

*Curriculum Vitae*  
**Bruce D. McCandliss, PhD**

**Contact information**

Graduate School of Education  
Stanford University  
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Areas of specialization: Cognitive Psychology, Cognitive Neuroscience,  
Developmental Psychology, Educational Cognitive Neuroscience

**Current Appointment**

Professor, Graduate School of Education, Stanford University.  
Professor, Department of Psychology, Stanford University  
Training Faculty, Interdepartmental Neurosciences Program, Stanford University

**Education**

1985-1989 B.S. Michigan State University, East Lansing, MI  
1991-1992 M.S. University of Oregon, Eugene, OR  
1992-1997 PhD. University of Oregon, Eugene, OR

**Professional experience**

1991-1996 Graduate Research Assistant, University of Oregon, Eugene, OR.  
1996-1999 Postdoctoral Research Scientist, Center for the Neural Basis of  
Cognition, Carnegie Mellon University and University of Pittsburgh,  
Pittsburgh, PA.  
1996-1999 Director, Learning Research and Development Center Reading  
Institute, University of Pittsburgh, Pittsburgh, PA.  
1999-2005 Assistant Professor of Psychology in Psychiatry, Weill Medical  
College of Cornell University, New York, NY.  
2005-2008 Associate Professor of Psychology in Psychiatry, Weill Medical  
College of Cornell University, New York, NY.  
2005-2008 Training Faculty, Neuroscience PhD Program, Weill Medical College  
of Cornell University, New York, NY  
2009-2014 Faculty Member, Neuroscience Graduate Program, Vanderbilt Brain  
Institute, Vanderbilt University  
2009-2014 Patricia and Rodes Hart Chair of Psychology and Human  
Development, Peabody College of Education and Human  
Development, Vanderbilt University  
2009-2014 Professor of Psychology, Department of Psychology, School of Arts  
and Science, Vanderbilt University

- 2014- Professor, Graduate School of Education, Stanford University.  
2014- Professor, Department of Psychology, Stanford University.

### **Honors, Awards, Advisory Appointments**

#### Honors

- 1988 Phi Beta Kappa.  
1997 McDonnell Foundation Cognitive Neuroscience Postdoctoral Fellowship.  
2002 John C. Merck Scholars Award, Biology of Developmental Disabilities in Children.  
2006 U.S. Presidential Commendation: Presidential Early Career for Achievement in Science and Engineering (PECASE).

#### Awards for Trainees

- 2012 Excellence in Cognitive Studies Award to Jessica Wise  
2010 Foundation Fyssen Award to Arnaud Viarouge  
2010 Fulbright Fellowship Award to Fengji Geng  
2008 Fulbright Fellowship Award to Fransica Serano.  
2005 Finish Academy Of Science Fellowship Award to Minna Hannula.  
2005 Duvigneud Symposium Award of Excellence to Sumit Niogi.  
2003 NIH-NRSA Postdoctoral Training Award to Jason Zevin.  
2003 Swiss National Science Foundation Fellowship Award to Urs Maurer.  
2002 Fulbright Fellowship Award to Maria Ruz.

#### Advisory Board Appointments

- Board of Directors, International Mind, Brain, and Education Society (IMBES)  
Scientific Advisory Board (Chair), Temporal Dynamics of Learning Center.  
National Science Foundation, Science of Learning Center, UCSD.  
Scientific Advisory Board (Member), Visual Learning 2, National Science Foundation, Science of Learning Center, Gallaudet University.  
Scientific Advisor, Organization for Economic Cooperation and Economic Development, Center for Educational Research and Innovation: International Literacy Network  
Scientific Advisory Board Member, Canadian Language and Literacy Network

### **Publications**

#### Statistical Summary

Citations = 11,330; h-index = 41; i10-index = 59; Papers > 100 citations = 28  
(Google Scholar)

## U.S. Patents

Niogi, S., & McCandliss, B. D. (2011). Reproducible Objective Quantification Method to Segment White Matter Structures. United States Patent No. 8,077,937, Issued Dec 13, 2011

## Articles

Posner, M. I., & McCandliss, B. D. (1993). Converging methods for investigating lexical access. *Psychological Science*, 4, 305-309.

