

# Rachel 'Rae' Eaton

| [eatonrm@gmail.com](mailto:eatonrm@gmail.com) | (503)-550-5072 | [rachelmeaton.com](http://rachelmeaton.com)

**Summary** Ph.D. candidate in analytical chemistry with over eight years of experience in formal and informal science education. Experience developing educational materials for both K-undergraduate chemistry education and graduate student pedagogical education.

## Experience

### University of Washington – Seattle, WA

#### 08/2014 – Present **Graduate Student Researcher**

- Designed and constructed new ion mobility-mass spectrometry instrumentation to study protein structure
- Presented work at three national and several local conferences; published results in three academic papers
- Research funded through competitive grants: National Science Foundation Graduate Research Fellowship (3 years); American Chemical Society Division of Analytical Chemistry Graduate Research Fellowship (9 months)
- Trained two junior graduate students in techniques relevant to research project

#### 09/2014 – Present **Women in Chemical Sciences at UW (volunteer)**

- Elected positions: President (2017-2018), Outreach Coordinator (2015-2016)
- Led team of volunteers in design of interactive activity (~5 minutes, grades K-5) and workshop (45 minutes, grades 6-12) that demonstrate key principles of chemistry and the scientific method
- Organized lectures, workshops, and outreach events for membership and UW community

#### 09/2015 – 09/2018 **TA Conference Workshop Facilitator (Annual Conference on Teaching and Learning)**

- Recommended for position by instructor from previous TA assignment
- Designed curricula for 75-minute workshops for new and returning teaching assistants on 4 topics: managing teaching laboratories, quiz sections, or office hours effectively, and active learning techniques

#### 09/2014 – 03/2015 **Teaching Assistant (Introductory Chemistry Series)**

- Led lab and quiz sections (24 students / section) that emphasized student collaboration and problem solving
- Graded exams and lab reports; tutored students one-on-one and in small groups

### Pacific Science Center – Seattle, WA

#### 01/2017 – Present **Science Communication Fellow (volunteer)**

- Used principles of science communication and education to develop an interactive demo that teaches concepts from chemical separations to K-12 students and family (part of the Meet a Scientist program)
- Presented public lecture on prototyping and instrument development

### Oberlin College – Oberlin, OH

#### 08/2013 – 07/2014 **Researcher**

- Developed a biochemical marker to identify ovarian cancer protein marker HE4
- Presented work at a national conference and published an academic paper

#### 09/2010 – 05/2013 **Teaching Assistant (Chemistry)**

- Developed and led weekly workshops that emphasized student collaboration and problem solving
- Answered questions concerning lab procedures and managed laboratory safety (20 students / section)
- Graded homework assignments, quizzes and lab reports; tutored students one-on-one and in small groups

## Education

Summer 2019

**Ph. D., Chemistry** (GPA: 4.0/4.0)

**University of Washington – Seattle, WA**

Thesis Adviser: Matthew F. Bush

Honors: ARCS Foundation Fellow (2014-2017), Lloyd E. and Florence M. West Fellowship in Chemistry (2017-2018)

- Spring 2019**      **Certificate, Science, Technology, and Society Studies**  
**University of Washington** – Seattle, WA
- May 2013**      **B.A., Chemistry and Biochemistry** (GPA: 3.6/4.0, High Honors in Biochemistry)  
**Oberlin College** – Oberlin, OH  
Thesis Adviser: Rebecca Whelan  
Honors: Sigma Xi

### **Additional Volunteer Experience**

- 2017 – 2018**      Treasurer, Out in Science, Technology, Engineering, and Math at the University of Washington
- 2016 – 2018**      Mentor, UW Chemistry Mentor Network