

Curriculum Vitae
Bruce D. McCandliss, PhD

Patricia and Rodes Hart Professor, Psychology and Human Development
 Areas of specialization: Cognitive Neuroscience, Cognitive Development

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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.
 2005-2009 Associate Professor of Psychology in Psychiatry, Weill Medical College of Cornell University, New York, NY.
 2009 Professor, Patricia and Rodes Hart Chair of Psychology and Human Development, Vanderbilt University.

Honors

Primary Awards

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).

Student Awards Sponsored by B.D. McCandliss

2010	Foundation Fyssen Award to Arnaud Viarouge
2010	Fulbright Fellowship Award to Fengji Geng
2008	Fulbright Fellowship Award to <i>Fransica Serano</i> .
2006	Perry Award to <i>Marc Dubin</i> .
2005	Finish Academy Of Science Fellowship Award to <i>Minna Hannula</i> .
2005	Duvigneud Symposium Award of Excellence to <i>Sumit Niogi</i> .
2003	NIH-NRSA Postdoctoral Training Award to <i>Jason Zevin</i> .
2003	Swiss National Science Foundation Fellowship Award to <i>Urs Maurer</i> .
2002	Fulbright Fellowship Award to <i>Maria Ruz</i> .

Publications

Articles in Peer Reviewed Journals

(total SSCI citations = 2,081 2010 citations = 554)

1. Posner, M. I., & **McCandliss, B. D.** (1993). Converging methods for investigating lexical access. *Psychological Science*, **4**, 305-309.
2. **McCandliss, B. D.**, Posner, M. I., and Givòn, T. (1997) Brain plasticity in learning visual words. *Cognitive Psychology*, **33**, 88-110.
3. Posner, M. I., Abdullaev, Y., **McCandliss, B. D.** & Sereno, S. (1999) Neuroanatomy, circuitry, and plasticity of word reading. *Neuroreport*, **10**, (9) R12-23.
4. McClelland, J. L., Thomas, A., **McCandliss, B. D.** and 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.
5. Fan, J.I., **McCandliss, B. D.**, Somer, T., Raz, A., and Posner, M.I. (2002). Testing the efficiency and independence of attention networks. *Journal of Cognitive Neuroscience* **14**, 340-347.
6. **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
7. **McCandliss, B.D.**, Sandal, 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.
8. 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**, 155-182.

9. 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.
10. 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.
11. **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
12. **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.
13. **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
14. Rueda, M. R., Fan, J., **McCandliss, B. D.**, Halparin, J. D., Gruber, D. B., Lercari, L. P., et al. (2004). Development of attentional networks in childhood. *Neuropsychologia*, 42(8): 1029-1040.
15. Zevin, J. D., & **McCandliss, B. D.** (2005) Dishabituation of the BOLD response to speech sounds. *Behavioral and Brain Functions*. 1:4. (13 page paper indexed by volume number only)
16. Ruz M., Worden M. S., Tudela P., **McCandliss B. D.** (2005). Inattentional amnesia to words in a high attentional load task. *Journal of Cognitive Neuroscience*, 17(5): 768-776.
17. 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.
18. Ruz, M., Wolmetz, M.E., Tudela, P., & **McCandliss, B. D.** (2005). Two brain pathways for attended and ignored words. *Neuroimage*, 27 (4):852-61.
19. Fan, J., **McCandliss, B. D.**, Fossella, J., Flombaum, J. I., & Posner, M. I. (2005). The activation of attentional networks. *NeuroImage*. 26(2):471-9.
20. 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.
21. 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.
22. Voss, H. U., Zevin, J. D., & **McCandliss, B. D.** (2006). Functional MR imaging at 3.0 T versus 1.5 T: a practical review. *Neuroimaging Clinics of North America*., 16, 285-297.
23. Tricoli, 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 .

