Tech <> Neuroscience Intersections: Syllabus

January 16, 2020 / 12:00 PM - 1:00PM EST

Important Links

Workshop Hackpack

Pre-workshop checklist, and resources to explore during and after the workshop.

Hack the North 2020++ Event Schedule

Check this out to stay up-to-date on activities, workshops, and other key happenings this weekend.

Motivator

Artificial intelligence and mind control? It's all here--learn about the rapidly growing field of neurotechnology and current advancements in order to understand we can maximize its full potential now and into the future.

Prerequisite Knowledge

No prior experience or skills necessary! Everyone is welcome :)

Learning Outcomes

This is what you will walk away from the workshop able to do:

- Understand the principles of interdisciplinary STEM collaboration
- Gain a better understanding of basic brain function (e.g. neuroscience 101)
- Recognize applications of brain-computer interfaces
- Understand how innovation at the intersection of neuroscience and technology is shaping not only the trajectory of the field but also our everyday lives
- Explore potential careers in neurotechnology

Timeline (1 hour)

Time	Module	Description
5 min.	Intro and overview	Introduce the overall workshop topic, introduce presenter, cover quick presentation timeline
5 min.	Defining interdisciplinary STEM	Explain dictionary definition of “interdisciplinary STEM”
5 min.	Neuroscience 101 and brains <> tech	General introductory overview of neuroscience concepts and how they relate to the tech world
10 min.	Brain-computer interface example (Neuralink) and discussion	Introduce brain-computer interfaces, provide more information about a popular example (Neuralink), address big ethical questions raised by this technology and host discussion
10 min.	Halfway Q&A and break	Answer any questions attendees have up until now and take a quick water break
10 min.	Examples of other tech <> neuro innovations	Detail innovations outside of brain-computer interfaces described prior
10 min.	Brainstorming/ideation and core values	Discuss the thought process behind building new innovations and the issues they attempt to solve
10 min.	Next steps and potential career paths	Detail internship, research, and entrepreneurship experience pathways as well as interdisciplinary career path examples
10 min.	Final Q&A	Answering any questions attendees have
1 min.	Closing remarks	Say thank you’s, encourage next steps, mention the hack pack and syllabus if not done so already