

Selene Schintu, Ph.D.

Curriculum Vitae

Neurocognitive Rehabilitation Center - CeRiN
Center for Mind and Brian Science - CIMEC
University of Trento
Via Matteo del Ben, 5/B - 38068 Rovereto, TN, Italy

+39 333-6697575 (phone)
selene.schintu@unitn.it (e-mail)
<https://orcid.org/0000-0002-6362-3905> (orcid)

EDUCATION

- 2011 - 2014 **Ph.D. in Cognitive Neuroscience**
Lyon Neuroscience Research Center (CRNL) - INSERM, CRNS, and Université Claude Bernard, Lyon 1, France
Advisor: Alessandro Farnè, Ph.D.
- 2006 - 2008 **MS Science of Mind**
University of Turin, Italy
Advisors: Giuliano Geminiani, M.D. Ph.D. and Federico Maria Cossa, M.D.
- 2003 - 2006 **BS Neuropsychological Sciences and Techniques**
University of Turin, Italy
Advisor: Bruno Bara, M.D. Ph.D.

PROFESSIONAL QUALIFICATION

- 2021 **Qualification to the profession of psychologist** (50/50; Ordine psicologi del Piemonte, section A, n°10190)
- 2018 - 2024 **National scientific qualification (ASN)** for the profession of Associate Professor (Italy)
Section: 11/E1 General Psychology, Psychobiology and Psychometric

PROFESSIONAL EXPERIENCE

- 2022 – now **Researcher.** Neurocognitive Rehabilitation Center (CeRiN)- Center for Mind and Brian Science (CIMEC), University of Trento
- 2019 - 2022 **Part-time Faculty** - Psychology Department, George Washington University, Washington DC, DC, USA
- 2015 - 2022 **Post-Doctoral Fellow** - National Institute of Neurological Disorders and Stroke (NINDS) - NIH and George Washington University, USA. Principal Investigators: Dr. Eric M. Wassermann and Prof. Sarah Shomstein
- 2011 - 2014 **Ph.D. Candidate** - Lyon Neuroscience Research Center (CRNL) - INSERM, CRNS, and Université Claude Bernard, Lyon 1, France. Principal Investigators: Dr. Alessandro Farnè
- 2010 - 2011 **Research Associate** - National Institute of Neurological Disorders and Stroke (NINDS) - NIH, USA. Principal Investigators: Dr. Jordan Grafman and Dr. Eric M. Wassermann
- 2009 **Student Internship** - Institut des Sciences Cognitives "Marc Jeannerod" – CNRS, Lyon, France. Principal Investigators: Dr. Michel Desmurget and Dr. Angela Sirigu

- 2008 - 2009 **Student Internship** - University of Turin in collaboration with San Camillo Hospital and Salvatore Maugeri Foundation, Turin, Italy. Principal Investigators: Dr. Patrizia Gindri and Dr. Federico Maria Cossa
- 2007 - 2008 **Student Internship** - San Camillo Hospital and Salvatore Maugeri Foundation, Turin, Italy. Principal Investigator: Dr. Patrizia Gindri

PROFESSIONAL AFFILIATIONS (past and present)

Society for Neuroscience
Vision Sciences Society
Cognitive Neuroscience Society
Organization for Human Brain Mapping
Società Italiana di Psicofisiologia & Neuroscienze Cognitive

EDITORIAL ROLE

Review editor: Frontiers in Human Neuroscience
Guest associated editor: Frontiers in Psychology

AD-HOC JOURNAL REVIEWING

Cerebral Cortex, Journal of Neuroscience, Cortex, Neuropsychologia, PLOS ONE, Experimental Brain Research, Perception, Neuroscience, Frontiers in Human Neuroscience, Frontiers in Neurology, Frontiers in Psychology, Journal of Intellectual Disability - Diagnosis and Treatment, Neuromodulation: technology at the neural interface, Journal of Experimental Psychology, Journal of Psychopathology, Perception, Attention Perception and Psychophysics, Brain Sciences, Symmetry.