24. Voss, H.U., Ulug, A.M., Dyke, J.P., Watts, R., Kobylarz, E.J., **McCandliss, B.**, 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):2005-11.
25. Suh, M., Kolster, R., Sarkar R., **McCandliss, B. D.**, J. Ghajar, & CNRC TBI (2006). Deficits in predictive smooth pursuit after mild traumatic brain injury. *Neuroscience Letters*, 401 (1-2): 108-113.
26. 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.
27. 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.
28. Voss, H. U., **McCandliss, B. D.**, Ghajar, J., Suh, M. (2006) A quantitative synchronization model for smooth pursuit target tracking. *Biological Cybernetics*. Nov 03;
29. 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):203-7.
30. Noble, K. G., Farah, M. & **McCandliss, B. D.** (2006). Socioeconomic background modulates cognition-achievement relationships in reading. *Cognitive Development 21: 349-368*.
31. 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
32. 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.
33. 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): 6197-206.
34. 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 (13 page paper referenced by volume number only)
35. Schlaggar, B., & **McCandliss., B.D.*** (2007). Development of Neural Systems for Reading. *Annual Review of Neuroscience*, 30:475-503.
* Shared first authorship
36. 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.

37. Noble, K. G., **McCandliss, B. D.**, & Farah, M. (2007). Socioeconomic gradients predict individual differences in neurocognitive abilities. *Developmental Science*. 10(4): 464-480.
38. 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 doi: 10.1002/da.20308.
39. Maurer, U., Zevin, J. Z., **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.
40. 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.
41. 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
42. 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 Human Neuroscience*, 2:18, doi: 10.3389/neuro.09.018.2008.
43. Suh, M., Kolster, R., Niogi, S., **McCandliss, B.D.**, Ivry, R. B., Voss, H.U., Sarkar, R., (2008) Degree of brain connectivity predicts eye-tracking variability. *Journal of the Korean Physical Society*, 53 (6), 3468-3473.
44. Varma, S., **McCandliss, B. D.**, Schwartz, D.L., (2008). Scientific and pragmatic challenges for bridging education and neuroscience. *Educational Researcher*: 37:140-152.
45. 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 Neurology* , 131: 3209-3221
46. 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.
47. 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.
48. 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.
49. 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. PMID: PMC2831631
50. Yoncheva, Y.N., 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. PMID: PMC2820701
 51. 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 PMID: PMC2848500
 52. 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 Neuroscience*, 4:212. doi: 10.3389/fnhum.2010.00212
 53. **McCandliss, B.D.** (2010). Educational Neuroscience: the early years. *Proceedings of the National Academy of Sciences*, 107: 8049-8050
 54. Hoefft, F., **McCandliss, B.D.**, Black, J., Gantman, A., Zakerani, N., Hulme, C., Lyytinen, H., Witfield-Gabrieli, S., Glover, G., Reiss, A. L., & Gabrielli, J.D.E. (in press) Neural systems predicting long-term outcome in dyslexia. *Proceedings of the National Academy of Sciences*.

Book chapters

1. **McCandliss, B. D.** & Yoncheva, Y.Y. (in press) Integration of left-lateralized neural systems supporting skilled reading. In A. Benasich & H. Fitch (Eds.) *The Extraordinary Brain*, Paul H. Brookes Publishing.
2. Tamm, L., **McCandliss, B. D.**, Liang, B. A., Wigal, T. L., Posner, M. I., & Swanson, J. M. (in press). Can attention itself be trained? Attention training for children at-risk for ADHD. In K. McBurnett (Ed.), *Attention Deficit/Hyperactivity Disorder: A 21st Century Perspective*. New York: Marcel Dekker.
3. Maurer U., & **McCandliss B.D.** (2008) The development of visual expertise for words: the contribution of electrophysiology. p.43-63. In E. L. Grigorenko & A. Naples (Eds.). *Single-Word Reading: Cognitive, behavioral and biological perspectives*. Mahwah, NJ: Lawrence Erlbaum Associates.
4. **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.
5. **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.
6. **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.

