

CURRICULUM VITAE

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POST-SECONDARY EDUCATIONAL HISTORY

Emory University, Atlanta, GA.	B.S.	1987	Biology
Washington University, St. Louis, MO	Ph.D.	1992	Neuroscience

PROFESSIONAL EMPLOYMENT AND APPOINTMENTS

2022-	Co-Director, Center for the Neural Basis of Cognition, U. of Pittsburgh
2020-	Co-Director, BRIDGE Imaging Center, U. of Pittsburgh
2008-	Professor, Dept. of Communication Sciences & Disorders, U. of Pittsburgh
2008-	Senior Scientist, Learning Research & Development Center, U. of Pittsburgh
2006-	Professor, Dept. of Psychology, U. of Pittsburgh
2006-	Professor, Dept. of Neuroscience, U. of Pittsburgh
2006-	Professor, Center for the Neural Basis of Cognition, U. of Pittsburgh
2005-	Adjunct Faculty, Department of Psychology, Carnegie Mellon U.
2016-2022	Chair, Department of Psychology, U. of Pittsburgh
2003-2006	Associate Professor, Dept. of Psychology, U. of Pittsburgh
2003-2006	Associate Professor, Dept. of Neuroscience, U. of Pittsburgh
2003-2006	Associate Professor, Center for the Neural Basis of Cognition, U. of Pittsburgh
1999-2008	Research Scientist, Learning Research & Development Ctr, U. of Pittsburgh
1998-2002	Assistant Professor, Dept. of Neuroscience, U. of Pittsburgh
1997-2002	Assistant Professor., Center for the Neural Basis of Cognition, U. of Pittsburgh
1997-2002	Assistant Professor, Dept. of Psychology, Univ. of Pittsburgh
1992-1996	Postdoctoral Research Associate, Depts. Neurology, U. of Iowa & Washing U.

HONORS, AWARDS, AND FELLOWSHIPS

2014-2016 Chair of the NIH Language and Communication Study Section
2007 Fellow, Association for Psychological Science
2002 APA Distinguished Scientific Award for Early Career Contribution to Psychology
2001 Chancellor's Distinguished Research Award
1999-2001 Alfred P. Sloan Research Fellow
1997 Wiley Young Investigator Award in Human Brain Mapping
1992-1996 Fellow, Charles A. Dana Foundation
1993 Finalist, Donald Lindsley Prize in Behavioral Neurosci., Soc. for Neuroscience
1991 Olin Fellowship for Outstanding Biomedical Research, Washington University
1987-1992 Fellow, Spencer T. Olin Foundation, Washington University
1987-1990 Fellow, National Science Foundation
1986 Phi Beta Kappa, Emory University
1983-1987 Woodruff Fellow, Emory University

PROFESSIONAL MEMBERSHIPS

2016- Member, Society for the Neurobiology of Language
2006- Member, Psychonomic Society
2006- Member, American Educational Research Association
2003- Member, Association for Psychological Science
1989- Member, Society for Neuroscience
1997- Member, Cognitive Neuroscience Society

PUBLICATIONS

Duricy E, Durikso C, Fiez JA (2023). Test-retest reliability is comparable for virtual and in-person post-stroke neuropsychological assessment. *Archives of Clinical Neuropsychology*, in press.

Koch GE, Libertus ME, Fiez JA, Coutanche MN (2023). Representations within the intraparietal sulcus distinguish numerical tasks and formats. *Journal of Cognitive Neuroscience*, 35 :226-240.

Weiss AR, Korzeniewska A, Chrabaszcz, Bush A, Fiez JA, Crone NE, Richardson RM (2023). Lexicality-modulated influence of auditory cortex on subthalamic nucleus during motor planning for speech. *Neurobiology of Language*, 4:53-80.

Norton CM, Ibinson JW, Pcola SJ, Popov V, Tremel JJ, Reder LM, Fiez JA, Vogt KM (2022). Neutral auditory words immediately followed by painful electric shock may show reduced next-day recollection. *Experimental Brain Research*, 240:2939-2951.

Ren X, Liu R, Coutanche MN, Fiez JA, Libertus ME (2022). Numerical estrangement and integration between symbolic and non-symbolic numerical information: Task-dependence

and its link to math abilities in adults. *Cognition*, 224:105067.

Wang D, Lipski W, Bush A, Chrabaszcz A, Dastolfo-Hromack C, Dickey M, Fiez JA, Richardson RM (2022). Lateralized and region-specific thalamic processing of lexical status during reading aloud. *Journal of Neuroscience*, 42:3228-3240.

Boring MJ, Silson EH, Ward MJ, Richardson RM, Fiez JA, Baker CI, Ghuman AS (2021). Multiple adjoining word- and face-selective regions in ventral temporal cortex exhibit distinct dynamics. *Journal of Neuroscience*, 41:6314-6327.

Chrabaszcz A, Wang D, Lipski WJ, Bush A, Crammond DF, Shaima S, Dickey MW, Holt LL, Turner RS, Fiez JA, Richardson RM (2021). Simultaneously recorded subthalamic and cortical LFPs reveal different lexicality effects during reading aloud. *Journal of Neurolinguistics*, 60:101019.

Dastolfo-Hromack C, Bush A, Chrabaszcz A, Lipski W, Wang D, Crammond DJ, Shaiman S, Dickey MW, Holt LL, Turner RW, Fiez JA, Richardson RM (2021). Articulatory gain predicts motor cortex and subthalamic nucleus activity during speech. *Cerebral Cortex*, 32:1337-1349.

Guediche S, Fiez JA (2021). Comprehension of Morse code predicted by item recall from working memory. *Journal of Speech, Language, and Hearing Research*, in press.

Vogt KM, Ibinson JW, Smith CT, Citro AT, Norton CM, Karim HT, Popov V, Mahajan A, Aizenstein HJ, Reder LM, Fiez JA. (2021). Midazolam and ketamine produce distinct neural changes in memory, pain, and fear networks during pain. *Anesthesiology*, 135:69-82.

Cox KM, Fiez JA (2020). Abstract inference of unchosen option values. *European Journal of Neuroscience*, 51:909-921.

Hirshorn EA, Simcox T, Durisko C, Perfetti CA, Fiez JA (2020). Unmasking individual differences in adult reading procedures by disrupting holistic orthographic perception. *PLoS ONE* 15: e0233041.

Ben-Yehudah G, Hirshorn EA, Simcox T, Perfetti CA, Fiez JA (2019). Chinese-English bilinguals transfer L1 lexical reading procedures and holistic orthographic coding to L2 English. *Journal of Neurolinguistics*, 50:136-148

Carlos BJ, Hirshorn EA, Durisko C, Fiez JA, Coutanche MN (2019). Word inversion sensitivity as a marker of visual word form area lateralization: An application of novel multivariate measure of laterality. *Neuroimage*, 191:493-502.

Chrabaszcz A, Neumann WJ, Stretcu O, Lipski WJ, Bush A, Dastolfo-Hromack CA, Wang D, Crammond DJ, Shaiman S, Dickey MW, Holt LL, Turner TS, Fiez JA, Richardson RM (2019). Subthalamic nucleus and sensorimotor cortex activity during speech production. *Journal of Neuroscience*, 39:2698-2708.

Lim SJ, Fiez JA, Holt LL (2019). Role of the striatum in incidental learning of sound

categories. *Proceedings of the National Academies of Science*, 116:4671-4880.

Martin L, Durisko C, Moore MW, Chen D, Fiez JA. The VWFA is the home of orthographic learning when house images are used as letters (2019). *eNeuro*, 6:ENEURO.0425-19.2019.

Martin L, Hirshorn EA, Durisko C, Moore MW, Schwartz R, Zheng Y, Fiez JA (2019). Do adults acquire a second orthography using their native reading network? *Journal of Neurolinguistics*, 50:120-135.

Vogt KM, Norton CM, Speer LE, Tremel JJ, Ibinson JW, Reder LM, Fiez JA (2019). Memory for non-painful auditory items is influenced by whether they are experienced in a context involving painful electrical stimulation. *Experimental Brain Research*, 237:1615-1627.

