

# Steven Paul Errington | Curriculum Vitae

Department of Neuroscience, Washington University School of Medicine in St. Louis, CB8108, 660 S. Euclid Ave., St. Louis, MO 63110  
Phone: +1 (615) 638 9637 | Email: esteve@wustl.edu

## Appointments

Jan 2023 to Present **Postdoctoral Research Associate** — Washington University School of Medicine, Saint Louis  
Supervisor: Professor Ilya Monosov

## Education

Aug 2017 to Dec 2022 **PhD Psychological Sciences (Neuroscience)** — Vanderbilt University, Nashville.  
Area: *Neural mechanisms of cognitive control in the primate medial frontal cortex.*  
Supervisor: Professor Jeffrey D. Schall

Jul 2013 to Dec 2014 **MRes Neuroscience** — Newcastle University, Newcastle-upon-Tyne.  
Thesis title: *Understanding the relationship between visual hallucinations, visuo-perceptual function and attention: a Masters in Research student pilot study*

Sept 2010 to Jun 2013 **BSc (Hons) Psychology** — Northumbria University, Newcastle-upon-Tyne.  
Thesis title: *Hemispherical differences in emotional processing in healthy adults: a personality-controlled, tDCS study.*

## Teaching Experience

Sept 2021 to Dec 2022 **Teaching Assistant** — Vanderbilt University, Nashville, TN.  
Courses: *PSY2750 (Perception), PSY2150 (Principles of Experimental Design)*

Oct 2014 to Jun 2017 **Graduate Demonstrator** — Newcastle University, Newcastle-upon-Tyne.  
Courses: *PSY1010 (Research Methods and Skills 1), PSY1011 (Research Methods and Skills 2), PSY2009 (Methods in Psychology 2A)*

## Awards, Funding, & Grants

Apr 2022 **VU Graduate Leadership Anchor Award**, Vanderbilt University.

Sept 2021 **VU Graduate School Travel Grant**, \$500, Vanderbilt University.

May 2021 **VU Psychology Department Scholarship Award**, \$400, Vanderbilt University.

Apr 2020 **VU Psychology Department Scholarship Award**, \$150, Vanderbilt University.

Jul 2019 **VU Graduate School Travel Grant**, \$500, Vanderbilt University.

Apr 2019 **William F. Hodges Teaching Assistant Award**, \$500, Vanderbilt University.

Mar 2019 **VU Psychology Department Scholarship Award**, \$1100, Vanderbilt University.

Nov 2018 **SfN Trainee Professional Development Award**, \$1000, Society for Neuroscience.

Nov 2015 **NIHR Travel Grant**, £2000, Biomedical Research Unit, Newcastle University & ARUK

Jul 2015 **Newcastle University Vacation Scholarship Award**, £1920, Newcastle University.

Aug 2013 **NIHR Biomedical Research Unit MRes Studentship**, £5500, Newcastle University.

Jun 2012 **Wellcome Trust Biomedical Vacation Scholarship**, £1440, Wellcome Trust.

## Professional Memberships

Nov 2017 to present **Society for Neuroscience**, Student Member

Dec 2018 to Dec 2021 **Vision Science Society**, Student Member

Dec 2018 to Dec 2019 **American Association for the Advancement of Science**, Student Member

## Science Outreach & Service

Jan 2020 to Feb 2020 **Vanderbilt University Psychology Faculty Search**, Student Liaison

July 2019 **Summer Academy at Vanderbilt for the Young**, Guest Speaker

Mar 2019 **Vanderbilt University Brain Blast 2019**, Student Volunteer

Mar 2019 **School of Science and Mathematics at Vanderbilt**, Guest Speaker

Feb 2019, 2020 **Vanderbilt University Psychology Interview Weekend**, Student Liaison

Feb 2019 to Jun 2019 **School of Science and Mathematics at Vanderbilt**, Mathematics Tutor