McCandliss, B. D., Posner, M. I., & Givón, T. (1997). Brain plasticity in learning visual words. *Cognitive Psychology*, 33, 88-110.

Posner, M. I., Abdullaev, Y., McCandliss, B. D., & Sereno, S. (1999). Neuroanatomy, circuitry, and plasticity of word reading. *Neuroreport*, 10(9) R12-23.

McClelland, J. L., Thomas, A., McCandliss, B. D., & Fiez, J. A. (1999). Understanding failures of learning: Hebbian learning, competition for representational space, and some preliminary experimental data. *Progress in Brain Research*, 121, 75-80.

Posner, M. I., & McCandliss, B. D. (1999). Brain circuitry during reading. In R. Klein & P. McMullen (Eds.), *Converging Methods for Understanding Reading and Dyslexia* (pp. 305-338). Cambridge, MA: MIT Press.

Casey, B. J., Thomas, K. M., & McCandliss, B. D. (2001). Applications of magnetic resonance imaging to the study of development. In C. A. Nelson & M. Luciana (Eds.), *The Handbook of Developmental Cognitive Neuroscience* (pp. 137-148). Cambridge, MA: MIT Press.

Fan, J., McCandliss, B. D., Somer, T., Raz, A., & Posner, M. I. (2002). Testing the efficiency and independence of attention networks. *Journal of Cognitive Neuroscience*, 14, 340-347.

McCandliss, B. D., Fiez, J. A., Protopapas, A., Conway, M., & McClelland, J. L. (2002). Success and failure in teaching the [r]-[l] contrast to Japanese adults: tests of a Hebbian model of plasticity and stabilization in spoken language perception. *Cognitive, Affective, and Behavioral Neuroscience*, 2(2), 89-108. \*

McClelland, J. L., Fiez, J. A., & McCandliss, B. D. (2002). Teaching the non-native [r]-[l] speech contrast to Japanese adults: training methods, outcomes, and neural basis. *Physiology and Behavior*, 77, 657-662.

McCandliss, B. D., Sandak, R., Beck, I., & Perfetti, C. (2003). Focusing attention on decoding for children with poor reading skills: Design and preliminary tests of the Word Building intervention. *Scientific Studies of Reading*, 7(1), 75-105.

Harm, W. M., McCandliss, B. D., & Seidenberg, M. S. (2003). Modeling the success and failures of interventions for disabled readers. *Scientific Studies of Reading*, 7(2), 155-182.

