



**Who are
we?**

Disability – an impairment that may be cognitive, developmental, intellectual, mental, physical, sensory, or some combination of these. The societal disadvantage arising from such impairments. Disability substantially affects a person's life activities and may be present from birth or occur during a person's lifetime.

Equity – the quality of being fair and impartial

The brain

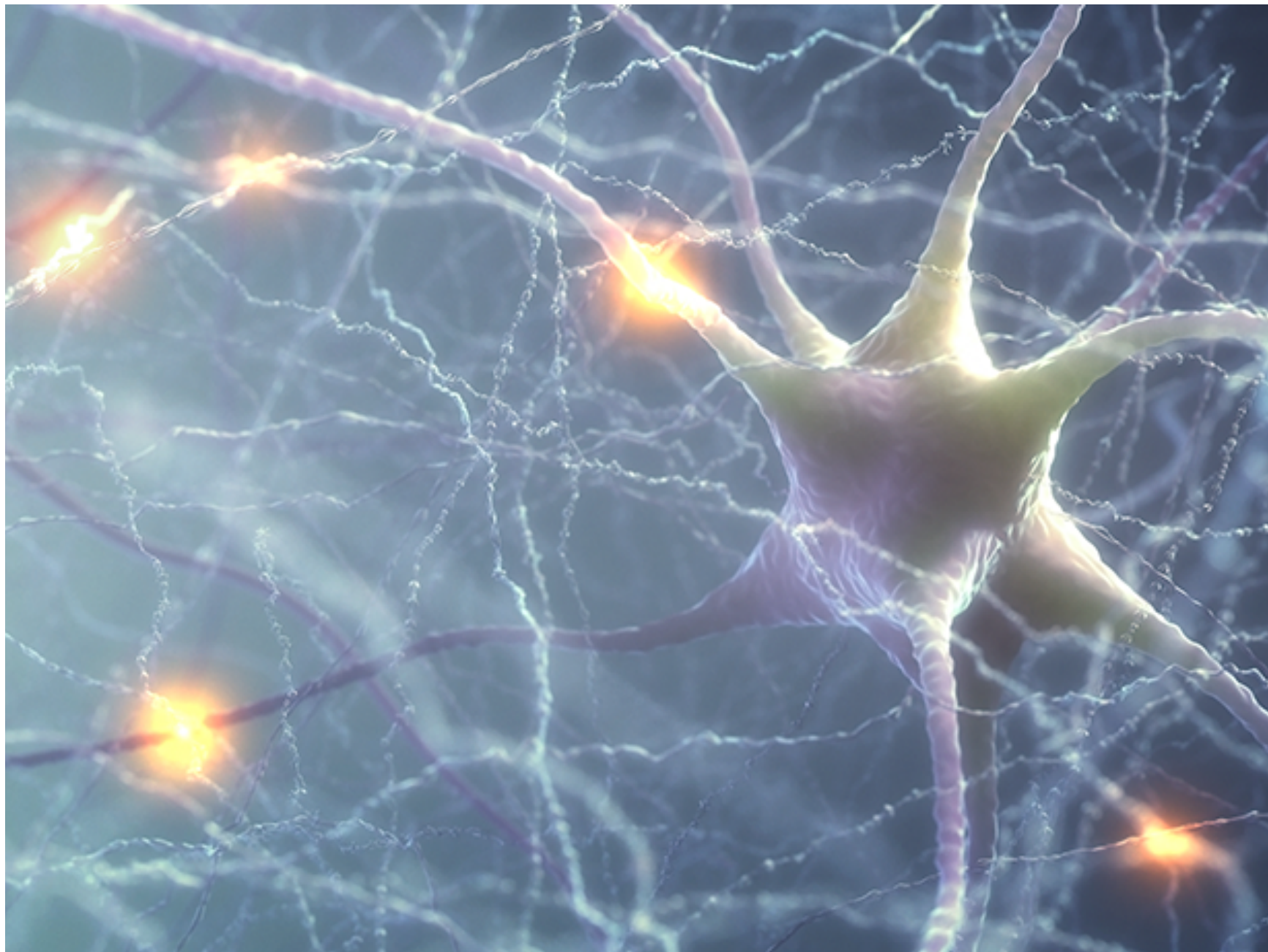
- magnificent and complex
- many parts - each with specific function
- regulates CNS
- regulates ability to speak, feel and process emotions

