



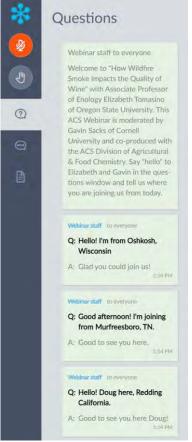
# HAVE QUESTIONS OR COMMENTS



"Why am I muted?"
Don't worry. Everyone is muted except the presenter and host.
Thank you and enjoy the show.



TYPE THEM INTO THE QUESTION BOX!







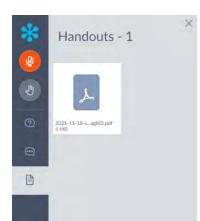
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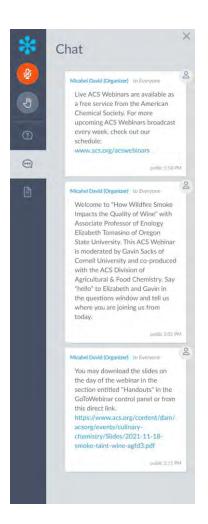
















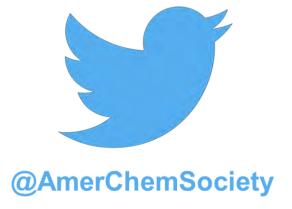


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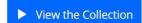
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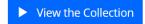
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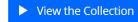
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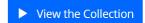
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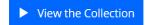
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Connect, collaborate, and stay informed about the trends leading chemical innovation

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# Join us in our efforts to increase the diversity of chemistry.



Valued donors like you have sustained ACS educational programs that are welcoming students from diverse backgrounds into our profession.

www.acs.org/donate



#### **A Career Planning Tool For Chemical Scientists**





ChemIDP is an Individual Development Plan designed specifically for graduate students and postdoctoral scholars in the chemical sciences. Through immersive, self-paced activities, users explore potential careers, determine specific skills needed for success, and develop plans to achieve professional goals. ChemIDP tracks user progress and input, providing tips and strategies to complete goals and guide career exploration.

#### The ACS Younger Chemists Committee https://acsycc.org



Striving to create an inclusive environment for diverse chemists



#### **YCC Diversity Haiku**

All here and all served

Diversified, varied, assorted, contrasting

And connected by chemistry

We believe in the strength of diversity in all its forms, because inclusion of and respect for diverse people, experiences, and ideas lead to superior solutions to world challenges and advances chemistry as a global, multidisciplinary science.







# Not Everything Meets the Eye

Invisible Disabilities and **Special Abilities** 





FREE Webinar | TODAY at 2pm ET (LICK - WATCH - LEARN - DISCUSS







#### Not Everything Meets the Eye: Invisible Disabilities and Special Abilities



PEPSI HOLMQUIST Adjunct Professor, National Technical Institute for the Deaf/Rochester Institute of Technology



Chair, Disability OutReach **Inclusion Community** 



Associate Professor, Department of Chemistry and Biochemistry, University of Arkansas



**PAULA CHRISTOPHER** Diversity Planning & Strategy Program Manager, Office of Diversity, Equity, Inclusion & Respect, American Chemical Society

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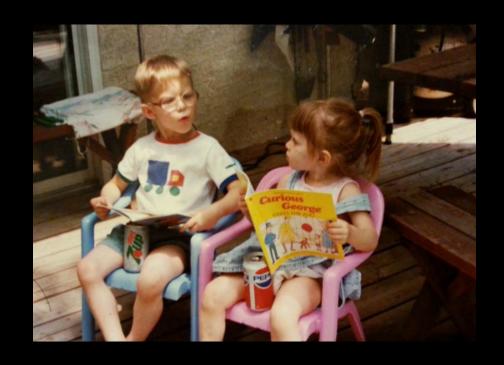
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## Disabilities

• Some are visible, some are not.

How many deaf people have you met?