- Fan, J., Flombaum, J. I., McCandliss, B. D., Thomas, K. M., & Posner, M. I. (2003). Cognitive and brain consequences of conflict. *NeuroImage*, *18*(1), 42-57.
- McCandliss, B. D., Kalchman, M., & Bryant, P. (2003). Design experiment and laboratory approaches to learning: steps toward collaborative exchange. *Educational Researcher*, *32*(1), 14-16.
- McCandliss, B. D., & Noble, K. G. (2003). The development of reading impairment: a cognitive neuroscience model. *Mental Retardation and Developmental Disabilities Research Reviews*, *9*(3), 196-204.
- McCandliss, B. D. (2003). Will advances in psychological and neurobiological understanding of learning disabilities lead to some form of cure? In A. Fine & R. Kotkin (Eds.), *Therapist's Guide to Learning and Attention Disorders* (pp. 468-473). New York: Academic Press.
- McCandliss, B. D. (2003). Brain plasticity in language at the systems level. In R. Kawashima & H. Koizumi (Eds.), *Learning Therapy* (pp. 61-80). Sendai, Japan: Tohoku University Press.
- McCandliss, B. D. (2003). Brain based education. In J. Guthrie (Ed.), *Encyclopedia of Education, Second Edition* (Vol. 1, pp. 202-206). New York: Macmillan Reference.
- McCandliss, B. D., Cohen, L., & Dehaene, S. (2003). The Visual Word Form Area: expertise for reading in the fusiform gyrus. *Trends in Cognitive Sciences*, *7*(7), 293-299.
- Rueda, M. R., Fan, J., McCandliss, B. D., Halparin, J. D., Gruber, D. B., Lercari, L. P., & Posner, M. I. (2004). Development of attentional networks in childhood. *Neuropsychologia*, *42*(8), 1029-1040.
- Zevin, J. D., & McCandliss, B. D. (2005). Dishabituation of the BOLD response to speech sounds. *Behavioral and Brain Functions*, *1*(4), 1-13.
- Ruz, M., Worden, M. S., Tudela, P., & McCandliss, B. D. (2005). Inattentive amnesia to words in a high attentional load task. *Journal of Cognitive Neuroscience*, *17*(5), 768-776.
- Maurer, U., Brandeis, D., & McCandliss, B. D. (2005). Fast, visual specialization for reading in English revealed by the topography of the N170 ERP response. *Behavioral and Brain Functions*, *1*(13), 1-12.
- Ruz, M., Wolmetz, M. E., Tudela, P., & McCandliss, B. D. (2005). Two brain pathways for attended and ignored words. *NeuroImage*, *27*(4): 852-861.
- Fan, J., McCandliss, B. D., Fossella, J., Flombaum, J. I., & Posner, M. I. (2005). The activation of attentional networks. *NeuroImage*. *26*(2), 471-9.
- Noble, K. G. & McCandliss, B. D. (2005) Reading Development and Impairment: behavioral, social, and neurobiological factors. *Journal of Developmental and Behavioral Pediatrics*. *26*(5), 370-378.
- Rueda, M.R., Rothbart, R.K., McCandliss, B. D., Saccomanno, L., & Posner, M.I. (2005). Training, maturation, and genetic influences on the development of executive attention. *Proceedings of the National Academy of Sciences*, *102*(41), 14931-14935.

- Voss, H. U., Zevin, J. D., & McCandliss, B. D. (2006). Functional MR imaging at 3.0 T versus 1.5 T. *Neuroimaging Clinics of North America*, 16(1), 285-297.
- Tricomi, E., Delgado, M. R., McCandliss, B. D., McClelland, J. L., & Fiez, J. A. (2006). Performance feedback drives caudate activation in a perceptual learning task. *Journal of Cognitive Neuroscience*, 18(6), 1029-1043.
- Voss, H. U., Ulug, A. M., Dyke, J. P., Watts, R., Kobylarz, E. J., McCandliss, B. D., Heier, L.A., Beattie, B. J., Hamacher, K. A., Vallabhajosula, S., Goldsmith, S., Ballon, D., Giacino, J.T., & Schiff, N.D. (2006). Possible axonal re-growth in late recovery from the minimally conscious state. *Journal of Clinical Investigation*. 116(7), 2005-2011.
- Suh, M., Kolster, R., Sarkar, R., McCandliss, B. D., & Ghajar, J. (2006). Deficits in predictive smooth pursuit after mild traumatic brain injury. *Neuroscience Letters*, 401(1), 108-113.
- Niogi, S. N., & McCandliss, B. D. (2006). Left lateralized white matter microstructure accounts for individual differences in reading ability and disability. *Neuropsychologia*, 44(11), 2178-2188.
- Noble, K. G., Wolmetz, M.E., Ochs, L.G., Farah, M. & McCandliss, B. D. (2006). Brain-behavior relationships in reading acquisition are modulated by socioeconomic status factors. *Developmental Science*. 9(6), 642-54.
- Suh M., Basu S., Kolster, R., Sarkar, R., McCandliss B. D., & Ghajar J. (2006). Increased oculomotor deficits during target blanking as an indicator of mild traumatic brain injury. *Neuroscience Letters*, 410(3), 203-207.
- Noble, K. G., Farah, M. & McCandliss, B. D. (2006). Socioeconomic background modulates cognition-achievement relationships in reading. *Cognitive Development*, 21, 349-368.
- Voss, H. U., McCandliss, B. D., Ghajar, J., Suh, M. (2007) A quantitative synchronization model for smooth pursuit target tracking. *Biological Cybernetics*, 96(3), 309-322.
- Niogi, S. N., Mukherjee, P., & McCandliss, B. D. (2007). Diffusion tensor imaging segmentation of white matter structures using a Reproducible Objective Quantification Scheme (ROQS). *NeuroImage*, 35, 166-174.
- Fan, J., Kolster, R., Ghajar, J., Suh, M., Knight R. T., Sarkar, R., & McCandliss, B. D. (2007). Response anticipation and response conflict: an event related potential and functional magnetic resonance Imaging study. *Journal of Neuroscience*, 27(9), 2272-2282.
- Fan, J., Byrne, J., Worden, M. S., Guise, K., McCandliss, B. D., Fossella, J., & Posner, M.I. (2007). The relation of brain oscillations to attentional networks. *Journal of Neuroscience*, 27(12), 6197-6206.
- Blau, V., Maurer, U., Tottenham, N., & McCandliss B. D. (2007) The face-specific N170 component is modulated by emotional facial expression. *Behavioral and Brain Functions*. 3(7), 1-13.