Alvarez T, Fiez JA (2018). Current perspectives on the cerebellum and reading development. *Neuroscience and Biobehavioral Reviews*, 92:55-66.

Ghuman AS, Fiez JA (2018). Parcellating the structure and function of the reading circuit [Comment]. *Proceedings of the National Academies of Science*, 115:10542-10544.

Lipski WJ, Alhourani A, Pirnia T, Jones PW, Dastolfo-Hromack C, Helou LB, Crammond DJ, Sahiman S, Dickey MW, Holt LL, Fiez JA, Turner RS, Richardson RM (2018). Subthalamic nucleus neurons differentially encode early and late aspects of speech production. *Journal of Neuroscience*, 38:5620-5631.

Liu R, Schunn CD, Fiez JA, Libertus ME (2018). The integration between nonsymbolic and symbolic numbers: Evidence from an EEG study. *Brain and Behavior*, 8:e00938.

Tremel JJ, Ortiz DM, Fiez JA (2018). Manipulating memory efficacy affects the behavioral and neural profiles of deterministic decision-making. *Neuropsychologia*, 114:214-230.

Moore MW, Fiez JA, Tompkins CA (2017). Consonant age of acquisition effects in nonword repetition are not articulatory in nature. *Journal of Speech, Language, and Hearing Research*, 60:3198-3212.

Yang Y, Dickey MW, Fiez JA, Murphy B, Mitchell T, Collinger J, Tyler-Kabara E, Boninger M, Wang W (2017). Sensorimotor experience with verb-category mapping in human sensory, motor, and parietal neurons. *Cortex*, 92:304-319.

Zelle SL, Gates KM, Fiez JA, Sayette MA, Wilson SJ (2017). The first day is always the hardest: Functional connectivity during cue exposure and the ability to resist smoking in the initial hours of a quit attempt. *Neuroimage*, 151:24-32.

Durisko C, McCue M, Doyle PJ, Dickey MW, Fiez JA (2016). A flexible and integrated system for the remote acquisition of neuropsychological data in stroke research. *Telemedicine and e-Health*, 22:1032-1040.

Fiez JA (2016). The cerebellum and language: Persistent themes and findings. *Brain and*

Language, 161:1-3.

Guediche S, Fiez JA, Holt LL (2016). Adaptive plasticity in speech perception: Effects of external information and internal predictions. *Journal of Experimental Psychology: Human Perception and Performance*, 42:1048-1059.

Hirshorn EA, Li Y, Ward M, Richardson RM, Fiez JA, Guzman AS (2016). Decoding and disrupting left mid-fusiform gyrus activity during word reading. *Proceedings of the National Academy of Sciences*, 113:8162-8167.

Hirshorn EA, Wrencher A, Durisko C, Moore MW, Fiez JA (2016). Fusiform gyrus laterality in writing systems with different mapping principles: An artificial orthography training study. *Journal of Cognitive Neuroscience*, 28:882-94.

Tremel JJ, Laurent PA, Wolk DA, Wheeler ME, Fiez JA (2016). Neural signatures of experience-based improvements in decision-making. *Behavioral Brain Research*, 315: 51-65.

Guediche S, Holt L, Laurent P, Lim SJ, Fiez JA (2015). Evidence for cerebellar contributions to adaptive plasticity in speech perception. *Cerebral Cortex*, 25:1867-77.

Liu AS, Kallai AY, Schunn CD, Fiez JA (2015). Using mental computation training to improve complex mathematical performance. *Instructional Science*, 43:463-485.

Hirshorn EA, Fiez JA (2014). Using artificial orthographies for studying cross-linguistic differences in the cognitive and neural profiles of reading. *Journal of Neurolinguistics*, 31:69-85.

Lim S-J, Fiez JA, Holt LL (2014). How may the basal ganglia contribute to auditory categorization and speech perception? *Frontiers in Neuroscience*, 8:230.

Fiez (2014). Neural basis of phonological memory. To appear in: *Neurobiology of Language* (GS Hickok, SL Small, eds).

Guediche S, Blumstein SE, Fiez JA, Holt LL (2014). Speech perception under adverse conditions: Insights from behavioral, computational, and neuroscience research. *Frontiers in Systems Neuroscience*, 7:126.

Moore MW, Brendel PC, Fiez JA (2014). Reading faces: Investigating the use of a novel face-based orthography in acquired alexia. *Brain and Language*, 129:7-13.

Moore MW, Durisko, C, Perfetti CA, Fiez JA (2014). Learning to read an alphabet of human faces produces left-lateralized training effects in the fusiform gyrus. *Journal of Cognitive Neuroscience*, 26:896-913.

Wilson SJ, Sayette MA, Fiez JA (2014). Self-control, negative affect and neural activity during effortful recognition in deprived smokers. *Social, Cognitive, and Affective Neuroscience*, 9:887-94.

Hedges JH, Adolph KE, Amso D, Beavelier D, Fiez JA, Krubitzer L, McAuley JD, Newcombe NS, Fietzpatrick SM, Ghajar J. (2013). Play, attention, and learning: how do play and timing shape the development of attention and influence classroom learning? *Annals of the New York Academy of Science*, 1292:1-20.

Simcox T, Fiez JA (2013). Collecting response times using Amazon Mechanical Turk and Adobe Flash. *Behavior Research Methods*, 10.3758/s13248-013-0345-y.

Wilson SJ, Creswell KG, Sayette MA, Fiez JA (2013). Ambivalence about smoking and cue-elicited neural activity in quitting-motivated smokers faced with an opportunity to smoke. *Addictive Behaviors*, 38 :1541-9.

Wilson SJ, Sayette MA, Fiez JA (2013). Self-control, negative affect and neural activity during effortful cognition in deprived smokers. *Social, Cognitive, and Affective Neuroscience*, Epub ahead of print.

Wilson SJ, Sayette MA, Fiez JA (2013). Neural correlates of self-focused and other-focused strategies for coping with cigarette exposure. *Psychology of Addictive Behaviors*, 27:466-476.

Kallai AY, Schunn CD, Fiez JA (2012). Mental arithmetic activates analogic representations of internally generated sums. *Neuropsychologia*, 50 :2397-407.

Tricomi E, Fiez JA (2012). Information content and reward processing in the human striatum during the performance of a declarative memory task. *Cognitive, Affective, and Behavioral Neuroscience*, 12 :361-72.

Wilson SJ, Sayette MA, Fiez JA (2012). Quitting-unmotivated and quitting-motivated cigarette smokers exhibit different patterns of cue-elicited brain activity when anticipating an opportunity to smoke. *Journal of Abnormal Psychology*, 121 :198-211.

Guediche S, Ben-Yehudah G, Fiez JA (2011). The cerebellum and language. In: *The Cambridge Encyclopedia of the Language Sciences* (P Hogan, ed), New York: Cambridge University Press, 148-150.

Moses-Kolko EL, Fraser D, Wisner KL, James JA, Sual AT, Fiez JA, Phillips ML (2011). Rapid habituation of ventral striatal response to reward receipt in postpartum depression. *Biological Psychiatry*, 15:198-211.

Chein JM, Fiez JA (2010). Evaluating models of working memory through the effects of concurrent irrelevant information. *Journal of Experimental Psychology: General*, 139:117-37.

Durisko C, Fiez JA (2010). Functional activation in the cerebellum during working memory and simple speech tasks. *Cortex*, 46:896-906.

Perfetti C, Nelson J, Liu Y, Fiez JA, Tan L-H (2010). The neural bases of reading: Universals and writing system variations. In: *The Neural Basis of Reading* (P Cornelissen, M Kringelbach, P Hansen, K Pugh, eds). Oxford: Oxford University Press, 147-172.

Fiez JA, Schunn CD (2009). Understanding the Neuroscience of Rigorous Learning. Interview (Willen L, Snider J) published in *Understanding and Reporting on Academic Rigor: A Hechinger Institute Primer for Journalists*. New York: The Hechinger Institute on Education and the Media, 11-13.

Nelson JR, Liu Y, Fiez J, Perfetti CA (2009). Assimilation and accommodation patterns in ventral occipitotemporal cortex in learning a second writing system. *Human Brain Mapping*, 30:810-20

Strick PL, Dum RP, Fiez JA (2009). Cerebellum and Non-Motor Function. *Annual Review of Neuroscience*, 32:413-34.

