

Sean Michael Quinn

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- Areas of Specialty**
- Biochemistry and cellular biology
 - Stopped-flow kinetics
 - TIRF microscopy
 - Bacterial/mammalian cell culture
 - Protein purification
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- Education**
- Doctorate of Philosophy in Biochemistry and Biophysics, 3.73** *Aug. 2014 - Present*
Rensselaer Polytechnic Institute, Troy, New York
- Bachelor of Science in Biochemistry and Biophysics, 3.76** *May 2014*
Rensselaer Polytechnic Institute, Troy, New York
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- Experience**
- Rensselaer Polytechnic Institute, Troy, NY** *May 2015 - Present*
Graduate Research Assistant
- Use kinetics and imaging approaches such as stopped-flow kinetics and TIRF microscopy to understand the kinesin-2 stepping cycle.
 - Use computational modeling programs such as MATLAB to further understand the stepping of heterodimeric kinesins
- Rensselaer Polytechnic Institute, Troy, NY** *Sept. 2014 - May 2015*
Graduate Teaching Assistant
- Planned and presented weekly lectures for introductory biology laboratories and cell biology sections.
 - Maintained regular office hours and provided timely student feedback on performance.
- Rensselaer Polytechnic Institute, Troy, NY** *Jan. 2014 - May 2014*
Volunteer Undergraduate Research Assistant
- Tracked the expression of osteoarthritic chondrocyte specific markers using western blots.
 - Mentored another undergraduate lab member in wet lab techniques such as protein extraction and immunoblotting.
- Eisai, Andover, MA** *June 2013 - Aug. 2013*
Drug Metabolism and Pharmacokinetics Intern
- Conducted enzyme kinetic studies with human kidney and liver microsomes and recombinant FMOs.
 - Used HPLC/MS/MS to quantify rates of a novel metabolite formation.
 - Presented research findings to senior staff.
- School Specialty, Nashua, NH** *July 2012 - Aug. 2012*
Temporary Seasonal Associate
- Prepared science kits for educational institutions across the country.
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- Leadership & Activities**
- Rensselaer High School Scholar Program, Troy, NY** *Sept. 2015-Present*
- Currently a co-coordinator for the program.
 - Currently help inform high school students about their labs and get them connected with their respective mentors.
- RPI Calculus Bridge Program, Troy, NY** *July 2015-Present*
- Helped mentor students with confocal microscopes in the imaging of various microorganisms.
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- Will be continuing my involvement in the program by serving as a mentor for first-year biochemistry students to promote their continued pursuit of STEM careers.

Albany Medical Center, Albany, NY

Sept. 2012 - Dec. 2012

- Volunteered in the CT scan and nuclear medicine departments
- Transported patients to their respective waiting areas and shadowed and helped the technicians

Rensselaer Polytechnic Institute Track & Cross Country, Troy, NY

2010-2014

- Cross-country Team Captain
- Served as a mentor for elementary students in math and science

Dec. 2010 – Jan. 2011

Presentations

- E6887 N-hydroxylation as a probe reaction **Andover, MA**

Aug. 2013

Skills

- Proficient in use of Microsoft Word, Excel, and Power Point
- Experienced with Total Internal Reflection Microscopy (TIRF)
- Adept in the use of AB SCIEX Triple Quadrupole 4500 mass spectrometer and analysis software
- Proficient in the use of VectorNTI, Kaleidograph, and GraphPad analysis software
- Proficient in mammalian cell culture maintenance
Excellent written and verbal communication skills on all platforms
- Highly organized and seek the completion of any project

Awards

- Awarded the Rensselaer Presidential Graduate Research Fellowship *Fall 2015*
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