- Schlaggar, B., & McCandliss, B. D. (2007). Development of Neural Systems for Reading. *Annual Review of Neuroscience*, *30*, 475-503.
- Tamm, L., McCandliss, B. D., Liang, B. A., Wigal, T. L., Posner, M. I., & Swanson, J. M. (2007). Can attention itself be trained? Attention training for children at-risk for ADHD. (pp. 397-409.) In K. McBurnett (Ed.), *Attention Deficit Hyperactivity Disorders: Concepts, Controversies, New Directions*, First Edition, New York: Marcel Dekker.
- Joanisse, M., Zevin, J. D., & McCandliss, B. D. (2007). Brain mechanisms implicated in the preattentive categorization of speech sounds revealed using fMRI and short interval habituation trials. *Cerebral Cortex*, *17*, 2084-2093.
- Noble, K. G., McCandliss, B. D., & Farah, M. (2007). Socioeconomic gradients predict individual differences in neurocognitive abilities. *Developmental Science*. *10*(4): 464-480.
- Dennis, T., Chen, C. C., & McCandliss, B. D. (2008). Threat-related attentional biases: an analysis of three attention systems. *Depression and Anxiety*, *25*(6), 1-10.
- Maurer, U., Zevin, J. D., McCandliss, B. D., (2008). Left-lateralized N170 effects of visual expertise in reading: evidence from Japanese syllabic and logographic scripts. *Journal of Cognitive Neuroscience*, *10*, 1878-1891.
- Van Eimeren, L. V., Niogi, S., McCandliss, B. D., Holloway, I. D., Ansari, D. (2008). White Matter Microstructures underlying Mathematical Abilities in Children. *NeuroReport*, *11*, 1117-1121.
- Niogi, S.N., Mukherjee, P., Ghajar, J, Johnson, C., Kolster, R., Sarkar, R., Lee, H., Meeker, H.R., Zimmerman, R., Manley, G. T., McCandliss, B. D, (2008). Extent of Microstructural White Matter Injury in Post-Concussive Syndrome Correlates with Impaired Cognitive Reaction Time: A 3 Tesla Diffusion Tensor Imaging Study of Mild Traumatic Brain Injury. *American Journal of Neuroradiology*, *29*, 967-973.
- Maurer, U., Rossion, B., & McCandliss, B. D. (2008). Category specificity in early perception: face and word N170 responses differ in both lateralization and habituation properties. *Frontiers in Human Neuroscience*, *2*(18), 1-7.
- Suh, M., Kolster, R., Niogi, S., McCandliss, B. D., Ivry, R. B., Voss, H.U., Sarkar, R., & Ghajar, J. (2008) Degree of brain connectivity predicts eye-tracking variability. *Journal of the Korean Physical Society*, *53*(6), 3468-3473.
- Varma, S., McCandliss, B. D, & Schwartz, D. L. (2008). Scientific and pragmatic challenges for bridging education and neuroscience. *Educational Researcher*, *37*, 140-152.
- Maurer U., & McCandliss B. D. (2008) The development of visual expertise for words: the contribution of electrophysiology. In E. L. Grigorenko & A. Naples (Eds.). *Single-Word Reading: Cognitive, Behavioral and Biological Perspectives*. (p.43-63). Mahwah, NJ: Lawrence Erlbaum Associates.
- Niogi, S. N., Mukherjee P., Ghajar, J., Johnson, C., Kolster, R., Lee, H., Suh, M., Zimmerman, R., Manley, G. & McCandliss B. D. (2008) Structural

