

SARAH ABU-SALIH

EDUCATION

Doctor of Pharmacy – May 2023

Butler University, Indianapolis, IN

Achievements: Dean's List 2018 – present

Academic Honors Diploma – 2017

Hamilton Southeastern High School, Fishers, IN

PROFESSIONAL EXPERIENCE

Pharmacy Intern, 06/2020-present

CVS Pharmacy, Noblesville, IN

- Evolve my pharmacy education under the direct supervision of a Pharmacist
- Counseled patients through utilization of my pharmaceutical education
- Collaborated with other healthcare professionals to provide excellent customer service to patients

Lab Assistant, 01/25/2021- present

Butler University, Indianapolis, IN

- Assisted students in completion of their labs and worked one-on-one to help students excel in their community pharmacy experiences.

Pharmacy Technician, 05/2017 – 07/2019

Walmart, Lawrence, IN

- Maintaining strict patient confidentiality
- Proficiency in computerized pharmacy system, including data entry and product ordering
- Communicating and collaborating with staff pharmacists, technicians & interns, and patients via phone and in person

Hospital Volunteer, 01/2015 – 05/2018

Community North Hospital, Indianapolis, IN

IU Health Saxony Hospital, Fishers, IN

MEMBERSHIP AND LEADERSHIP	<p>Rho Chi, <i>Member</i>, 2021-present</p> <p>Pediatric Pharmacy Education Done by Students, <i>Secretary</i>, 2020-present</p> <p>Healthcare Students of Color Alliance, <i>Advisory Board</i>, 2020-present</p> <p>Kappa Alpha Theta Fraternity, 2017-present</p>
LICENSURE	<p>State of Indiana Pharmacy Intern, <i>Indiana Professional Licensing Agency</i>, 8/10/2020 – 9/30/2021</p> <p>Intern License: #45022020A</p>
PROFESSIONAL PRESENTATIONS	<p>Butler University Chemistry Department Poster Session, <i>Butler University</i>, 12/7/2018</p> <ul style="list-style-type: none"> • Presented research and prepared a professional poster done under Dr. Carl DeAmicis to the Chemistry Department of Butler University. • Investigated the hydrochlorination of 1-Phenylproyne in order to conclude if it was an efficient solvent in replacement of methylene chloride, a suspect carcinogen.
ROTATIONS	<p>Introductory Pharmacy Practice Experience, <i>CVS Pharmacy</i>, Noblesville, IN, 7/6/2020-7/31/2020</p> <ul style="list-style-type: none"> • Preceptor: Rebecca Christner, PharmD

Butler Pharmacy and ATOM Summer Internship Statement of Interest

As a Pharmacy Student at Butler University, I have had the opportunity to acquire an exceptional education thus far that has submerged me into a realm of understanding the transformative field of pharmacy. As a future pharmacist, it is essential to be resilient and adaptable, as this diverse field is changing day-by-day. Furthermore, as the field of pharmacy continues to metamorphose into a more AI-driven, patient-centric approach to eliminate the extraneous previous methods, it is important for us to indulge ourselves into learning these new technologies so we can one day provide the best care to our patients. The clinical advances that have resulted from pharmaceutical research have not only improved the care of patients but has advanced the profession to continue being a vital position in the healthcare of patients. As a sophomore at Butler University, I had the opportunity to participate in research with Dr. DeAmicis where we explored the use of a different solvent in a lab that was performed in all Organic Chemistry labs at Butler University. This opportunity not only showed me that research, specifically within medicinal chemistry, is where my passions lie, but it also exposed me to the importance of how the technology we possess is crucial in cultivating efficient and accurate data. This specific internship piqued my interest because developing new drugs is time-consuming and expensive, but through utilization of new technologies, this field is transforming into a more efficacious and patient-centered field that is allowing pharmacists to maximize their knowledge, rather than being held back by previous technological roadblocks. I believe this internship would aid me in flourishing into a research pharmacist that prioritizes making clinical advancements that enhance the care of patients, rather than falling behind due to inexperience in the evolving technology that is nowadays consuming pharmaceutical research.