Ben-Yehudah G, Fiez JA (2008). Impact of cerebellar lesions on reading and phonological processing. *Annals of the New York Academy of Sciences*, 1145:260-74.

Cox KM, Aizenstein JH, Fiez JA (2008). Striatal outcome processing in healthy aging. *Cognitive, Affective, and Behavioral Neuroscience*, 8:304-17.

Tricomi E, Fiez JA (2008). Feedback signals in the caudate reflect goal achievement on a declarative memory task. *Neuroimage*, 41:1154-67.

Wilson SJ, Sayette MA, Delgado MR, Fiez JA (2008). Effect of smoking opportunity on responses to monetary gain and loss in the caudate nucleus. *Journal of Abnormal Psychology*, 117:428-34.

Ben-Yehudah, Fiez JA (2007). Development of verbal working memory. In: *Human Behavior and the Developing Brain, 2nd Ed.*, (D Coch, KW Fischer, G Dawson, eds.), New York: Guilford Press, 301-328.

Ben-Yehudah G, Guediche S, Fiez JA (2007). Cerebellar contributions to verbal working memory: beyond cognitive theory. *Cerebellum*, 63:193-201.

Goldberg RF, Perfetti CA, Fiez JA, Schneider W (2007). Selective retrieval of abstract semantic knowledge in left prefrontal cortex. *Journal of Neuroscience*, 27:3790-8.

Liu Y, Dunlap S, Fiez JA, Perfetti C (2007). Evidence for neural accommodation to a writing system following learning. *Human Brain Mapping*, 28:1223-34.

Perfetti CA, Liu Y, Fiez J, Nelson J, Bolger DJ, Tan LH (2007). Reading in two writing systems: Accommodation and assimilation of the brain's reading network. *Bilingualism: Language and Cognition*, 10:131-146.

Wilson SJ, Sayette MA, Fiez JA, Brough E (2007). Carry-over effects of smoking cue exposure on working memory performance. *Nicotine and Tobacco Research*, 9:613-9.

Ravizza SM, McCormick CA, Justus TA, Ivry RB, Fiez JA (2006). Cerebellar damage produces selective deficits in verbal working memory. *Brain*, 129:306-20.

Fiez JA, Tranel D, Seager-Frerichs D, Damasio H (2006). Specific reading and phonological processing deficits are associated with damage to the left frontal operculum. *Cortex*, 42:624-43.

Tricomi EM, Delgado MR, McCandliss BD, McClelland JL, Fiez JA (2006). Performance feedback drives caudate activation in a phonological learning task. *Journal of Cognitive Neuroscience*, 18:1029-1043.

Buckner RL, Keating JG, Martin TA, Fiez JA (2005). Seeing through prisms as a demonstration of visual-motor learning. In: *Lab Manual for Physiology: A Benjamin Cummings Custom Edition Preview Copy* (DU Silverthorn, BR Johnson, A Mills eds). San Francisco, CA: Benjamin Cummings.

Fiez JA, Buckner RL, Keating JG, Martin TA (2005). The mind, brain, and human memory: Using behavioral measures to study cognitive functions. In: *Lab Manual for Physiology: A Benjamin Cummings Custom Edition Preview Copy* (DU Silverthorn, BR Johnson, A Mills eds). San Francisco, CA: Benjamin Cummings.

Justus TC, Ravizza SM, Fiez JA, Ivry RB (2005). Reduced phonological similarity effects in patients with damage to the cerebellum. *Brain and Language*, 95:304-318.

Keating JB, Martin TA, Fiez JA, Buckner RL (2005). Altered limb position sense by muscle vibration. In: *Lab Manual for Physiology: A Benjamin Cummings Custom Edition Preview Copy* (DU Silverthorn, BR Johnson, A Mills eds). (DU Silverthorn, BR Johnson, A Mills eds). San Francisco, CA: Benjamin Cummings.

Ravizza SM, Behrmann M, Fiez JA (2005). Right parietal contributions to verbal working memory: Spatial or executive? *Neuropsychologia*, 43:2057-67.

Wilson SJ, Sayette MA, Delgado MR, Fiez JA (2005). Instructed smoking expectancy modulates cue-elicited neural activity: A preliminary study. *Nicotine and Tobacco Research*, 7:637-645.

Delgado MR, Stenger VA, Fiez JA (2004). Motivation-dependent responses in the human caudate nucleus. *Cerebral Cortex*, 14:1022-30.

Gilbert AM & Fiez JA (2004). Integrating rewards and cognition in the frontal cortex. *Cognitive, Affective and Behavioral Neuroscience*, 4:540-52.

May CJ, Delgado MR, Dahl RE, Stenger A, Ryan ND, Fiez JA, Carter CA (2004). Event-related functional magnetic resonance imaging of reward-related brain circuitry in children and adolescents. *Biological Psychiatry*, 55:359-366.

Ravizza SM, Delgado MR, Chein JM, Becker JT, Fiez JA (2004). Functional dissociations within the inferior parietal cortex in verbal working memory. *Neuroimage*, 22:562-73.

Tricomi EM, Delgado MR, Fiez JA (2004). Modulation of caudate activity by action contingency. *Neuron*, 41:281-292.

Wilson SJ, Sayette MA, Fiez JA (2004). Prefrontal responses to drug cues: a neurocognitive analysis. *Nature Neuroscience*, 7:211-214.

Chein JM, Ravizza SM, Fiez JA (2003). Using neuroimaging to evaluate models of working memory and their implications for language processing. *Journal of Neurolinguistics*, 16:315-339.

Delgado MR, Locke HM, Stenger VA, Fiez JA (2003). Dorsal Striatum Responses to Reward and Punishment: Effects of Valence and Magnitude Manipulations. *Cognitive, Affective, and Behavioral Neuroscience*, 3:27-38.

Fiez JA (2003). A user's commentary on Fiswidgets. *Neuroinformatics*, 1: 127-130.

McClelland JL, Fiez JA, McCandliss BD (2002). Teaching the /r/-/l/ Discrimination to Japanese Adults: Behavioral and Neural Aspects. *Physiology and Behavior*, 77:657-662.

Chein JM, Fissell K, Jacobs S, Fiez JA (2002). Functional heterogeneity within Broca's area during verbal working memory. *Physiology and Behavior*, 77: 635-639.

MacAndrew DK, Klatzky RL, Fiez JA, McClelland JL, Becker JT (2002). The phonological-similarity effect differentiates between two working memory tasks. *Psychological Science*, 13:465-468.

McCandliss BD, Fiez JA, Protopapas A, Conway M, McClelland JL (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. *Affective, Cognitive, and Behavioral Neuroscience*, 2:89-108.

Chein JM and Fiez JA (2001). Dissociation of verbal working memory system components using a delayed serial recall task. *Cerebral Cortex*, 11:1003-1014.

Fiez JA (2001). Bridging the gap between neuroimaging and neuropsychology: Using working memory as a case-study. *Journal of Clinical and Experimental Neuropsychology*, 23:19-31.

Fiez JA (2001). Neuroimaging studies of speech: An overview of techniques and methodological approaches. *Journal of Communication Disorders*, 34:445-454.

Fiez JA (2001). Reading, neural basis of. In: *International Encyclopedia of the Social and Behavioral Sciences* (Smelser NJ, Baltes PB, eds.). New York: Pergamon, Oxford, 12791-12796.

Roskies AL, Fiez JA, Balota DA, Raichle ME, Petersen SE (2001). Task-dependent modulation of regions in the left inferior frontal cortex during semantic processing. *Journal*

of Cognitive Neuroscience, 13:829-843.

Delgado MR, Fissell K, Nystrom LE, Noll DC, Fiez JA (2000). Tracking the hemodynamic responses to reward and punishment in the striatum. *Journal of Neurophysiology*, 84:3072-3077.

Fiez JA (2000). News and views. Sound and meaning: how native language affects reading strategies. *Nature Neuroscience*, 3:3-5.