RESEARCH SUPPORTS

- 2021 - 2022 **Intramural Research Program**
PI: Eric Wassermann, M.D.
Role: Post-doctoral fellow
- 2018 - 2020 **Kirschstein National Research Service Award (NRSA similar to F32)**
PI: Selene Schintu, Ph.D.
Direct costs: \$250,000
- 2015 - 2017 **Intramural Research Program**
PI: Eric Wassermann, M.D.
Role: Post-doctoral fellow
- 2011 - 2014 **McDonnell Foundation School Awards**
PI: Alessandro Farné, Ph.D.
Role: Ph.D. student

AWARDS AND HONORS

- 2021 **Outstanding Poster** - to supervised student (Amelia Stapleton), NIH, USA
- 2019 **Outstanding Poster** - to supervised student (Catherine A Cunningham), NIH, USA

- 2018 **Exceptional Summer Student Award** - to supervised student (Claire Factor), NIH, USA
- 2017 **Outstanding Poster** - to supervised student (Zayna Alam), NIH, USA
- 2016 **Travel Award** - 30th Symposium: the future of visual attention, USA
- 2012 **SIPF Award for Best Scientific Contribution** - Italian Society of Psychophysiology and Cognitive Neuroscience, Italy
- 2009 **Women's Travel Awards** - Berlin School of Mind and Brain, Germany

INVITED TALKS

- 2021 Interhemispheric Balance: Dynamic Changes of Spatial Representations.
Cognitive and forensic neuropsychology lab, University of Pavia, Italy. Virtual due to COVID-19.
- 2021 Spatial representation and interhemispheric Balance.
Cognitive Neuroscience Lab, COSPECS department, University of Messina, Italy. Virtual due to COVID-19.
- 2021 The consequences of Spatial Representations' changes over the interhemispheric balance
Centre de Recherche en Neurosciences de Lyon (CRNL), Lyon, France. Virtual due to COVID-19.
- 2021 Interhemispheric Balance: Dynamic Changes of Spatial Representations.
National Science Foundation (NSF), EPSCoR Attention Consortium's, Early-Stage Investigator Colloquia Series. Virtual due to COVID-19.
- 2020 Interhemispheric Balance: Dynamic Changes of Spatial Representations.
Non-Invasive Brain Stimulation Series, National Institute of Health, Bethesda, MD, USA. Virtual due to COVID-19.
- 2020 Interhemispheric Balance: Dynamic Changes of Spatial Representations.
Early-Stage Investigator Colloquia Series, University of Reno, NV, USA. Virtual due to COVID-19.
- 2020 Inhibitory rTMS over the right parietal cortex modulates functional connectivity.
European Workshop Cognitive neuroscience, Brixen, Italy.
- 2018 Prismatic adaptation an effective tool for changing functional connectivity, space representation and learning.
San Camillo Hospital, IRCCS, Turin, Italy.
- 2018 Prismatic adaptation modulates inter-hemispheric balance with a subsequent change in visual field coverage.
Vision Science Society, St. Pete Beach, FL, USA.
- 2018 Prismatic adaptation modulates inter-hemispheric balance with a subsequent change in visual field coverage.
CAPital area Cognition/Attention/Perception Conference, George Washington University, Washington DC, DC, USA.
- 2017 Prismatic adaptation - a tool to ameliorate neglect symptoms and modulate intact cognition.
Clinical Grand Rounds, National Institute of Health, Bethesda, MD, USA.
- 2016 Paired-pulse parietal-motor stimulation can act as a neuromodulator when combined with prism adaptation.
Society for Neuroscience San Diego, CA, USA.
- 2015 The action of prism adaptation on intact visuospatial cognition - when time matters to space.
George Washington University, Washington DC, DC, USA.
- 2014 The action of prism adaptation on intact visuospatial cognition - when time matters to space.
National Institute of Health, Bethesda, MD, USA.

TEACHING

OWNERSHIP OF UNIVERSITY COURSES

- 2021 PSYC 3122 - Cognitive Neuroscience
Summer semester, 48 hours (synchronously online due to COVID-19), George Washington University, USA
- 2021 PSYC 3122 - Cognitive Neuroscience
Spring semester, 48 hours (synchronously online due to COVID-19), George Washington University, USA
- 2020 PSYC 3122 - Cognitive Neuroscience
Summer semester, 48 hours (synchronously online due to COVID-19), George Washington University, USA
- 2019 PSYC 3122 - Cognitive Neuroscience
Fall semester, 48 hours, George Washington University, USA

SEMINAR ACTIVITIES

- 2020 Guest lecture: Let's talk about emotions
George Washington University, USA
- 2019 Guest lecture: Emotions - What are those?
George Washington University, USA
- 2018 Guest lecture: Prismatic adaptation an effective tool for changing functional connectivity, space representation and learning
University of Turin, Italy
- 2018 Guest lecture: Hemispheric lateralization
George Washington University, USA
- 2017 Guest lecture: Brain asymmetries
George Washington University, USA
- 2016 Guest lecture: Attention and hemispatial neglect
American University, USA