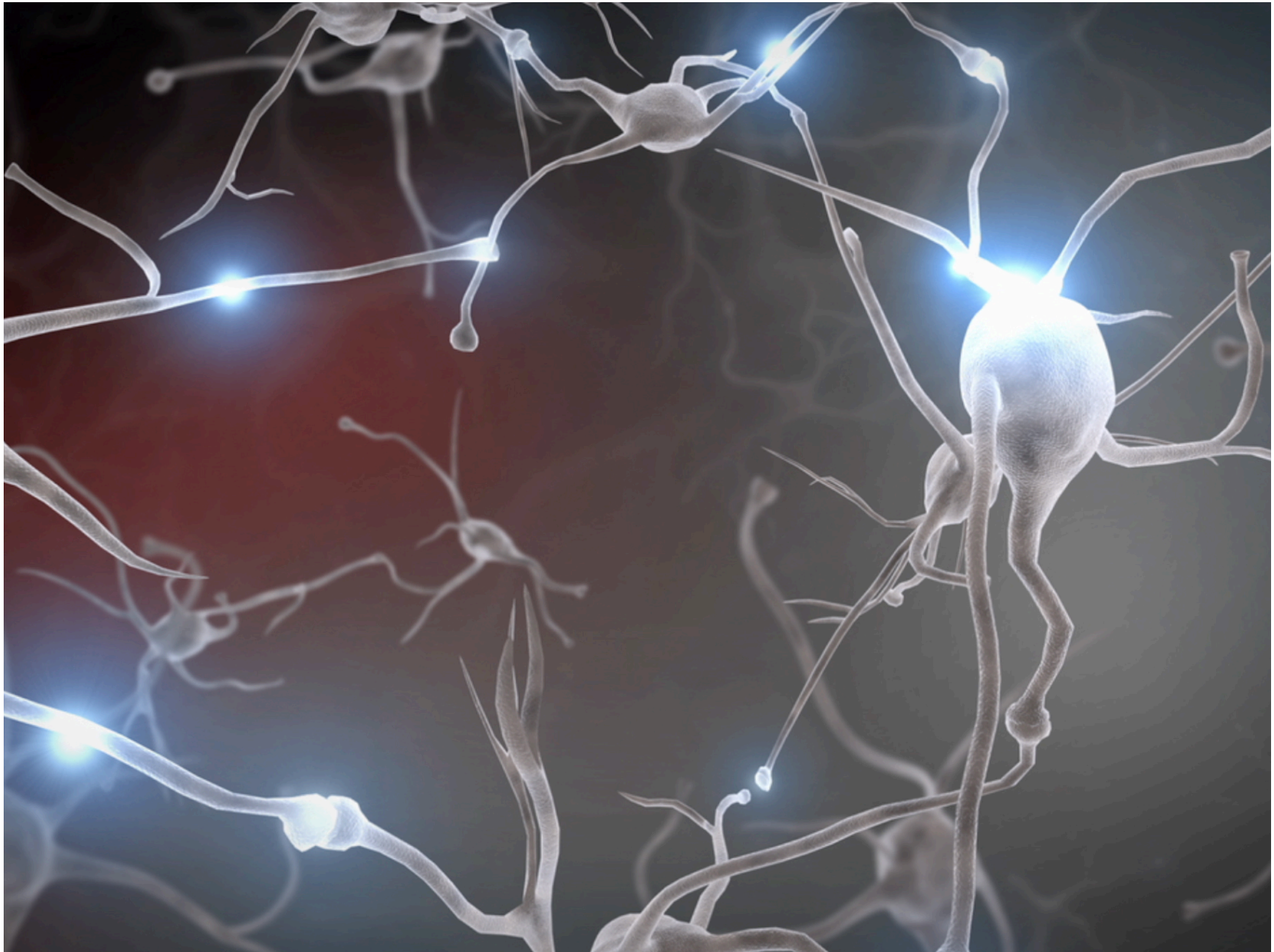


Brain injury

- A hidden disability
- Traumatic (external force)
 - Falls
 - Assaults
 - MV
 - Abuse
 - Violence
- Non-traumatic (internal force)
 - Stroke
 - Tumor
 - Seizure
- ABI — injury to the brain that is not hereditary, congenital, degenerative, or induced by birth trauma
 - Essentially, this type of brain injury is one that has occurred after birth.
 - Injury results in a change to the brain's neuronal activity — affects physical integrity, metabolic activity, or functional ability of nerve cells in the brain.