Fiez JA, Damasio H, Grabowski TJ (2000). Lesion segmentation and manual warping to a reference brain: Intra- and interobserver reliability. *Human Brain Mapping*, 9:192-211.

Rosen H, Petersen SE, Linenweber MR, Snyder AZ, White DA, Chapman L, Dromerick WA, Fiez JA, Corbetta M (2000). Neural correlates of recovery from aphasia after damage to left inferior frontal cortex. *Neurology*, 55:1883-1894.

Sandak, R Fiez JA (2000). Stuttering: A view from neuroimaging. *Lancet*, 356:445-446.

Becker JT, MacAndrew DK, Fiez JA (1999). A comment on the functional localization of the phonological storage subsystem of working memory. *Brain and Cognition*, 41:27-38.

Fiez JA, Balota DA, Raichle ME, Petersen SE (1999). Effects of lexicality, frequency, and spelling-to-sound consistency on the functional anatomy of reading. *Neuron*, 24:205-218.

Ivry RB, Fiez JA (1999). Cerebellar contributions to cognition and imagery. In: *The New Cognitive Neurosciences* (Gazzaniga MS, ed). Cambridge, MA: The MIT Press, 999-1011.

McClelland JL, Thomas A, McCandliss BD, Fiez JA (1999). Understanding failures of learning: Hebbian learning, competition for representational space, and some preliminary experimental data. In: *Cognitive Disorders: The Neurocomputational Perspective* (Reggia J, Ruppin E, Glanzman D, eds). Oxford: Elsevier, 75-80. (Also appeared as: *Progress in Brain Research*, 121:75-80.

Desmond JE, Fiez JA (1998). Neuroimaging studies of the cerebellum: Language, learning, and memory. *Trends in Cognitive Science*, 2: 355-361.

Fiez JA, Petersen SE (1998). Neuroimaging studies of word reading. *Proceedings of the National Academy of Sciences, USA*, 95:914-921.

Petersen SE, van Mier H, Fiez JA, Raichle ME (1998). The effects of practice on the functional anatomy of task performance. *Proceedings of the National Academy of Sciences, USA*, 95:853-860.

Fiez, JA (1997). Phonology, semantics, and the role of the left inferior prefrontal cortex. *Human Brain Mapping*, 5:79-83.

Fiez JA (1997). Neuroimaging approaches to studying reading. In: *Functional Brain Imaging: Society for Neuroscience Short Course*. Washington, D.C.: Society for

Neuroscience.

Fiez JA, Raichle ME (1997). Linguistic processing. In: *The Cerebellum and Cognition* (Schmahmann J, ed). San Diego, CA: Academic Press, 233-254. (Also appeared as: The International Review of Neurobiology, Vol. 41).

Fiez JA, Tranel D (1997). Standardized stimuli and procedures for investigating the retrieval of lexical and conceptual knowledge for actions. *Memory & Cognition*, 25:543-569.

Shulman GL, Corbetta M, Buckner RL, Raichle ME, Fiez JA, Miezin FM, Petersen SE (1997). Top-down modulation of early sensory cortex. *Cerebral Cortex*, 7:193-206.

Shulman GL, Corbetta M, Buckner RL, Fiez JA, Miezin FM, Raichle ME, Petersen SE (1997). Common blood flow changes across visual tasks: I. Increases in subcortical structures and the cerebellum but not in nonvisual cortex. *Journal of Cognitive Neuroscience*, 9:624-647.

Shulman GL, Corbetta M, Fiez JA, Buckner RL, Miezin FM, Raichle ME, Petersen SE (1997). Searching for activations that generalize over tasks. *Human Brain Mapping*, 5:317-322.

Shulman GL, Fiez JA, Corbetta M, Buckner RL, Miezin FM, Raichle ME, Petersen SE (1997). Common blood flow changes across visual tasks: II. Decreases in cerebral cortex. *Journal of Cognitive Neuroscience*, 9:648-663.

Demonet JF, Fiez JA, Paulesu E, Petersen SE, Zatorre RJ (1996). PET studies of phonological processing: A critical reply to Poeppel. *Brain and Language*, 55:352-379.

Fiez JA (1996). Cerebellar contributions to cognition. *Neuron*, 16:13-15.

Fiez JA, Raichle ME, Balota DA, Tallal P, Petersen SE (1996). PET activation of posterior temporal regions during auditory word presentation and verb generation. *Cerebral Cortex*, 6:1-10.

Fiez JA, Raichle ME, Petersen SE (1996). Identification of two pathways used for verbal response selection. In: *Developmental Dyslexia: Neural, Cognitive, and Genetic Mechanisms* (Chase C, Rosen G, Sherman G, eds). Timonium, MD: York Press, pp. 227-258.

Fiez JA, Raife EA, Balota DA, Schwarz JP, Raichle ME, Petersen SE (1996). A positron emission tomography study of the short-term maintenance of verbal information. *The Journal of Neuroscience*, 16:808-822.

Fiez JA, Tallal P, Raichle ME, Miezin FM, Katz WF, Petersen SE (1995). PET studies of auditory and phonological processing: Effects of stimulus characteristics and task demands. *Journal of Cognitive Neuroscience*, 7:357-375.

Raichle ME, Fiez JA, Videen TO, MacLeod AK, Pardo JV, Fox PT, Petersen SE (1994).

Practice-related changes in human brain functional anatomy during nonmotor learning. *Cerebral Cortex*, 4:8-26.

Fiez JA, Petersen SE (1993). PET as part of an interdisciplinary approach to understanding processes involved in reading. *Psychological Science*, 4:287-293.

Petersen SE, Fiez JA (1993). The processing of single words studied with positron emission tomography. *Annual Review of Neuroscience*, 16:509-530.

Fiez JA, Petersen SE, Cheney MK, Raichle ME (1992). Impaired non-motor learning and error detection associated with cerebellar damage: A single-case study. *Brain*, 115:155-178.

Fiez JA (1992). *Functional anatomy of lexical processing: PET activation and performance studies*. Ann Arbor, MI: Ph.D. Dissertation, University Microfilms, Inc.

Petersen SE, Fiez JA, Corbetta M (1992). Neuroimaging. *Current Opinion in Neurobiology*, 2:217-222.

RECENT CONFERENCE ABSTRACTS (2012-PRESENT)

Paul S, Lear K, Chrabaszcz A, Durisko C, Fiez JA (2023). Does ADHD impact orthographic learning in people with dyslexia? (2023). Orthographic learning in adults through overt and covert reading. *Human Sentence Processing 2023*, Pittsburgh, PA.

Chrabaszcz A, Gebremedhen N, Alvarez A, Durisko C, Fiez J (2023). Orthographic learning in adults through overt and covert reading. *Human Sentence Processing 2023*, Pittsburgh, PA.

Fiez JA, Duricy E, Durisko C (2023). Comparing the reliability of virtual and in-person post-stroke neuropsychology assessment with speech and language tasks. Symposium presentation at the *Association for Research in Otolaryngology*, Orlando, FL.

Vogt K, Reddy SN, Kozdron , Burlew AC, Shafer SL, Aizenstein HJ, Reder LM, Ibinson JW, Fiez JA (2023). Modulation of human memory and pain by diverse anesthetic agents: A randomized placebo-controlled crossover 7 Tesla functional MRI study in healthy young adults. Annual meeting of the *International Anesthesiology Research Society*. San Francisco, CA.

Duricy E, Fiez JA (2022). A single-case study of left parietal damage and numeracy abilities. Annual meeting of the *Cognitive Neuroscience Society*, San Francisco.

Fiez JA, Durisko C, Duricy E, Vincent A, Brady E, Lear K (2022). Merging research and education through an undergraduate laboratory course involving aphasia assessment and student projects using the lesion method. *Society for the Neurobiology of Language*, Philadelphia, PA.

Ren X, Coutanche MN, Fiez JA, Libertus ME (2022). Integration of symbolic and non-symbolic numerical information in children: Task dependence and its link to math abilities. Annual meeting of the *Mathematical Cognition and Learning Society*, Belgium.

Ren X, Coutanche MN, Fiez JA, Libertus ME (2022). Integration of symbolic and non-symbolic numerical information in children: Task dependence and its link to math abilities. Annual *NSF Brain Initiative Meeting*, Washington DC.