MENTORING

- 2020 - 2022 Amelia Stapleton, graduate student at NIH, USA
- 2017 - 2019 Catherine A Cunningham, graduate student at NIH, USA
- 2019 Claire Factor, undergraduate summer student at NIH, USA
- 2016 - 2017 Fatou H Sarr, undergraduate student at George Washington University, USA
- 2016 - 2017 Zayna Alam, graduate student at NIH, USA
- 2009 - 2010 Ivan Patané et Michela Caldano, Master students at CRNL, France

PUBLICATIONS

- Schintu S**, Kravits DJ, Silson EH, Cunningham CA, Wassermann EM and Shomstein S. Dynamic changes in spatial representation within the posterior parietal cortex in response to visuomotor adaptation. Accepted, *Cerebral Cortex*.
- Schintu S**, Gotts SJ, Freedberg M, Shomstein S and Wassermann EM. Effective connectivity underlying neural and behavioral components of prism adaptation. Accepted, *Frontiers in Psychology*
- Tambone R, Poggio G, Pyasik M, Burin D, Dal Monte O, **Schintu S**, Ciorli T, Lucà L, Semino MV, Doricchi F, Pia L (2021) Changing your body changes your eating attitudes: embodiment of a slim virtual avatar induces avoidance of high-calorie food. *Heliyon* 7:e07515.

- Pyasik M, Fortunato E, Dal Monte O, **Schintu S**, Garbarini F, Ciorli T, Pia L (2021) Self-other distinction modulates the social softness illusion. *Psychological Research* <https://doi.org/10.1007/s00426-021-01549-8>.
- Schintu S**, Cunningham CA, Freedberg M, Taylor P, Gotts SJ, Shomstein S and Wassermann EM (2021) Callosal anisotropy predicts attentional network changes after parietal inhibitory stimulation. *NeuroImage* 226, 117559.
- Schintu S**, Freedberg M, Gotts SJ, Cunningham CA, Alam ZM, Shomstein S, Wassermann EM (2020) Prism adaptation modulates connectivity of the intraparietal sulcus with multiple brain networks. *Cerebral Cortex* 30: 4747-4758.
- Schintu S**, Chaumillon R, Guillaume A, Salemme R, Reilly KT, Pisella L, and Farnè A (2020) Eye dominance modulates visuospatial attention. *Neuropsychologia* 141:107314.
- Schintu S**, Freedberg M, Alam Z, Shomstein S and Wassermann EM (2018) Left-shifting prism adaptation boosts reward-based learning. *Cortex* 109:279-286.
- Brighenti S, **Schintu S**, Liloia D, Keller R. (2018). Neuropsychological aspects of Asperger Syndrome in adults: a review. *Neuropsychological Trends* 24: 63-95.
- Schintu S**, Patané I, Caldano M, Salemme R, Reilly KT, Pisella L, Farnè A (2017) The asymmetrical effect of leftward and rightward prisms on intact visuospatial cognition. *Cortex* 97:23–31.
- Wilkinson L, Koshy PL, Steel A, Bageac D, **Schintu S**, Wassermann EM (2017) Motor cortex inhibition by TMS reduces cognitive non-motor procedural learning when immediate incentives are present. *Cortex* 97:70-80.
- Martín-Arévalo E, **Schintu S**, Farnè A, Pisella L, Reilly KT (2018) Adaptation to Leftward Shifting Prisms Alters Motor Interhemispheric Inhibition. *Cerebral Cortex* 28:528-527.
- Schintu S**, Martín-Arévalo E, Vesia M, Rossetti Y, Salemme R, Pisella L, Farnè A, Reilly KT (2016) Paired-pulse parietal-motor stimulation differentially modulates corticospinal excitability across hemispheres when combined with prism adaptation. *Neural Plasticity* 2016:1-9.
- Knutson KM, Dal Monte O, **Schintu S**, Wassermann EM, Raymont V, Grafman J, Krueger F (2015) Areas of Brain Damage Underlying Increased Reports of Behavioral Disinhibition. *The Journal of Neuropsychiatry and Clinical Neuroscience Summer* 27(3):193-8.
- Schintu S**, Hadj-Bouziane F, Dal Monte O, Knutson KM, Pardini M, Wassermann EM, Grafman J, Krueger F (2014) Object and space perception – Is it a matter of hemisphere? *Cortex* 57:244-253.
- Dal Monte O, **Schintu S**, Pardini M, Berti A, Wassermann EM, Grafman J, Krueger F (2014) The left inferior frontal gyrus is crucial for reading the mind in the eyes. Brain lesion evidence. *Cortex* 58: 9-17.
- Schintu S**, Pisella L, Jacobs S, Salemme R, Reilly KT, Farnè A (2014) Prism adaptation in the healthy brain: The shift in line bisection judgments is long lasting and fluctuates. *Neuropsychologia* 53:165-170.
- Pardini M, Gialloreti L E, Mascolo M, Benassi F, Abate L, Guida S, Viani E, Dal Monte O, **Schintu S**, Krueger F, and Cocito L (2012) Isolated theory of mind deficits and risk for frontotemporal dementia: a longitudinal pilot study. *Journal of Neurology, Neurosurgery & Psychiatry* 84(7):818-821.
- Dal Monte O, Krueger F, Solomon J, Schintu S, Knutson KM, Strenziok M, Pardini M, Leopold A, Raymont V, and Grafman J (2012) A voxel-based lesion study on facial emotion recognition after penetrating brain injury. *Social Cognitive and Affective Neuroscience* 8(6):632-9.
- Di Monaco M, **Schintu S**, Dotta M, Barba S, Tappero R, and Gindri P (2011) Severity of unilateral spatial neglect is an independent predictor of the functional outcome after acute inpatient rehabilitation in right-hemisphere stroke people. *Archives of Physical Medicine and Rehabilitation* 92(8):1250-1256.

