

Hidden Sector of Diversity: Neurodiversity and Invisible Disabilities



**April is the Autism Awareness Month
9th Month of National Shortage of ADHD Medication**

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Our Definitions for Discussions

- **Invisible disabilities:** disabilities including ADHD, autism, PTSD, learning disabilities, chronic pain
(often pre-existing; not visible; do not ‘go away’)
- **Neurodiversity:** natural variations in the human brain and cognition create spectra of traits, for instance in sociability, learning, attention, mood, and other mental functions.
Neurodiversity cultivates diverse abilities.
- **Mental health issues:** general behavioral or mental pattern that causes distress or impairment of personal functioning
“41% of graduate students scored as having moderate to severe anxiety on the GAD07 scale as compared to 6% of the general population” [Evans et al, Nature \(2018\)](#)

Challenges for Neurodivergent People

1. Full body condition that makes relating to the world a very different experience (including connective tissue disorders, Sensory Processing Disorder) comorbid with Autism, ADHD, etc., **not just related to the brain.**
2. 30% of ADHD people have [chronic unemployment issues](#)
National crisis of shortage of ADHD medication [[link](#)].
 1. 42% of young adults who experience Autism never worked for pay during their early 20s, <https://autismsociety.org/>
 2. Compared to 10% unemployment for disabled persons and the US national average of 4%.

Neurodiversity is an Advantage & an Important Diversity

- **Neurodivergent people are unconventional thinkers: provide new perspectives, creativity, different attention to details.**
- However, academic career expectations (such as social and speaking norms) are frequently misaligned with neurodivergent strengths.
- Misalignment creates many challenges: **seminars, job application process, recommendations, networking, [subminimum wage through legal loophole](#), and less promotions.**
- Most not conditioned to accommodate the neurodivergence in academia. **Strong stigma associated with neurodiversity & Invisible disabilities.**

Action Items & Recommendations for P5, DOE, and NSF

- Read 'neurodiversity in academia'; normalize discussions
- **Increase representation of people with invisible disabilities**
- **Incentivize hiring to preserve neurodivergent and disabled talents** (cross-departmental or cross-divisional?)
- **Dedicated fellowships and grants**
- **Create an academia for everyone, e.g., support independence & reduce nepotism (stop 'hiring by association')**
- **[More specific recommendations](#)**



Thank you!

The follow-up slides are existing efforts
and topics for further discussions

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Existing Efforts

1. Welsh, “[Mental health for academics](#);” Slack channel
2. Assamagan, et al, Snowmass Whitepaper: “Building a Culture of Equitable Access and Success for Marginalized Members in Today's Particle Physics Community,” <https://arxiv.org/abs/2206.01849>
3. Charley, “[How to be human in physics](#)”
4. New research to help neurodiverse people with Artificial Intelligence, **Tsai**, Pishgar, Baldi, et al, in progress
5. Aspen, Snowmass, and TeVPA Mental Health & Neurodiversity Lunches; [Fermilab Early-Career Seminar](#)

Topics for further discussions

1. Utilize resource inc. HR, lab/school sources, etc.
2. Develop mentoring & group meeting plans
3. Increase representation of neurodiverse people
4. Reduce negative connotation/descriptions
5. Conflict resolution for neuro-diverse people
6. Co-learning with LGBTQIA community
7. Intersectionality: gender, racial, cultural discussions