Duricy E, Durisko C, Fiez JA (2021). Damage to the left intraparietal sulcus does not consistently impair numeracy abilities. Annual meeting of the *Cognitive Neuroscience Society*, online.

Ren X, Coutanche MN, Fiez JA, Libertus ME (2021). The neural basis for number processing and its relation to individual differences in adults' mathematical skills. Annual meeting of the *Society for Neuroscience*, online.

Ren X, Liu R, Coutanche M, Fiez JA, Libertus M (2021). Numerical integration between the exact and approximate number systems: Evidence for task-dependence and its link to math abilities in adults. Annual *NSF Brain Initiative Meeting*, online.

Vogt KM, Smith CT, Ibinson JW, Fiez JA (2021). Whole brain connectivity changes with midazolam sedation during task performance and period gain: A functional MRI study in healthy young adults. Annual meeting of the *International Anesthesiology Research Society*, online.

Weiss AR, Korzeniewska, Chrabaszczyk, Bush A, Fiez JA, Crone NE, Richardson RM (2021). Auditory cortex influences subthalamic nucleus activity during reading aloud. Annual meeting of the *Society for Neuroscience*, online.

Gebremedhen N, Durisko C, Duricy E, Ito K, Liew SL, Fiez JA (2020). Quality control of manual lesion tracing with automated segmentation approaches. *Society for the Neurobiology of Language*, online.

Gebremedhen N, Fraser C, Snow S, Durisko C, Berti L, Shixiiong J, Jacobs S, Fridriksson J, Fiez JA (2020). DeepMedic for automated lesion segmentation in chronic stroke. Annual meeting of the *Cognitive Neuroscience Society*. Boston, MA.

Koch GE, Durisko C, Liu R, Libertus ME, Fiez JA, Coutanche MA (2020). Neural representation of number across semantic, phonological, visual, and manual formats. Annual *NSF Brain Initiative Meeting*, Washington, DC.

Vogt KM, Ibinson JW, Mahajan AM, Aizenstein HJ, Fiez JA (2020). During acute intermittent pain, midazolam and ketamine distinctly alter functional connectivity between memory, pain, and fear response centers in the human brain. *15th Annual Symposium on Advances in Pain Research*, sponsored by the National Institutes of Health. Washington, DC.

Vogt KM, Smith CT, Mahajan A, Ibinson JW, Fiez JA (2020). Neural correlates of memory formation during period acute pain with low-dose midazolam and ketamine: A randomized

within-subject crossover functional MRI study in healthy young adult subjects. Annual meeting of the *International Anesthesiology Research Society*. San Francisco, CA.

Liu R, Koch G, Coutanche MN, Fiez JA, and Libertus M. (2019). Representing numerical information across different formats in the adult brain. Annual meeting of the *Mathematical Cognition and Learning Society*. Ottawa, Canada.

Koch GE, Liu R, Libertsu ME, Fiez JA, Coutanche MN (2019). Neural representations of number across semantic, phonological, visual, and manual formats. Annual meeting of the *Society for Neuroscience*, Chicago, IL.

Libertus E, Coutanche M, Fiez JA, Koch G, Liu R (2019). Neural integration of visual and semantic number knowledge in 4th graders and adults. Annual *NSF Brain Initiative Meeting*, Washington, DC.

Ruizhe L, Koch G, Coutanche M, Fiez JA, Libertus M (2019). Representing numerical information across different formats in the adult brain. Annual *Cognition and Learning Society Conference*, Montreal, CA.

Baalason D, Durisko C, Fiez JA (2018). A new resource for aphasia research: The Western Pennsylvania Patient Registry (WPPR) and the Remote Acquisition of Neuropsychological Data (RAND) System. Annual meeting of the *Academy of Aphasia*, Montreal, CA.

Chrabaszc A, Neumann WJ, Stretcu O, Lipski WJ, Bush A, Dastolfo-Hromack C, Wang D, Crammond DJ, Shaiman S, Dickey MW, Holt LL, Turner RS, Fiez JA, Richardson M (2018). Cortical and subcortical representations of consonant articulatory features. Annual meeting of the *Society for Neuroscience*, San Diego, CA.

Coutanche M, Fiez JA, Libertus M (2018). Neurobehavioral integration of visual and semantic number knowledge and its role for individual variation in math ability. Annual *NSF Brain Initiative Meeting*, Washington, DC.

Dastolfo-Hromack C, Alhourani A, Lipski WJ, Crammond DJ, Shaiman S, Dickey MW, Holt LL, Turner RS, Fiez JA, Richardson M (2018). Local field potentials in the human subthalamic nucleus predict scaling of speech production. Annual meeting of the *Society for Neuroscience*, San Diego, CA.

Ghuman AS, Li Y, Hirshorn EA, Richardson RM, Fiez JA (2018). Information processing dynamics in human category-sensitive ventral temporal cortex. Annual meeting of the *Organization for Human Brain Mapping*, Singapore.

Hirshorn EA, Carlos B, Durisko C, Perfetti C, Fiez JA, Coutanche MA (2018). Word inversion sensitivity as a marker of word identification style and visual word form area lateralization. Annual meeting of the *Society for Neuroscience*, San Diego, CA.

Lipski WJ, Richardson M, Bush A, Wang D, Dastolfo-Hromack C, Chrabaszc, Crammond DJ, Shaiman S, Turner RS, Fiez JA (2018). Neuronal firing in the subthalamic nucleus

encodes chunks in speech sequences. Annual meeting of the *Society for Neuroscience*, San Diego, CA.

Martin M, Durisko C, Moore MW, Fiez JA (2018). Learning to Read a Second Orthography Recruits the Visual Word Form Area and a Broader Reading Network. Annual meeting of the *Society for the Neurobiology of Language*.

Vogt KM, Ibsinson JW, Speer LE, Smith CT, Reder LM, Fiez JA (2018). Modulation of human memory by midazolam and ketamine during painful stimulation. Annual meeting of the *Society for Neuroscience in Anesthesiology and Critical Care*. San Francisco, CA.

Wang D, Lipski WJ, Bush A, Dastolfo-Hromack, Chrabaszcz A, Crammond DJ, Shaiman S, Turner RS, Fiez JA, Richardson M (2018). Differential modulation of neural activity in the ventral lateral nucleus of the thalamus during speech production. Annual meeting of the *Society for Neuroscience*, San Diego, CA.

Ward MJ, Boring MJ, Silson E, Richardson RM, Baker CI, Fiez JA, Ghuman AS (2018). Anterior fusiform naming area: a patch at the anterior tip of the fusiform causally linked to reading and language. Annual meeting of the *Vision Sciences Society*, St. Petersburg, FL.

Boring M, Ward MJ, Lipski WJ, Richardson RM, Fiez JA, Ghuman AS (2017). Functional connectivity dynamics of the left midfusiform gyrus during single, printed word presentation. Annual meeting of the *Vision Sciences Society*, St. Petersburg, FL.

Lipski WJ, Alhourani A, Prinia T, Jones PW, Dastolfo-Hromack C, Helous LB, Crammond DJ, Shaiman S, Dickey MW, Holt LL, Litman D, Turner RS, Fiez JA, Richardson RM (2017). Speech encoding in the human subthalamic nucleus. Annual meeting of the *Society for Neuroscience*, Washington, DC.

Adebiyi O, Durisko C, McCue M, Doyle PJ, Dickey MW, Fiez JA (2016). Remote acquisition of neuropsychological data through the use of a collaborative videoconferencing system. Annual meeting of the *Cognitive Neuroscience Society*. New York, NY.

Ghuman AS, Li Y, Hirshorn EA, Fiez JA, Richardson RM (2016). Information processing dynamics in human category-selective fusiform gyrus. Annual meeting of the *Vision Sciences Society*. St. Pete Beach, FL.

Hirshorn EA, Durisko C, Colarusso J, Simcox T, Fiez JA (2016). Stealth readers: Distinct reading profile of individuals with word inversion sensitivity. Annual meeting of the *Society for the Scientific Study of Reading*, Porto, Portugal.

