

## **Silvia A. Bunge, Ph.D.**

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### **Education**

1996 – 2001 Ph.D. in Neuroscience, Stanford University  
1992 – 1996 B.S. Intensive in Biology (Psychobiology track), Yale College  
1990 – 1992 Diploma of Collegiate Studies: Health Sciences & Pure and Applied Sciences, Collège Jean-de-Brébeuf, Montreal

### **Positions and Employment**

#### *Employment*

2014 – Professor, Psychology & Helen Wills Neuroscience Institute, UC Berkeley  
2007 – 2014 Assistant Prof (2007-2009); Associate Prof (2009-2014), UC Berkeley  
2003 – 2006 Assistant Professor, Dept. of Psychology & Center for Mind and Brain  
University of California at Davis  
2001-2003 Postdoctoral Associate, Department of Brain and Cognitive Sciences  
Massachusetts Institute of Technology

#### *Positions*

2022 – 2024 Elected member, Divisional Council of Academic Senate, UCB  
2021 – 2024 Helen Wills Neuroscience Institute Advisory Committee  
2021 – Helen Wills Neuroscience Institute Graduate Program Steering  
Committee, UCB  
2009-14; 18 – Executive Committee, Helen Wills Neuroscience Institute, UC Berkeley  
2018 – 2019 Interim Co-Director, Institute of Cognitive and Brain Sciences, UCB  
2017 – 2019 Developmental Area Head, Dept of Psychology, UCB  
2016 – 2019 Futures Committee, Department of Psychology, UCB  
2011 – 2013 Co-Vice Chair, Department of Psychology, UCB

### **Awards and Honors**

2018 Selected as a Fellow of the Association for Psychological Science  
2016 Elected to Society of Experimental Psychologists  
2015 Jacobs Foundation Advanced Career Research Fellowship  
2015 Alexander von Humboldt Research Award (100 scholars in any field)  
2013 Elected to International Mind, Brain, and Education Society Board of Directors  
2012 Presidential Chair Fellow, Center for Teaching and Learning, UC Berkeley  
2011 James S. McDonnell Foundation 21<sup>st</sup> Century Science Initiative, Scholar  
Award in Understanding Human Cognition (15 cognitive scientists worldwide)  
2011 – 18 National Scientific Council on the Developing Child member (11 members)  
2010 – 16 1<sup>st</sup> Innovation By Design team in Frontiers of Innovation: Building  
Caregiver Capacities, developing interventions in Washington State.  
2010 Finalist, Aspen Brain Forum Award in NeuroEducation  
2007 – 10 MacArthur Law and Neuroscience Consortium  
2007 Young Investigator Award, Cognitive Neuroscience Society  
2006 Elected to Memory Disorders Research Society

2004 – 09 John Merck Scholarship in the Biology of Developmental Disabilities  
1999 McDonnell Summer Institute in Cognitive Neuroscience Fellowship  
1996 – 2001 Baxter Foundation Graduate Fellowship, Stanford Medical School  
1996 Distinction in Biology; Graduation with Honors from Yale College

## Publications

*Publications from the current period of review are marked in blue.*

### Textbook

Bortfeld, H. & **Bunge**, S.A. (in press) Fundamentals of Developmental Cognitive Neuroscience. Cambridge University Press.

### Edited volumes

**Bunge**, S.A. & Wallis, J. (Eds.) The Neuroscience of Rule-Guided Behavior, Oxford University Press, 2007.

**Bunge**, S.A. & O'Hare E.D. (Eds.) The Developing Human Brain. Frontiers Research Topic. 2012.

### Peer-reviewed empirical papers

Cited ~20,000 times (*h-index* = 65; *i10-index* = 109 (Google Scholar, 06/2022))

118. Willbrand, E.H., Parker, B.J., Voorhies, W.I., Miller, J.A., Lyu, I., Hallock, T., Aponik-Gremillion, L., Alzheimer's Disease Neuroimaging Initiative, **Bunge**, S.A., Foster, B.L., & Weiner, K.S. (in press, *Science Advances*). A new tripartite landmark in human posterior cingulate cortex.

