MARINA BEDNY
Curriculum Vitae
Assistant Professor
Johns Hopkins University
Department of Psychological & Brain Sciences
3400 N. Charles Street, Baltimore, MD 21218
marina.bedny@jhu.edu

RESEARCH INTERESTS

How do nature and nurture contribute to the human mind and brain? Our lab investigates this age-old question using the methods of cognitive neuroscience and experimental psychology. A key approach in the lab compares the minds and brains of people with different developmental experiences: sighted, congenitally blind and late-blind individuals. One direction of research examines how people who are born blind think about "visual" concepts, such as *blue glow* and *stare*. In what way are the cognitive and neural representations of these categories different and similar across sighted and blind people? Another line of work examines the function of "visual" cortices in blind individuals. What functions do visual cortices acquire in blindness and how similar are these new functions to the typical visual functions of occipital cortices? Is plasticity during childhood different than plasticity in adulthood and if so in what way?

ACADEMIC POSITIONS

2013 to present – Assistant Professor, Department of Psychological and Brain Sciences
Johns Hopkins University
2013 to present – Joint Appointment in the Department of Cognitive Science
Johns Hopkins University
2008 to 2012 – Postdoctoral Fellow, Department of Brain and Cognitive Sciences
Massachusetts Institute of Technology
2006 to 2008 – Postdoctoral Fellow, Berenson-Allen Center for Noninvasive Brain Stimulation
Harvard Medical School (Beth Israel Deaconess Medical Center)

EDUCATION

2006 – Ph.D. in Experimental Psychology, University of Pennsylvania
2002 – M.A. in Experimental Psychology, University of Pennsylvania
2001 – B.A. in Cognitive Science, Johns Hopkins University

PUBLICATIONS

Books & Chapters

1. **Bedny M.** & Caramazza A. Section Editors: Concepts and Core Domains In: Gazzaniga, Mangun, Poeppel *The Cognitive Neurosciences*. 6/e MIT Press; in press.
2. **Bedny M** & Caramazza A. Introduction to Concepts and Core Domains. In: Gazzaniga, Mangun, Poeppel, *The Cognitive Neurosciences*. 6/e MIT Press; in press.

3. **Bedny M**. The contribution of sensory-motor experience to the mind and brain. In: Gazzaniga, Mangun, Poeppel, *The Cognitive Neurosciences*. 6/e MIT Press; in press.
4. **Bedny M**., Paus, T., Doesburg, S.M., Giedd, J. Rowshanak, H., Kolb, B., Purdon, P.L., Rakic, P., Sisk, C.L. (2018) Understanding effects of experience on neurocognitive development through the lens of early adolescence. Benasich, A. A., and U. Ribary, eds. 2018. *Manifestations and Mechanisms of Dynamic Brain Coordination over Development*. Strüngmann Forum Reports, vol. 25, J. Lupp, series editor. Cambridge, MA: MIT Press.
5. **Bedny M**. & MacSweeney Insights into the neurobiology of language from individuals born blind or deaf. In: Hagoort P, *Human Language from Genes to Brains to Behavior*. MIT Press; in press.

Journal Articles, Under Review (bioRxiv/PsyArXiv, under review)

1. Loiotile, R.E., Cusack, R., **Bedny, M.** (under review) Naturalistic stories synchronize "visual" cortices across congenitally blind individuals.
2. Pant, R., Kanjlia, S., **Bedny, M.** (under review, posted 2019) A sensitive period in the neural phenotype of language in blind individuals. *bioRxiv*
3. Kanjlia, S. Feigenson, L., **Bedny, M.** (under review, posted 2019) Neural basis of approximate number system develops independent of visual experience. *bioRxiv*.
4. Kim, J.S., Elli, G.V., **Bedny, M.** (under review, posted 2019). Furry hippos and scaly sharks: Knowledge of animal appearance among sighted and blind individuals. *PsyArXiv*.
5. Loiotile, R.E., Lane, C., Omaki, A., **Bedny, M.** (under review, posted 2019). Enhanced sentence processing abilities among congenitally blind adults. *PsyArXiv*.
6. Loiotile, R.E., Kanjlia, S., **Bedny, M.** (under review, posted 2018) Visual "cortices" of congenitally blind adults respond to executive demands. *bioRxiv*.