Martin LM, Durisko C, Moore MW, Fiez JA (2016). Reading an artificial orthography results in left visual word form area activation. Annual meeting of the *Cognitive Neuroscience Society*. New York, NY.

Tremel JJ, Wheeler ME, Laurent PA, Wolk DA, Fiez JA (2016). Neural signatures of experience-based improvements in decision making. Annual meeting of the *Cognitive Neuroscience Society*. New York, NY.

Vogt KM, Ibinson JW, Tremel J, Popov V, Reder LM, Fiez JA (2016). Variability in the effect of experimental pain on long-term memory during sedation with dexmedetomidine and midazolam. Annual meeting of the *American Society of Anesthesiologists*, Chicago, IL.

Vogt KM, Ibinson JW, Tremel J, Reder LM, Fiez JA (2016). Acute experimental pain affects long-term memory of auditory cues presented during sedation with dexmedetomidine and midazolam. Annual meeting of the *International Anesthesia Research Society*, San Francisco, CA.

Vogt KM, Ibinson JW, Tremel J, Reder LM, Fiez JA (2016). Modulation of long-term auditory memory by acute pain, including during sedation with dexmedetomidine and midazolam. Annual meeting of the *Association of University Anesthesiologists*, San Francisco, CA.

Alvarez TA, Fiez JA (2015). Phonological recoding and orthographic learning: Testing the self-teaching hypothesis in young adults. Annual meeting of the *Society for the Scientific Study of Reading*, The Big Island, Hawaii.

Fiez JA (2015). Contributions of the cerebellum to reading development. Symposium on Cerebellar contributions to learning and cognition. Annual meeting of the *Cognitive Neuroscience Society*. San Francisco, CA.

Hirshorn EA, Durisko C, Moore M, Perfetti CA, Fiez JA (2015). Effects of mapping principle on the learning trajectory of two artificial orthographies. Symposium: Using dynamic learning studies to probe interactions between reading and lexical learning – Part 2. Annual meeting of the *Society for the Scientific Study of Reading*, The Big Island, Hawaii.

Liu AS, Schunn CD, Fiez JA, Libertus ME (2015). Symbolic Integration, Not Symbolic Estrangement, of Double-Digit Numbers. *Proceedings of the 37th Annual Conference of the Cognitive Science Society*, in press.

Lopresti C, Alvarez TA, Fiez JA (2014). Motor sequencing in the human cerebellum: How movement predictor and effector influence activity. Annual meeting of the *Society for Neuroscience*, Washington, DC.

Tremel JJ, Laurent PA, Wolk DA, Wheeler ME, Fiez JA (2014) Modulation of declarative memory efficacy affects neither learning rate nor the role of reinforcement learning systems in deterministic, feedback-based decision-making. Annual meeting of the *Society for Neuroscience*, Washington, DC.

Tremel JJ, Laurent PA, Wolk DA, Wheeler ME, Fiez JA (2014) Modulation of declarative memory efficacy affects neither learning rate nor the role of reinforcement learning systems in deterministic, feedback-based decision-making. Annual meeting of the *Society for Neuroscience*, Washington, DC.

Yang Y, Dickey MW, Fiez J, Murphy B, Mitchell T, Collinger J, Tyler-Kabara E, Boninger M, Wang W (2014). Concept encoding in individual neurons in motor cortex. Annual meeting of the *Society for the Neurobiology of Language*, Washington, DC.

Hirshorn E, Wrencher A, Schwartz R, Durisko C, Moore M, Fiez J (2013). Using artificial orthographies to study the neural correlates and fusiform laterality of writing systems with different grain sizes. Annual meeting of the *Society for the Neurobiology of Language*, San Diego, CA.

Moore M, Durisko C, Chen D, Brendel P, Hirshorn E, Fiez (2013). Reading houses : A house-based orthography elicits left fusiform activation. Annual meeting of the *Society for the Neurobiology of Language*, San Diego, CA.

Simcox T, Ben-Yehuda G, Perfetti C, Fiez J (2013). Word inversion reveals native language influences on lexical organization in a second language. Annual meeting of the *Society for the Neurobiology of Language*, San Diego, CA.

Simcox T, Ben-Yehuda G, Perfetti C, Fiez J (2013). Word inversion reveals native language influences on lexical organization in a second language. Annual meeting of the *Society for the Neurobiology of Language*, San Diego, CA.

Collins E, Moore M, Durisko C, Fiez J (2013). Building a better network : artificial orthographies and the serial decoding scaffold. Annual meeting of the *Society for the Neurobiology of Language*, San Diego, CA.

Lim S-J, Fiez JA, Holt LL (2013). Investigating the role of speech-selective regions during videogame-based non-speech sound category acquisition. Annual meeting of the *Society for the Neurobiology of Language*, San Diego, CA.

Moore MW, Fiez JA, Tompkins CA (2013). Differences between early-developing and late-developing phonemes: Implications for phonological deficits in SLI. Annual *Symposium on Research in Child Language Disorders*, Madison WI.

Lim S, Fiez JA, Wheeler ME, Holt LL (2013). Investigating the neural basis of video-game-based category learning. Annual meeting of the *Cognitive Neuroscience Society*, Toronto, Canada.

Simcox, T, Fiez JA (2013). Collecting response times using Amazon Mechanical Turk and Adobe Flash. Annual meeting of the *American Psychological Society*, Washington, DC.

Lim S, Fiez JA, Holt LL. (2013). Context-dependent modulation of striatal systems during incidental auditory category learning. Annual meeting of the *Society for Neuroscience*, San Diego.

Alvarez TA, Lopresti C, Durisko C, Tremel J, Fiez JA (2013). The cerebellum and cognition: Investigating functional specialization within the cerebellum. Annual meeting of the *Society for Neuroscience*, San Diego.

Lopresti C, Alvarez TA, Durisko C, Tremel J, Fiez JA (2013). The cerebellum and phonological processing: Common activation across verbal working memory and rhyme judgment tasks. Annual meeting of the *Society for Neuroscience*, San Diego.

Hirshorn EA, Wrencher A, Cordier J, Moore MW, Fiez JA (2012). Developing an alphasyllabary writing system for English: Implications for decoding and the VWFA.. Annual meeting of the *Society for the Neurobiology of Language*, Donostia, Spain.

Kallai A, Schunn CS, Fiez JA (2012). Automaticity in processing numbers that were never presented: An fMRI study. Annual meeting of the *Cognitive Neuroscience Society*, Chicago IL.

INVITED CONFERENCE AND WORKSHOP PRESENTATIONS (2012-PRESENT)

Fiez JA (2023, March). Reading now & then. Presentation at WUNIC Symposium/Petersen Festschrift, Washington University in St. Louis, St. Louis, MO.

Fiez JA (2023, February). Comparing the reliability of virtual and in-person post-stroke neuropsychology assessment with speech and language tasks. Symposium presentation at the *Association for Research in Otolaryngology*, Orlando, FL

Fiez JA (2019, November). Session presentation for *Science 2019*, University of Pittsburgh.

Fiez JA (2019, October). Keynote address at the *International Conference on Psycholinguistics in China*. Chengdu, China.

Fiez JA (2018, June). Does L1 Chinese literacy affect L2 English reading? *International Workshop on Advanced Learning Sciences 2018*. Pittsburgh, PA.

Fiez JA (2018, September). The cerebellum and reading. *Parallel Distributed Processing and the emergence of an understanding mind. Symposium in honor of James L. McClelland*. Princeton, NJ.

Fiez JA (2018, August). How does your brain specialize itself for reading? Keynote address. Annual conference of the *Society for the Neurobiology of Language*. Quebec City, CA.

Fiez JA (2018, October). The cerebellum and language. Keynote address, Annual meeting of the *Academy of Aphasia*, Montreal, CA.

Fiez JA (2015, March). Contributions of the cerebellum to reading development. Symposium on Cerebellar contributions to learning and cognition. Annual meeting of the *Cognitive Neuroscience Society*. San Francisco, CA.

Fiez JA (2015, January). Modeling bilingual reading in artificial orthographies. Talk presented at the *Netherlands Institute for Advanced Study Workshop on Second Language Reading Across Languages and Writing Systems*, Wessenaar, The Netherlands.