7. 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.
8. Posner, M. I., Abdullaev, Y. G., **McCandliss, B. D.**, & Sereno, S. C. (1999). Anatomy, circuitry and plasticity of word reading. In J. Everatt (Ed.), *Reading and Dyslexia: Visual and attentional processes* (pp. 137-162). London and New York: Routledge.
9. 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.

Conference Proceedings (since 2009)

1. Hubbard E. M. & **McCandliss, B.D.** (in press). Frontal vs. parietal contributions to elementary school children's number concepts. Paper presented to the annual meeting of the Cognitive Neuroscience Society, San Francisco, CA.
2. Moneta, L. & **McCandliss, B.D.** (in press). Developmental differences between exact and approximate subtraction. Paper presented to the annual meeting of the Cognitive Neuroscience Society, San Francisco, CA.
3. Yoncheva., Y., Wise, J. & **McCandliss, B.D.** (in press). Attentional focus during learning impacts N170 lateralization to novel visual word forms. Paper presented to the annual meeting of the Cognitive Neuroscience Society, San Francisco, CA.
4. Viarogue, A., Avery, S. & **McCandliss, B.D.** (in press). White matter structure underlying individual differences in children's math and reading abilities. Paper presented to the annual meeting of the Cognitive Neuroscience Society, San Francisco, CA.
5. Starkey, G.S. & **McCandliss, B. D.** (in press). Cognitive relationships between nonsymbolic enumeration and symbolic math fluency. Paper presented to the annual meeting of the Cognitive Neuroscience Society, San Francisco, CA.
6. **McCandliss, B.D.** (2010) "Quick, How Many?" Fluency in "Subitizing" and "Groupitizing" Link to Arithmetic Skills. Paper presented to the annual meeting of the American Education Research Association, Denver, CO.
7. **McCandliss, B.D.** (2010) Principles of success and failure in reading instruction via the lens of systems neuroscience. Paper presented in minisymposium "Exploring Interdisciplinary Pathways: Enriching Neuroscience Research by Connecting to Educational Practice and Theory" to the annual meeting of the Society for Neuroscience, San Diego, CA.
8. Yoncheva, Y., Maurer, U., Zevin, J.D., **McCandliss, B.D.** (2010) Auditory rhymes: differential neural engagement for associated spelling but not acoustic similarity. Paper presented to the annual meeting of the Organization for Human Brain Mapping, Barcelona, Spain.
9. Hannula., M.H., Price, G., Ansari, D., **McCandliss, B. D.** (2010) Neural

correlates of symbolic number comparison in 6-12 year-old children. Paper presented to the annual meeting of the Organization for Human Brain Mapping, Barcelona, Spain.

10. **McCandliss B. D.**, (2009) Understanding the specific functional contribution of distinct white matter tract structures in development and dysfunctions in language and executive function. Presentation to the annual meeting of the Winter Conference on Brain Research. Denver, CO.
11. Yoncheva, Y. N., Maurer, U., Zevin, J. D., & **McCandliss, B. D.**, (2009) Attention to auditory words: ERPs reveal rhyming effects and the impact of associated visual word forms, yet both effects depend on selectively attending to speech. Presentation to the annual meeting of the Organization for Human Brain Mapping, San Francisco, CA.
12. Lewkowicz, D. J., Wallace, M., Lickliter, R., Bahrick, L., Ghazanfar, A., **McCandliss, B.D.**, (2009) The development of multisensory integration. A symposium presented to the International Multisensory Research Forum, New York, NY.
13. Schwade, J., Goldstein, M. H., Amso, D., Anderson, S.E., Spivey, M. &
14. **McCandliss, B.D.**, (2009) Paying Attention to Attention in Language Learning and Development. Symposium presented to the Society for Research in Child Development, Denver, CO.
15. Liu, R., Skipper, J., **McCandliss, B. D.**, Zevin, J., D. (2009) Neural activity underlying passive perception of Native vs. Non-native phonetic contrasts. Presentation to the annual meeting of the Cognitive Neuroscience Society, San Francisco, CA
16. Zevin, J., D. Yang, J.F., Skipper, J., **McCandliss, B.D.**, (2009) Responses to two types of behaviorally relevant variability in speech in a passive fMRI paradigm. Presentation to the annual meeting of the Cognitive Neuroscience Society, San Francisco, CA
17. Skipper, J., Liu, R., **McCandliss, B. D.**, Zevin, J., D. (2009). The brain uses co-speech gestures to set the context for speech understanding. Presentation to the annual meeting of the Cognitive Neuroscience Society, San Francisco, CA
18. McMains, S. A., Serrano F., Kung, C. C., Fox, I., **McCandliss, B. D.**, Kastner, S. (2009) Subcortical Cellular Mechanisms and Pathways in Vision. Presentation to the Society for Neuroscience, Chicago, IL.