Curriculum Vitae

Ryan J. Friedrich

41 Forest Glen Ct, Terre Haute, IN | 759 Berkley Pl, Indianapolis, IN
rfriedri@butler.edu | (812)-264-9248 | [LinkedIn](#)

Education

Butler University, Indianapolis, IN

- **Doctor of Pharmacy**, College of Pharmacy & Health Sciences **May 2023**
4.0 GPA
- **Master of Business Administration**, Lacy School of Business **May 2023**
Taking night classes to simultaneously attain MBA with PharmD
- **Minor in Business**, Lacy School of Business **August 2019**

Experience

Student Pharmacist Intern

April 2020 – Present

CVS Health - CVS SimpleDose Pharmacy, Indianapolis, IN

- Contribute to pharmacy operations in multiple roles including shipping, prescriber communications, patient communications, inventory management and prescription fulfillment.
- Developed/implemented changes to fulfillment practices using the “robot” dispensing machine.

Lab Assistant in Basic Pharmaceutics Class

January 2021 – Present

Butler University College of Pharmacy and Health Sciences

- Taught and assisted younger pharmacy students in learning how to sterile compound once weekly in lab sessions for the Basic Pharmaceutics class.

Pharmacy Technician and Intern

May 2018 – April 2020

Terre Haute Regional Hospital, Terre Haute, IN

- Contributed to pharmacy operations through sterile and non-sterile compounding, ordering medication, stocking deliveries, delivering medication throughout hospital, answering nurse phone calls, auditing inventory, and reviewing controlled substance activity.
- Created and delivered presentation on safer sterile compounding practices.

Tennis Instructor

June 2016 – August 2017

Terre Haute Junior Tennis Association, Terre Haute, IN

Field Maintenance Employee

March 2014 – August 2017

Riley Recreational League, Terre Haute, IN

Introductory Pharmacy Practice Experience

Student Pharmacist – Retail

July 2020 – August 2020

Walgreens Community Pharmacy, Avon, IN Preceptor: Kelly Yaros, PharmD

- Contributed to pharmacy operations through prescription fulfillment, helping patients at the register and drive-thru, calling patient and providers, and taking call-in scripts from doctors.
- Learned organizational activities of the pharmacy manager often by sitting in on phone calls

Leadership and Involvement

Industry Pharmacists Organization VIP Case Competition

October 2020 – February 2021

- Worked within a team of pharmacy students to develop and bring to market a new medication to treat eosinophilic asthma. Focused on medical affairs, regulatory affairs, clinical development, and marketing research.

Master Business Administration Gateway Experience

August 2019

Butler University MBA program consulting for Indiana Bureau of Motor Vehicles

- As a team of four MBA students we had to identify problems existing within current branches of the Indiana BMV in the Indianapolis area. We then found potential solutions to these problems and presented them to the Indiana BMV's executive board.

Academic Chairman of Sigma Nu Social Fraternity

August 2019 – December 2019

Sigma Nu Fraternity Executive Team

November 2019 – December 2020

Certifications, Skills, and Honors

American Pharmacists Association Pharmacy-Based Immunizations: Certified Student Immunizer

Dean's List: Fall 2017, Spring 2018, Fall 2018, Spring 2019, Fall 2019, Spring 2020, Fall 2020

Sigma Nu Pledge Scholar: 2018 award recipient

Proficient in Microsoft Excel, PowerPoint and Office 365.

Licensed IN Student Pharmacist Intern

September 10, 2020

Indiana Professional Licensing Agency

License number: 45022052A

HIPAA Privacy Training for Health Professionals 2021 Certification

January 25, 2021

CEImpact Pharmacy Education

OSHA Bloodborne Pathogens Standard 2021 Certification

January 25, 2021

CEImpact Pharmacy Education

Basic Life Support for Health Professionals Certification

March 2021

Professional Associations:

Rho Chi Society

2021 - Present

Industry Pharmacists Organization

2020 – Present

Academy of Managed Care Pharmacy

2017 – Present

College of Psychiatric and Neurologic Pharmacists

2018 – Present

Volunteer Experience:

COVID-19 Vaccine Clinic Volunteer:

2020 – Present

Out of the Darkness Walk:

2017 – Present

Trees Inc. Keep Terre Haute Beautiful:

2015 – Present

Kiwanis Club of Terre Haute Member:

2017 – Present

Catholic Charities Food Drive:

2015 – Present

Butler University Dance Marathon:

2017 - 2020

Polar Plunge:

2017 - 2020

As a pharmacy student that has been learning about medications and their development over the last few years, I recognize the importance of an AI driven approach to drug discovery. If we plan to continue making breakthroughs in pharmaceuticals and improve medication therapies in the future, it is important to utilize technology and data science fully in our approach. I also recognize that an increased emphasis on data analytics and computer programming is not only occurring in the process of drug development, but across most industries in the world. The most successful companies in the world are starting to emphasize their internal investments on improving software. In the future understanding and having skills like computer programming and machine learning is only going to become more important.

At this point I have almost no experience with computer programming or machine learning, but I recognize how useful these skills can be in the process of drug development. If I was going to start further exploring how I can learn more about these and start working with them, it would be difficult to figure out where to start. This internship opportunity with ATOM provides an opportunity that could not only help teach me and facilitate my learning in data analytics but could additionally provide an opportunity to apply those new skills in projects and research with a knowledgeable mentor.

I have had a very strong desire to complete some sort of research before I graduate from Butler's pharmacy program. Of the research opportunities I have investigated, working on drug discovery projects using a data analytics approach is one of the most intriguing projects I have encountered. This opportunity to learn more about data analytics in drug discovery, develop those skills, and apply them to projects in drug discovery would be something I would be truly grateful for.

Ryan Friedrich

Caiden J. Lukan

Home: 2742 Connolly Ln, West Dundee, IL 60118

School: 4550 Sunset Avenue, Indianapolis, IN 46208

clukan@butler.edu

847-502-9484

Profile:

Disciplined and conscientious student currently enrolled in the Butler University College of Health Sciences' Doctor of Pharmacy program, pursuing a minor in Data Science. During my last two years of high school, I attended a full-time accelerated college program and graduated high school with my Associates in Science Degree. I am currently employed at Walgreens pharmacy as an intern and work approximately eight hours a week. When I am not attending school full time at Butler, I work full time as an Intern at the Walgreens pharmacy in my hometown. I am an active member of Phi Delta Chi pharmacy fraternity. I enjoy attending meetings with like-minded students who also have a strong interest in learning as much as possible while enrolled in the pharmacy program at Butler University. Being enrolled in the pharmacy program has given me the opportunity to apply my logical mindset to an academically rigorous program. Upon graduation, my goal is to pursue a career in Research and Development with a pharmaceutical company. Until then, I will be residing most of the year in Indianapolis, Indiana.

Education:

PharmD candidate, May 2024 – BUTLER UNIVERSITY, Indianapolis, IN

- In addition to courses that are required for the core pharmacy program, I will have proficiency in C++ by the end of Spring 2021

Associate in Science, May 2019 – ELGIN COMMUNITY COLLEGE, Elgin, IL

- Notable courses: Calculus I – III, Logic

Work History:

WALGREENS PHARMACY: May 2020-current

Title: Pharmacy Technician

Duties and responsibilities include, but are not limited to:

- Immunizations
- Taking call in prescriptions
- Filling prescriptions
- High attention to detail
- High standard of customer service

RANDALL OAKS GOLF COURSE: May 2018-August 2020

Title: Golf Course and Pro Shop Staff

Duties and responsibilities include, but are not limited to:

- Train employees
- Moving and Sanitizing golf carts
- Junior Golf Instruction
- Upkeep of the driving range
- High standard of Customer Service

Licenses/Certifications

Immunizer Certification APhA, October 2020

State of Indiana Pharmacy Intern, August 2020

- #45022569A

Memberships/Affiliations

Phi Delta Chi Professional Fraternity, November 2020-current

Title: School outreach committee

Club Ultimate Frisbee, August 2019-current

Statement of Interest

Caiden Lukan

I want to express my interest in the summer internship with ATOM. Immediately after I heard that there was an opportunity such as this, I contacted former students who completed the internship last year, which further amplified my interest in ATOM. My fascination with numbers, combined with my strong knowledge of Chemistry and my pursuit of a Data Science Minor, would enable me to make a substantial contribution in this role.