Fiez JA (2014, November). Rewire. Talk presented at the *Unboxed Conference* sponsored by Leadership Pittsburgh, Farmington, PA.

Fiez (2014, November). *Perspectives on educational neuroscience*. Workshop sponsored by the *Society for Neuroscience*, Washington DC.

Fiez (2014, June). Educational neuroscience and reading. *Mini-Symposium on Educational Neuroscience*, Multimodal Neuroscience Training Program, Pittsburgh, PA.

Fiez (2012, May). Play, Attention, and Learning (PAL): How Does Play and Timing Shape the Development of Attention and Facilitate Classroom Learning? Workshop sponsored by the New York Academy of Sciences. New York, NY.

RECENT DEPARTMENTAL COLLOQUIA (2012-PRESENT)

Core for Advanced Resonance Imaging, Baylor College of Medicine, January 2020

Center for Advances of Language Science, Beijing, China, October 2019

Center of Chinese Ministry of Education. Beijing, China, October 2019

Neurology Grand Rounds, University of Pittsburgh, February 2018

Huck Institutes Distinguished Lecturer, Penn State, April 2014

Neuroscience Program, University of Iowa, September 2013

Brain and Cognitive Sciences Department, MIT, October 2013

Temple Inst for Learning & Education Sciences, Temple University, October 2012

Department of Psychiatry, University of Pittsburgh, January 2012

PENDING GRANT SUBMISSIONS

None.

ACTIVE RESEARCH PROJECTS

LRDC Internal Grant 7/01/23-6/30/24

Studying the Neural Basis of Braille Literacy and Numeracy

Total costs: \$54,400

NIH T32 GM081760-01 7/1/22-6/30/27

Predocutorial Training Program in Behavioral Brain Research

Total costs: \$1,558,575

Project title: Principal Investigator

NIH U01 NS128921-01

The Neural Code and Dynamics of the Reading Network

Total costs: \$4,870,359

Project role: Co-Investigator (PI: Tandon)

LRDC Internal Grant 7/01/22-6/30/24

Testing the Efficacy and Mechanism of a Glass Analysis Method Reading Intervention
Total costs: \$148,707
Project title: Principal Investigator

NIH U01NS117836-01 9/17/20-6/30/25
Cortical-Basal Ganglia Speech Networks
Total costs: \$1,195,991
Project title: Co-Investigator (PI: Richardson)

NIH R01 HD096738-01A 9/12/19-7/31/24
Investigating the role of the cerebellum in reading
Total costs: \$3,453,356
Project role: Principal Investigator

NSF 1923129 9/1/19-8/31/22
Total costs: \$668,330
Studying the neural basis of numeracy using the lesion method
Project role: Principal Investigator

NSF 1734735 9/1/17-11/30/20
NCS-FO: Neurobehavioral integration of visual and semantic number knowledge and its role for individual variation in the math ability of children and adults
Total costs: \$982,661
Project role: Co-Principal Investigator (PI: Libertus)

NIH T32 GM081760-01 7/1/07-6/30/22
Predoctoral Training Program in Behavioral Brain Research
Total costs: \$1,558,575
Project title: Principal Investigator

PREVIOUSLY SPONSORED RESEARCH PROJECTS

NIH U01NS098969 7/30/2016-5/31/2019
Subthalamic and corticosubthalamic coding of speech production
Total costs: \$3,084,000
Subcontract to Fiez: ~ \$500,000
Project title: Co-Investigator (PI: Richardson)

NIH K18DC014577 5/01/2016-4/30/2018
Training in lesion-symptom mapping for speech-language research
Total costs: \$167,875
Project title: Principal Investigator

NIH R21MH106317 4/01/2015-3/31/17
Neural Substrates of Deterministic Decision Making
Total costs: \$401,694
Project title: Principal Investigator

NIH R21DC013568A 7/01/14-6/30/16
Remote Neuropsychological Assessment: A Proof-of-Concept Test
Total costs: \$423,500
Project title: Principal Investigator

NIH R01DC011520 04/01/12-3/31/16
Neural Basis of Verb-Argument Processing
Total costs: \$1,288,000
Subcontract to Fiez: 5% annual effort
Project title: Co-Investigator (PI: Dickey)

LRDC Internal Grants 7/1/14-6/30/16
The dangers of computation without quantitative meaning: Testing the case of symbolic
estrangement
Total costs: \$87,955
Subcontract to Fiez: ~ \$25,000
Project title: Co-Principal Investigator (PI: Libertus)

American Heart Association 1/01/14-12/31/16
Cyber-Enabled Neuropsychological Self-Assessment (CENSA) in Stroke Research
Total costs: \$150,000
Project role: Principal Investigator

NIH R01HD060388 8/15/2009-7/31/2014
Reading and the Right Fusiform
Total costs: \$1,545,000
Project role: Principal Investigator

NSF 1125719 9/01/2011-8/31/14
The Cerebellum and Language
Total costs: \$593,228
Project role: Principal Investigator

LRDC Internal Grants 7/1/11-6/30/13
The Cerebellum and Language
Total costs: \$88,209
Project title: Principal Investigator

NSF 0815945 8/15/09-7/31/11
Training in Arithmetical Fluency
Total costs: \$1,241,568
Project title: Principal Investigator

NSF/NIH Suppl Award SBE-0839229 7/1/09-6/30/10
Pittsburgh Science of Learning Center
Total costs: \$200,000
Project title: Project Principal Investigator (Center PI: Koedinger)

NIH RO1MH59256 1/1/06-12/31/11
Articulatory/Phonological Processes in Working Memory
Total costs: \$2,235,698
Project Title: Principal Investigator

NIH R01 DA018910 9/30/04-8/31/09
Pubertal Maturation and Drug Use Vulnerability
Total costs: \$1,466,875
Subcontract to Fiez: 0.6 months of annual salary
Project title: Co-investigator (PI: Dahl)

NIH R01 NS048178 7/15/05-5/31/09
fMRI in the Examination of Episodic Memory after TBI
Subcontract to Fiez: 5% annual effort
Project title: Co-investigator (PI: Ricker)

NIH R01 DA02463 1/1/06-12/31/08
Neural Bases of Executive Control in Addiction
Total costs: \$800,000
Project title: Principal Investigator

James S. McDonnell Foundation 12/01/02-5/1/07
The Functional Neuroanatomy of Reading: Comparative Research Across Writing Systems
and Levels of Expertise
Total costs: \$446,796
Project Title: Principal Investigator

Pittsburgh Mind Body Center 1/1/07-12/31/07
Attentional bias, craving, and smoking-related cues: an fMRI investigation
Project title: Co-Investigator (PI: Tindle)

Pittsburgh Science of Learning Center (NSF) 10/1/06-8/31/07
Training of arithmetical fluency
Total costs: \$27,420
Project title: Principal Investigator

NIH P50 MH64445 6/01/02-5/30/07
Toward a Neurobiologically Constrained Framework for Modeling Human Cognition.
Interactive Processes in Language: Sentence Processing
Total center costs: \$9,733,932
Subcontract to Fiez: \$438,388
Project Title: Co-Investigator (Center PI: McClelland; Project PI: McDonald)

NIH RO1MH59256 7/1/00-6/30/06
Articulatory/Phonological Processes in Working Memory
Total costs: \$1,469,319
Project Title: Principal Investigator

Pittsburgh Inst for Neurodegenerative Disorders 4/1/03-3/31/06
Functional Neuroimaging of Reward-related Processing in Parkinson's Disease
Total costs: \$25,000
Project Title: Principal Investigator

NIH 1R01 NS044837-01 10/01/02-6/30/05
Participation of the Cerebellum in Problem Solving
Total costs: \$772,000
Subcontract to Fiez: 0.6 months of annual salary support
Project Title: Co-investigator (PI: Houk)

NIH RO1 DA14103 8/01/01-12/31/05
fMRI Studies of the Neural Basis of Reward Processing
Total costs: \$879,042
Project Title: Principal Investigator

Alfred P. Sloan Foundation 9/16/99-9/15/01
Alfred P. Sloan Research Fellowship
Total costs: \$35,000
Project Title: Principal Investigator

