In this study, we looked at brain activity in 130 school-aged children with and without ADHD using EEG. Prior research has found that children with ADHD have reduced amplitude of the P3 component, which is a brain response that happens when a child is paying attention to something new in their environment. In our study, we found that lower P3 amplitude in children with ADHD was due to more variability in the timing of the P3 response across trials, as well as lower P3 amplitudes on individual trials. Altogether, this means that children with ADHD have reduced and more variable brain responses when they are attending to new things in their environment.

**MEET THE TEAM**

Marija Pranjić joined the Arnett Lab in February 2023 as a visiting doctoral student. She is pursuing her PhD in neuroscience and music at the University of Toronto, investigating the role of auditory perception in motor development. Before that, she studied and worked in Croatia, the UK, and the US. Outside of the lab, Marija enjoys traveling, watching Formula 1, and facilitating youth outreach programs.

**CURRENTLY RECRUITING**

- **RHINO-Mites Study** is currently seeking 2.5-4 year old children with or without a family member who has ADHD
- **BAT Study** is now recruiting DMC patients!

- 7–11-year-old patients with ADHD who would benefit from stimulant medications
- Must be stimulant naïve
- Exclusionary criteria include: autism, intellectual disability, seizures

**FUNDING UPDATES**

Drs. Arnett and Peisch were awarded the Steve Samuels & Ami Cipolla Innovation Pilot Grant to investigate differences in brain activity underlying inattention among children with ADHD, anxiety, and co-existing ADHD+anxiety. Stay tuned for a recruitment call!