## Publications

- In preparation **14** | **Errington, S.P.**, Sajad, A., Logan, G. D., & Schall, J.D. (In preparation). Reward context influences going but not stopping in a saccade countermanding task. *In preparation*.
- 13** | Thirunavukkarasu, P., **Errington, S.P.**, Sajad, A. & Schall, J.D. (In preparation). Functional architecture of task-related visuomotor responses in Supplementary Eye Field. *In preparation*.
- Under review **12** | **Errington, S. P.**, Westerberg, J.A., Woodman, G. F., & Schall, J.D. (Under review). Cortical Contributions to Medial Frontal  $\beta$ -Bursts during Executive Control.
- 2023 **11** | Fu, F., Sajad, A., **Errington, S.P.**, Schall, J.D., & Rutishauser U. (2022). Neurophysiological mechanisms of performance monitoring in human and nonhuman primates. *Nature Reviews Neuroscience*. \*
- 2022 **10** | Sajad, A\*, **Errington, S. P.\***, & Schall, J.D. (2022). Functional architecture of executive control and associated event-related potentials. *Nature Communications*, 13(1), 1-19.
- 2021 **9** | Mann, L. G., Hay, K. R., Song, A. K., **Errington, S. P.**, Trujillo, P., Zald, D. H., Yan, Y., Kang, H., Logan, G. D., & Claassen, D. O. (2021). D2-Like Receptor Expression in the Hippocampus and Amygdala Informs Performance on the Stop-Signal Task in Parkinson's Disease. *Journal of Neuroscience*, 41(48), 10023-10030.
- 2020 **8** | **Errington, S. P.**, Woodman, G. F., & Schall, J.D. (2020). Dissociation of medial frontal  $\beta$ -bursts and executive control. *Journal of Neuroscience*, 40(48), 9272-9282.
- 7** | **Errington, S. P.**, & Schall, J.D. (2020). Express saccades in a countermanding task. *Journal of Neurophysiology*, 124(1), 484-496.
- 2018 **6** | Tarawneh, G., Nityananda, V., Rosner, R., **Errington, S.**, Herbert, W., Arranz-Paraíso, S., Busby, N., Tampin, J., Read, J. C. A., & Serrano-Pedraza, I. (2018). Contrast thresholds reveal different visual masking functions in humans and praying mantises. *Biology Open*, 7(4), bio029439.
- 2017 **5** | Tarawneh, G., Nityananda, V., Rosner, R., **Errington, S.**, Herbert, W., Cumming, B., Read, J. C. A. & Serrano-Pedraza, I. (2017). Invisible noise obscures visible signal in insect motion detection. *Scientific Reports*, 7(1), 3496
- 4** | Nityananda, V., Tarawneh, G., **Errington, S.**, Serrano-Pedraza, I., & Read, J. C. A. (2017). The optomotor response of the praying mantis is driven predominantly by the central visual field. *Journal of Comparative Physiology A*, 203(1), 77-87.
- 2015 **3** | McNally, R. J., Basta, N. O., **Errington, S.**, James, P. W., Norman, P. D., Hale, J. P., & Pearce, M. S. (2015). Socioeconomic patterning in the incidence and survival of teenage and young adult men aged between 15 and 24 years diagnosed with non-seminoma testicular cancer in northern England. *Urologic Oncology: Seminars and Original Investigations*, 33(12), 506-509.
- 2** | Schmidt, K. J., Cowen, P., Harmer, C.J., Tzortzis, G., **Errington, S. P.**, & Burnet, P. W. J. (2015). Probiotic intake reduces the waking cortisol response and alters emotional bias in healthy volunteers. *Psychopharmacology*, 1(19).

2014 1 | McNally, R. J., Basta, N. O., **Errington, S.**, James, P. W., Norman, P. D., & Craft, A. W. (2014). Socioeconomic Patterning in the Incidence and Survival of Children and Young People Diagnosed with Malignant Melanoma in Northern England. *Journal of Investigative Dermatology*, 134(11), 2703-2708.