Invited presentations (Since 2009)

International

1. **McCandliss, B. D.** (2011) McDonnell Institute on Educational Neuroscience, Atacama, Chile
2. **McCandliss, B. D.** (2011) McDonnell Network on Plasticity and Sensitive Periods, Montreal, Canada

3. **McCandliss, B. D. (2010).** Invited Plenary Speaker. 3rd Biennial Conference on Brain Development and Learning, Vancouver, CA.
4. **McCandliss, B. D. (2010).** Invited Lecture. The Dyslexia Foundation “The Extraordinary Brain Symposium”, Ashford Castle, Ireland.
5. **McCandliss, B. D. (2009).** Invited Presentation: Safra Research Center for the Study of Learning Disabilities Inaugural Conference , Haifa, Israel
6. **McCandliss, B. D. (2009).** Invited Presentation: McDonnell Network on Plasticity and Sensitive Periods, Tokyo, Japan.
7. **McCandliss, B. D. (2009).** Invited Presentation: Workshop on Developmental Neuroimaging, Amsterdam National Academy of Sciences, Amsterdam, The Netherlands.
8. **McCandliss, B. D. (2009).** Invited Presentation: International Symposium on Neural Correlates of Normal and Abnormal Reading, University of Maastricht, The Netherlands.

Domestic (within United States)

1. **McCandliss, B. D. (2011).** Invited Keynote Address, International Mind, Brain, Education Society, San Diego, CA.
2. **McCandliss, B. D. (2011).** Invited Keynote Address, American Education Research Association, Special Interest Group on Brain Science, New Orleans, LA.
3. **McCandliss, B. D. (2010).** Invited Lecture. Education Research and Development Institute (ERDI), Nashville, TN.
4. **McCandliss, B. D. (2010).** Invited Lecture. Brain Awareness Week Keynote Lecture. Adventure Science Center, Nashville, TN
5. **McCandliss, B. D. (2010).** Invited Lecture. National Science Foundation REESE PI Meeting, Washington, DC
6. **McCandliss, B. D. (2010).** Speech and Language Pathology Graduate Studies Grand Rounds Lecture. Vanderbilt University
7. **McCandliss, B. D. (2009).** Homecoming Lecture. Vanderbilt University
8. **McCandliss, B. D. (2009)** Invited Presentation. Conference on Neurocognitive Development, University of California, Berkeley, Berkeley, CA.

Research grants

Pending

2011-2016	\$4,148,1021	Preproposal Application for Supplemental Methodological Studies for the National Children’s Study: “The National Children’s Imaging Study” PI:Swanson (UC-Irvine).
2011-2016	\$4,320,000	NIH R01 “The Sensitive Period in Speech Perception” PI: Pugh (Haskins Laboratories)
2011-2016	\$816,773	NIH K01 “Neurobehavioral Investigation of Tactile

Features in Autism Spectrum Disorders”
 PI: Cascio (Vanderbilt University)