Journal Articles, Published & Peer Reviewed

1. **Bedny, M.** Koster-Hale, J., Elli, G., Yazzolino, L., Saxe, R. (2019). There's more to "sparkle" than meets the eye: Shared knowledge of vision and light verbs among congenitally blind individuals. *Cognition*.
2. Elli, G. V., Lane, C. & **Bedny, M.** (2019) A double dissociation in sensitivity to verb and noun semantics across cortical networks. *Cerebral Cortex, bhz014*
3. Kanjlia, S., Pant, R. & **Bedny, M.** (2018). Sensitive period for cognitive repurposing of human visual cortex. *Cerebral Cortex, bhz280*
4. Kanjilia, S., Feigenson, L., **Bedny, M.** (2018). Numerical cognition is resilient to dramatic changes in early sensory experience. *Cognition*. 179, 111-120.
5. Kim, J. S., Kanjlia, S., Merabet, L. B., & **Bedny, M.** (2017). Development of the Visual Word Form Area Requires Visual Experience: Evidence from Blind Braille Readers. *Journal of Neuroscience*, *37*(47), 11495–11504.
6. **Bedny, M.** (2017) Evidence from blindness for a cognitively pluripotent cortex. *Trends in Cognitive Science. 21*(9), 637-648.
7. Lapinskaya, N., Uzomah, U., **Bedny, M.**, & Lau, E. (2016). Electrophysiological signatures of event words. Dissociating syntactic and semantic category effects in lexical processing. *Neuropsychologia*, *93*(Part A), 151–157.
8. Lane, C., Kanjlia, S., Richardson, H., Fulton, A., Omaki, A., & **Bedny, M.** (2016). Reduced Left Lateralization of Language in Congenitally Blind Individuals. *Journal of Cognitive Neuroscience*, *6*, 1–14.
9. Kanjlia, S., Lane, C., Feigenson, L., & **Bedny, M.** (2016). Absence of visual experience modifies the

