

I. Identifying Data

Name Jessica M. Ross, Ph.D.
 Current Position Postdoctoral Research Fellow
 Current Affiliations Veterans Affairs Palo Alto Healthcare System, Stanford University School of Medicine
 Contact/website jross4@stanford.edu / jessicamarieross.com

II. Education History

Fellowship Training

- 2021- Sierra Pacific Mental Illness Research Education and Clinical Centers (MIRECC), Veterans Affairs Palo Alto Healthcare System, Palo Alto, CA
- 2021- Dept of Psychiatry & Behavioral Sciences, Stanford University School of Medicine, Palo Alto, CA
- 2018-21 Harvard Medical School, Berenson-Allen Center for Noninvasive Brain Stimulation, Beth Israel Deaconess Medical Center, Boston, MA

Colleges and Universities Attended

- 2018 Ph.D. Cognitive and Information Sciences, University of California, Merced
- 2011 A.S. Biology (with honors) / A.A. Psychology (with honors), Sacramento City College
- 2008 B.A. Music / B.A. Italian Studies, University of California, Davis

Additional Training

- 2018 Intensive Course in Transcranial Magnetic Brain Stimulation, Harvard Medical School, Boston, MA
- 2018 Kavli Summer Institute in Cognitive Neuroscience, Tahoe, CA
- 2017 ERP Boot Camp, Center for Mind and Brain, UC Davis
- 2017 Swartz Center for Computational Neuroscience, UC San Diego (Scott Makeig and John Iversen)
- 2016 UC Retreat Workshop, Research in Music Experience and Communication, Marconi, CA
- 2016 Kavli Summer Institute, Cognitive Neuroscience, UC Santa Barbara
- 2016 Swartz Center for Computational Neuroscience, UC San Diego (Scott Makeig and John Iversen)
- 2015 UC MERCI Symposium/Workshop on Research on Music Experience and Communication, UCLA
- 2015 Transcranial Magnetic Stimulation Methods and Practice, Division of Biokinesiology and Physical Therapy, University of Southern California, Los Angeles
- 2015 Generalized Linear Model Workshop, UC Merced
- 2014 Advanced Training Institute on Non-Linear Methods for Psychological Science, American Psychological Association, University of Cincinnati, Ohio
- 2014 Dynamics of Music and Language Summer School, UC Merced Center for Human Adaptive Systems and Environments (CHASE)
- 2012 Auditory Neuroscience (Graduate Coursework), UC Davis Extension
- 2011 Cognitive Neuroscience and Group Study (Graduate Coursework), UC Davis Extension
- 2008 Summer Abroad Folk Music Program in Ljubljana, Slovenia
- 2006 Spring Quarter Abroad Language and Culture Program in Syracuse, Sicily

III. Publications

Research Articles (24 published/13 first author, 4 in review)

1. Parmigiani, S., **Ross, J.**, Cline, C., Minasi, C., Gogulski, J. Keller, C.J. (2023). Reliability and validity of TMS-EEG biomarkers. *Biological Psychiatry: Cognitive Neuroscience and Neuroimaging*, Published online December 17, 2022.
2. Gogulski, J., **Ross, J.M.**, Talbot, A., Cline, C., Donati, F.L., Munot, S., Kim, N., Gibbs, C., Bastin, N., Yang, J., Minasi, C., Sarkar, M., Truong, J., Keller, C.J. (In press). Personalized repetitive transcranial magnetic stimulation for depression: a review. *Biological Psychiatry: Cognitive Neuroscience and Neuroimaging*, Published online October 29, 2022.
3. **Ross, J.M.**, Cline, C.C., Sarkar, M., Truong, J., Keller, C.J. (2023/in review). Neural effects of TMS trains on the human prefrontal cortex. bioRxiv. Published online February 2, 2023:10.1101/2023.01.30.526374.
4. Carey, S., **Ross, J.M.**, Balasubramaniam, R. (2023) The effects of auditory and tactile noise on the control of upright posture. *Experimental Brain Research*.
5. Gogulski, J.*, Cline, C.C.*, **Ross, J.M.**, Truong, J., Sarkar, M., Parmigiani, S., Donati, F., Keller, C.J. (2023/in review). Mapping cortical excitability in the human dorsolateral prefrontal cortex. bioRxiv. Published online January 20, 2023: 10.1101/2023.01.20.524867.