NSF SBR 9873465 10/1/98-9/30/01
Computational Models and Coordinated Neuroimaging of Learning and Cognitive Function
Total costs: \$1,200,000
Project title: Co-Principal Investigator (PI: Schneider)

NSF IRI-9720350 10/1/97-9/30/00
The Biological Basis of Incremental Learning
Total costs: \$775,000 total award
Subcontract to Fiez: \$24,294
Project Title: Co-Principal Investigator (PI: Touretzky)

NSF IRI-9720348 10/1/97-5/31/00
Intervention Strategies that Promote Learning: Their Basis and Use in Enhancing Literacy
Total costs: \$998,161
Subcontract to Fiez: \$212,189
Project Title: Co-Principal Investigator (PI: McClelland)

PROFESSIONAL SERVICE

Member of the Editorial Board for:
Cerebral Cortex, Cerebellum, Journal of Neurolinguistics, Open Mind

Ad hoc manuscript reviewer (5-10 papers per year) for:
Brain, Brain and Language, Current Biology, Journal of Cognitive Neuroscience,
Journal of Neuroscience, Neuroimage, Neuropsychologia, Proceedings of the National

Academy of Sciences, USA

Member of the NIH Cognitive Neuroscience Study Section (June 2005-July 2009)
Member of the NIH Language and Communication Study Section (October 2011-June 2014)
Chair of the NIH Language and Communication Study Section (October 2014 – June 2016)

Ad hoc grant reviewer for the National Science Foundation, National Institutes of Health,
Neurobiology of Language Conference (2013, 2014, 2017)

UNIVERSITY AND DEPARTMENTAL SERVICE

Active service:

Co-Director, Center for the Neural Basis of Cognition (2022-present)
Co-Director, BRIDGE Center (2020-present)
Chair, Steering Committee for the BRIDGE Center (2018-2020)
Member, Dietrich School Diversity Committee (2016-present)
Member, University Research Council (2012-present)
Co-Director, Western Pennsylvania Patient Registry (2008-present)
Co-Director, Behavioral Brain Research Training Program (2007-present)

Major past service:

Member, CNBC Executive Committee (1997-2022)
Chair, Dept. of Psychology (2016-2022)
Member, Reimagining the CNBC Core Committee (2022)
Co-Manager, Neuroscience Imaging Center (2010-2019)
Member, Search Committee for the Vice-Chancellor for Research (2016-2017)
Member, CNUP Training Grant Steering Committee (2003-2016)
Member, Psychology Executive Committee (2002-2016)
Director of Graduate Studies and Chair, Graduate Education Committee (2009-2016)
Director, Hot Metal Bridge Fellowship Program in Psychology (2010-2015)
Member, Psychology Faculty Development Committee (2003-2007)
Chair, Cognitive Program in Psychology (2004-2006)
Chair, LRDC Strategic Planning Committees (2008-9, 2014)
Chair, LRDC Diversity Committee (2009-2011)
Member, LRDC Executive Committee (2003-2007)
Member, Provost's LRDC Search Committee (2007-2008)
Member, BIRC Management Committee (2002-2010)

COURSES TAUGHT

Undergraduate courses:

PSY1059: Advanced Lab: Neuropsychology of Brain Injury (20-2, 21-1)
PSY042/0421: Human Cognition (98-1, 99-1, 00-2, 01-2, 04-2, 05-2, 06-2, 08-1)
PSY1470: Brain and Cognition (99-1, 01-1, 02-1, 03-2, 07-2)
PSY1054: Emotion and the Brain (03-2, 05-1, 07-1, 10-1, 11-1, 13-1, 14-2)
PSY1059: Advanced Lab in the Neuropsychology of Brain Injury (20-2)

Graduate courses:

PSY2475: Behavioral Neuroscience (10-1, 12-1, 14-2, 16-2)
PSY2575: Perspectives on Psychology and Neuroscience (00-2, 01-2, 04-1, 06-1, 08-1)
PSY2575: Seminar on Affective Cognitive Neuroscience (01-2)
Guest lecturer in Neuro3, Graduate course in Systems Neuroscience (00-2, 02-1)
Faculty Supervisor, CNUP Journal Club (03-01)

CURRENT TRAINEE SUPERVISION

Advanced trainees:

Anna Chrabaszcz, Postdoc/Research Associate, 2017-
Keith Vogt, Assistant Professor of Anesthesiology, T32/K mentee, 2017-

Graduate (Ph.D.) student supervision:

Erin Duricy, Neuroscience, 2019-
Sachi Paul, Clinical Psychology, 2022-

STUDENT COMMITTEES (2022-2023)

Xiaoxi (Amy) Qi (Fall 2022). Undergraduate Honors Thesis
Sophia Norvilas (Fall 2022). Undergraduate Honors Thesis
Vivek Rajkumar (Fall 2022). Undergraduate Honors Thesis
Xeuying (Caroline) Ren (Spring 2023). Psychology Dissertation Proposal
Lin (Zoe) Zhou (Spring 2023). Psychology Dissertation Proposal
Toni Kolobaric (Summer 2022). Neuroscience Comprehensive Exam.
Toni Kolobaric (Fall 2022). Neuroscience Dissertation Proposal

PREVIOUS TRAINEES

Post-doctoral fellow supervision:

Keith Vogt, 2015-2017 (T32 mentor)
Assistant Professor, University of Pittsburgh
Elizabeth Hirshorn, 2012-2017
Assistant Professor, SUNY New Paltz
Arava Kallai, 2009-2012
Postdoctoral fellow, Ben Gurion University
Susan Ravizza, 2001-2004
Associate Professor, Michigan State University
Simone Sprenger, 2003-2004
Assistant Professor, University of Groningen, Netherlands
Gal Ben-Yehuda, 2004-2009
Assistant Professor, Open University, Israel
David Fraser, 2006-2009
Assistant Professor, Chatham University
Hilary Tindle, 2005-2009 (K-award co-mentor)
Associate Professor of Medicine, Vanderbilt-Ingram Cancer Center

Graduate (Ph.D.) student supervision:

Travis Alvarez, Dept. of Psychology, 2012-2019
Lecturer, Dept. of Psychology, U. of Pittsburgh
Joshua Tremel, Dept. of Psychology, 2014-2018
Data Scientist, KPMG, Seattle, WA
Michelle Moore, Dept. of Communication Sciences & Disorders, 2005-2012
Assistant Professor, Dept. of Communication Sciences, U. of West Virginia
Karin Cox, Dept. of Psychology (Cognitive), 2004-2011
Masters student in Computer Science, University of Pittsburgh
Sara Guediche, Dept. of Neuroscience, 2004-2009
Postdoctoral fellow, Basque Center on Cognition, Brain, and Language, Spain
Alison Gilbert, Dept. of Psychology (Clinical), 2001-2008
Research Scientist, Northshore Health System
Steve Wilson (co-advisor with Michael Sayette), Dept. of Psych (Clinical), 2002-2008
Associate Professor, Penn State University
Elizabeth Tricomi, Psychology (Cognitive), 2000-2006
Associate Professor, Rutgers University
Jason Chein (co-advisee with Walt Schneider), Psychology (Cognitive), 1997-2004
Associate Professor, Temple University
Mauricio Delgado, Dept. of Neuroscience, 1998-2002
Associate Professor, Rutgers University

Graduate (M.S) student supervision:

August Vincent, Psychology, 2019-2023
Current position unknown
Nadait Gebremedhen, Dept. of Psychology, 2019 - 2021
Pursuing U.S. medical licensure
Courtney Lopresti, Dept. of Neuroscience, 2010-2014
Medical content writer at Sovereign Health of California
Darshana Tuladhar, Dept. of Psychology, 2010-2013
User Research, Blink UX
Andrea Ponting, Dept. of Neuroscience, 2008-2010
Subsequently obtained a degree in Pharmacy
Dimitrios Donavos, Dept. of Psychology (Cognitive), 2000-2004
Research Adjunct, Maryland Center for Advanced Study of Language
Chris May, Dept. of Psychology (Cognitive), 2004-2006
Current position unknown