- dissociation of attentional control and memory in adults with and without mild traumatic brain injury. *Brain: A Journal of Neurology*, 131, 3209-3221.
- Yang, J., McCandliss, B. D., Shu, H. & Zevin, J. D. (2009) Simulating language-specific and language-general effects in a statistical learning model of Chinese reading. *Journal of Memory and Language*, 61, 238-257.
- Maurer, U., Blau, V. C., Yoncheva, Y., & McCandliss, B. D. (2010). Development of visual expertise for reading: Rapid emergence of visual familiarity for an artificial script. *Developmental Neuropsychology*, 35(4), 404–422.
- Yoncheva, Y. N., Blau, V. C., Maurer, U., & McCandliss, B. D. (2010). Attentional focus during learning impacts N170 ERP responses to an artificial script. *Developmental Neuropsychology*, 35(4), 423-445.
- Niogi, S. N., Mukherjee P., Ghajar, J., & McCandliss B. D. (2010) Individual differences in distinct components of attention are linked to anatomical variations in distinct white matter tracts. *Frontiers in Neuroanatomy*, 4(2), 1-12.
- Yoncheva, Y. Y., Zevin, J. D., Maurer, U., & McCandliss, B. D. (2010). Auditory selective attention to speech modulates activity in the visual word form area. *Cerebral Cortex*, 20(3), 622–632.
- Zevin, J. D., Yang, J., Skipper, J. I., & McCandliss, B. D. (2010). Domain general change detection accounts for "dishabituation" effects in temporal-parietal regions in fMRI studies of speech perception. *Journal of Neuroscience*, 30, 1110-1111.
- Zevin, J. D., Datta, H., Maurer, U., Rosania, K. A., & McCandliss, B. D. (2010). Native language experience influences the topography of the mismatch negativity to speech. *Frontiers in Human Neurocscience*, 4(212), 1-12.
- McCandliss, B. D. (2010). Educational Neuroscience: the early years. *Proceedings of the National Academy of Sciences*, 107, 8049-8050.
- Hoefl, F., McCandliss, B. D., Black, J., Gantman, A., Zakerani, N., Hulme, C., Lyytinen, H., Witfield-Gabrieli, S., Glover, G., Reiss, A. L., & Gabrieli, J. D. E. (2011). Neural systems predicting long-term outcome in dyslexia. *Proceedings of the National Academy of Sciences*, 108, 361-366.
- Wise, J., Yoncheva, Y., & McCandliss, B. D. (2011). Effects of preference and strategy on learning to read an artificial script. *Indiana University Undergraduate Journal of Cognitive Science*, 6, 38-47.
- McCandliss, B. D. (2012). Microstructural properties of white matter tracts are linked to the efficiency of specific attention networks. (pp. 187-196.) In M. I. Posner (Ed.) *Cognitive Neuroscience*, 2<sup>nd</sup> Edition. New York: Guilford Press.
- McCandliss, B. D. & Yoncheva, Y.Y. (2012). Integration of left-lateralized neural systems supporting skilled reading. (pp. 315-328.) In A. Benasich & H. Fitch (Eds.) *Developmental Dyslexia: Early Precursors, Neurobehavioral Markers, and Biological Substrates*. Baltimore, MD: Paul H. Brookes Publishing.