6. Rodionov, A., Ozdemir, R.A., Benwell, C.S.Y., Fried, P.J., Boucher, P., Momi, D., **Ross, J.M.**, Santarnecchi, E.*, Pascual-Leone, A.*, Shafi, M.M.* (2023/in review). Reliability of resting-state EEG modulation by continuous and intermittent theta burst stimulation of the primary motor cortex: a sham-controlled study. *bioRxiv*. Published online May 12, 2023: 10.1101/2023.05.12.540024.
7. **Ross, J.M.***, Proksch, S.*, Iversen, J.R., Balasubramaniam, R. (In revision). Left hemisphere dominance in the dorsal auditory stream for musical beat phase timing perception.
8. **Ross, J.M.**, Santarnecchi, E., Lian, S.L., Fong, T.G., Touroutoglou, A., Cavallari, M., Trivison, T.G., Marcantonio, E.R., Libermann, T.A., Schmitt, E., Inouye, S.K.*, Shafi, M.M.*, Pascual-Leone, A.* (2022). Neurophysiologic predictors of individual risk for post-operative delirium after elective surgery. *Journal of the American Geriatrics Society*, 1-10.
9. **Ross, J.M.**, Sarkar, M., Keller, C.J. (2022). Experimental suppression of transcranial magnetic stimulation-electroencephalography sensory potentials. *Human Brain Mapping*, 43(17):5141-5153.
10. **Ross, J.M.**, Ozdemir, R.A., Lian, S.J., Fried, P.J., Schmitt, E.M., Inouye, S.K., Pascual-Leone, A., Shafi, M.M. (2022). A structured ICA-based process for removing auditory-evoked potentials. *Scientific Reports*, 12, 1391.
11. Pabst, A., Comstock, D.C., Mede, B., Proksch, S., **Ross, J.M.**, Balasubramaniam, R. (2022). A systematic review and meta-analysis of the efficacy of intermittent theta burst stimulation (iTBS) on cognitive enhancement. *Neuroscience and Biobehavioral Reviews*, 135, 104587.
12. **Ross, J.M.**, Balasubramaniam, R. (2022). Time perception for musical rhythms: sensorimotor perspectives on entrainment, simulation and prediction. *Frontiers in Integrative Neuroscience*, 16:916220.
13. **Ross, J.M.**, Comstock, D., Iversen, J.R., Makeig, S., Balasubramaniam, R. (2022). Cortical mu rhythms during action and passive music listening. *Journal of Neurophysiology*, 127, 213-224.
14. Comstock, D., **Ross, J.**, Balasubramaniam, R. (2021). Modality-specific frequency band activity during neural entrainment to auditory and visual rhythms. *European Journal of Neuroscience*, 54(2), 4649-4669.
15. Nguyen, H.M., Aravindakshan, A., **Ross, J.M.**, Disbrow, E.A. (2020). Time course of cognitive training in Parkinson disease. *NeuroRehabilitation*, 46, 311-320.
16. **Ross, J.M.**, Iversen, J.R., Balasubramaniam, R. (2018). Dorsal premotor contributions to auditory rhythm perception: Causal transcranial magnetic stimulation studies of interval, tempo, and phase. *bioRxiv*. Published online July 13, 2018:10.1101/368597.
17. **Ross, J.M.**, Iversen, J.R., Balasubramaniam, R. (2018). The role of posterior parietal cortex in beat-based timing perception: A continuous theta-burst stimulation study. *Journal of Cognitive Neuroscience*, 30(5), 634-643.
18. **Ross, J.M.**, Iversen, J.R., Balasubramaniam, R. (2016). Motor simulation theories of musical beat perception. *Neurocase* 22(6).
19. Ventura, M.I., Barnes, D.E., **Ross, J.M.**, Lanni, K.E., Sigvardt, K.A., Disbrow, E.A (2016). A pilot study to evaluate multi-dimensional effects of dance for people with Parkinson's disease. *Contemporary Clinical Trials*, 51, 50-55.
20. **Ross, J.M.**, Will, O.J., McGann, Z., Balasubramaniam, R. (2016). Auditory white noise reduces age-related fluctuations in balance. *Neuroscience Letters*, 630, 216-221.
21. **Ross, J.M.**, Warlaumont, A.S., Abney, D.H., Rigoli, L.M., Balasubramaniam, R. (2015). Influence of musical groove on postural sway. *Journal of Experimental Psychology: Human Perception and Performance*, 42(3), 308-19.
22. **Ross, J.M.**, Balasubramaniam, R. (2015). Auditory white noise reduces postural fluctuations even in the absence of vision. *Experimental Brain Research*, 233(8), 2357-63.
23. **Ross, J.M.**, Balasubramaniam, R. (2014). Physical and neural entrainment to rhythm: human sensorimotor coordination across tasks and effector systems. *Frontiers in Human Neuroscience*, 8:576.
24. Abney, D.H., Warlaumont, A.S., Haussman, A., **Ross, J.M.**, Wallot, S. (2014). Using non-linear methods to quantify changes in infant limb movements and vocalizations. *Frontiers in Psychology*, 5:771.
25. Lanni, K.E., **Ross, J.M.**, Higginson, C.I., Dressler, E.M., Sigvardt, K.A., Zhang, L., Malhado-Chang, N., Disbrow, E.A. (2014). Perceived and performance-based executive dysfunction in Parkinson's disease. *Journal of Clinical and Experimental Neuropsychology*, 36(4), 342-255.