\* shared first-authorship

+ review paper

## Selected Talks & Presentations

- Talks
- Errington, S. P.**, Sajad, A., & Schall, J.D. (2022, Mar). *Cortical microcircuitry of executive control*. Talk given at Desrochers Lab, Brown University, online.
- Errington, S. P.** (2021, Sept). *Neural mechanisms of cognitive control in the primate medial frontal cortex*. Talk given at Monosov Lab, Washington University at St Louis, MO.
- Errington, S. P.**, Woodman, G.F., & Schall, J.D. (2020, Dec). *Cortical contributions to medial frontal  $\beta$ -bursts during executive control*. Talk given at Aron Lab, University of California San Diego, Online.
- Errington, S. P.**, Woodman, G.F., & Schall, J.D. (2020, Oct). *Dissociation of medial frontal  $\beta$ -bursts and executive control*. Talk given at Cognitive Neurology Lab, University of Iowa, online.
- Errington, S. P.**, Sajad, A., & Schall, J.D. (2019, August). *Cortical microcircuitry of executive control*. Talk given at Newcastle University Neuroscience Seminar Series, Newcastle-upon-Tyne, UK.
- Errington, S. P.**, Sajad, A., & Schall, J.D. (2018, May). *Microcircuitry of visual performance monitoring in the supplementary eye field: Laminar distribution of visual processing under conflict*. Talk given at the Vision Science Society meeting, St Pete Beach, FL.
- Posters
- Sajad, A., **Errington, S. P.**, & Schall, J.D. (2022, November). *Functional characterization of feedback-related negativity and associated sensory event-related potentials in medial frontal cortex*. Poster presented at the Society for Neuroscience annual meeting, San Diego, CA.
- Errington, S. P.**, Sajad, A., & Schall, J.D. (2022, November). *Absence of conflict signaling in midcingulate cortex: Neural spiking in macaques during a stop-signal task*. Poster presented at the Society for Neuroscience annual meeting, San Diego, CA.
- Herrera, B., Sajad, A., **Errington, S. P.**, Schall, J.D., Riera., J. (2022, November). *Cell-specific mechanisms of theta oscillations during error monitoring in medial frontal cortex: Empirical findings and biophysical modeling*. Poster presented at the Society for Neuroscience annual meeting, San Diego, CA.
- Herrera, B., Sajad, A., **Errington, S. P.**, Schall, J.D., Riera., J. (2021, November). *Low frequency spike-field coupling for error monitoring in medial frontal cortex: Empirical findings and biophysical modeling*. Poster presented at the Society for Neuroscience annual meeting, Online.
- Errington, S. P.**, & Schall, J.D. (2020, June). *Express saccades during a countermanding task*. Poster presented at the Vision Sciences Society annual meeting, Online.
- Errington, S. P.**, Sajad, A., & Schall, J.D. (2019, October). *Microcircuitry of Agranular Cortex: Multiplexed executive control and performance monitoring signals*. Poster presented at the Society for Neuroscience annual meeting, Chicago, IL.
- Errington, S. P.**, Sajad, A., & Schall, J.D. (2019, July). *Microcircuitry of Executive Control: Cortical microcircuitry of gaze monitoring in the supplementary eye field*. Poster presented at the Gordon Research Conference on Eye Movements, Lewiston, ME.
- Errington, S. P.**, Sajad, A., & Schall, J.D. (2019, May). *Microcircuitry of Executive Control: Cortical microcircuitry of gaze monitoring in the supplementary eye field*. Poster presented at the Vision Science Society meeting, St Pete Beach, FL.

**Errington, S. P.,** Sajad, A., & Schall, J.D. (2018, November). *Microcircuitry of Performance Monitoring: Laminar profile of conflict monitoring in the supplementary eye field*. Poster presented at the Society for Neuroscience annual meeting, San Diego, CA.

**Errington, S. P.,** Sajad, A., & Schall, J.D. (2018, October). *Microcircuitry of Performance Monitoring: Laminar profile of conflict monitoring in the supplementary eye field*. Poster presented at the 6<sup>th</sup> Workshop on Computational Properties of the Prefrontal Cortex, Nashville, TN.

**Errington, S. P.,** Elder, G., Collerton, D., Firbank, M.J., & Taylor, J.P. (2015, December). *Visual hallucinations, attention and visuo-perceptual function in Lewy body dementia*. Poster presented at the International Dementia with Lewy Body Conference, Fort Lauderdale, FL.