One of the determining factors in choosing a pharmacy career has been to gain expertise in scientific knowledge and facts that would be useful in applying innovation, medicine, and drug discovery.

Memorizing facts in the pharmacy program at Butler will be both useful and necessary in community and hospital pharmacy. My desire to take these facts and apply them in a more conceptual way through AI and machine learning is what fuels my desire to continue to learn more about the application of data analytics and the future of pharmacy. Instead of being content with drug knowledge I learn from school, I would like to apply the information in ways where increased logic and critical thinking must be used more frequently.

An opportunity to become an intern with ATOM would allow me to learn from industry thought leaders that value the optimization of production, and efficiency. Transforming drug discovery in a way that integrates high-performance computing with scientific data is an exciting game-changer in the pharmaceutical industry. The amalgamation of National laboratories, UC San Francisco, and GSK will provide me with resources and experience that I cannot find in a classroom.

I am currently enrolled in a computer science class that has laid the foundation of how useful knowledge in computer science can help accelerate drug discovery and improve the medical field. Knowing that computer science is one of the fastest-growing careers, the marriage of pharmacy and computer science is a unique talent to have. In this internship, I hope to improve my programming skills and build on the knowledge that I have from Pharmacy school. The opportunity to apply this knowledge either through improving the AI and machine learning of the ATOM pipeline itself or analyzing results would be a role I am eager to contribute.

Kendra Schorr

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Phone: 812-319-1535 | e-mail: kschorr@butler.edu

EDUCATION

Butler University, Indianapolis, IN

Doctor of Pharmacy

GPA 4.00/4.00

May 2024

Indiana University, Bloomington, IN

Pre-pharmacy

GPA: 3.98/4.00

Hutton Honors College

North Posey High School, Poseyville, Indiana

Details: valedictorian, class treasurer; graduated May 2017

RELATED PROFESSIONAL EXPERIENCE

Pharmacy Intern, CVS Pharmacy, Evansville, Indiana; March 2019–present

- * Licensed by Indiana Professional Licensing Agency

Job Shadowing, Pharmacist, Deaconess Hospital, Evansville, Indiana; March 12, 2019

- * 5 hours

- * Observed all aspects of the different pharmacy roles in the hospital

Job Shadowing, Pharmacist, St. Vincent Hospital, Evansville, Indiana; December 18–December 19, 2019

- * 6 hours

- * Observed IV room, pediatric rounds, ICU, and clinical pharmacist roles

OTHER WORK EXPERIENCE

Summer help, SABIC Innovative Plastics, Mount Vernon, Indiana; June–August 2017

- * Duties: Remodeled and organized a conference room

- * Skills acquired/developed: teamwork and decision-making skills

Server, Silver Bell Restaurant, St. Wendel, Indiana; March–August 2017

- * Duties: Waited on guests by taking their orders, presenting their food and clearing their table, maintained pleasant relationships with the guests, served food properly and followed company protocol on server expectations and guest relations

- * Skills acquired/developed: interpersonal communication and time management skills, the ability to work under pressure

Server, Bob Evans Restaurants, Evansville, Indiana; January–June 2016

- * Duties: Waited on guests by taking their orders, presenting their food and clearing their table, maintained pleasant relationships with the guests, served food properly and followed company protocol on server expectations and guest relations

- * Skills acquired/developed: interpersonal communication and time management skills, the ability to work under pressure

RESEARCH EXPERIENCE

Research Assistant, Samson Lab, Department of Molecular and Cellular Biochemistry, Indiana University, December 2017–May 2020

LICENSURES AND CERTIFICATIONS

State of Indiana Pharmacy Intern, License Number: 45022625A, September 2020

Pharmacy-Based Immunization Delivery, American Pharmacist Association, January 2021

Adult, Child, and Baby First Aid/CPR/AED Certification, American Red Cross, January 2021

TEACHING EXPERIENCE

Tutor, middle-school students, mathematics, North Posey High School; Spring 2017

Tutor, elementary school students, reading, Fairview Elementary School; September 2017–present