Research Articles in Preparation

26. **Ross, J.M.**, Gogulski, J., Cline, C.C., Parmigiani, S., Tugin, S., Sarkar, M., Truong, J., Forman, L., Keller, C.J. (In prep). Sensory Entrained TMS (seTMS) Optimizes Motor Evoked Responses.
27. Parmigiani, S.*, Cline, C.*, Sarkar, M., Truong, J., Forman, L., **Ross, J.M.**, Gogulski, J., Keller, C.J. (In prep). Real-time optimization of cortical excitability in the human dorsolateral prefrontal cortex.
28. Carey, S., **Ross, J.M.**, Abney, D.H., Balasubramaniam, R. (In prep). Varying the parameters of auditory noise and its effect on balance.
29. Gogulski, J., Cline, C.C., **Ross, J.M.**, Parmigiani, S., Keller, C.J. (In prep). Reliability of the TMS-evoked potential in dorsolateral prefrontal cortex.

Dissertation

1. **Ross, J.M.** (2018). Sound Guides Action and Action Scaffolds Sound Perception. *UC Merced*. ProQuest ID: Ross_ucmerced_1660D_10403. Merritt ID: ark:/13030/m5t201nf.

Book Chapters (1 total, all authors contributed equally)

1. Ashburn, S.M., Abugaber, D., Antony, J.W., Bennion, K.A., Bridwell, D., Cardenas-Iniguez, C., Doss, M., Fernández, L., Huijsmans, I., Krisst, L., Lapate, R., Layher, E., Leong, J., Li, Y., Marquez, F., Munoz-Rubke, F., Musz, E., Patterson, T.K., Powers, J.P., Proklova, D., Rapuano, K.M., Robinson, C.S.H., **Ross, J.M.**, Samaha, J., Sazma, M., Stewart, A.X., Stickel, A., Stolk, A., Vilgis, V., Zirnstein, M. (2020). Toward a socially responsible, transparent, and reproducible cognitive neuroscience. In M. Gazzaniga & R. Mangun (Eds.), *The Cognitive Neurosciences VI*. Cambridge, MA: MIT Press.

Oral Presentations (10)