# My childhood... and my namesake



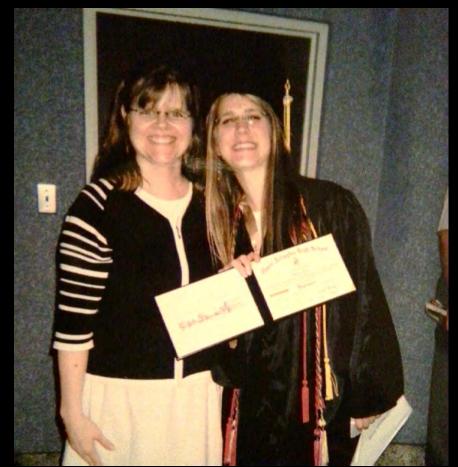


# My Deaf family



# My dad - my inspiration





### Rochester Institute of Technology National Technical Institute for the Deaf



## Crack in the Pipeline...

#### **HEARING LOSS = LOSS OF AMBIENT KNOWLEDGE**

- Ambient knowledge is what people pick up from their surroundings, out of the classroom
- Also known as "incidental learning"
- Gives a sense of belonging
- Drastic gap in schooling between hearing and deaf peers
  - Deaf students severely lack in ambient knowledge, falling behind their hearing peers
  - Contributes greatly to the sense of loneliness and loss in deaf people
  - A large crack in the educational pipeline
- Requires additional work the "Deaf Tax"

My graduate research in mass spectrometry







## Person of Privilege

 A person in minority needs another person in a position of privilege to help.

My person of privilege? My advisors.

# My advisors and labs



Dr. Vicki Wysocki and lab members



Dr. Mark Foster and lab members



### Where am 1?



- Becoming a tenure-track professor
- How to balance work and family?
- How to establish my lab and research?

# Advocacy for the Underprivileged

How can we fix the leaky pipeline for the deaf and disabled people in STEM?



#### ADHD Superpower

Business mogul Sir Richard Branson, Ikea founder Ingvar Kamprad, and JetBlue founder David Neeleman, all have ADHD: The Entrepreneur's Superpower.

- Creativity
- Spontaneity
- Hyperfocus
- Day dreaming

- Risk-taking
- High energy
- Resilience
- Problem-solving skills



### **Audience Survey Question**

ANSWER THE QUESTION ON THE INTERACTIVE SCREEN IN ONE MOMENT



#### What is the first letter that you see?

- T
- R
- 5
- Q
- Other

**RRRRRRRR** RRRRRRRR **RRRRRRRR** RRRRRRRR RRRRRRRR RRRRRRRR **RRRRRRRR RRRRRRRR** RRRRRRRR **RRRRRRRR** RRRRRRRR RRRRRRRR RRRRRRRR RRRRRRRR RRRRRRRR **RRRRRRRR** 

<sup>\*</sup> If your answer differs greatly from the choices above tell us in the chat!

#### Autism Superpower - Specify Asperger's Syndrome

People with autism tend to notice and can see small details that others may not be able to pick up on.

#### Other traits associated with Asperger's Syndrome:

- Very strong ethics
- Very logical
- Very Honest
- Persistent
- Not socially driven
- Have values that aren't shaped by financial, social, or political influences
- High integrity

#### Schizophrenia Superpower



# Studies have shown carriers for the schizophrenia gene have many advantages:

- Decreased frequency of viral infections
- Higher IQ
- Increased creativity
- Mathematical reasoning
- State of constant alertness
- Divergent thinking

#### Blind and Visually Impaired





Dr. Carry Supalo, PhD - Chemist



Dr. Mona Minkara, PhD - Chemist



Dr. Henry Wedler, PhD - Chemist

Blind and Visually impaired can use their "superpower" mentally imagine the structure of organic compounds and see chemical reactions in a way that sighted individuals can't.

#### Superpower of Hiring People with Disabilities



- Competitive advantage
  - ✓ diverse customers
  - ✓ customer loyalty & satisfaction
  - √ innovation
  - ✓ productivity
  - ✓ work ethic
  - ✓ safety
- Improvements in profitability
  - ✓ profits and cost-effectiveness
  - ✓ turnover and retention
  - ✓ reliability and punctuality
  - ✓ employee loyalty
  - √ company image
- Ability awareness





Inclusive work culture

#### Superpowers with Living with a Disability



# Adaption:

a change or the process of change by which an organism or species becomes better suited to its environment.

#### **Picture Credits and Citations**



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- Empiribox Primary School Science Evolution of Man <a href="https://www.empiribox.com/the-differences-between-adaptation-inheritance-evolution/">https://www.empiribox.com/the-differences-between-adaptation-inheritance-evolution/</a>



### **Audience Survey Question**

ANSWER THE QUESTION ON THE INTERACTIVE SCREEN IN ONE MOMENT



Is it safe for someone to work in a chemistry lab if they can't see everything they are doing?

