

# Jonah Kember

## Curriculum Vitae

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### A. Formal Education

Brock University, 2020 – Present

Degree: M.A, Child and Youth Studies (90% 1<sup>st</sup> Year Average)

Brock University, 2016 – 2020

Degree: B.A (Hons), Child and Youth Studies (89% 4<sup>th</sup> Year Average)

### B. Awards and Honours

2021 Faculty of Social Sciences Research Award- \$1,500 value, Brock University

2021 Faculty of Social Sciences Student Initiative Research Assistantship, Brock University

2021 Dean's Honour List – Year One (Masters), Faculty of Social Sciences, Brock University

2020 Dean's Honour List – Year Four (Undergraduate), Faculty of Social Sciences, Brock University

### C. Relevant Coursework

Developmental Psychology (M.A), Brock University, 92%

Quantitative Research Methods (M.A), Brock University, 89%

Individual Honour's Thesis, Brock University (B.A), 92%

### D. Research/Scholarly Activities

#### Conference Presentations

Jonah Kember, Carolynn Hare, Ayda Tekok-Kilic, Stephen Emrich, Sidney Segalowitz, William Marshall, Erin Panda (August 2021). The segregation of task-based EEG networks into functionally specialized systems is reduced in those with hyperactive traits. Poster. *Canadian Association for Neuroscience Meeting* (Virtual).

Jonah Kember, Carolynn Hare, Ayda Tekok-Kilic, Sydney J. Segalowitz, Erin Panda (March 2021). Dynamic Configuration of the EEG Functional Network During Response Inhibition Differs Between ADHD Subtypes in a Non-clinical Population. Poster. *Cognitive Neuroscience Society Annual Conference* (Virtual).

Pre-recorded presentation: <https://www.youtube.com/watch?v=6livj0CH12Q&t=4s>

Jonah Kember, Ayda Tekok-Kilic, Elizabeth Pang, Erin Panda (June 2020) Semantic priming reveals a gradient effect of semantic context on children's developing word reading and vocabulary skills. Poster. *Canadian Association for Neuroscience Meeting* (Conference cancelled).

Jonah Kember, Ayda Tekok-Kilic, Erin Panda (May 2020). Alpha Oscillations are Related to Children's Developing Word- Reading Ability. Poster. *Cognitive Neuroscience Society Annual Conference* (Virtual).

Jonah Kember, Ayda Tekok-Kilic, Erin Panda (May 2020). Semantic Integration Is Related More to Children's Vocabulary Than to Their Word Reading Skills. Poster. *Association for Psychological Science* (Conference cancelled).

#### Academic Service

**Peer Review:** Ad-hoc review for the journal 'Developmental Cognitive Neuroscience'.

**Mentorship:** Helped 4<sup>th</sup> year students in the Neuroscience, Psychology, and Child and Youth Studies programs analyze EEG data.

#### Works in Progress

Jonah Kember, Ayda Tekok-Kilic, Carolynn Hare, Stephen Emrich, William Marshall, Sidney Segalowitz, Erin Panda (2021). Dynamic configuration of large-scale cortical networks during an inhibitory task accounts for heterogeneity in attention-deficit/hyperactivity disorder traits. Manuscript to be submitted to *Biological Psychiatry: Cognitive Neuroscience and Neuroimaging*.

Erin J. Panda, Jonah Kember, Zahra Emami, Candace Nayman Taufik A. Valiante & Elizabeth W. Pang (2021). Dynamic functional brain network connectivity during pseudoword processing relates to children's reading skill. Manuscript submitted for publication.

Rachel Cochrane, Jonah Kember, Ayda Tekok-Kilic, Elizabeth W. Pang, Erin Panda (2021).  
Developmental Differences in Phonological Processing: ERP and Oscillatory Power  
Analysis

## **E. Research Experience**

2021 – Present      Research Assistant, Erin Panda, Ayda Tekok-Kilic & Sidney Segalowitz,  
Brock University and Pathstone Mental Health.

Description of Responsibilities:

- Developed a MATLAB toolbox meant for EEG data analysis. Includes functions capable of analyzing EEG networks, event-related potentials, and oscillatory power data.
- Created informed consent forms.

<https://github.com/JonahKember/Developmental-Neuroscience-Lab-Toolbox>

2020 – 2021      Research Assistant, Erin Panda, Brock University

Description of Responsibilities:

- Developed methods for analyzing the organization of EEG functional networks. Implemented these in MATLAB.
- Took the lead in manuscript writing and contributed to the editing process for “Dynamic functional brain network connectivity during pseudoword processing relates to children’s reading skill.”

2019 – Present      Lab Member, Developmental Neuroscience Lab, Brock University

Description of Responsibilities:

- Wrote code that could be used by 4<sup>th</sup> year Honour’s students for the analysis of EEG data.
- Attend weekly lab meetings.
- Led a ‘2021 EEG Data Analysis Summer Workshop’, offered to undergraduate Neuroscience, Psychology, and Child and Youth Studies students.

## **F. Teaching Experience**

### Employment

2020 – Present      Teaching Assistant for CHYS 2P52: Quantitative Research Methods for  
the Behavioural Sciences, Brock University.

- Plan and facilitate seminars.
- Grade course content.

- Presented a lecture to the class on quantitative research strategies:  
<https://www.youtube.com/watch?v=GSdCUDIGPR0>
- Student feedback:  
“Jonah was very open to everyone’s comments and opinions and made online seminars an easy process.”  
“Jonah took his time to explain things and to make sure everyone was comfortable with the content before moving on. I really appreciated it.”

## **G. Community Service**

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|----------------|---|
| 2019 – Present | Event Planner, Kristen French Child Advocacy Center.                          |
| 2016 – 2019    | Program Facilitator, Learning Disabilities Association of the Niagara Region. |
- Volunteer of the Month (November 2017).

## **H. Professional Memberships**

- Cognitive Neuroscience Society (2020 – Present).
- Canadian Association for Neuroscience (2020 – Present).

## **I. References**

### Dr. Erin Panda

Assistant Professor, Brock University  
Co-Director, Developmental Neuroscience Lab  
905-688-5550 ext. 3178  
[epanda@brocku.ca](mailto:epanda@brocku.ca)

### Dr. Ayda Tekok-Kilic

MA thesis committee member, Research Supervisor  
Co-Director, Developmental Neuroscience Lab  
905-688-5550 ext. 3937  
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### Dr. Stephen Emrich

MA thesis committee member  
Director, Visual Cognitive Neuroscience Lab, Brock  
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Dr Sidney Segalowitz

Professor

Director, Laboratory of Cognitive and Affective Neuroscience, Brock University

Founding Director, Institute for Lifespan Development Research, Brock University

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