1. **Ross, J.M.**, Sarkar, M., Keller, C.J. (2023). ATTENUATE for experimental suppression of TMS-EEG sensory potentials. 5th International Brain Stimulation Conference, Lisbon, Portugal.
2. Gogulski, J., Cline, C.C., **Ross, J.M.**, Parmigiani, S., Truong, J.T., Sarkar, M., Donati, F., Vijaya, D., Keller, C.J. (2022). Using TMS-EEG to probe fronto-parietal connectivity of individual subjects. 2022 Neuroscience Meeting Planner. San Diego, CA, USA.
3. **Ross, J.** (2022). Sensory neuroscience for TMS-EEG. Symposium for Aalto-Stanford Pilot Project. Aalto University, Helsinki, Finland.
4. Proksch, S., **Ross, J.M.**, Comstock, D. C., Backer, K.C., Iversen, J. R., Balasubramaniam, R. (2022). Motor contributions to rhythm perception: a TMS-EEG Study. Meeting of the Society for Music Perception and Cognition. Portland, OR, USA.
5. **Ross, J.M.** (2021). Multisensory and sensorimotor neuroscience, and clinical applications. Frontiers of Science Institute, University of Northern Colorado, Greeley, Colorado, USA.
6. **Ross, J. M.**, Iversen, J. R., Makeig, S., Balasubramaniam, R. (2019). Covert motor activity and auditory rhythm perception. New England Sequencing and Timing (NEST), Storrs, Connecticut.
7. **Ross, J.**, Iversen, J., Balasubramaniam, R. (2017). The role of dorsal premotor cortex in auditory timing: A continuous theta-burst stimulation study. Meeting of the Society for Music Perception and Cognition, San Diego, California.
8. Balasubramaniam, R., **Ross, J. M.** (2016). Human postural entrainment to the auditory environment. The Guy Van Orden UConn Workshop on Cognition and Dynamics, XI, Storrs, Connecticut.
9. **Ross, J.M.**, Warlaumont, A.S., Rigoli, L., Balasubramaniam, R. (2015). The influence of musical groove on balance control. Meeting of the Society for Music Perception and Cognition, Nashville, Tennessee.
10. **Ross, J.M.**, Warlaumont, A.S., Rigoli, L., Balasubramaniam, R. (2014). Using auditory noise to reduce postural sway in standing adults. Auditory Perception, Cognition, and Action Meeting, Long Beach, California.

Posters (>20)

1. **Ross, J.M.**, Sarkar, M., Keller, C.J. (2023). ATTENUATE for experimental suppression of TMS-EEG sensory potentials. 5th International Brain Stimulation Conference, Lisbon, Portugal.
2. Sarkar, M., **Ross, J.M.**, Cline, C.C., Keller, C.J. (2023). Investigating effects of auditory salience on TMS-EEG artifact and local cortical excitability. Cognitive Neuroscience Society Annual Meeting, San Francisco, CA.
3. **Ross, J.M.**, Sarkar, M., Keller, C.J. (2021). Experimental suppression of TMS-EEG sensory potentials requires an optimal combination of techniques due to the multisensory experience of TMS. 4th International Brain Stimulation Conference, Charleston, South Carolina, USA.
4. Sarkar, M., **Ross, J.M.**, Keller, C.J. (2021). Minimizing discomfort from TMS through experimental

