CURRICULUM VITAE

**Julie A. Fiez**

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# MAILING ADDRESS

 605 LRDC

 3939 0'Hara Street

 University of Pittsburgh

 Pittsburgh, PA 15260

# PHONE AND E-MAIL

 412-624-7078 (work)

 412-687-7392 (home)

 412-422-9149 (fax)

 e-mail: fiez@pitt.edu

# 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 virttual 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.

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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.

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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 forma area lateralization: An application of novel multivariate measure of laterality. *Neuroimage*, 191:493-502.

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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.

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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.

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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.

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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.

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

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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.

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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.

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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.

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# RECENT CONFERENCE ABSTRACTS (2012-PRESENT)

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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). Modualtion 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 Francicso.

Fiez JA, Durikso 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 Intitiative 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, Chrabaszcz, 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 Pennyslvania Patient Registry (WPPR) and the Remote Acquisition of Neuropsychological Data (RAND) System. Annual meeting of the *Academy of Aphasia*, Montreal, CA.

Chrabaszcz A Neurmann 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). Coritcal 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, Drammond 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 inverstion 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, Chrabaszcz, 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 modulaton 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

Predoctoral 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)

Search committee for Chair of Communication Sciences & Disorders (2022-2023)

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:

Chair, Steering Committee for the BRIDGE Center (2018-2020)

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