

# MOHAMED KASHKOUSH

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## Education

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**Doctor of Pharmacy** Aug. 2017 – April 2021  
University of Pittsburgh School of Pharmacy  
Pittsburgh, PA | Current GPA: 3.741

**Bachelor of Science in Industrial Engineering** Aug. 2013 – April 2017  
University of Pittsburgh Swanson School of Engineering  
Pittsburgh, PA | Graduated *cum laude*

## Licensures and Certifications

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**Basic Life Support** Issued 2/10/18  
American Heart Association Certificate ID:185502428059 Expires 2/29/20

**Pharmacy Intern License** Issued 9/6/17  
Pennsylvania State Board of Pharmacy License Number: PI121431 Expires 9/6/23

**Health Systems Engineering Graduate Certificate** Issued 4/30/17  
University of Pittsburgh Department of Industrial Engineering

- Certificate awarded upon completion of 15 extracurricular credits
- Courses: Senior Projects (IE 1090), Database Design (IE 1014), Operations Improvement in Healthcare (IE 1106), Health Systems Engineering (IE 1108), Ethical Dilemmas Balancing Cost, Risk, and Scheduling (ENGR 1500)

## Professional Experiences

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**Business Development Associate** May 2018 – Present  
Peptilogics, Inc. | Pittsburgh, PA

- Regularly provide Chief Executive and Scientific Officers with industry-wide business and regulatory updates
- Continuously review and summarize scientific literature in the areas of antimicrobial resistance, infectious disease, and orthopedic surgery
- Work with Acting Chief Medical Officer to describe patient populations affected by potentially amenable infectious diseases
- Review and edit corporate presentations, submissions, and filings

**Pharmacy Intern** May 2018 – May 2019  
University of Pittsburgh Medical Center

- Presbyterian Shadyside Hospital Pharmacy | Pittsburgh, PA
- Responsible for sterile compounding, dispensing, delivery, and reconciliation
  - Ensured controlled substance regulatory compliance

**Researcher**

March 2016 – Jan 2019

University of Pittsburgh Graduate School of Public Health  
Behavioral & Community Health Sciences | Pittsburgh, PA

- Interviewed substance use disorder treatment centers and at-risk laypersons
- Transcribed interviews for qualitative analysis
- Contributed and edited manuscript
- Project: Community Engaged Research and Agent-Based Modeling to Improve Narcan Distribution and Reduce Opioid Overdose

**Researcher**

May 2017 – Jan. 2018

University of Pittsburgh Swanson School of Engineering  
Department of Industrial Engineering | Pittsburgh, PA

- Analyzed opioid overdose and naloxone administration trends in Baltimore City to optimally plan naloxone distribution programs
- Collaborated with Baltimore City Health Department and Office of the Governor of Maryland for permission to access data during state of emergency
- Project: Hierarchical Data-Driven Models for Naloxone Procurement and Distribution Amidst the Opioid Crisis

**Research Assistant**

May 2015 – Aug. 2017

University of Pittsburgh Swanson School of Engineering  
Department of Industrial Engineering, Laboratory for  
Advanced Materials at Pittsburgh | Pittsburgh, PA

- Manufactured nanopatterned surfaces using reactive ion etching technology
- Optimized etch recipes towards antibacterial and antireflective properties
- Conducted weekly literature reviews and presented findings quarterly

**Summer Intern**

June 2014 – Aug. 2014

Lehigh Valley Health Network  
Management Engineering Department | Allentown, PA

- Conducted time-studies comparing nurse workload in observation unit to medical-surgical units
- Recommended 5:1 nurse-to-patient staffing ratio based on statistical workload analysis. Recommendation was approved and additional nurse was assigned.

**Invited Conference Presentations**

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1. **Kashkoush M**, Katz D, Patel A. Transcriptomic Analysis of *Escherichia coli* Response to Ciprofloxacin in Microgravity. National Center for Earth and Space Science Education Student Spaceflight Experiments Program 2019 Annual Conference. Chantilly, Virginia. July 2019.
2. **Kashkoush M**, Reber S. Citizen Science: Naloxone Availability in Allegheny County Pharmacies. Allegheny County Overdose Prevention Coalition Summer Conference 2017. Pittsburgh, Pennsylvania. July 2017.

