

## Mary Mahoney

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4440 Vestal Parkway East  
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### Education

May 2019	<b>B.S. Physics, Chemistry Minor</b>	Physics Department Binghamton University, Binghamton, NY
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### Research Experience

2017- Now	<b>Binghamton University, School of Pharmacy</b> Principle Investigator: Dr. Anthony Di Pasqua Student Researcher, Binghamton University <i>My responsibility as undergraduate of member of Dr. Di Pasqua's research group involved gaining proficiently in a dosimetry software, VARSKIN5, which I used to dose SCC-25 (squamous carcinoma cells) with a therapeutic relevant dose from <sup>166</sup>Hol MSNs (mesoporous silica nanoparticles).</i>
2015-2016	<b>Freshman Research Immersion, Biomedical Chemistry</b> Advisor: Dr. Susan Flynn Student Researcher, Binghamton University <i>My responsibility as an invited student into the FRI was to work within in a team which conducted a range of biomedical chemistry laboratory research experiments, which were all closely monitored by my research advisor. Over this sequence of 3 semester course-based research program, my teams and I investigated a wide range of topics: from glutamate transporters to oxidative stress. During this extensive program, my laboratory skill set now encompasses basic microbiological techniques (including bacterial transformation and bacteria culture), fluorescent microscopy, fluorescent plate reader, pipette technique, preparing dilutions, preparing mutations with site directed mutagenesis, and mammalian cell culture. This program also expanded my scientific skill set of public speaking, scientific writing (including proposal and poster writing), Microsoft excel, and scientific poster and oral presentation.</i>

### Teaching Experience

Aug 2016- Dec 2016	<b>Peer Mentor</b> , Biology, Binghamton University <i>My responsibility as a peer mentor primarily includes aiding a team of 6 peers in their research project in the FRI program. In addition, I receive leadership and mentorship training as part of my teaching experience.</i> Dr. Megan Fegley, FRI Program Coordinator Binghamton University, 4440 Vestal Parkway East Binghamton NY 13902 Tel (office) (607)-777-6793 Email: mfegley@binghamton.edu
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Jan 2016-  
May 2017      **Peer Mentor**, Anthropology, Binghamton University  
*My responsibility as a peer mentor primarily includes aiding a team of 5 peers in their independent research project in the FRI program. In addition, I also graded assignments and provided feedback on student reports and draft posters.*  
Dr. Michel Shamoon-Pour, FRI Program Coordinator  
Binghamton University, Michel Shamoon-Pour  
4440 Vestal Parkway East  
Binghamton NY 13902  
Email: mshamoo1@binghamton.edu

## Awards

2015-2016      Dean's List, Binghamton University  
*Fall 2015, Spring 2016, Fall 2016 inclusive.*  
*Awarded to students with 3.50+ semester GPA.*

## Certifications

2015-2017      Lifeguarding with Waterfront Skills, American Red Cross  
*Awarded by completion of the American Red Cross's lecture and practicum course of lifeguarding.*  
Kingston, NY

2016-2018      Basic Life Support, American Heart Association  
*Awarded by completion of the American Heart Association's course of basic life support that included adult and pediatric CPR and AED training.*  
LaGrangeville, NY

## Presentations

*Poster*          "Investigating Treatment Options of Type 2 Diabetes"  
Authors: Alfred A Malomo Jr., Alexis Knisel, Cindy Ng, and Mary Mahoney  
Binghamton University (2015), Binghamton, NY

*Poster*          "Investigating the Antioxidant Properties Acetylsalicylic acid in A549 Cells Stressed by Colchicine Application"  
Authors: Rebecca Roffe, Táchira Pichardo, and Mary Mahoney  
Binghamton University (2016), Binghamton, NY

## Employment History

Sept 2014-  
Nov 2014      Party City, Sales Associate  
*Responsibilities included cleaning aisles, stocking, aiding customers on the sales floor.*  
Kingston, NY

June 2015-  
August 2015      Callabar Swim and Tennis, Lifeguard  
*Responsibilities included rescue and administrating CPR if needed, cleaning,*

*child care, and supervising swimmers.*  
Kingston, NY

*Feb 2016* Broome County Board of Elections, *Poll Inspector*  
*Responsibilities includes signing voters into the poll station, handing out ballots, and assisting voters with voting machines.*  
Binghamton, NY

*Jan 2017* Binghamton University School of Pharmacy, Standardized Patient  
*Responsibilities include memorizing a script, acting out the symptoms of the patient, providing feedback to the pharmacy student.*  
Binghamton, NY

### **Leadership**

*2015-Now* Cofounder, Secretary of Chess Club  
*Responsibilities include recording attendance, planning events, and attending weekly meetings.*  
Binghamton University, Binghamton, NY

*2017-Now* President, CoRE (Computer, Robotics, and Engineering) live and learn  
*Responsibilities include running a weekly meeting, running E-board meetings, planning and coordinating CoRE events, resolving conflicts, serving as the CoRE representative at Dickinson Community meetings.*  
Binghamton University, Binghamton NY

*2016-2017* Historian, CoRE (Computers, Robotics, and Engineering) live and learn  
*Responsibilities include documenting or photographing CoRE history, attending events, attending weekly group and Eboard meetings.*  
Binghamton University, Binghamton, NY

*2017-Now* Mentor, Biochemistry Club  
*Responsibilities include being a mentor to an underclassmen fellow STEM major to whom I provide advice on classes, getting into a research lab, and degree and career pathways.*  
Binghamton University, Binghamton, NY

### **Extracurricular Activities**

*2015-Now* Member, Biochemistry Club

*2015-Now* Member, Pre Med Association

*2016-Now* Member, Gymnastics Club Sport

*2017-Now* Member, Pre-SOMA

### **Volunteering**

- October 2014* O+ Festival, *Volunteer*  
*O+ festival is a country wide weekend long festival run by volunteers where underserved artisan members of the community receive free healthcare in exchange for art and music.*  
*Responsibilities included manning the merchandise table, selling products, and handling money.*  
Kingston, NY
- Jan 2015- June 2015* Fairly New Thrift Shop, *Volunteer*  
*Responsibilities included maintaining appearance of shop, pricing items, helping customers, and stocking donations.*  
Kingston, NY
- Fall 2015; Fall 2017* Physics Outreach Program (POP), *Volunteer*  
*POP is a volunteer program run through Binghamton University that presents science demonstrations in community elementary schools to spark interest in STEM.*  
*Responsibilities included operating and presenting the demonstrations to the children.*  
Binghamton, NY

## References

Dr. Susan Flynn  
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