117. Willbrand, E.H.\*, Voorhies, W.I.\*, Yao, J.K., Weiner, K.S.\*, & **Bunge**, S.A.\* (2022) Presence or absence of a prefrontal sulcus is linked to reasoning performance during child development. *Brain Structure and Function*. 227(7):2543-2551. doi: 10.1007/s00429-022-02539-1. \* joint first/senior authors

116. Starr, A., Leib, E., Younger, J., NSF Science of Learning Consortium, Uncapher, M., & **Bunge**, S.A. (2022). Relational thinking: An overlooked component of executive functioning. *Developmental Science*. doi: 10.1111/desc.13320

115. Yao, J.K., Voorhies, W.I., Miller, J.A., **Bunge**, S.A.\*, & Weiner, K.S.\* (2022) Sulcal depth in prefrontal cortex: A novel predictor of working memory performance. *Cerebral Cortex*. \* joint senior authors. <https://doi.org/10.1093/cercor/bhac173>

114. Ichien, N., Alfred, K., Baia, S., Kraemer, D., **Bunge**, S.A., Lu, H., & Holyoak, K. (2022) Relation Representations in Analogical Reasoning and Recognition Memory. *Cognitive Science Society Proceedings*.

113. Estrada, E., **Bunge**, S.A., and Ferrer, E. (2021) Controlling for cohort effects in accelerated longitudinal designs using continuous- and discrete-time dynamic models. *Psychol Methods*. doi: 10.1037/met0000427
112. Ellwood-Lowe, M.E., Irving, C., & **Bunge**, S.A. (2022). Exploring neural correlates of behavioral and academic resilience among children in poverty. *Developmental Cognitive Neuroscience*. 54:101090. doi: 10.1016/j.dcn.2022.101090.
111. Ellwood-Lowe, M.E., Whitfield-Gabrieli, S., & **Bunge**, S.A. (2021). What is an adaptive pattern of brain activity for a child? It depends on their environment. *Nature Communications*. (2021) 12:7183 | <https://doi.org/10.1038/s41467-021-27336-y>  
Press release: <https://news.berkeley.edu/2021/12/10/low-income-kids-use-different-brain-function-to-ace-achievement-tests/>  
\*Listed as one of the 2021 Top 25 Social Sciences and Human Behaviour Articles published in Nature Communications: <https://www.nature.com/collections/ccjddcabab>
110. Voorhies, W.I., Miller, J.A., Yao, J.A., **Bunge**, S.A.\* , & Weiner, K.S.\* (2021) Cognitive insights from evolutionarily new brain structures in prefrontal cortex. \* joint senior authors. *Nature Communications*, 12(1):5122. doi: 10.1038/s41467-021-25162-w  
Press release: <https://neuroscience.berkeley.edu/overlooked-folds-in-the-brain-are-related-to-the-development-of-reasoning-skills/>
109. Batra, R., **Bunge**, S.A., & Ferrer, E. (2021) Modeling Retest Effects in Developmental Processes - A Latent Change Score Modeling Approach. *Structural Equation Modeling*.
108. Haft, S.L., **Bunge**, S.A., Uchikoshi, Y., & Zhou, Q. (2021) Home Literacy Environment and Executive Functions in Chinese American and Mexican American Preschoolers in Head Start. *Early Education and Development*.
107. Lyu, I., Bao, S., Hao, L., Yao, J., Miller, J., Voorhies, W., Taylor, W., **Bunge**, S., Weiner, K., Landman, B. (2021). Labeling Lateral Prefrontal Sulci using Spherical Data Augmentation and Context-aware Training, *NeuroImage*. Apr 1;229:117758. doi: 10.1016/j.neuroimage.2021.117758. PMID: 33497773.
106. Starr, A., Srinivasan, M., & **Bunge**, S.A. (2020). Semantic knowledge influences visual working memory in adults and children. *PLoS One*. Nov 11;15(11):e0241110. doi: 10.1371/journal.pone.0241110. PMID: 33175852; PMCID: PMC7657485.
105. Wang, W.-C., Hsieh, F., Swamy, G., & **Bunge**, S.A. (2021) Transient neural activation of abstract relations on an incidental analogy task. *Journal of Cognitive Neuroscience*. Jan;33(1):77-88. doi: 10.1162/jocn\_a\_01622. PMID: 32812826.
104. Hao, L. et al. (2020) Automatic labeling of cortical sulci using spherical convolutional neural networks in a developmental cohort. *Proc IEEE Int Symp Biomed Imaging*.
103. Gruber, Mendle, et al. [One of 70 co-authors] (2020) The Future of Women in Psychological Science. *Perspect Psychol Sci*. 2020 Sep 9:1745691620952789. doi: 10.1177/1745691620952789. Epub ahead of print. PMID: 32901575.