- optimization of sensory suppression protocols. 4th International Brain Stimulation Conference, Charleston, South Carolina, USA.
5. Buss, S.S., Passera, B., **Ross, J.**, Hagan, B., Press, D., Shafi, M.M. (2021). TMS-EEG as a measure of cortical hyperexcitability in motor and parietal cortex in Alzheimer's disease: a pilot study. Alzheimer's Association International Conference, Amsterdam, Netherlands and Online.
 6. Passera, B., Buss, S.S., **Ross, J.M.**, Hagan, B., Press, D., Shafi, M.M (2021). TMS-EEG as a measure of cortical hyperexcitability in motor and parietal cortex in Alzheimer's disease: a pilot study. 4th International Brain Stimulation Conference, Charleston, South Carolina, USA.
 7. **Ross, J.**, Proksch, S., Iversen, J. R., Balasubramaniam, R. (2019). Hemispheric differences in the role of the parietal cortex in auditory beat perception. Meeting of the Society for Music Perception and Cognition, New York City, N.Y.
 8. Proksch, S., **Ross, J. M.**, Balasubramaniam, R. (2019). Hemispheric differences in parietal contributions to auditory beat perception. 2019 Spring School Language and Music in Cognition: Integrated Approaches to Cognitive Systems. Cologne, Germany.
 9. **Ross, J.**, Iversen, J. R., Balasubramaniam, R. (2018). Dorsal premotor contributions to auditory timing: Causal transcranial magnetic stimulation studies of interval, tempo, and phase. 2018 Neuroscience Meeting Planner. San Diego, CA.
 10. **Ross, J.**, Iversen, J., Balasubramaniam, R. (2017). The role of dorsal premotor cortex in auditory timing: A continuous theta-burst stimulation study. Meeting of the Society for Music Perception and Cognition, San Diego, CA.
 11. **Ross, J.**, Iversen, J., Balasubramaniam, R. (2017). Mapping out cortical contributions to auditory timing: A causal transcranial magnetic stimulation study of interval and beat-based timing perception. 2017 Neuroscience Meeting Planner. Washington, DC. Online.
 12. **Ross, J.**, Iversen, J., Balasubramaniam, R. (2017). Dorsal and ventral premotor contributions to auditory timing: A continuous theta-burst stimulation study. International Multisensory Research Forum, Nashville, TN.
 13. **Ross, J.**, Iversen, J., Balasubramaniam, R. (2017). The role of posterior parietal cortex in beat-based timing perception: a continuous theta-burst stimulation study. Cognitive Neuroscience Society Annual Meeting, San Francisco, CA.
 14. **Ross, J.**, Iversen, J., Makeig, S., Balasubramaniam, R. (2016). An EEG examination of neural entrainment and action simulation during rhythm perception. 14th International Conference for Music Perception and Cognition, San Francisco, CA.
 15. **Ross, J.M.**, Warlaumont, A.S., Rigoli, L., Balasubramaniam, R. (2015). Influence of high and low groove music on postural sway dynamics. 37th Annual Meeting of the Cognitive Science Society, Pasadena, CA.
 16. Ventura, M.I., **Ross, J.M.**, Lanni, K.E., Sigvardt, K.A., Disbrow, E.A. (2015). Improving cognitive functioning and quality of life through dance for PD: A pilot intervention trial. 19th International Congress of Parkinson's Disease and Movement Disorders. San Diego, CA.
 17. **Ross, J.M.**, Balasubramaniam, R. (2015). Contribution of auditory feedback to postural stability. Cognitive Neuroscience Society Annual Meeting, San Francisco, CA.
 18. Ventura, M.I., **Ross, J.M.**, Lanni, K.E., Sigvardt, K.A., Disbrow, E.A. (2015). Motor and cognitive benefits of dance for people with Parkinson's disease. Cognitive Neuroscience Society Annual Meeting, San Francisco, CA.
 19. **Ross, J.M.**, Warlaumont, A.S., Rigoli, L., Balasubramaniam, R. (2014). Influence of high and low groove music on postural sway dynamics. Advanced Training Institute on Non-Linear Methods for Psychological Science, American Psychological Association, University of Cincinnati, Ohio.
 20. Dressler, E.M., Aravindakshan, A., **Ross, J.**, Sigvardt, K., Zhang, L., Malhado-Chang, Disbrow, E.A. (2013). Impaired motor preparation under conditions of response uncertainty in Parkinson's disease. Program No. 431.05/M18. 2013 Neuroscience Meeting Planner. San Diego, CA.
 21. Lanni, K.E., **Ross, J.**, Higginson, C.I., Dressler, E.M., Sigvardt, K.A., Zhang, L., Malhado-Chang, N., Disbrow, E.A. (2013). Measuring perceived and performance-based executive dysfunction in Parkinson's disease. Program No. 431.04/M17. 2013 Neuroscience Meeting Planner. San Diego, CA.
 22. **Ross, J.**, Dressler, E., Sigvardt, K.A., Aravindakshan, A., Yund, E.W., Woods, D., Disbrow, E. (2012). Cognitive neurorehabilitation of movement initiation in Parkinson's disease. Program No. 802.19. 2012 Neuroscience Meeting Planner. New Orleans, LA.

IV. Grants and Funding

Current

2021-23 Advanced Fellowship Program in Mental Illness Research and Treatment, Sierra Pacific Mental Illness Research Education and Clinical Centers (MIRECC), VA Palo Alto Health Care System