neural basis of numerical thinking. *Proceedings of the National Academy of Sciences*, *113*(40), 11172–11177.
10. Lane, C., Kanjlia, S., Omaki, A., & **Bedny, M.** (2015). "Visual" cortex of congenitally blind adults responds to syntactic movement. *Journal of Neuroscience*. 35(37): 12859-12868.
11. **Bedny, M.,** Richardson, H., & Saxe, R. (2015). "Visual" cortex responds to spoken language in blind children. *Journal of Neuroscience*. 35(33): 11674-11681.
12. Deen, B., Saxe, R., **Bedny, M.** (2015). Occipital cortex of blind individuals is functionally coupled with executive control areas of frontal cortex. *Journal of Cognitive Neuroscience.* 27(8): 1633-1647
13. Koster-Hale, J., **Bedny, M.**, Saxe, R. (2014). Thinking about seeing: Perceptual sources of knowledge are encoded in the theory of mind brain regions of sighted and blind adults. *Cognition*. 133: 65-78
14. **Bedny, M.,** Dravida, S., & Saxe, R. (2014). Shindigs, brunches, and rodeos: The neural basis of event words. *Cognitive, Affective, & Behavioral Neuroscience*. 14(3): 891-901
15. Dravida, S., Saxe, R., **Bedny, M.** (2013). People can understand visual motion without activating visual motion brain regions. *Frontiers in Psychology.*
16. Strnad L, Peelen MV, **Bedny M**, Caramazza A (2013). Multivoxel Pattern Analysis Reveals Auditory Motion Information in MT+ of Both Congenitally Blind and Sighted Individuals. *PLoS ONE.*
17. **Bedny, M.** & Saxe, R. (2012) Insights into the origins of knowledge from the cognitive neuroscience of blindness. *Cognitive Neuropsychology*. 29(1-2): 56-84.
18. Gweon, H., Dodell-Feder, D., **Bedny, M.**, Saxe, R. (2012). Theory of Mind performance in children correlates with functional specialization of brain regions recruited for thinking about thoughts. *Child Development*. 83(6): 1853-1868.
19. **Bedny, M.,** Caramazza, A., Pascual-Leone, A., Saxe, R. (2012). Typical neural representations of action verbs develop without vision. *Cerebral Cortex*. 22(2): 286-193.
20. **Bedny, M.,** Pascual-Leone, A., Saxe, R. (2011). A sensitive period for language in the visual cortex: Distinct patterns of plasticity in congenitally versus late blind adults. *Brain and Language*. 122(3): 162-170.
21. **Bedny, M.** & Caramazza, A. (2011). Perception, action, and word meanings in the human brain: the case from action verbs. *Annals of the New York Academy of Sciences*. 1224: 81–95.
22. **Bedny, M.,** Pascual-Leone, A., D. Dodell-Feder, Fedorenko, E., Saxe, R. (2011). Language processing in the occipital cortices of congenitally blind adults. *Proceedings of the National Academy of Sciences.* 108(11): 4429–4434.
23. Dodell-Feder, D., Koster-Hale, J., **Bedny, M.,** Saxe, R. fMRI item analysis in a theory of mind task. (2011). *Neuroimage*. 55(2): 705-712.
24. **Bedny, M.**, Konkle, T., Pelphrey, K., Saxe, R., Pascual-Leone, A. (2010). Sensitive period for a multi-modal response in human visual motion area MT/MST. *Current Biology.* 20(21): 1900-1906.
25. **Bedny, M.,** Pascual-Leone, A., Saxe, R. (2009). Growing up blind does not change the neural bases of Theory of Mind. *Proceedings of the National Academy of Sciences.* 106(27): 11312-11317.
26. **Bedny, M.,** Caramazza, A., Grossman, E., Pascual-Leone, A. and Saxe, R. (2008). Concepts are more than percepts: the case of action verbs. *Journal of Neuroscience.* 28(44): 11347-11353.
27. **Bedny, M.,** McGill, M., Thompson-Schill, S.L. (2008). Semantic adaptation and competition during word comprehension. *Cerebral Cortex.* 18(11): 2574-2585.
28. **Bedny, M.,** Aguirre, G. K., Thompson-Schill, S. L. (2007). Item analysis in functional magnetic resonance imaging. *Neuroimage*. 35: 1093-1102.
29. **Bedny, M.,** Hulbert, J. C., Thompson-Schill, S. L. (2006). Understanding words in context: the role of Broca's area in word comprehension. *Brain Research*. 1146: 101-104.
30. **Bedny, M.,** & Thompson-Schill, S. L. (2006). Neuroanatomically separable effects of imageability and grammatical class during single-word comprehension. *Brain and Language*. 98(2): 127-139.
31. Thompson-Schill, S. L., **Bedny, M.,** & Goldberg, R. F. (2005). The frontal lobes and the regulation of mental activity. *Current Opinion Neurobiology*. 15(2): 219-224.

32. Bedny, G., Karwowski, W. & **Bedny, M.** (2001). The principle of unity of cognition and behavior: Implications of activity theory for the study of human work. *International Journal of Cognitive Ergonomics.* 5(4): 401-420.