## Poster Presentations

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1. **Kashkoush M**, Katz D, Patel A. How Does Microgravity Affect *E. coli* Response to Ciprofloxacin? National Center for Earth and Space Science Education (NCESSE) Student Spaceflight Experiments Program 2019 Annual Conference. Chantilly, Virginia. July 2019.
2. **Kashkoush M**, Kayes I, Leu P, Wang B. Silver coated silicon nanocone arrays for enhanced antibacterial surfaces. NDConnect 2016 Undergraduate Research Competition. South Bend, Indiana. October 2016.
3. **Kashkoush M**, Leu P. Black Silicon for Photovoltaics and Antibacterial Surfaces. SCIENCE 2015 Undergraduate Poster Session. Pittsburgh, Pennsylvania. October 2015.
4. **Kashkoush M**. Statistical Analysis of the Workload on the LVHN Observation Unit. LVHN Research Scholar Program Poster Session. Lehigh Valley Health Network, Allentown, Pennsylvania. July 2014.

## Publications

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1. **Kashkoush M**. Slow Down, SpaceX. *The Scientist Magazine – Life Sciences News and Articles*. March 2019. <https://www.the-scientist.com/news-opinion/opinion--slow-down--spacex--65603>
2. Heo J, **Kashkoush M**, Mansour D. What Antimicrobial Stewardship Means To Me: Perspective From Three Pharmacy Students. *IDStewardship – Promoting Clinical Pharmacy & Antimicrobial Stewardship*. January 2019. <https://www.idstewardship.com/antimicrobial-stewardship-means-perspective-three-pharmacy-students/>
3. **Kashkoush M**. Optimizing Antimicrobial Stewardship in Department of Veterans Affairs. *The Capsule: Martinsburg VA Medical Center Newsletter*. July 2018.
4. **Kashkoush M**. Black Silicon for Photovoltaics and Antibacterial Surfaces. *Ingenium: Swanson School of Engineering Annual Research Magazine*. April 2016.

## Submitted Manuscripts

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1. Danforth S, Egan J, Hawk M, Heilman D, **Kashkoush M**. Barriers and Facilitators to Community-Based Naloxone Distribution to Reduce Opioid Overdose Deaths. Submitted to *PLOS One*.
2. Burrell A, Ethun L, **Kashkoush M**, Mirigian L, Pringle J, Reber S. A Survey of Naloxone Availability and Barriers in Pharmacies in Allegheny County, Pennsylvania. Submitted to *Journal of the American Pharmacists Association*.

## Honors and Awards

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ASHP-SSHP Outstanding Professional Development Project Award	Oct. 2019
Script Your Future National Challenge Class Award	Sep. 2019
John P. and Constance A. Curran Pharmacy Scholarship	June 2019
NCESSE Student Spaceflight Experiments Program Winner	Dec. 2018

John P. and Constance A. Curran Pharmacy Scholarship	June 2018
William W. Goode, Sr. Scholarship	June 2018
Cigna Case Competition 1 <sup>st</sup> Place Winner	Oct. 2017
NDCONNECT National Finalist	Sep. 2016
PPG Fellow	Sep. 2015
Mascaro Center for Sustainable Innovation Research Fellow	Apr. 2015
Lehigh Valley Health Network Research Scholar	March 2014
Swanson School of Engineering Undergraduate Scholarship	Aug. 2013
Honors College Tuition and Book Scholarship	Aug. 2013
Swanson School of Engineering Office of Diversity Scholarship	Aug. 2013

## **Leadership Experiences**

**Vice President & Partner** May 2019 - Present

University of Pittsburgh

Pittsburgh Pharmacy Investment Portfolio

- Designed accountability scorecard measuring objectives & key results
- Designed template for reporting committee monthly reports
- Responsible for driving medium- and long-term strategy of organization

**Reporting Committee Member** May 2018 - Present

University of Pittsburgh

Pittsburgh Pharmacy Investment Portfolio

- Responsible for market comparison analysis and financial metrics of holdings

**Antibiotic Stewardship Awareness Project Leader** May 2018 - Present

University of Pittsburgh

Student Society of Health System Pharmacists (SSHP)

- Organized 2 guest lectures, 1 of which was in collaboration with Pennsylvania Department of Health
- Wrote article for idstewardship.com promoting pharmacy student engagement in antibiotic stewardship, which was featured in the University of Minnesota Center for Infectious Disease Research & Policy newsletter
- Collaborating with Allegheny County Health Department to design and distribute antibiotic prescribing survey among county dental practices

**Class President & Dean's Advisory Board Member** Sep. 2017 – Aug. 2018

University of Pittsburgh

School of Pharmacy Class of 2021

- Served as liaison between classmates and pharmacy school leadership
- Sent weekly reports to classmates containing assignments, exams, and events
- Organized white coat ceremony and presented gratitude speech to donors