- McCandliss, B. D. (2012). Helping dyslexic children attend to letters within visual word forms. *Proceedings of the National Academy of Sciences*, *109*, 11064-11065.
- Yang, J.F., Shu, H., McCandliss, B. D., & Zevin J.D. (2013). Orthographic influences on division of labor in learning to read Chinese and English: Insights from computational modeling. *Bilingualism: Language and Cognition*, *16*, 354-366.
- Yoncheva, Y. N., Maurer, U., Zevin, J. D., & McCandliss, B. D. (2013). Effects of rhyme and spelling patterns on auditory word ERPs depend on selective attention to phonology. *Brain and language*, *124*(3), 238-243.
- Gimenez, P., Bugescu, N., Black, J., Hancock, R., Pugh, K., Nagamine, M., Kutner, E., Mazaika, P., Hendren, R., McCandliss, B. D., & Hoeft, F. (2014) Neuroimaging correlates of handwriting quality as children learn to read and write. *Frontiers in Human Neuroscience*, *8*:155.
- Starkey, G. & McCandliss, B. D., (2014). The emergence of “groupitizing” in children’s numerical cognition. *Journal of Experimental Child Psychology* *126*, 120-137..
- Mukherjee P, McCandliss B. D. Extent of microstructural white matter injury in postconcussive syndrome correlates with impaired cognitive reaction time: A 3T diffusion tensor imaging study of mild traumatic brain injury. *American Journal of Neuroradiology News Digest*
- Weisberg, D. S., Hirsh-Pasek, K., Golinkoff, R. M., & McCandliss, B. D. (2014). *Mise en place*: setting the stage for thought and action. *Trends in Cognitive Sciences*, *18*(6), 276-278.
- Viarouge, A., Hubbard E. M. & McCandliss, B. D. (2014). The cognitive mechanisms of the SNARC effect: an individual differences approach. *PLoS One*, *9* (4), e95756.
- Yoncheva, Y., Maurer, U., Zevin, J., & McCandliss, B. D. (2014). Selective attention to phonology dynamically modulates initial encoding of auditory words within the left hemisphere. *NeuroImage*, *97* (15), 262-270
- Yoncheva, Y., Wise, J., & McCandliss, B.D. (2015). Hemispheric specialization for visual words is shaped by attention to sublexical units during initial learning. *Brain and Language*, *145*, 23-33.
- Gordon, R. L., Fehd, H. M., & McCandliss, B. D. (2015) Does music training enhance literacy skills? A Meta-analysis. *Frontiers in Psychology*. *6*: 1777