- Yes
- No
- Maybe, it depends

<sup>\*</sup> If your answer differs greatly from the choices above tell us in the chat!





# The glovebox and chemical safety and hygiene

I got into inorganic chemistry because of the bright colors!

 unexpectedly inorganic chemistry turned out to use the safest experimental methods.

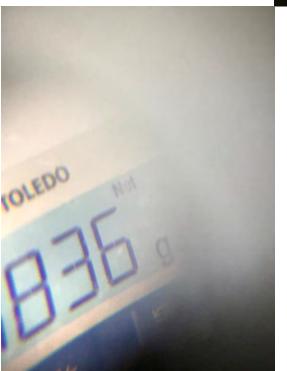
 All chemicals and solvents are completely contained and unable to come in contact with the skin and eyes.

You can put them right up to your face!









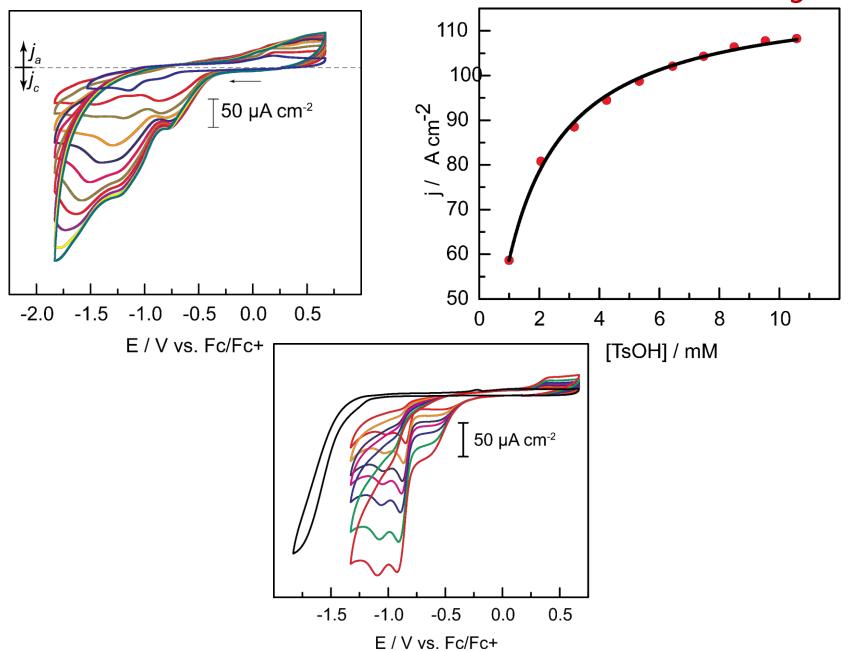


## Other notes on chemical safety

- One must be tidy
- Wear gloves and PPE at all times
- Build good habits that ensure proper handling of waste
  - Aqueous waste is always labeled in blue and in hood A
  - Organic waste is always labeled in red and in hood B
- Be selective about what you work with



## Electrochemical Reduction of Mo Catalysts



# Pl stuff: Analyzing data with students

Regular data meetings

 Electronic notes and summaries (so they can be read on or by a computer)

Organized presentation of raw data (this is a hard one)

Even more computer screens!





# When things are different try not to think they are "wrong"

• When workflows or different or have a different pacing don't assume they are "worse".

 Look at the sum total of what folks can do not if it's done the "correct" way.

Some tasks take more time some tasks take less time. (like everyone else)

## Some common frustrations

• If there is something a VI person cannot do it is because they are "dumb" or "lazy".

 People with disabilities "have an advantage" because they have extra time on exams etc. etc.

 If someone can't do everything others do they aren't "a good scientist"







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Date: Thursday, December 23, 2021 @ 6-7pm IT (7:30am ET)

Speaker: Dr. Shekhar Mande, Ministry of Science and Technology, India

Moderator: Dr. Deeksha Gupta, American Chemical Society

Register for Free!

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- How to contribute in making India move towards the sustainable path of Atmanirbhar Bharat
- How to mold career in innovation and entrepreneurship
- · How to bridge gaps to increase your chance of employability

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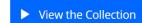
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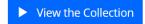
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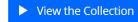
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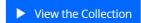
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