**Board Advisor**

May 2017 – April 2018

University of Pittsburgh  
Panthercare

- Provided guidance, references, and project ideas to new executive board

**Founder, President, and Project Manager**

Sep. 2015 – April 2017

University of Pittsburgh  
Panthercare

- Developed vision and wrote constitution for student organization that sought to remedy health issues of vulnerable populations through goal-directed collaboration with professionals
- Led citizen science survey of Allegheny County pharmacies gauging participation in naloxone distribution programs in collaboration with University of Pittsburgh School of Pharmacy Program Evaluation and Research Unit
- Survey data was used to populate [OverdoseFreePA.org naloxone finder](http://OverdoseFreePA.org)
- Reported results to Director of Allegheny County Health Department and Administrator of Allegheny County Department of Human Services

**Teaching Experiences**

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**Special Topics Speaker**

Nov. 2018 – Present

Pittsburgh Pharmacy Investment Portfolio

- Presented 4 extracurricular biotechnology topics of interest at group meetings
- Topics: Gene Therapy for Neurodegenerative Diseases (Oct. 2019), A Primer on Gene Therapy (Oct. 2019), New Drugs for Resistant Bugs (April 2019), and CAR-T Therapy (Nov. 2018)

**Teaching Assistant**

Aug. 2014 – Dec. 2014

University of Pittsburgh Department of Biological Sciences

Course: Foundations of Biology I (BIOSC 0150)

- Lectured and graded assignments during weekly recitation sessions
- Held group and individual tutoring sessions during weekly office hours

**Media Appearances & Interviews**

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1. Martin A. To Pharmacy & Beyond: Pitt Pharmacy in Space with Mohamed Kashkoush. *The Fit Pharmacist Healthcare Podcast*. August 2019. <https://thefitpharmacist.com/episode-75-to-pharmacy-beyond-pitt-pharmacy-in-space-with-mohamed-kashkoush?p=>
2. Jantsch K. Space-bound PittPharmacy experiment examines antibacterial resistance. *Pittsburgh Post-Gazette*. July 2019. <https://www.post-gazette.com/news/science/2019/07/19/PittPharmacy-International-Space-Station-E-coli-experiment-antibiotic-resistance/stories/201907180151>
3. Davis K. Pitt Pharmacy Students To Blast Antibiotic Resistance Experiment Into Space. *90.5 WESA: Pittsburgh's NPR News Station*. January 2019. <https://www.wesa.fm/post/pitt-pharmacy-students-blast-antibiotic-resistance-experiment-space#stream/0>

## **Community Service**

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### **Student Mentor** 2019 – Present

University of Pittsburgh Student Spaceflight Experiments Program

- After winning competition in previous year, served as mentor for aspiring competitors
- Provided advice relating to experimental design, proposal writing, logistical considerations, and approaching potential sponsors

### **Student Mentor and Camp Counselor** 2015 – 2017

INVESTING NOW Program

University of Pittsburgh Swanson School of Engineering

Office of Diversity

- Taught aspiring high school students about engineering and technology fundamentals using hands-on learning methods
- Mentored students and offered career & education advice
- College enrollment ranged from 97 – 100% in traditionally low-enrollment communities

### **Panthercare** 2015 – 2017

- Volunteered at Birmingham Free Clinic prior to involving Panthercare in fundraising events
- Collected healthy food items and donated to 412 Food Rescue

## **Introductory Pharmacy Practice Experiences**

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### **University of Pittsburgh Medical Center** Aug. 2019

Presbyterian Shadyside Hospital, Infectious Disease

Consult Service and Antimicrobial Management Program

Preceptor: Brian Potoski, PharmD, BCPS

- Rounded with infectious disease consult service and practiced making antimicrobial regimen recommendations
- Reviewed clinical trials to identify patient eligibility for short-course therapy

### **Rite Aid Pharmacy #10917** Dec. 2018 – March 2018

Monroeville, PA

Preceptor: David Voit, RPh

- Dispensed medications and counseled patients
- Assisted staff with pharmacy maintenance and regulatory compliance

### **PA State Health Insurance Assistance Program**

APPRISE Program of Allegheny County

Sep. 2017 – April 2018

Preceptor: William McKendree, JD, MPA

- Solved voicemail backlog issues by creating automatically updating database
- Served as administrative assistant to program supervisor
- Counseled Medicare patients on regimen-specific Medicare Part D plans

## **Professional & Student Organization Membership**

Pennsylvania Pharmacists Association	2018 – Present
Student Association of Specialty Pharmacy	2018 – Present
American Pharmacists Association	2017 – Present
Student Industry Organization	2017 – Present
Student Society of Health System Pharmacists	2017 – Present
Pittsburgh Pharmacy Investment Portfolio	2017 – Present
Pittsburgh Quantum Institute	2015 – Present
Primary Care Progress	2017 – 2018
Panthercare	2015 – 2018