INVITED TALKS

1. Contributions of experience to mind & brain: Insights from studies of language in blindness, Conference on Human Sentence Processing (CUNY), March 2019, Denver, CO
2. Resilience & flexibility in the human brain: evidence from cognitive neuroscience studies of blindness, Colloquium at The Smith-Kettlewell Eye Research Institute, San Francisco, CA
3. Contributions of experience to mind & brain: Insights from studies of language in blindness, Colloquium at Department of Linguistics, New York University, March 2019, New York, NY
4. Nature and nurture in neurocognitive development: Insights from studies with blind individuals. Cognitive and Cognitive Neuroscience Southwest Regional Conference, September 2018, Rice University, Houston, TX.
5. Nature and nurture in neurocognitive development: Insights from studies with blind individuals. FLUX Society for Human Brain Development, August 2018, Berlin, Germany.
6. Nature and nurture in neurocognitive development. Science of Learning Institute, Johns Hopkins University, December 2017. Baltimore MD
7. Nature and nurture in neurocognitive development: insights from studies of plasticity in blindness. Helen at Wills Neuroscience Institute and the Cognitive Neuroscience Group in the Department of Psychology University of California, Berkeley, September 2017, Berkeley, CA.
8. The Power of the Mind: Research Exploring the Capacity of the Blind. Invited Talk: National Federation of the Blind Annual Convention, July 2017, Orlando, Florida.
9. Influence of experience on concepts and brain development. Social Cognitive Neuroscience of Thought Summer School, June 2017, Siena, Italy.
10. How sensory experience shapes the human mind and brain: insights from empirical investigations of cognition in blindness. American Philosophy Association Pacific Division Meeting in Seattle, Session on Sensory Transformation and Disability, April 2017, Seattle, WA.
11. Invited Discussant Ernst Struengmann Forum on "Manifestations and Mechanisms of Dynamic Brain Coordination over Development" at Frankfurt Institute for Advanced Studies, March 2017, Frankfurt, Germany.
12. Effects of experience on neurocognitive development: insights from studies of blindness. Colloquium at the UC-Davis Center for Mind & Brain, March 2017, Davis, CA.
13. Nature and Nurture in Human Brain Development: Insights from Studies with Blind Individuals. Distinguished Lectures in Educational Neuroscience 2016-2017, Gallaudet University, October 2016, Washington, DC.
14. The neural basis of events. Event Structure Invited Symposium, Cognitive Science Society Annual Meeting, August 2016, Philadelphia, PA.
15. Language processing in the visual cortex of blind individuals. Neural Plasticity Workshop: Insights form Deafness and Language, University of College London, June 2016, London, UK.
16. Nature and Nurture in Neurocognitive Development. Villanova Psychology Department Colloquium, February, 2016, Villanova, PA.
17. Nature and Nurture in Neurocognitive Development. Cognitive Development Society Preconference: "Early development, conceptual change, and continuity: Insights from cognitive neuroscience." October 2015, Columbus, OH.

18. Nature and Nurture in Neurocognitive Development. Beijing Normal University, School of Brain and Cognitive Sciences. June 2015, Beijing, China.
19. Nature and Nurture in Neurocognitive Development. Peking University, School of Brain and Cognitive Sciences. June 2015, Beijing, China.
20. Developmental experience drives functional specialization in human cortex. Rovereto Workshop on Concepts, Objects and Actions, May 2015, Rovereto, Italy
21. Nature and Nurture in Neurocognitive Development. Center for Brain Plasticity and Recovery, Georgetown University Medical Center, October 2015, Washington, DC.
22. Session Organizer, Session on Neuroplasticity and Development, German-American Kavli Frontiers of Science Symposium, April, 2014, Irvine, CA.
23. Nature & nurture in human cognition: evidence from studies of blindness, University of Pennsylvania Center for Cognitive Neuroscience Colloquium Series, January 2014, Philadelphia, PA.
24. Insights into the origins of language from studies of blindness. Johns Hopkins University, Department of Cognitive Science, Colloquium, September 2013, Baltimore, MD.
25. Visual cortex invaded by higher cognitive functions as a result of early blindness. Optical Society of America Annual Meeting, October 2013, Houston, TX.
26. Insights into abstract thought from studies of blindness, University of Maryland Neuroscience and Cognitive Science Seminar Series, October 2013, College Park, MD.
27. Insights into nature and nurture from studies of blindness, Blind Brain Workshop, University of Pisa, October 2013, Pisa, Italy.
28. Nature & nurture in human cognition: evidence from studies of blindness. University of Maryland Cognitive Science Colloquium, December 2013, College Park, MD.
29. Nature & nurture in neurocognitive development. May 2013, Royal Society Meeting on Blindness and Visual Development, Chicheley, UK.