Gammeri R*, **Schintu S***, Salatino A, Vigna F, Mazza A, Gindri P, Barba S, Ricci R. Prism adaptation and visual scanning training differentially affect neglect patients' perceptual and response biases. *Neuropsychological Rehabilitation*.

Mazza A, Dal Monte O, **Schintu S**, Colombo S, Michielli N, Sarasso P, Törlind P, Cantamessa M, Montagna F, Ricci R. The neural underpinning of divergent thinking: a multimodal approach. *Cortex*.

*co-authorship

CONFERENCE PROCEEDINGS

Martín-Arévalo E, **Schintu S**, Farné A, Pisella L, Reilly KT (2017) Adaptation to leftward shifting prisms alters motor inter-hemispheric inhibition. *Brain Stimul Basic Transl Clin Res Neuromodulation* 10:465.

Schintu S, Freedberg M, Alam Z, Wassermann E, Shomstein S (2017) Prismatic Adaptation Boosts Feedback-Based Learning. *Journal of Vision* 17:1304–1304.

Schintu S, Silson E, Alam Z, Wassermann E, Shomstein S (2018) Prismatic adaptation modulates inter-hemispheric balance with a subsequent change in visual field coverage. *Journal of Vision* 18:897–897.

POSTER PRESENTATIONS

Stapleton A, **Schintu S**, Wassermann EM (2022) Interhemispheric asymmetry is a biomarker of attentional performance. NIH Postbac Poster Day, Bethesda, MD, USA. Virtual due to COVID-19

Stapleton A, **Schintu S**, Wassermann EM (2021) Interhemispheric dynamics: from attentional behavior to connectivity. NIH Postbac Poster Day, Bethesda, MD, USA. Virtual due to COVID-19.

Schintu S, Cunningham CA, Freedberg M, Taylor P, Gotts SJ, Shomstein S and Wassermann EM (2020) Callosal anisotropy predicts attentional network changes after parietal inhibitory stimulation. Transcranial Brain Stimulation. Cognitive Neuroscience Workshop, CiMEC, University of Trento, Italy. Virtual due to COVID-19.

Schintu S, Freedberg M, Cunningham CA, Gotts SJ, Shomstein S and Wassermann EM (2020) Inhibitory rTMS over the right parietal cortex modulates functional connectivity. Cognitive Neuroscience Society. Virtual due to COVID-19.

Schintu S, Freedberg M, Cunningham CA, Gotts SJ, Shomstein S and Wassermann EM (2020) Inhibitory rTMS over the right parietal cortex modulates functional connectivity. European Workshop Cognitive Neuroscience, Brixen, Italy.

Stapleton A, **Schintu S**, Triggiani IA, Freedberg M, Wassermann EM (2020) Visuospatial Attention and Its Asymmetries: From Behavior to Neurophysiology. NIH Postbac Poster Day, Bethesda, MD, USA.

Schintu S, Cunningham CA, Freedberg M, Gotts SJ, Shomstein S, Wassermann EM (2019) Inhibitory rTMS over the right parietal cortex modulates functional connectivity. Society for Neuroscience, Chicago, IL, USA.