Submitted

- 2023-24 Letter of Intent for the Pre-Clinical Therapeutics Pipeline Program, Role: Consultant
Funder: The Michael J. Fox Foundation
Home-use of customized auditory biofeedback to improve Postural Instability and Gait Difficulty
- 2023-28 Letter of Intent for CDA-2, Spring 2023, Role: PI
Funder: Clinical Science R&D Service (CSR&D), Dept of Veterans Affairs
Sensory Entrained Transcranial Magnetic Brain Stimulation (seTMS) for Major Depression
- 2024-26 Young Investigator Grant (YI)
Funder: Brain & Behavior Research Foundation
Sensory Entrained Transcranial Magnetic Brain Stimulation (seTMS) for Major Depression
- 2023-28 Letter of Intent for CDA-2, Fall 2022, Role: PI
Funder: Clinical Science R&D Service (CSR&D), Dept of Veterans Affairs
Sensory Entrained Transcranial Magnetic Brain Stimulation (seTMS) for Major Depression
- 2023-28 1K01MH132898-01 (resubmission), Role: PI
Funder: NIMH
Sensory Entrained Transcranial Magnetic Brain Stimulation (seTMS)
- 2023-28 1K01MH132898, Role: PI
Funder: NIMH
Sensory Entrained Transcranial Magnetic Brain Stimulation (seTMS)
- 2023-28 Letter of Intent for CDA-2, Spring 2022, Role: PI
Funder: Clinical Science R&D Service (CSR&D), Dept of Veterans Affairs
Sensory Entrained Transcranial Magnetic Brain Stimulation (seTMS) for Major Depression
- 2021 Travel Fellowship for the Society of Biological Psychiatry (SOBP) annual meeting
- 2021-22 UC President's Postdoctoral Fellowship Program, University of California
Dynamic Network Mapping of Prediction in the Brain: Study of Motor Contributions to Auditory Perception Using Scalp Electroencephalography (EEG)
- 2018-21 1F32MH118722-01, Role: PI
Funder: NIMH
Functional Connectivity of Prediction for Musical Rhythm Perception: A Transcranial Magnetic Brain Stimulation and Electroencephalography Mixed Methods Study of Neural Dynamics
- 2019-20 UC President's Postdoctoral Fellowship Program, University of California
Dynamic Network Mapping of Prediction in the Brain: EEG and TMS Studies of Auditory-Motor Interaction
- 2019-20 Applied Technology Grant, Role: Consultant
Funder: The Michael J. Fox Foundation
Electroskip PD: Adaptive rhythmic auditory stimulation to re-synchronize gait in PD
- 2018-19 Academic Pathways: An Initiative for Academic Diversity, Vanderbilt University
- 2018-19 NSF Proposal Number: 1810639, Role: PI
Funder: SBE Postdoctoral Research Fellowship, NSF
Tracking time-sensitive measures of auditory-motor prediction across the brain before and after focal brain stimulation
- 2015-17 Applicant ID: 1000186829
Funder: Graduate Research Fellowship Program (GRFP), NSF
Rhythmic entrainment to music and language
- 2014-16 Applicant ID: 1000186829
Funder: Graduate Research Fellowship Program (GRFP), NSF
Elements of rhythmicity in music and language
- Completed
- 2020 Manufacturing Grant (\$34,000), Role: Consultant
Funder: Fuzehub, New York State, *Electroskip*
- 2020 Commercialization Competition Winner (\$50,000), Role: Consultant
Funder: Fuzehub, New York State, *Electroskip*

- 2019 Innovation Award (\$20,000), Role: Consultant
Funder: Fuzehub, New York State, *Electroskip*
- 2017-18 Graduate Dean's Dissertation Year Fellowship
Funder: University of California, Merced
- 2017 Scholarship for the 2017 UC Davis ERP Bootcamp
Funder: University of California, Davis
- 2017 Student Exchange, Swartz Center for Computational Neuroscience, UC San Diego Funder: UC Music Experience Research Community Initiative (UC MERCI)
- 2016 Student Exchange, Swartz Center for Computational Neuroscience, UC San Diego Funder: UC Music Experience Research Community Initiative (UC MERCI)
- 2015 Graduate Student Fellowship
Funder: Mark S. Aldenderfer, Dean of the School of Social Sciences, Humanities, and Arts, UC Merced
- 2015 Graduate Dean's Fellowship
Funder: Marjorie Zatz, Vice Provost and Dean of Graduate Education, UC Merced
- 2014 Graduate Fellowship Incentive Program Award
Funder: Graduate Division, UC Merced
- 2014 Travel grant, Advanced Training Institute on Non-Linear Methods for Psychological Science
Funder: American Psychological Association

V. Awards and Honors

- 2016-17 GRAD-EXCEL Peer Mentorship Program Award, Graduate Division, UC Merced
- 2015 UC Merced GradSLAM Finalist
- 2015 National Science Foundation Graduate Research Fellowship (NSF GRFP) Honorable Mention
- 2010-11 International Honor Society Phi Theta Kappa member
- 2009 Special Thanks for Achieving Results (STAR) award, United States Geological Survey, Biological Resources Division
- 10/09 Expert of the month, Allexperts.com