REPRESENTATIVE CONFERENCE PRESENTATIONS

1. Sub-specialization of “visual” cortex for multiple higher-cognitive functions in blindness. *Kanjlia, S., Loiotile., R., Harhen, N., **Bedny, M.**, Cognitive Neuroscience Society Annual Meeting, March 2019, San Francisco, CA. *Postdoctoral award
2. “Visual” cortex activity during non-visual tasks is “cross-modal” in late but not congenital blindness. Loiotile, R., **Bedny, M.,** Cognitive Neuroscience Society Annual Meeting, March 2019, San Francisco, CA. *Blitz Talk
3. Visual cortices assume distinct cognitive functions in congenital and adult-onset blindness, Pant R., Kanjlia S., Lane C., **Bedny M.**, Society for Neuroscience Annual Conference, November 2017, Washington DC
4. A sensitive period for the modification of the language network in blindness, Society for the Neurobiology of Language Annual Conference, November 2017, Pant R., Kanjlia S., Lane C., **Bedny M.,** Baltimore, MD
5. fMRI-Guided Theat Burst Stimulation to the Superior Temporal Cortex Impairs Sentence Processing. **Bedny, M.,** Kim, J., Cantarero, G., Celnik, P. Cognitive Neuroscience Society Annual Meeting, March, 2017, San Francisco, CA. *Blitz Talk
6. Intraparietal sulcus codes for auditory quantities. Kanjlia, S., Feigenson, L. & **Bedny, M**. Cognitive Neuroscience Society Annual Meeting, March, 2017, San Francisco, CA.
7. Blind individuals do not develop a reading area in ventral occipitotemporal cortex. Kim, J., Kanjlia, S.,

Merabet, L., **Bedny, M.** Cognitive Neuroscience Society Annual Meeting, March, 2017, San Francisco, CA.

8. The neural representation of verbs and nouns meaning. Elli, G., Lane, C., **Bedny, M.** Cognitive Neuroscience Society Annual Meeting, March, 2017, San Francisco, CA.
9. Neural representations of person types overlap with Theory of Mind regions. Lane, C., Elli, G., **Bedny, M**. Cognitive Neuroscience Society Annual Meeting, March, 2017, San Francisco, CA.
10. Lane, C., Kanjlia, S., Omaki, A., & **Bedny, M.** Atypical language lateralization in congenital blindness. Society for Neurobiology of Language 7th Annual Meeting, October, 2015, Chicago, IL.
11. Kim, J.S., Kanjlia, S. & **Bedny, M.** Braille Reading in the visual vortex of blind individuals. Society for Neurobiology of Language 7th Annual Meeting, October, 2015, Chicago, IL. *Graduate Student Abstract Merit Award Winner
12. Kanjlia, S., Kim, J.S. & **Bedny, M.** Braille processing in visual cortex of congenitally blind individuals. Society for Neuroscience 45th Annual Meeting, October, 2015, Chicago, IL.
13. Elli, G. V., Landau, B., **Bedny, M.** How children reason about perception in people with different sensory experience: Evidence from verbs of perception. Cognitive Development Society Annual Meeting, October, 2015, Columbus, OH.
14. **Bedny, M.,** Lane, C., Kanjlia, S, Feigenson, L, Omaki, A. Evidence for A Pluripotent Brain: Higher Cognitive Functions in Visual Cortex of Blind Individuals. The 5th International Conference on Cognitive Neurodynamics. June, 2015, Sanya, China
15. Kanjlia, S., Lane, C., Feigenson, L., & **Bedny, M**. Visual cortex of congenitally blind adults responds to symbolic math. (Talk) Vision Sciences Society 15th Annual Meeting, May, 2015, St. Petersburg, FL.
16. Kanjlia, S., Lane, C., Feigenson, L., & **Bedny, M.** Numerical abilities develop independent of visual experience. Cognitive Neuroscience Society 22nd Annual Meeting, March, 2015, San Francisco, CA.
17. **Bedny, M.,** Lane, C., & Kanjlia, S. Higher-order cognitive functions in the "visual" cortex of congenitally blind adults. Cognitive Neuroscience Society 22nd Annual Meeting, March, 2015, San Francisco, CA.
18. Lane, C., Kanjlia, S., Omaki, A., & **Bedny, M.** Domain specific higher-cognitive responses in "visual" cortex of blind adults. Society for Neuroscience 15th Annual Meeting, November, 2014, Washington D.C.
19. Kanjlia, S., Lane, C., Feigenson, L., & **Bedny, M.** Neural substrates of numerical processing develop independent of visual experience. Society for Neuroscience 44th Annual Meeting, November, 2014, Washington D.C. *Graduate Student Abstract Award Winner
20. Lane, C., Kanjlia, S., Omaki, A., & **Bedny, M.** Sensitivity to syntactic complexity in visual cortex of blind adults. (Talk) Annual Neurobiology of Language Conference, August, 2014, Amsterdam, Netherlands.
21. **Bedny, M.,** Deen, B., Saxe, R. (Talk) Higher order cognitive functions in the visual cortex of blind adults. Society for Neuroscience. November, 2013, San Diego, CA.
22. Koster-Hale, J., **Bedny, M.,** Saxe, R. (2013). Thinking about Seeing: Perceptual sources of knowledge are encoded similarly in the theory of mind brain regions of sighted and blind adults. Society for Neuroscience, 2013, San Diego CA ("Hot topic" award).
23. **Bedny, M.,** Richardson, H., Pu., H., Saxe, R. Emergence of visual cortex plasticity in congenitally blind children. Cognitive Neuroscience Society Annual Meeting, 2011, San Francisco, CA.
24. **Bedny, M.** Symposium Chair. Effects of developmental experience on neurocognitive development: insights into the origins of human cognition. Development of language without vision at the Cognitive Development Society's Biennial Meeting, October, 2011, Philadelphia, PA.
25. Dodell-Feder, D., **Bedny, M.,** Saxe, R. fMRI item analysis in a theory of mind task. Human Brain Mapping Annual Meeting, 2010, Barcelona, Spain.
26. **Bedny, M**., Dodell-Feder, D., Fedorenko, E., Pascual-Leone, A., Saxe, R. (Talk) Language processing in the occipital cortex of congenitally blind adults. Annual Neurobiology of Language Conference, November, 2010, San Diego, CA.