## Research grants

### Awarded

- 2014 - 2018 \$1,599,382 IES R305A130099 Co-PI: McCandliss (PI: Farran)  
Contributions to Mathematics Competency of at-risk students: the impact of executive function, approximate number system, and early mathematics skills.
- 2011 – 2016 \$3,805,778 NIH R01 HD065794 Co-PI: McCandliss (PI: Pugh)  
Neurobiological predictors of spoken and written language learning.
- 2012 – 2013 \$50,000 Vanderbilt University Discover Grant  
Co-PI: McCandliss (Co-PI: Levin).  
Exploring interactions of core cognitive systems during natural event perception.
- 2009– 2013 \$1,500,000 J.S. McDonnell Foundation Network Grant Co-PI: McCandliss (PI: Maurer). Brain CPR: Critical Periods Re-examined.
- 2009– 2013 \$1,000,000 NSF 07-595 0816063 PI: McCandliss  
Brain correlates of early math and number skills: tracing changes related to age and instruction in a natural experiment.
- 2005- 2012 \$500,000 NIH R42MH076317-02 PI: McCandliss  
Interfacing of Research Modalities in Developmental Cognitive Neuroscience
- 2007- 2011 \$1,969,295 NIH-RO1EY017699. Co-PI: McCandliss (PI: Kasner),  
Functions of the thalamus in perception and cognition.
- 2004- 2009 \$1,600,000 NSF REC-0337715 National Science Foundation  
PI: McCandliss  
Biological Bases of Alphanumeric Learning Interventions.
- 2005- 2007 \$99,098 NIH-STTR R41 MH076317 PI: McCandliss  
Interfacing of Research Modalities in Developmental Cognitive Neuroscience
- 2003- 2007 \$2,600,000 JSMF-BMB&B-2003-001  
Co-PI: McCandliss (PI: Ghajar) McDonnell Foundation Program in Bridging Mind, Brain and Behavior: Cognitive and Neurobiological Research Consortium in Traumatic Brain Injury
- 2002- 2007 \$300,000 JMSP-BDDC-2002 PI: McCandliss  
John Merck Faculty Scholar Award in Biological Bases of Developmental Disabilities: Development of Visual Word Recognition Skills: A cognitive neuroscience approach to normal function, impairment, and intervention.

2000- 2006	\$747,500	NIH/NICHHD 5 P50 HD25802-13 Project II Co-PI: McCandliss (Co-PI: Posner) (Center PI: Shaywitz): Attentional Mechanisms of Literacy Development
1999- 2004	\$748,000	National Science Foundation: BCS Program (99-07831) Co-PI: McCandliss (Co-PI: Posner)
1997- 2001	\$600,000	National Science Foundation: Learning in Intelligent Systems. Co-Investigator: McCandliss (PI: McClelland)
1998- 2001	\$600,000	McDonnell Foundation Cognitive Studies in Education Program: Enhancing Early Literacy Skills through Tutors and Computers (JSMF-CSEP-EDU 98-3) Co-PI: McCandliss (Co-PI: Beck)
1997- 2000	\$105,000	McDonnell Foundation Program in Cognitive Neuroscience Researcher Initiated Award: Brain Activations in Learning to Read: An fMRI Investigation (JSMF-RIA-CN 97-29) Co-Investigator: McCandliss (PI: Schneider)

### **Teaching** (since 2011)

#### 2015 (Stanford)

EDUC 218	Cognition and Learning: Executive Function
EDUC 266	Educational Neuroscience
EDUC 368	Cognitive Development

#### 2014 (Vanderbilt)

PSY.353.01	Advanced Seminar: Cognitive Studies - Executive Function
PSY.357.01	Seminar in Cognitive Science (Co-taught)
PSY.399.28	Ph.D. Dissertation Research
PSY.2980	Directed Research
PSY.396.02	Educational Cognitive Neuroscience
NURO.340	Systems Neuroscience (Co-taught)
NURO.345	Fundamentals of Neuroscience I. (Co-taught)
PSY.399.28	Ph.D. Dissertation Research
PSY.379.26	Non-Candidate Research
PSY.2980.14	Directed Research

#### 2013

PSY.236.01	The Visual System (Co-taught)
PSY.396.02	Special Topics in Psychology –Developmental Cognitive Neuroscience
PSY.357.01	Seminar in Cognitive Science (Co-taught)
PSY.379.26	Non-Candidate Research
PSY.399.28	Ph D Dissertation Research

## 2012

PSY.290.22	Directed Study
PSY.369.02	Master's Thesis Research
PSY.379.26	Non-Candidate Research
PSY.399.28	Ph D Dissertation Research
PSY.236.01	The Visual System (Co-taught)
PSY.379.26	Non-Candidate Research
PSY.396.02	Special Topics Psychology- Educational Cognitive Neuroscience

