



Eric Kuebler (PhD)

RECENT PROJECTS

Cross-method classification of neuron types (2018-2022) *Western University, Robarts Research Institute, London, Ontario*
Extracellular physiologists are often forced to 'record blind' with little to no knowledge of the types of neurons they record. **Solution:** We developed a method to accurately (90%) classify the four main types of neurons (including three interneurons) in extracellular recordings based on intracellular neural network models (GitHub).

Analysis pipeline for intracellular recordings (2018-2022) *Western University, Robarts Research Institute, London Ontario*
Our lab needed an in-house analysis pipeline for single neuron recordings including statistical modeling and data visualization. **Solution:** We developed statistical analyses and quality control to examine the responses of single neurons (in voltage). This project grew to include a publicly available resource developed by our small group and funding for a worldwide collaboration (NeuroNex).

Analysis pipeline for extracellular recordings (2012-2018) *University of Ottawa and The National Research Council of Canada*
The analysis of voltage recordings generated by neurons cultured on multi-electrode arrays was cumbersome and done on an individual basis. **Solution:** We developed software to batch process recordings, including statistical analysis of connectivity thus significantly reducing hours spent manually loading files (GitHub).

TRAINING

Western University – Postdoc Trainee (2018-2022) **Neuroscience**
Developed analysis pipelines for lab trainees to use, and a new method for analyzing recordings of interconnected neurons. Gained experience with team leadership, training students, and coding methods. Gained experience with diverse coding methods.

University of Ottawa – MA/PhD (2012–2018) **Experimental Psychology**
Coursework included psychology, advanced statistics, seminar courses in neuroscience, and computational modeling. Main workload consisted of generating analysis pipeline for experimental work and computational models. Gained experience in lab management, training students, and university level teaching (Introduction to Statistics for Psychology, 60+ undergraduates).

Laurentian University – BA (2009-2012) **Psychology**
Coursework focused on psychology, statistics, research, physiology, and biology. Gained experience as volunteer researcher in cognitive psychology lab, tutoring, and mentoring.

PROFILE

As a postdoctoral researcher, data analysis has been an integral part of my training in both experimental psychology and neuroscience.

I focus on generating analyses that are transferrable to colleagues and can be maintained.

I emphasize transparency, data literacy, high quality visualization, and interpretation of statistical analysis.

I have a passion for generating functional solutions.

CONTACT

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Software Experience

MATLAB	9
Python	2
SQL	1
R	<1
Adobe Suite	4
Microsoft Office	9
Slack	4
Discord	1.5

years experience