27. **Bedny, M**., Dodell-Feder, D., Fedorenko, E., Hawkins, E., Kanwisher, N., Pascual-Leone, A., Saxe, R. (Talk) Left occipital cortex of congenitally blind adults responds to grammatical structure. Cognitive Neuroscience Society Annual Meeting, 2010, Montreal, QC.
28. **Bedny, M.,** Caramazza, A. Konkle, T., Pascual-Leone, A., Saxe, R. (Talk) Effects of visual deprivation on action verb representations in the lateral-temporal-cortex: evidence from congenitally blind adults. Cognitive Neuroscience Society Annual Meeting, 2009, San Francisco, CA.
29. **Bedny, M**. Konkle, T., Saxe, R., Pascual-Leone, A. (Talk) Plasticity in the visual motion system of congenitally and late blind adults. Society for Neuroscience Annual Meeting, 2009, Chicago, IL.
30. Gweon, H., Dodell-Feder, D., **Bedny, M.**, Olson-Brown, R., Saxe, R. Developmental change in the neural mechanisms of Theory of Mind. Poster presented at the Society for Neuroscience Annual Meeting, 2009, Chicago, IL.
31. **Bedny, M.,** Caramazza, A., Grossman, E., Pascual-Leone, A. and Saxe, R. Are word meanings "webs of sensations"? Counterevidence from an fMRI study of motion and non-motion words. Poster presented at the Cognitive Neuroscience Society Annual Meeting, 2008, San Francisco, CA.
32. **Bedny, M.,** Chen, L., Pascual-Leone, A. and Saxe, R. (Talk) Recruitment of visual cortex for language in early-blind adults increases with age. Society for Neuroscience Annual Meeting, 2008, Washington, DC.
33. Saxe, R., **Bedny, M.,** Scholz, J. Pascual-Leone, A. Reasoning about beliefs in blind and sighted: A modality-independent neural substrate of theory of mind. Poster presented at the Cognitive Neuroscience Society Annual Meeting, 2008, San Francisco, CA.
34. Quintero, A. Scholz, J. **Bedny, M.**, Saxe, R. The Brain Response to Theory of Mind Generalizes Across Items and Modalities. Poster presented at the Cognitive Neuroscience Society Annual Meeting, 2008, San Francisco, CA.
35. **Bedny, M.,** Caramazza, A., Grossman, E., Pascual-Leone, A. and Saxe, R. Concepts are not "webs of sensation": Evidence from motion words. Paper presented at the Cognitive Science Society Annual Meeting, 2008, Washington D.C.
36. **Bedny, M.,** McGill, M., & Thompson-Schill, S. L. Banks, organs and even chickens: The role of the left inferior frontal gyrus in resolving lexical ambiguity. Poster presented at the Cognitive Neuroscience Society Annual Meeting, 2007, New York, NY
37. **Bedny, M.,** Geoffrey A. K. & Thompson-Schill, S.L. Item analysis applied to neuroimaging: solving the mystery of reversible grammatical class effects. Poster presented at the 6th International fMRI meeting and Autumn School, 2006, Sorrento, Italy.
38. **Bedny, M.**, Geoffrey A. K. & Thompson-Schill, S.L. Item analysis applied to neuroimaging: solving the mystery of reversible grammatical class effects. Poster presented at the Cognitive Neuroscience Society Annual Meeting, 2006, San Francisco, CA.
39. **Bedny, M.**, Hulbert, N. & Thompson-Schill, S. L. Contextual meaning selection during comprehension of homonymous and polysemous words. Poster presented at the Cognitive Neuroscience Society Annual Meeting, 2005, New York, NY.
40. **Bedny, M.**, Starace, N. & Thompson-Schill, S. L. The neural correlates of imageability and grammatical class: an event related fMRI study. Poster presented at the Cognitive Neuroscience Society Annual Meeting, 2004, San Francisco, CA.