Impact



- student

- auditory learner (“A”)
- musical interest
- physically fit

- social outcast

- home

- compliant

- photography



- A severe brain injury results in cognitive deficits including difficulties with:

- Attention
- Concentration
- Distractibility
- Memory
- Speed of Processing
- Confusion
- Perseveration
- Impulsiveness
- Language Processing
- “Executive functions”

- student

- struggled to attain “B”
- musical frustration
- weight gain

- glass doll

- home

- angry

- photography

- outbursts





CWD



- Judy Summers-Gates
 - An education with a disability
 - Obtained education in spite of a disability
- Karl Booksh
 - Hidden disability
- John Johnston
 - Employment of PWD
 - Unique Abilities
- **One step ah**



Nanotechnology

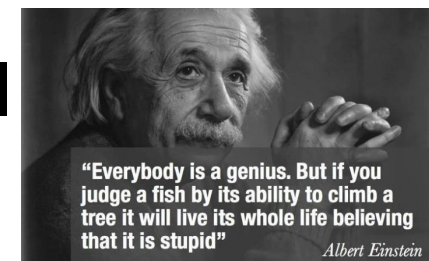
- Understanding and control at the nanoscale
 - Very small scale – one billionth (10^{-9}) m
 - Chem, bio, phys, mat sci, eng
- Used to create materials on larger scale
 - Bottom up
- Nanoscale particles are not new in either nature or science.




Recent leaps in technology have given scientists new tools to understand and take advantage of phenomena that occur naturally when matter is organized at the nanoscale.



** a scale that requires accommodations

CWD & ADA – Two paths, one goal



- CWD was established in 1980, preceding the ADA by ten years.
 - ACS has a vision!
 - UK – Disability Discrimination Act (1995, modified in 2010) 
 - Canada – Accessibility for Ontarians with Disabilities Act (2005) 
- Not A Disability, But A Unique Ability
- Over the last 3-4 decades, the introduction of equality legislation and improved access to public spaces mean disabled people have greater opportunities, **visibility** and aspirations than ever before. 
- Despite this progress, negative public attitudes and awkwardness about disability prevail.
 - Two thirds (67%) of the British public feel uncomfortable talking to disabled people.
 - Over a third (36%) of people tend to think of disabled people as not as productive as everyone else.
 - Over 4/5 (85%) of the British public believe that disabled people face prejudice.
 - Roughly a quarter (24%) of disabled people have experienced attitudes or behaviors where other people expected less of them because of their disability.
 - 1/5 (21%) of 18 – 34 years old admit that they have actually avoided talking to a disabled person because they weren't sure how to communicate with them.
- <http://www.scope.org.uk/Scope/media/Images/Publication%20Directory/Current-attitudes-towards-disabled-people.pdf>



Culture

- Regulations will not change the minds and opinions of others
- Everyone should be viewed as different, yet we cannot discriminate because of our differences
- Unconscious bias
 - Creating/facilitating ignorance
 - 95% of who we are – age 3
 - View toward disability and unity is on the shoulders of the parents
 - Primary educators influence on “yes we can”
 - Broaden understanding and beyond

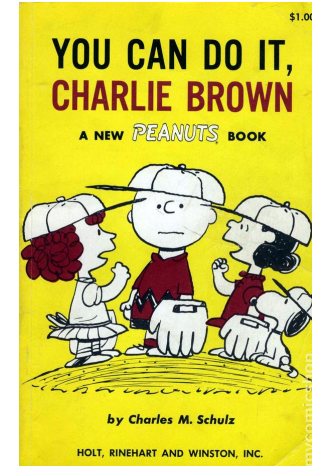


My role as an educator/advocate

- What culture am I creating?
 - Everyone needs accommodation
 - Accommodation w/out marginalizing the learning process does not hinder education
- Do I respect the abilities of each student?
- Do I focus on student learning?
- Will I be discriminated because of who I am?
- Conforming to nor or adapting to the needs of the individual
 - Don't conform - "ousted"
 - Conform or adapt to address the needs of the individual

Take Away

- People with disabilities problem solve to overcome (perceived) barriers.
Scientists problem solve to overcome (physical/chemical/experimental) barriers.
- Overall – 17%; undergrad – 8%; grad – 3%; post-doc – <1%
- Ask not what ODS can do for me, rather ask what I can do for ODS
- Educator / educari
 - To lead or draw out, forth or away
 - To raise up; to erect
- “The only thing we have to fear is fear itself.” (FDR, 1933)
 - Everything you ever wanted is on the other side of fear.
- ABI @ 15 ➤ HS ➤ BS ➤ MS ➤ PhD
 - Not aware of anyone obtaining PhD after ABI
 - Not aware of faculty with ABI
 - All after being told not possible
 - Why? Because parents/mentors said, “Yes, you can!”
- Just because someone does not (look like you) does not mean that person does not have your best interests in mind.



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