

## OVERVIEW

I am a developer of open-source scientific software, and a scientist trained in acoustic phonetics, speech perception, and auditory neuroscience. My interest broadly centers on the perception and representation of speech sounds. I am also a certified [Software Carpentry](#) instructor.

**Current position:** Research Scientist at the University of Washington's [Institute for Learning & Brain Sciences](#), where I lead the development of [MNE-Python](#) neuroscience analysis software, and analyze infant and adult magnetoencephalography (MEG) data.

## ACADEMIC DEGREES

- PhD in Linguistics (UW, 2013): "Prosody, intelligibility and familiarity in speech perception" ([PDF](#)).
- MA in Linguistics (UW, 2009): "The semantics of implicitly relational predicates" ([PDF](#)).
- BS in Neurobiology, BA in Philosophy (UW, 2002).

## OTHER EDUCATION

- [Creating Community Playbooks](#) (Birdaro, 2025).
- [Community Engagement Fundamentals](#) (CSCCE, 2023).
- Postdoctoral training in psychophysics and auditory neuroscience ([LABS<sup>N</sup>](#), 2013–2018).
- [Kavli Summer Institute in Cognitive Neuroscience](#) (UC Santa Barbara, 2017).
- [Machine Learning](#) (Stanford University / Coursera, 2016).
- [International Chinese Language Program](#) (National Taiwan University, 2008).

## TEACHING EXPERIENCE

- **Instructor:** Software Carpentry Workshops "The Unix shell", "Version control with git", "Programming with Python", "R for reproducible scientific analysis" (UW eScience Institute: 2016, 2017, 2018, 2019; Benaroya Research Institute: 2020; U. Minnesota: 2022, 2023, 2024).
- **Instructor:** Introduction to Phonetics (UW: 2010, 2011).
- **Teaching Assistant:** Introduction to Linguistics, four sections (UW: 2008–2009).
- **Co-instructor:** "New Majors" proseminar for incoming Philosophy students (UW: 2001, 2002).

## TECHNICAL SKILLS

- **Programming:** Python, R, JavaScript, Praat, Bash, GNU Make, Octave/MATLAB.
- **Scientific computing:** git/GitHub, cloud deployment, machine learning, data visualization.
- **Research hardware:** EEG, MEG, eye tracking, pupillometry, audio processors, microphones.
- **Document generation:** Sphinx, Jupyter, Pandoc, Markdown, R Markdown, reStructuredText, LaTeX, Beamer, HTML, (S)CSS.

## SOFTWARE & CORPORA

- **Leader (Steering Council Chair)** of [MNE-Python](#): human neurophysiology analysis. ([repo](#))
- **Maintainer of PyData Sphinx Theme**: theme for software documentation websites. ([repo](#))
- **Co-creator of PHOIBLE**: a database of over 3000 phonological inventories. ([repo](#))
- **Co-creator of UW/NU Corpus**: a 2-dialect, 20-talker corpus of 200 parallel sentences of English.
- **Co-creator of expyfun**: run psychophysics experiments in Python. ([repo](#))
- **Creator of phonR**: analyze & visualize vowels in R. ([repo](#) | [CRAN](#))
- **Creator of "Praat Semi-Auto"**: software to streamline manual measurements in acoustic phonetics, when automated methods are not good enough. ([repo](#))

**PEER-REVIEWED ARTICLES (16 TOTAL, 6 FIRST-AUTHORED)**

*Omitted here:* 3 invited talks, 4 conference proceedings, 1 technical report, 14 conference presentations, 1 preprint. Comprehensive BibTeX available [here](#).