CONFERENCE ORGANIZATION

2018 – present Program Committee Chair Society for the Neurobiology of Language

HONORS/AWARDS

2013 – Kavli Frontiers Fellow of the National Academy of Sciences

2007 to 2011, Grant from Clinical Loan Repayment Program of the National Institute on Deafness and Other Communication Disorders at NIH
2005 – Fellow, Summer Institute in Cognitive Neuroscience, Dartmouth College, Hanover New Hampshire
2002 – Honorable Mention, National Science Foundation Graduate Fellowship
2001 – Bachelors of Arts with Honors in Cognitive Science, Johns Hopkins University
2001 – Phi Beta Kappa Honors Society, Johns Hopkins University

MEMBERSHIPS

2018 – present	Board Member Society for the Neurobiology of Language
2008 – present	Member, Society for Neuroscience
2008 – present	Member, Society for the Neurobiology of Language
2001 – present	Member, Cognitive Neuroscience Society
2011 – present	Member, Cognitive Development Society
2009 – present	Member, Cognitive Science Society

AD-HOC REVIEWER

Brain and Language
Cerebral Cortex
Cognition
Cognitive Neuroscience
Current Biology
Journal of Cognitive Neuroscience
Journal of Experimental Psychology: Learning, Memory and Cognition
Journal of Experimental Psychology: General
Journal of Neuroscience
Language and Cognition
Neuron
Neuroimage
Proceedings of the National Academy of Sciences
Psychological Science

TEACHING & ADVISING

Graduate Students & Post-doctoral Fellows

Lisa Musz (current post-doc)
Research: Experience in cognitive and neural development
Role: Advisor
Shipra Kanjlia (PhD graduate, current post-doc)
Research: Experience based change in numerical cognition
Role: Advisor
Rita Loiotile (PhD graduate)
Research: Neuroplasticity in visual cortex
Role: Advisor
Giulia Elli (graduate student)
Research: First person experience contribution to concepts.

Role: Advisor

Judy Kim (graduate student)

Research: Neurobiological basis of language

Role: Advisor

Undergraduate Courses Taught

Mind, Brain & Experience, Undergraduate (JHU)
Neurobiology of Human Cognition, Undergraduate (JHU)
Introduction to Cognitive Neuroscience, Undergraduate (UPenn)
Cognitive Neuroscience of Development (MIT, Graduate Courses, Co-Taught)
Psychological & Brain Sciences Core Topics A (JHU, Graduate Courses, Co-Taught)
Psychological & Brain Sciences Core Topics B (JHU, Graduate Courses, Co-Taught)
Fundamentals of Psychological and Brain Sciences (JHU, Graduate Courses, Co-Taught)

Representative Graduate Student Committees Service

Advanced Exam Committee Member, Department of Psychological and Brain Sciences, student: Hsiang Yun Chien, Advisor: Christopher Honey, August 2018

Graduate Board Oral Examination Committee Member, Department of Psychological and Brain Sciences, student: Rita Loiotile, Advisor Marina Bedny, Defense October 2018

Graduate Board Oral Examination Committee Member, Department of Psychological and Brain Sciences, student: Shipra Kanjlia, Advisor Marina Bedny, Defense October 2018

