

# Renee Brigham

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## EDUCATION

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**University of Minnesota-Twin Cities**, Minneapolis, MN  
Ph.D. Student in **Biomedical Engineering**

**Sep 2018-Present**

**University of Rochester**, Rochester, NY  
Bachelor of Science in **Biomedical Engineering**

**Aug 2014-May 2018**

## EXPERIENCE

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**Visible Heart Laboratories, University of Minnesota**, Minneapolis, MN  
Graduate Research Assistant under Paul A. Iaizzo, Ph.D.

**Nov 2018-Present**

- Work in a team to conduct novel cardiac device research and innovation in both large animal and human models
- Thesis work related to imaging, electrophysiology, and electroanatomical mapping systems
- Educate student groups about cardiac anatomy through lab tours and community outreach

**University of Rochester**, Rochester, NY  
Undergraduate Research Assistant under Catherine K. Kuo, Ph.D.

**Sep 2015-May 2018**

- Worked in a team on projects to characterize conditions for tendon formation during embryonic development
- Achieved proficiency in histology, window culture, immunostaining, and animal dissection
- Oversaw all tissue processing for all lab projects and troubleshoot histological protocols
- Consulted with orthopedic surgeons on laboratory projects during weekly meetings
- Contributed to the submission of the lab's successful NIH RO1 grant proposal
- Trained new undergraduate and graduate students on lab protocols
- Utilized medical databases and scientific journals to formulate experimental designs

Team Member for the Advancement of Breast Pump Accessibility in the NICU **Sep 2017-May 2018**

- Worked in a team of 4 students to design a cleaning system to improve washing and sterilization of breast pumps for mothers of infants in the neonatal intensive care unit
- Created an educational booklet to increase likelihood of successful breast milk production, particularly for mothers with high-risk pregnancies

## EMPLOYMENT

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**University of Rochester**, Rochester, NY  
Peer Advisor

**May 2017-May 2018**

- Advised biomedical engineering students on university policies, course schedules, research opportunities, and other facets of the department
- Mentored incoming first year students and assisted with department orientation events

Study Group Leader

**Sep 2015-May 2017**

- Facilitated group discussions and created an environment for collaborative study for introductory biology (4 semesters) and calculus (2 semesters)
- Conducted small research projects related to pedagogical methods and optimizing student learning