## 2011

NSC.291.16	Independent Readings
NSC.292.52	Undergraduate Research
PSY.290.22	Directed Study
PSY.369.02	Master's Thesis Research
PSY.379.26	Non-Candidate Research
PSY.2980.05	Directed Research
PSY.236.01	The Visual System (Co-taught)
PSY.361.01	Seminar: Cognitive Development
PSY.290.06	Directed Study
PSY.369.02	Master's Thesis Research
PSY.379.26	Non-Candidate Research
PSY.397.01	Readings & Research Psych

## **Mentorship**

### Postdoctoral Fellows:

Andrew Mattarella-Micke PhD, (current) Stanford University  
Gillian Starkey, PhD (current) Stanford University  
Jason Zevin, PhD Associate Professor, University of Southern California  
Urs Maurer, PhD Assistant Professor, University of Hong Kong  
Minna Hannula, PhD Collegium Researcher, University of Turku  
Francisca Serrano, PhD Assistant Professor, University of Granada  
Ed Hubbard, PhD Assistant Professor, University of Wisconsin  
Arnaud Viarouge, PhD Research Scientist, INSERM, France

### Doctoral Students:

Kimberly Noble, MD-PhD, Assistant Professor, Columbia University  
Maria Ruz, PhD, Assistant Professor, University of Granada  
Yuliya Yoncheva, PhD. Postdoctoral Fellow, NYU Child Study Center  
Chang Gu, PhD. Statistical Analyst, Hyundai Capital America  
Sumit Niogi, MD-PhD, Medical Resident, Weill Cornell Medical College  
Fengji Geng, PhD, Post doctoral Fellow, University of Maryland  
Leanne Moneta (PhD Candidate, Spring 2015) Vanderbilt University

## **Service**

### Grant Review:

Medical Research Council, United Kingdom Ad-hoc review  
Israel Science Foundation, Israel Ad-hoc review  
Canadian Language Learning Research Network, Canada Ad-hoc review  
NWH Council, The Netherlands Ad-hoc review  
National Science Foundation IGERT Review Panel  
National Science Foundation: Ad-hoc review  
National Institute of Health: NINDS-Cognition SEP Ad-hoc review  
National Institute of Health: LCOM-NIDCD Ad-hoc review  
National Institute of Health: MFSR-BBBP Ad-hoc review

### Associate Editor:

Frontiers in Psychology, Language Sciences

### Ad Hoc Journal Review:

Neuron, Proceedings of the National Academy of Sciences, Memory and Cognition, Public Library of Science-Biology, Developmental Psychology, Journal of Neuroscience, Journal of Experimental Psychology: Human Perception and Performance, Brain and Behavioral Sciences, Journal of Experimental Child Psychology, Cognitive and Affective Behavioral Neuroscience, NeuroImage, Journal of Cognitive Neuroscience, Cerebral Cortex, Cognition,

### University Service (since 2011)

Executive Committee, Psychology and Human Development Departmental  
Cognition and Cognitive Neuroscience Area Head, Department of Psychology  
and Human Development  
Psychology and Human Development Departmental Faculty Review Committee  
Faculty Search Committee, Speech and Hearing Sciences  
Vanderbilt Brain Institute, Steering Committee  
Vanderbilt Brain Institute, Outreach Committee, (Chair)  
Vanderbilt Brain Institute, Educational Neuroscience Committee, (Chair)  
Faculty Search Committee in Cognitive Neuroscience, Psychology Department,  
College of Arts & Science, Psychology  
Faculty Search Committee in Educational Neuroscience, Peabody College  
Curriculum Development Committee for Transinstitutional Educational  
Neuroscience PhD Program, Peabody College, Vanderbilt Brain Institute,  
College of Arts and Science  
Psychology and Human Development Department Graduate Student Recruitment  
Committee (Chair)  
Neuroscience Graduate Program Recruitment Committee  
Department "Czar" of SONA Credit Pool for Human Subjects Participation