102. Galeano Weber, E., Klegowits, H., Fisher, A., & **Bunge**, S.A. (2020) Insights into visual working memory precision at the feature- and object-levels from a hemispheric encoding manipulation. *Quarterly Journal of Experimental Psychology*
101. **Bunge**, S.A., and Leib, E. (2020) How does education hone reasoning ability? *Current Directions in Psychological Science*.
100. Whitfield-Gabrieli S., Wendelken C., Cutting L., **Bunge** S.A. (2020) Intrinsic Brain Architecture Predicts Future Attentional and Mood Problems in a Normative Pediatric Sample. *JAMA Psychiatry*. doi:10.1001/jamapsychiatry.2019.4208.  
Press release: <https://news.berkeley.edu/2020/01/03/brain-scans-childrens-mental-health/>
99. Lee, J.K., Fandakova, Y., Johnson, E.G., Cohen, N.J., **Bunge**, S.A., Ghetti S. (2020) Changes in anterior and posterior hippocampus differentially predict item-space, item-time, and item-item memory improvement. *Developmental Cognitive Neuroscience*.
98. Brod, G., Breitwieser, J., Hasselhorn, M., & **Bunge**, S.A. (2019). Being proven wrong only elicits learning among children with higher executive function skills. *Developmental Science*. DOI: 10.1111/desc.12916.
97. Miller Singley, A.T., Crawford, J.L., & **Bunge**, S.A. 2020. Using Eye Tracking to Probe Developmental and Skill-based Differences in Fraction Magnitude Evaluation. *Journal of Numerical Cognition*. Vol. 6(1), 83–107, <https://doi.org/10.5964/jnc.v6i1.119>
96. Mota, N., Callipo, R., Leite L., Torres, A., Weissheimer, J., **Bunge** S.A., Copelli, M., & Ribeiro, S. (2019). Speech organization during literacy acquisition predicts reading fluency and verbal short-term memory performance. *Mind, Brain and Education*. Published July 1, 2019. <https://doi.org/10.1111/mbe.12208>
95. Fandakova, Y., Leckey, S., Driver, C.C., **Bunge**, S.A., & Ghetti, S. (2019) Neural specificity of scene representations is related to memory performance in childhood. *Neuroimage*. 99:105-113
94. Eckstein, M., Starr, A., & **Bunge**, S.A. (2019) How the inference of hierarchical rules unfolds over time. *Cognition*. 185:151-162.
93. Williams, A.I., Zhou, Q., Uchikoshi, & **Bunge**, S.A. (2018). Links between English and heritage language proficiency and executive functions in dual language learners from Head Start families. *Early Education and Development*. 30(3): 357-374.
92. Selmeczy, D., Fandakova, Y., Grimm, K.J., **Bunge**, S.A., and Ghetti, S. (2018) Longitudinal Trajectories of Hippocampal and Prefrontal Contributions to Episodic Retrieval: Effects of Age and Puberty. *Developmental Cognitive Neuroscience*. 20:100599.
91. Guerra-Carrillo, B. & **Bunge**, S.A. (2018) Eye gaze patterns reveal how reasoning skills improve with experience. *Nature Partner Journal: Science of Learning*.  
Press release: <http://news.berkeley.edu/2018/10/18/lSAT-eye-tracking/>
90. Starr, A., Vendetti, M., & **Bunge**, S.A. (2018). Eye movements provide insight into the development of analogical reasoning. *Acta Psychologica* 186:18-26.