VI. Teaching Experience

Coursework

- 2021 Instructor, Frontiers of Science Institute, University of Northern Colorado
- 2015-16 Assistant, COGS 144: Animal Cognition, UC Merced (UG: enrollment ~76)
Assistant, MGMT 158: Service Innovation, UC Merced (UG: enrollment ~45)
- 2014-15 Assistant, COGS 140: Perception and Action, UC Merced (UG: enrollment ~188)
- 2013-14 Assistant, COGS 130: Cognitive Neuroscience, UC Merced (UG: enrollment ~169)
Assistant, COGS 151: Speech Processing, UC Merced (UG: enrollment ~ 32)
- 2011-12 Resident Scientist, David Lubin Elementary School, Sacramento, CA

Special Pedagogical Activities

- 2022-23 TMS Basic Practical Training, Stanford Keller Lab
- 2016 Human motion capture systems training for COGS 180: Gesture, UC Merced
- 2015 TMS workshop for BIOE 113: Bioinstrumentation, UC Merced
- 2008 Certification: California Basic Educational Skills Test (CBEST), Permanent passing status

Mentorship

Psychiatry residents (TMS-EEG training)

Francesco Luciano Donati MD

Juha Gogulski MD PhD

Graduate students (GRAD-EXCEL Peer Mentorship Program, UC Merced)

Adolfo Ramirez

Daniel Schloesser

Karie Moorman

Timothy Meyer

Research Assistants

Manjima Sarkar

Jade Truong

Brenna Hagan

Courtney Hoblock

Undergraduate Research

Assistants (not exhaustive)

Naryeong Kim

Alexandria Pabst

Lillian Rigoli

Hoang Nguyen

Christine Vu

Amanda Pandey

Orion Will

Zach McGann

Saraching Chao

Jacob Gonzales

Alison Crosby

Timothy Schwartz

High School Students

Lilian Chen

Medha Pulluru

Lahari Vallamkonda

Esha Venkat

Sofia Kirkman
Shu Jing Lian

Donnaban Orozco
Harrison Tom
May Sermonia

Journal of Emerging Investigators

1. Venkat, E., Pulluru, M., Vallamkonda, L., Chen, L., **Ross, J.M.** (Accepted 5/16/23). Effect of Omega-3 on Membrane Properties of Bovine Blood Cells Modeling Cerebral Cavernous Malformations. *Journal of Emerging Investigators*.

Frontier of Science Institute Mentored Projects (oral presentation and poster presentation)

1. Chen, L., **Ross, J.** (2021). A review of the physical principles of brain-computer interfaces and their contemporary applications for motor rehabilitation. Frontiers of Science Institute, University of Northern Colorado.
2. Pulluru, M., Vallamkonda, L., Venkat, E., Chen, L., **Ross, J.** (2021). What is the effect of omega-3 fatty acids on the vascular permeability of the cellular junctions in bovine blood cells as a model for cerebral cavernous malformations? Frontiers of Science Institute, University of Northern Colorado.
3. Vallamkonda, L., Pulluru, M., Venkat, E., Chen, L., **Ross, J.** (2021). Effects of dietary omega-3 on vascular permeability, and the implications for cerebral cavernous malformations. Frontiers of Science Institute, University of Northern Colorado.
4. Venkat, E., Pulluru, M., Vallamkonda, L., Chen, L., **Ross, J.** (2021). Effect of omega-3 on the vascular permeability of the cellular junctions of bovine blood cells as a model for CCM. Frontiers of Science Institute, University of Northern Colorado.

VII. Media and Impact

- Preliminary Research Finds That EEG and TMS-EEG Measures May Identify Individuals At Risk of Post-Operative Delirium, *Hebrew SeniorLife*, October 25, 2022.
- Faces of Manufacturing: Electroskip, *Fuzehub, New York State*, February 23, 2022.
- Successful Aging After Elective Surgery (SAGES), *SAGES News Study Newsletter*, July 2, 2020.
- Meta-analysis of neuroimaging during passive music listening: Motor network contributions to timing perception, *Timing Research Forum Blog*, March 9, 2019.
- To Hear the Beat, Your Brain May Think About Moving to it: A Brain Region Linked to Movement is Integral to Recognizing Rhythms, *Science News: Magazine for the Society for Science and the Public*, February 16, 2018.
- Elsevier AudioSlides: Ross, J.M., Will, O.J., McGann, Z., & Balasubramaniam, R. (2016). Auditory white noise reduces age-related fluctuations in balance. *Neurosci. Lett.* 630, 216-221.

