

## Sonia Spindt

### EDUCATION

UC Berkeley – B.A. Molecular and Cellular Biology – *Neurobiology*  
Single Subject Credential – Chemistry  
Single Subject Credential -- Mathematics

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### RESEARCH

**Mills Teacher Scholar – Research Investigator of Computer Science Group** 2016 –Present

- Co-facilitator for 2018 Mills Teacher Scholar group in Computer Science, which mentors 30 computer science instructors in original pedagogical research projects.
- Developed and implemented an experimental project that elucidated how instructor assessment of student risk can better lead to the formation of concrete problem solving methods in computer science. Presented findings at the Inquiry in Action Forum on March 23<sup>rd</sup> 2017.

**UCSF Helen Diller Cancer Institute – Research Associate in the Petritsch Lab** 2014-2016

- Efficiently collaborated with peers to help elucidate the cellular mechanism for the division and differentiation of neural stem and progenitor cells in hopes of better understanding brain cancers.
- Performed a wide array of laboratory techniques necessary for molecular research, including DNA isolation and purification, PCR, sectioning, genotyping, immunofluorescence staining and imaging.
- Performed statistical analysis of data collected using R.

**UC Berkeley Institute of Human Development – Research Assistant in the Gopnik Lab** 2011-2014

- Worked on a team of 6 individuals in the completion of developmental cognitive neuroscience experiments, demonstrating how Bayesian models might be used to explain how children learn (3-6 years old)
  - Finished 6 projects that involved experimental design, implementation of experiments, data collection, and interpretation of data
  - Presented final results in front of the department chair, post-doctoral fellows, graduate and undergraduate students
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### WORK EXPERIENCE

**Teach for America – Oakland, California** 2015-Present

- Founder of the Department of Computer Science at Madison Park Academy. Department has recently expanded to include 6 other instructor members and their respective engineering and design coursework.
- Teaches AP Computer Science and Web Design to 180 high school students.
- Responsible for developing original curriculum in Python, HTML, CSS, and JavaScript.
- Collaborates with a team of 6 STEM instructors to determine strategies for increasing student achievement under the new state science standards.
- Mentor to 6 first-year corps members placed in secondary science.

**SMASH -- Level Playing Field Institute** January 2017 – August 2017

- Development of new project-based learning curriculum for computer science courses found within the SMASH academy of UC Berkeley.
- Web design instructor for 30 students, who were selectively chosen to participate within this advanced summer STEM program.

**Upward Bound Project – Holy Names University** 2013-2015

- Worked on a team of 4 mentors that oversaw the academic progress of 110 Oakland High School students in Biology, Chemistry, and Physics.
- Gave special lectures to help spark interest in potential fields (i.e. cloning and molecular biology, artificial intelligence, net neutrality, and gender divide within technological workforce.)

**Graduate Degrees Assistant – UC Berkeley** 2010 – 2014

- One of two assistants responsible for maintaining an entirely paper-based filing system on 10,000 graduate students.
- Responded to graduate student inquiries and assisted in the submission of doctoral theses.

## COMMUNITY SERVICE

- Folsom State Prison – The Last Mile Program** **2017--Present**
- Computer Science instructor for inmates at Folsom State prison.
  - Responsible for the development and implementation of JavaScript, jQuery, AngularJS, and node.JS lesson plans with restricted technological resources.
- San Quentin State Prison** **2013-2014**
- Served on a board as Project Coordinator, which implemented classes on chronic care management for diabetes.
  - Taught classes of 30 inmates on topics related to chronic care management (neuropathy, nutrition for diabetics, etc.)
- Highland Hospital** **2011-2014**
- 1 of 15 trainers in the Emergency Department of a level 1 trauma center
  - Participated in the OREX for a year, observing surgeries and presenting related topics at team meetings
  - Volunteer in the Orthopedic Surgery clinic, assisting physicians with suture removal, cast placement, vital readings, and overall patient care
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## LEADERSHIP

- Education Resource Strategies– District-level representative for MPA** **2016 - Present**
- One of six committee members responsible for planning school-wide systems: such as designing the master schedule for all classes provided, pathway development for a new Digital Design academy, and the hiring of new staff for the next academic year.
  - One of six individuals allocating the \$1,002,810 budget determined by next year's school-wide systems
- School Leadership Team – Elected Teacher Representative** **2016 – Present**
- One of three teachers nominated and subsequently elected to assess stakeholder interest in the school wide systems.
  - Prepares and implements appropriate staff training modules based on stakeholder needs.
  - Responsible for summarizing and relaying the general sentiments of parents, local business owners, and students to school administrators.
- Synesthesia Association at Berkeley** **2011-2014**
- Treasurer and secretary of a 15 member organization that promotes awareness of perception
  - Implements general-interest events that host on average 250 people
- Wonder Works** **2011-2012**
- Served on a team of 20 that went out into the local elementary schools to generate interest in science at a young age
  - Developed activities to demonstrate topics of science for forty 5<sup>th</sup> graders
- Pre Medical Honor Society** **2011-2012**
- Earned valuable member of an organization that aids students with high GPAs interested in pursuing careers in the medical field
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## Skills and Hobbies

CPR Certified. Programming Languages: Python, JavaScript, HTML, and CSS. Art: Pottery and aerial acrobatics. Computer Science: Enthusiastically attends monthly RailsBridge and Women Who Code events.