Schintu S, Freedberg M, Gotts SJ, Cunningham CA, Alam ZM, Shomstein S, Wassermann EM (2019) Prism adaptation modulates connectivity of the intraparietal sulcus with multiple brain networks. NINDS/NIH Retreat, Bethesda, MD, USA.

Schintu S, Freedberg M, Gotts SJ, Cunningham CA, Alam ZM, Shomstein S, Wassermann EM (2019) Prism Adaptation Differentially Modulates Resting-State Functional Connectivity. Organization Human Brain Mapping, Rome, Italy.

Cunningham CA, **Schintu S**, and Wassermann EM (2019) White Matter Differences and Visuospatial Cognition: Interparietal tracts explain functional variability after cTBS. NIH Postbac Poster Day, Bethesda, MD, USA.

- Schintu S**, Freedberg M, Gotts SJ, Cunningham CA, Shomstein S and Wassermann EM (2019) Prism adaptation differentially modulates functional connectivity according to the side of visual displacement. Cognitive Neuroscience Society, San Francisco, CA, USA.
- Schintu S**, Freedberg M, Silson EH, Gotts S, Kravitz D J, Shomstein S and Wassermann EM (2018) Prismatic Adaptation Modulates Visual Field Coverage and Resting State Functional Connectivity. Society for Neuroscience, San Diego, CA, USA.
- Schintu S**, Silson EH, Alam ZM, Wassermann EM, and Shomstein S (2018) Prismatic adaptation modulates inter-hemispheric balance with a subsequent change in visual field coverage. Gordon conference - Neurobiology of Cognition, Sunny River Newry, ME, USA.
- Schintu S**, Silson EH, Alam ZM, Wassermann EM, and Shomstein S (2018) Prismatic adaptation modulates inter-hemispheric balance with a subsequent change in visual field coverage. Organization Human Brain Mapping, Singapore.
- Schintu S**, Freedberg M, Alam Z, Wassermann EM and Shomstein S (2017) Prismatic adaptation boosts feedback-based learning. Society for Neuroscience, Washington DC, DC, USA.
- Schintu S**, Freedberg M, Alam Z, Wassermann EM and Shomstein S (2017) Prismatic adaptation boosts feedback-based learning. Vision Science Society, St. Pete Beach, FL, USA.
- Alam Z, **Schintu S**, Wassermann EM (2017) Prismatic adaptation modulates resting-state functional connectivity. NIH Postbac Poster Day, Bethesda, MD, USA.
- Wilkinson, L., Koshy, P. J, Ewul, E. L. V., **Schintu, S**, & Wassermann, EM (2016) Procedural learning with and without feedback are impaired by inhibition of the dorsolateral prefrontal cortex. Society for Neuroscience, San Diego, CA, USA.
- Schintu S**, Chaumillon R, Guillaume A, Salemme R, Reilly KT, Pisella L, and Farnè A (2016) The influence of the dominant eye in visuospatial attention. 30th Symposium: the future of visual attention, Rochester, MA, USA.
- Schintu S**, Pisella L, Vesia M, Farnè A, Reilly KT (2014) Leftward prism adaptation modulates PPC-M1 interactions within both hemispheres: a twin-coil paired-pulse TMS approach. Society for Neuroscience, Washington DC, DC, USA.
- Schintu S**, Pisella L, Jacobs S, Salemme R, Reilly KT, Farnè A (2013) Prism Adaptation Induces a Long-Lasting Bisection Bias in Healthy Subjects. French Society for Neuroscience, Lyon, France.
- Schintu S**, Pisella L, Jacobs S, Salemme R, Reilly KT, Farnè A (2012) Prism Adaptation Induces a Long-Lasting Bisection Bias in Healthy Subjects. XX Congresso SIPF, Venice, Italy.

ACADEMIC SERVICE ACTIVITIES

- 2022 Member of ethics committee COSPECS department, University of Messina, Italy
- 2021 Judge, 17th Graduate Research Symposium, NIH USA
- 2019 Judge, Postbac Poster Day, NIH, USA
- 2018 Judge, Postbac Poster Day, NIH, USA
- 2017 Judge, 13th Graduate Research Symposium, NIH, USA
- 2017 Grant Assessment Reviewer, Rigor and Reproducibility Pilot Test for R01, NIH, USA
- 2016 Judge, Postbac Poster Day, NIH, USA
- 2014 Outreach, Semaine du Cervau, Lyon, France
- 2013 Outreach, Semaine du Cervau, Lyon, France