SELECTED PAPERS AND PRESENTATIONS

Presentation: Hygiene and Health Tips, HOSA State Competition, Indianapolis, Indiana; April 2017

SERVICE AND LEADERSHIP

Executive Board Member, Honors Bloomington Outreach, Bloomington Indiana; December 2017–present

Member, Best Buddies, Bloomington, Indiana; August 2017–May 2019

HONORS, AWARDS, AND SCHOLARSHIPS

Phi Eta Sigma (ΦΗΣ), National Freshman Honor Society; January 2018–present

Lilly Endowment Community Scholarship, Posey County Community Foundation; Poseyville, Fall 2017–Spring 2021

Metz Scholarship, Indiana University; Bloomington, Indiana; Fall 2017–Spring 2018

Outstanding Achievement in Mathematics Award, University of Evansville; Evansville, Indiana; 13 April 2016

Founders Scholar, Indiana University; Bloomington, Indiana; Spring 2018 and Spring 2019

PROFESSIONAL ORGANIZATIONS

Lilly Scholars Network, Indiana University and Butler University, February 2018–present

American Medical Women’s Association, Indiana University, August 2018–May 2019

SKILLS

Analytical skills: critical thinking, data analysis, problem-solving, research

Organizational skills: attention to detail, deadline-setting, multitasking, time management and schedule-making

Interpersonal skills: leadership, negotiation, listening, motivating others, verbal and written communication, ability to take charge

Leadership skills: delegating responsibility, trustworthiness, commitment communication, positivity

Languages: English: native proficiency. Spanish: novice proficiency.

Software: Microsoft Word, Excel, and PowerPoint

Technology: web and social media skills

Other skills: ability to work under pressure

EXTRACURRICULAR ACTIVITIES AND INTERESTS

Health, especially exercise

Reading, especially

REFERENCES

Dr. Josh Koch, Pharmacist, Pharmacy Department, Deaconess Hospital, 600 Mary Street, Evansville, IN 47710; (812) 568-2336 (cell); jakoch1@butler.edu

Dr. Rachel Samson, Assistant Research Scientist, Department of Biochemistry, Indiana University, Simon Hall 400B, 212 S. Hawthorne Dr., Bloomington, IN 47405; (812) 855-3724 (work); rsamson@gmail.com

Dr. Jeffrey D. Holdeman, Director of Undergraduate Studies, Department of Slavic and East European Languages and Cultures, Indiana University, GISB 4041, 355 N. Jordan Ave., Bloomington, IN 47405; 812-855-5891 (work), 812-335-9868 (home); jeffhold@indiana.edu

Last updated February 19, 2021

February 21, 2021

Dear Dr. Caleb Class and ATOM Members,

Good day. I would like to formally present this letter of interest for the ATOM Remote Data Analytics in Drug Discovery Summer Internship.

Before starting pharmacy school, I was interested in the informatics side of pharmacy. It was an aspect of the College of Pharmacy's curriculum that drew me to various universities during my search. During my interview to join Butler University's Doctor of Pharmacy program, a professor mentioned that Butler was developing an Informatics Track for their curriculum. It was one of the factors that led me to choose Butler University. This internship would be a valuable supplement to my education and can open many career pathways. The role of computers and data analytics will continue to increase in the daily activities and decisions made by pharmaceutical professionals. This internship would be a great opportunity for me to become educated and gain working experience in this aspect of pharmaceutical careers.

ATOM's vision focuses mainly on drug discovery in terms of efficiency and effectiveness by using data analytics. The many steps and processes of drug discovery and development are aspects of pharmacy that interest me greatly. I look forward to learning more about the process and how it can be improved using data analytics. This internship will help connect my current experiences in retail pharmacy and classroom/lab work with data analytics and drug discovery, thus broadening my experience base and making me a better pharmacist.

I want to thank you for considering my request to join your team for the ATOM Remote Data Analytics Drug Discovery Summer Internship. This internship would teach me the basics and provide the foundation for which to build my experience and education. I look forward to hearing from you, and I am excited for this opportunity to learn more about informatics. Please call or email at your convenience.

Sincerely,

Kendra Schorr

(812) 319-1535

kschorr@butler.edu