Active Awards

2008-2011	\$1,000,000	National Science Foundation: REESE project grant “Brain correlates of early math and number skills: tracing changes related to age and instruction in a natural experiment” PI: McCandliss 25% effort
2011-2012	\$8000.00	Vanderbilt International Office Travel Award. PI: McCandliss
2006-2011	\$2,781,213	NIH R01 “The Sensitive Period in Speech Perception” PI: McCandliss 45% effort
2009-2010	\$90,000	Foundation Fyssen Postdoctoral Scholarship: Arnaud Faculty Sponsor: B. D. McCandliss
2010-2011	\$45,000	Fulbright Postdoctoral Scholarship: Fengji Geng Faculty Sponsor: B. D. McCandliss
2008-2010	\$750,000	NIH-STTR Phase 2 “Interfacing of Research Modalities in Developmental Cognitive Neuroscience”. PI: McCandliss 10% effort
2008-2010	\$455,200	Distributed Phonetic Representations in the Brain PI: Zevin, Co-PI: McCandliss 10% effort
2011-2013	\$959,413	PECASE Supplement to NIH R01 “The Sensitive Period in Speech Perception” PI: McCandliss 45% effort
2007-2012	\$1,298,960	NIH-RO1. “Functions of the thalamus in perception and cognition” PI: S. Kasner, Co-PI: McCandliss 5% effort
2007-2012	\$1,500,000	J. S. McDonnell Foundation Network Grant. “Brain Critical Periods Re-examined” PI: Maurer, Co-PI: McCandliss 5% effort

Completed Awards

2008-20010	\$85,000	Fulbright Postdoctoral Scholarship: Francisca Serrano Faculty Sponsor: B. D. McCandliss (effort N/A)
2004-2009	\$1,600,000	National Science Foundation: Research On Learning and Education (NSF REC-0337715): “Biological Bases of Alphanumeric Learning Interventions”. PI: McCandliss : 25% Effort
2008-2009	\$25,000	University of Zurich Grant to Support International Collaboration: “Audio-visual integration while reading and its contribution to dyslexia: An event-related potential (ERP) and EEG source coherence study”

		PI: Maurer. Faculty Sponsor: McCandliss (effort N/A)
2006-2007	\$100,000	NIH-STTR “Interfacing of Research Modalities in Developmental Cognitive Neuroscience”. PI: McCandliss 10% effort
2003-2007	\$2,600,000	J.S. McDonnell Foundation Program in Bridging Mind, Brain and Behavior: (JSMF-BMB&B-2003-001) “Cognitive and Neurobiological Research Consortium in Traumatic Brain Injury” PI: J. Ghajar; Co-investigator: B. D. McCandliss
2002-2007	\$300,000	John Merck Faculty Scholar Award in Biological Bases of Developmental Disabilities (JMSP-BDDC-2002): “Development of Visual Word Recognition Skills: A cognitive neuroscience approach to normal function, impairment, and intervention.” PI: B.D. McCandliss
2000-2006	\$747,500	NIH/NICHD Center Grant, (Center PI: S. Shaywitz) (5 P50 HD25802-13): “Project II Attentional Mechanisms of Literacy Development” Co-Pis: M. Posner & B.D. McCandliss :
2002-2005	\$300,000	National Institute of Drug Abuse (NIDA): R21 (5 R21 DA015882-03) PI: BJ Casey; Co-Investigator, B. D. McCandliss
1999-2004	\$748,000	National Science Foundation: BCS Program (99-07831) Co-Pis: M. Posner & B.D. McCandliss
1997-2001	\$600,000	National Science Foundation: Learning in Intelligent Systems Award PI: J. McClelland; Co-Investigator: B. D. McCandliss
1998-2001	\$600,000	McDonnell Foundation Cognitive Studies in Education Program: Enhancing Early Literacy Skills through Tutors and Computers (JSMF-CSEP-EDU 98-3) Equal Co PIs: I. Beck & B.D. McCandliss
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) PI: W. Schneider; Co-Investigator: McCandliss :
2005-2007	\$80,000	Finish Academy of Sciences Faculty Sponsor: McCandliss
2003-2006	\$105,000	NIH-NRSA Postdoctoral Training Award: Development of Speech Perception (5 F32 DC006352-02) Faculty Sponsor: McCandliss
2003-2005	\$80,000	Swiss National Science Foundation Award