VIII. Volunteer Work

Reviewer	Numerous, including Journal of Cognitive Neuroscience, Gait & Posture, Experimental Brain Research, Human Movement Science, Music Perception, PLOS ONE, Attention, Perception, & Psychophysics, Society for Music Perception & Cognition research conference
Reviewer	Perception, Action, and Cognition program at NSF
2015-18	Graduate Student Representative, Advisory Committee, UC Merced Transportation and Parking Services
2016	Experienced Teacher's Assistant Informational Panel, Graduate Student TA Orientation, Center for Engaged Teaching and Learning (CETL), UC Merced
2016	Public outreach, Mercy Hospital 5K Stroke Awareness Run
2009-18	Expert, Entomology Question and Answer Service, Allexperts.com
2015	37 th Annual Meeting of the Cognitive Science Society, Pasadena, CA
2014	Cognitive Science Student Association Meeting graduate applications, UC Merced
2014	Days & Nights Festival, Philip Glass Center for Arts, Science, and the Environment, Big Sur, CA
2014	"Child Triumphs and Troubles: Language and Learning in the Early Years" Professional Development and Research Lab Tours, UC Merced
2011-12	Brain Awareness Week (K-6 brain education), Center for Neuroscience, UC Davis
2004-08	Founding member of the One World Children's Fund, Davis Branch, Davis, CA

Professional Affiliations

Cognitive Neuroscience Society, Society for Music Perception & Cognition, Cognitive Science Society, American Psychological Association, Society for Neuroscience

IX. Employment History

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| 2021- | Postdoctoral Research Fellow, Sierra Pacific Mental Illness Research Education and Clinical Centers |
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- (MIRECC), Veterans Affairs Palo Alto Healthcare System, Palo Alto, CA
- 2021- Postdoctoral Research Fellow (P.I.: C. Keller), Stanford University School of Medicine, Palo Alto, CA
- 2021- Collaborator Status, Harvard Medical School, Berenson-Allen Center for Noninvasive Brain Stimulation, Beth Israel Deaconess Medical Center, Boston, MA
- 2021 Instructor, Frontiers of Science Institute, University of Northern Colorado
- 2018-21 Postdoctoral Research Fellow (P.I.: M. Shafi), Harvard Medical School, Berenson-Allen Center for Noninvasive Brain Stimulation, Beth Israel Deaconess Medical Center, Boston, MA
- 2018 Associate Specialist, Step I, UC Merced
- 2017-18 Graduate Dean's Dissertation Year Fellow, UC Merced
- 2016-17 Graduate Student Researcher (P.I.: R. Balasubramaniam), UC Merced
National Science Foundation: *Collaborative Research: Brain Mechanisms of Rhythm Perception: The Impact of the Motor System on Auditory Perception*
- 2016 Teaching Assistant, Animal Cognition (J. Milostan), UC Merced
- 2015 Teaching Assistant, Service Innovation (P. Maglio), UC Merced
- 2015 Graduate Student Researcher (P.I.: R. Balasubramaniam), UC Merced
Blum Center for Economic Development: *Rhythmic Skills and Reading: An Intervention Study in the San Joaquin Valley*
- 2014 Teaching Assistant, Perception and Action (R. Balasubramaniam), UC Merced
- 2014 Teaching Assistant, Cognitive Neuroscience (A. Warlaumont), UC Merced
- 2013 Teaching Assistant, Speech Processing (A. Warlaumont), UC Merced
- 2012-13 Psychology Tech. GS-181-5, Dept. of Veterans Affairs, Northern California Health Care System, Martinez, CA
- 2011-13 Research Assistant (PI: E. Disbrow), Center for Neuroscience, UC Davis
- 2011-12 Independent Living Facilitator, InAlliance, Sacramento, CA
- 2011-12 Science Teacher, Resident Science Program, David Lubin Elementary, Sacramento, CA
- 2010 Junior Specialist (PI: P. Janata), Center for Mind and Brain, UC Davis
- 2009-10 Research Intern (PI: P. Janata), Center for Mind and Brain, UC Davis
- 2003-09 Biological Science Tech. GS-5, Davis Field Station (PI: A.K. Miles), United States Geological Survey, Western Ecological Research Center, UC Davis