

MAX PLANCK INSTITUTE FOR HUMAN COGNITIVE AND BRAIN SCIENCES



Girls' Day & Boys' Day Future Day / Zukunftstag April 28, 2022

Program and Abstracts

Organized by the Researchers, Public Relations and Equal Opportunity team at the Max Planck Institute for Human and Cognitive Sciences https://www.cbs.mpg.de/en email: future-day@cbs.mpg.de

11:30-12:15 (GMT+1)

Zoom link 1: https://gwdg.zoom.us/j/85693492918?pwd=OXQ0czVVRi92aHZCSHEvb0FjR0lzZz09

Workshop 1: "What is cognitive and brain research?"

Pepijn Meurs

What is cognitive and brain research? To answer that question, we have to ask ourselves what is the brain, what is cognition, and most importantly, what is research? In this workshop we will walk through the modern scientific method of brain and cognitive research together.

12:15-13:00 (GMT+1)

Zoom link 2: https://gwdg.zoom.us/j/85858984158?pwd=bTZJV21BUklTOUF6Y3l2R2hZSnpTUT09

Workshop 2: "The Neuroscience of Meditation!"

Bonnie OMalley

Most people know that meditation is an exercise carried out by buddhist monks. But did you know that it can help with stress, benefit your health, and even rewire your brain? A few years ago at the Max Planck Institute for Human Cognitive Brain Sciences, we carried out one of the biggest research studies on meditation. We collected so much data that we are still analyzing some of it today! In this workshop, I will give a brief introduction into this research; How does meditation work? What

happens in the brain when we meditate? How can it benefit us? You will also get an opportunity to try out two different meditation practices yourself!

13:40-14:25 (GMT+1)

Zoom Link 3: https://gwdg.zoom.us/j/85693492918?pwd=OXQ0czVVRi92aHZCSHEvb0FjR0lzZz09

Workshop 3: "Language, communication, and brain- How our brains process language?"

Zhizhao Jiang & Sabrina Turker

Language is a very important part of everyday life. We use language to communicate with our families, our friends, and strangers. We exchange our thoughts and feelings and are eager to learn about others' thoughts and feelings. The language ability is one of the most amazing abilities that we have. But how does human brain understand and produce language? In this class, we will talk about two crucial brain regions involved in processing language: Broca's area and Wernicke's area. We will learn about their locations (with some fun drawings) and their functions. We will also gain an understanding of what happens when one of these two language areas are hurt in the brain, which is an interesting part of my research.

14:25-15:05 (GMT+1)

Zoom Link 4:

https://gwdg.zoom.us/j/85858984158?pwd=bTZJV21BUklTOUF6Y3l2R2hZSnpTUT09 Workshop 4: "Music as therapy - effects of musical euphoria" Tom Fritz

We know it from anecdotal evidence, musical ecstasy, trance, people can achieve it in archaic cultures using archaic musical rituals. Having gathered data from music-ethnological experiments, we today use modern music-feedback technology (Jymmin) to translate these archaic principles to modern day rehabilitation. It can make strenuous experiences in rehabilitation passionate and beautiful for participants, and goes along with a number of positive physiological and cognitive effects. We wonder, was music in the course of human development also invented for these reasons?