2002-2005 \$50,000 Faculty Sponsor: **McCandliss**
Fulbright Graduate Scholarship
Faculty Sponsor: **McCandliss**

Academic Professional Service

Extramural Professional Responsibilities

Scientific Advisor, Organization for Economic Cooperation and Economic Development, Center for Educational Research and Innovation: International Literacy Network

External Advisory Board Member, Canadian Language and Literacy Network

Advisory Board Member, International Mind, Brain, and Education Society

Office of Economic Cooperation and Development – Center for Education Research and Innovation, Paris, France Scientific Consultant,

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

Editor:

Developmental Cognitive Neuroscience: Special Issue on Educational Neuroscience (2011)

Associate Editor:

Frontiers in Language Science

Review Editor:

Frontiers in Neuroimaging

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,

Teaching

Spring 2010

PSY.1690.03 Explorations of Meditation Practice for Self and Society
NSC.292.32 Undergraduate Research
PSY.236.01 The Visual System, (Co-taught)
PSY.290.14 Directed Study
PSY.369.12 Master's Thesis Research
PSY397.03 Reading & Research in Psychology

Fall 2010

PSY.298 Directed Research
PSY.397 Readings & Research in Psychology
PSY.369.15 Master's Thesis Research
PSY.379.26 Non-Candidate Research
PSY.397.03 Reading & Research in Psychology

Fall 2009

PSY.353.01 Advanced Seminar: Educational Cognitive Neuroscience
PSY.236.01 The Visual System, (Co-taught)
PSY.2980.15 Directed Research
PSY.397.06 Readings & Research in Psychology (Sole Instructor)

Advising

Undergraduate Advising

Jessica Wise
Sarah Pearman
Mallory Messenger
Nida Shahzad
Alexandria Desire
Kayleen Hannaway
Sarah Muller

Doctoral Student Advising:

Lianne Moneta (NSF REESE Project)
Gillian Starkey (Expert Program)
Chang Gu (NIH Sensitive Periods in Language Project)
Ayzit Doydum (NIH Sensitive Periods in Language Project)
Fengji Geng (Fulbright Program Visiting Graduate Student)

Postdoctoral Fellow Advising:

Ed Hubbard, PhD (NSF REESE Project)
Arnaud Viarouge, PhD (Fissen Foundation Awardee)

Yuliya Yoncheva (Weill Cornell Medical College)

Vanderbilt University Professional Service

University Level Service

University International Delegate: University of Utrecht (Jan. 2010), Vanderbilt International Office.

Graduate Training Program, Student Poster Judge, Science Day. (February 2010)

Social Sciences Chair Search Committee, Member (McNamara, Chair).

Vanderbilt Kennedy Center Lectures Committee, Member (Wallace, Chair)

Educational Neuroscience Initiative Committee, Member (Kennedy, Chair)

Neuroscience Graduate Program Recruitment Committee, Member (Wallace. Chair)

Departmental Service

Department of Psychology (A&S) Faculty Search Committee

Department of Psychology and Human Development Faculty Search Committee

Department of Psychology and Human Development Faculty Promotion Review

Committee, Member (Reiser, Chair)

CCN Graduate Program Committee, Member (Levin/Palmeri, Chair)

Student Advising Committees

Dissertation Committee Member, Kelley Durkin

MAP Committee Member, Suk Won Han

MAP Committee Member, Kelley Durkin

MAP Committee Member, Stephen Killingsworth

Graduate Student Committee Member, Alicia Hymel

Graduate Student Committee Member, Katherine McEldoon,

Neuroscience Graduate Program Dissertation Committee Member, Andrea

Hillock,