Graduate Board Oral Examination Committee Member (Alternate), Department of Psychological and Brain Sciences, student: Mark Schurgin, Advisor Jonothan Fombaum, Defense March 2017

Advanced Exam Committee Member, Department of Psychological and Brain Sciences, student: Giulia Elli, Advisor: Marina Bedny, September 2016

Advanced Exam Committee Member, Department of Psychological and Brain Sciences, student: Judy Kim, Advisor: Marina Bedny, September 2016

Graduate Board Oral Examination Committee Member, Department of Psychological and Brain Sciences, student: Kitty Xu, Advisor: Susan Courtney, April 2016

Graduate Board Oral Examination Committee Member, Cognitive Science Department, student: David Rothlein, Advisor Brenda Rapp, Defense September 2015

Advanced Exam Committee Member, Department of Psychological and Brain Sciences, student: Tammy Tran, Advisor: Michela Gallagher, Defense September 2015

Advanced Exam Committee Member, Department of Psychological and Brain Sciences, student: Shipra Kanjlia, Advisor: Marina Bedny, September 2015

Graduate Board Oral Examination Committee Member, Cognitive Science Department, student: Teresa Schubert, Advisor Michael McCloskey, Defense January 2015

Graduate Board Oral Examination Alternate Committee Member, Cognitive Science Department, student: Katrina Ferrara, Advisors Barbara Landau & Soojin Park, Defense January 2014

Graduate Board Oral Examination Committee Member, Department of Psychological and Brain Sciences, student: Gi Yeul, Advisor: Jonathan Flombaum, Defense February 2014

Graduate Board Oral Examination Committee Member, Department of Psychological and Brain Sciences, student: Aimee Stahl, Advisor: Lisa Feigenson, Defense April 2014

Advanced Exam Committee Member, Department of Psychological and Brain Sciences, student: Jenny Wang, Advisor: Lisa Feigenson, June 2014

Advanced Exam Committee Member, Department of Psychological and Brain Sciences, student: Mark Schurgin, Advisor: Jonathan Flombaum, June 2014

OTHER REPRESENTATIVE UNIVERSITY COMMITTEES AND SERVICES

Feature speaker at the Krieger School of Arts and Science Alumni dinner in Palm Beach Florida Feb, 2019

Member of Faculty Search Committee for Bloomberg Distinguished Professorship of Computational Neuroscience of the Human Brain, Department of Psychological Sciences and Department of Biomedical Engineering, 2013-2014.

Member of Faculty Search Committee for Bloomberg Distinguished Professorship of Neurodevelopment, School of Education and School of Public Health, 2014.

Member of Faculty Search Committee, Tenure-track or tenured Professor of Human Cognitive Neuroscience/Cognitive Psychology, Department of Psychological and Brian Sciences, 2014.

FUNDING

"Learning about color in the absence of vision: A training study in blind and sighted individuals"
Undergraduate Research Award
Hopkins Office of Undergraduate Research
Funding Period 1/2019-5/2019
Awarded to Brianna Aheimer
Total award: $3,000

"Visual cortex plasticity in blindness: a window into flexibility of human cortex" 1R01EY027352-01A1
National Institute of Health, National Eye Institute R01

Funding Period 9/2017-6/2022
PI: Marina Bedny
Total award: $2,457,837

“Insights into human brain plasticity from studies of blindness.”
Johns Hopkins University, Catalyst Award
Funding Period 7/2017- 7/2018
PI: Marina Bedny
Total award: $70,000

“Insights into Human Learning and Development from Visual Cortex Plasticity in Blindness”
Science of Learning Institute Grant
Funding Period 2014-2016
PI: Marina Bedny
Co-PIs Akira Omaki, Pablo Celnik
Total award: $150,000

“The role of visual experience in numerical processing.”
NSF Graduate Research Fellowship
Awarded to Shipra Kanjlia
Funding Period: 2014-2017
Total award: $135,000

“The neural bases of word meanings: Insights from combined fMRI & TMS studies.”
Source: Loan Repayment Program, National Eye Institute, Nationa Institute of Health
Funding Period 2007-2011
PI: Marina Bedny
Sponsor: Alvaro Pascual-Leone