 2018.

**Leon N.** Chronic Heart Failure Management: Debunking Myths and Misconceptions. American Society of Health-System Pharmacists Midyear Clinical Meeting. Anaheim, California. December 2018.

**Leon N.** Unlocking Your Potential in Academic Pharmacy. American Society of Health-System Pharmacists Midyear Clinical Meeting. Anaheim, California. December 2018.

**Shah BM,** Worley M. Therapeutics Debate 2018: Carbapenem vs Non-Carbapenem for ESBL Infections. American Society of Health-System Pharmacists Midyear Clinical Meeting. Anaheim, California. December 2018.

**Egras AM.** Diabetes Elective for Pharmacy Students. International Meeting on Simulation in Healthcare. San Antonio, Texas. January 2019.

Kliethermes MA, Griffin B, Vest K, Lynch S, **Mayer DC.** Advocacy across the spectrum of pharmacy: starting at the corner of happy and healthy. Annual Pharmaceutical Care Lyceum. Deep Portage, Michigan. January 2019.

**Leon N.** Pharmacology Review. Goldfarb Foundation Board Review Course. Philadelphia, Pennsylvania. January 2019.

**Schafer JJ.** Current Management Strategies for Human Immunodeficiency Virus. Tabula Rasa HealthCare University. Tabula Rasa HealthCare, Moorestown, New Jersey. January 2019.

**Nightingale G.** Polypharmacy 101: Targeting the Basics. A webinar presentation for the Nursing and Allied Health Group, International Society of Geriatric Oncology. February 2019.

Ippolito M, Hopfinger N, Nayak AP, \*Sakkal LA, \*Rajkowski KZ, Liu X, Kobilka, BK, Penn RB, **Armen RS,** Scott CP, Benovic JL. Negative Allosteric Modulation of Arrestin Recruitment to the b2-Adrenergic Receptor. Experimental Biology, Orlando FL, April 6-9 2019.

Desai V, Buchhalter E, Cabanzo M, Tiwari A, Lai JCK, **Bhushan A.** Differential Effects of Combination treatment of Biochanin A and Statins on Glioblastoma Multiforme cell proliferation and cell metabolism. Annual Meeting of American Association for Cancer Research. Atlanta GA, March 29-April 3, 2019.

**Leon N.** A Network of Pennsylvania Pharmacists Reaching Patients Where They Are: Early Implementation of a Partnership with a Managed Care Organization. Invigorating Public Health in Pennsylvania through Community-Based Initiatives Conference. Lancaster, Pennsylvania. April 2019.

**Schafer JJ.** HIV and AIDS. A webinar program delivered for The ASHP/ACCP Board of Pharmacy Specialties Infectious Diseases Pharmacy Specialty Review and Recertification Course. April 2019.

**Nightingale G.** Are "Silver Survivors" Too Old for Treatment? An Update on how Chronologic and Functional Age Can Influence Treatment-related Effects. Hematology/Oncology Pharmacy Association Annual Conference. Fort Worth, Texas. April 2019.

**Nightingale G.** Time for a ReMEDy: A Focus on Pharmacy and the Older Adult. A webinar presentation for the Association of Community Cancer Centers as part of the Multidisciplinary Approaches to Caring for Geriatric Cancer Patients Series. May 2019.

**Nightingale G.** Special Issues with Prescriptions in Older Patients with Cancer: Polypharmacy and Drug Interactions. American Society of Clinical Oncology Annual Meeting. Chicago, Illinois. June 2019.

Sharma N, **Kaushal G, Bhushan A, Bhardwaj V.** Metabolic Deregulation Promotes Targeted Therapy Resistance in PDAC. Conference Gordon Research Conference on Pancreatic Diseases. Newry, ME. June 2019.

## JCP PROGRAM OUTCOMES

### National Association of Boards of Pharmacy Exam (NAPLEX)

The NAPLEX®, or North American Pharmacist Licensure Examination®, measures a candidate's knowledge of the practice of pharmacy. It is just one component of the licensure process and is used by the boards of pharmacy as part of their assessment of a candidate's competence to practice as a pharmacist.

#### First-Time Passing Percentage

	JCP	National*
Class of 2018	100%	89.5%
Class of 2019	93.4%	87.8%

\*All Graduates from American Council for Pharmacy Education (ACPE) Accredited Programs

### Post-Graduate Advanced Training

Graduates who entered residencies or fellowships following the completion of the PharmD degree

	Overall % of Graduates who entered training programs (including those in ASHP* Match)	Graduates who participated in the ASHP* Matching program who were matched	National average for graduates in the ASHP* Matching program
Class of 2019	34%	25/36 (69%)	66%

\*American Society of Health-System Pharmacists (ASHP)

### Graduation Rates

	On-time Graduation Rate (Students who completed the PharmD degree within the specified 4 years)
Class of 2019	87%

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