- Westner, McCloy, Larson, Gramfort, Katz, Smith, Delorme, Litvak, Makeig, Oostenveld, Schoffelen & Tierney (2025). *Imaging Neurosci.* ([DOI](#) | [preprint](#))
- Yeatman, McCloy, Caffarra, Clarke, Ender, Gijbels, Joo, Kubota, Kuhl, Larson, O'Brien, Peterson, Takada & Taulu (2024). *Brain Res. Bull.* ([DOI](#) | [preprint](#) | [repo](#))
- Clarke, Larson, Peterson, McCloy, Bosseler & Taulu (2022). *Front. Neurol.* ([DOI](#))
- Emmons, Lee, Estes, Dager, Larson, McCloy, St. John & Lau (2022). *J. Autism Dev. Disord.* ([DOI](#) | [preprint](#))
- O'Brien, McCloy & Yeatman (2019). *J. Acoust. Soc. Am.* ([DOI](#) | [preprint](#) | [repo](#))
- McCloy & Lee (2019). *Lang. Cogn. Neurosci.* ([DOI](#) | [supplement](#) | [preprint](#) | [repo](#))
- McCloy, Larson & Lee (2018). *J. Acoust. Soc. Am.* ([DOI](#) | [supplement](#) | [preprint](#) | [repo](#))
- O'Brien, McCloy, Kubota & Yeatman (2018). *Sci. Rep.* ([DOI](#) | [preprint](#) | [repo](#))
- McCloy, Lau, Larson, Pratt & Lee (2017). *J. Acoust. Soc. Am.* ([DOI](#) | [supplement](#) | [preprint](#) | [repo](#))
- Hasegawa-Johnson, Jyothi, McCloy, Mirbagheri, di Liberto, Das, Ekin, Liu, Manohar, Tang, Lalor, Chen, Hager, Kekona, Sloan & Lee (2017). *IEEE/ACM Trans. Audio, Speech, Lang. Process.* ([DOI](#) | [preprint](#) | [repo](#))
- McCloy, Larson, Lau & Lee (2016). *J. Acoust. Soc. Am.* ([DOI](#) | [preprint](#) | [repo](#))
- McCloy & Lee (2015). *J. Acoust. Soc. Am.* ([DOI](#) | [preprint](#) | [repo](#))
- McCloy, Wright & Souza (2015). *Lang. Speech.* ([DOI](#) | [preprint](#))
- Barrack, McCloy & Wright (2014). *Indogermanische Forsch.* ([DOI](#) | [preprint](#))
- Souza, Gehani, Wright & McCloy (2013). *J. Amer. Acad. Audiol.* ([DOI](#) | [preprint](#))
- Moran, McCloy & Wright (2012). *Language.* ([DOI](#) | [preprint](#) | [repo](#))

**ACADEMIC SERVICE: PANELS, CONFERENCES & COMMITTEES**

- Review Panelist: NSF POSE (2022).
- Member: LSA Committee on Scholarly Communication in Linguistics (2014–2018).
- Session organizer: “Quantitative Methodology in Physiological and Psychophysical Data Analysis,” 171st Meeting of the Acoustical Society of America, Salt Lake City (2016).
- Member: LSA Technology Advisory Committee (2013–2014).
- Conference chair: 24th Northwest Linguistics Conference, Seattle (2008).
- Referee: LSA Annual meeting (2014, 2016), Northwest Linguistics Conference (2008, 2012).

**ACADEMIC SERVICE: MENTORSHIP & OUTREACH**

- Organizer: MNE-Python New Developers Sprint ([2021](#), [2022](#)) and Intermediate Training ([2023](#)).
- Mentor: 2 graduate students, 1 undergraduate, and 3 high school students (2011-2019).
- Volunteer: Pacific Science Center’s [Paws On Science Weekend](#) (2016).

**SELECTED GRANTS, FELLOWSHIPS, AND AWARDS**

- [1 grant](#) from US National Science Foundation, total \$499,717 (2025-2027).
- 2× grants ([1](#), [2](#)) from CZI Essential Open Source Software for Science, total \$420,000 (2020-2023).
- NIH LRP award (2014–2016).
- FLAS fellowship, Modern Standard Chinese, U.S. Department of Education (2007–2008).