A "Bond" Not Broken With Blindness

The importance of Accommodation and Encouraging Students with Disabilities to Pursue Careers in the Sciences

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Reaching Students with Disabilities City University of New York October 27, 2018

Points of Discussion

- My story
- The significance of supportive professors
- Classroom and testing accommodations
- Lab accommodations
- The importance of summer research

Losing my vision but not my mind





Images from attending Space Camp at the U.S. Space and Rocket Center in Huntsville, Alabama (2008).

From Hating Chemistry to Living for Chemistry

What changed my opinion?



The Impact of Professors

- Be available
- Be open-minded
- Be communicative
- Be supportive



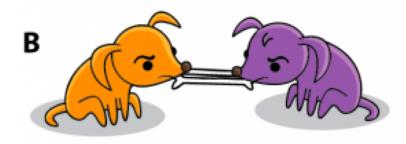


Image:https://manoa.hawaii.edu/exploringourfluidearth/c hemical/chemistry-and-seawater/covalent-bonding

Classroom Accommodations

- Low vision technology
- Descriptions of material displayed during class
- Bridging gaps by building models

Tactile Graphics

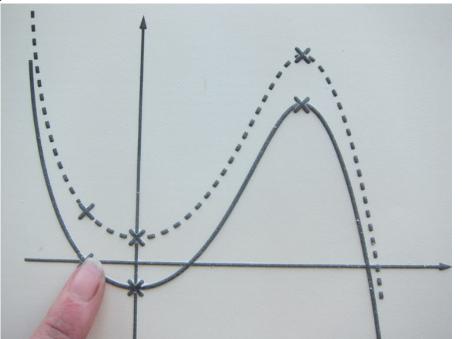
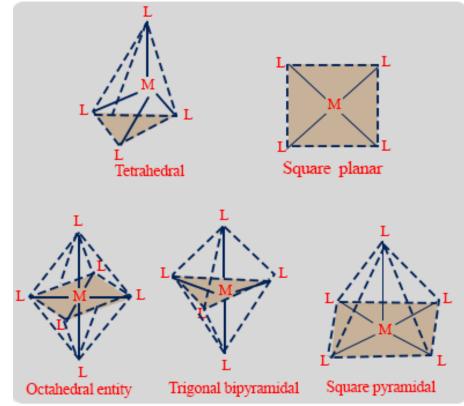




Image: http://cecitech.com/en/?product=visiobookhd-the-foldable-portable-desktop-magnifier



Aira & eSight Glasses

Aira Horizon Glasses







https://aira.io/aira-for-higher-education

https://www.esighteyewear.com

The Best "Lab" Accommodation

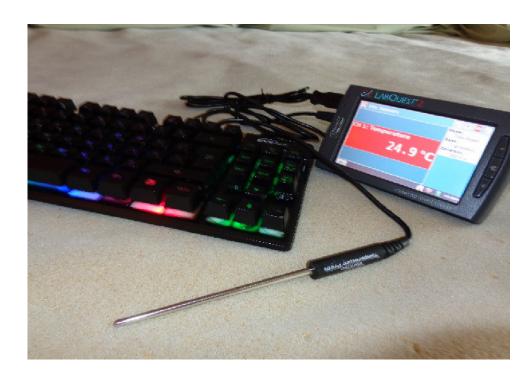






Enhancing the Lab Experience for Blind and Low Vision Students

- Having a lab assistant
- The role of the lab assistant
- Tactically marking glassware
- Talking Lab Quest



http://independencescience.com/product/talking-labquest-2/

Summer Research Opportunities for Students with Disabilities

National Science Foundation's Research Experience for Undergraduates specifically for students with disabilities:

- 1. Science and Engineering Leadership Initiative REU at the University of Delaware https://sites.udel.edu/seli-ud/
- 2. Science and Mathematics REU at the National Technical Institute for the Deaf, Rochester Institute of Technology https://people.rit.edu/bcjntm/REU.html

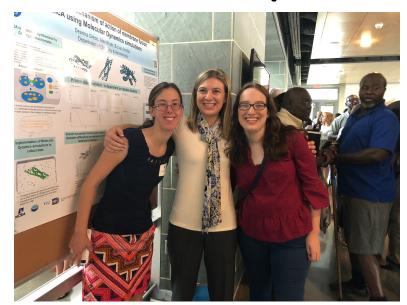
American Association for the Advancement of Science's Entry Point!

Places students with disabilities in a variety of internship programs - https://www.aaas.org/programs/entry-point



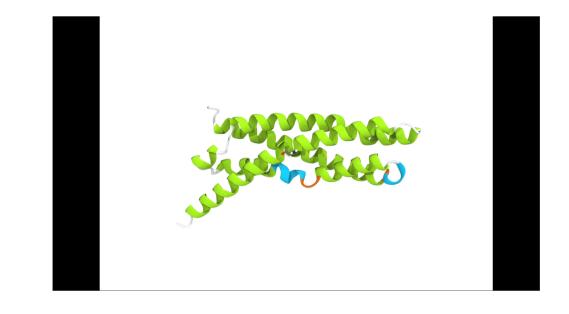


Benefits of Participating in a REU & My Summer Experience at University of Delaware

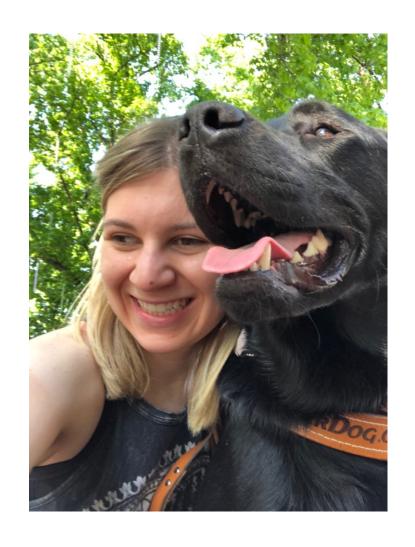


Computational Chemistry Research Research involving Constant pH Molecular Dynamics simulations to analyze the effects of altering pH on protein structure

- Teaches students how to advocate for themselves in graduate school and the work place
- Exposes students to areas of chemistry that are not hindered by disability
- Integrates students into the graduate student community



Concluding Remarks & Thank You!







Ask us anything!