89. Brod, G., Hasselhorn, M., & **Bunge**, S.A. (2018). When making a prediction boosts learning: The element of surprise. *Learning and Instruction* 55, 22-31.
88. Miller Singley, A.T. & **Bunge**, S.A. (2018). Eye gaze patterns reveal how we reason about fractions. *Thinking and Reasoning: Special issue on "Reasoning and mathematics"*. 24(4): 445-468.
87. Guerra-Carrillo, B., Katovich, K., & **Bunge**, S.A. (2017). Does higher education hone cognitive functioning and learning efficacy? Findings from a large, representative sample. *PLoS One* Aug 23;12(8):e0182276.
86. Wendelken, C., Ferrer, E., Ghetti, S., Bailey, S., Cutting, L., & **Bunge**, S.A. (2017). Fronto-parietal structural connectivity in childhood predicts development of functional connectivity and reasoning ability: a large-scale longitudinal investigation. *Journal of Neuroscience*. Aug 30;37(35):8549-8558. Selected for *Society for Neuroscience* press promotion. Press coverage:  
<https://www.sciencedaily.com/releases/2017/08/170807082201.htm>
85. Fandakova, Y., Selmecky, D., Leckey, S., Grimm, K.J., Wendelken, C., **Bunge**, S.A., & Ghetti, S. (2017). Changes in ventromedial prefrontal and insular cortex support the development of metamemory from childhood into adolescence. *Proceedings of the National Academy of Sciences*. Jul 18;114(29):7582-7587.
84. Vendetti, M.\*, Starr, A.\*, Johnson, E.L., Modavi, K., & **Bunge**, S.A. (2017) Eyegaze patterns reveal optimal strategies during analogical reasoning. *Frontiers in Psychology – Cognition*. <https://doi.org/10.3389/fpsyg.2017.00932> (\*shared first authorship)
83. Brod, G., **Bunge**, S.A., & Shing, Y. (2017) Does one year of schooling improve children's cognitive control and alter associated brain activation? *Psychological Science* May 1:956797617699838. doi: 10.1177/0956797617699838. [Epub ahead of print]
82. Green, C.T., Chiongban, V.B., Barrow, M., Ferrer, E., & **Bunge**, S.A. (2017). Fluid reasoning predicts future mathematical performance among children and adolescents. *Journal of Experimental Child Psychology*. Jan 30;157:125-143.
81. Whitaker, K.J.\*, Vendetti, M.S.\*, Wendelken, C., & **Bunge**, S.A. (2017) Neuroscientific insights into the development of analogical reasoning. *Developmental Science*. (\*shared first authorship) Mar 12. doi: 10.1111/desc.12531. [Epub ahead of print]
80. Eckstein, M., Guerra-Carrillo, B., Miller Singley, A.T., & **Bunge**, S.A. (2017) Beyond eye gaze: What else can eyetracking reveal about cognition and cognitive development? *Developmental Cognitive Neuroscience*. Jun;25:69-91. doi: 10.1016/j.dcn.2016.11.001. Epub 2016 Nov 11.
79. Fandakova, Y., Wendelken, C., Lee, J.K., **Bunge**, S.A., & Ghetti, S. (2016) The Importance of Knowing When You Don't Remember: Neural Signaling of Retrieval Failure Predicts Memory Improvement Over Time. *Cerebral Cortex*. Nov 23:1-13. doi: 10.1093/cercor/bhw352. [Epub ahead of print]

78. Op de Macks Z.A., **Bunge**, S.A. Bell, O.N., Wilbrecht, L., Kriegsfeld, L.J., Kayser, A.S., & Dahl, R.E. (2016) Risky decision-making in adolescent girls: The role of pubertal hormones and reward circuitry. *Psychoneuroendocrinology*. 74:77-91
77. Op de Macks Z.A., **Bunge**, S.A. Bell, O.N., Kriegsfeld, L.J., Kayser, A.S., & Dahl, R.E. (2016) The effect of social rank feedback on risk taking and associated reward processes in adolescent girls. *Social, Affective, and Cognitive Neuroscience* Sep 10. pii: nsw125. Aug 17;74:77-91. doi: 10.1016/j.psyneuen.2016.08.013.
76. Mota, N.B., Weissheimer, J., Madruga, B., Adamy, N., **Bunge**, S.A., Copelli, M., & Ribeiro, S. (2016) A naturalistic assessment of the organization of children's memories predicts cognitive functioning and reading ability. *Mind, Brain, and Education*. Doi: 10.1111/mbe.12122
75. Church-Lang, J., **Bunge**, S.A., Petersen, S., & Schlaggar, B. (2016). Preparatory engagement of cognitive control networks increases late in childhood. *Cerebral Cortex*. Mar 1;27(3):2139-2153.
74. Sastre III, M., Wendelken, C., **Bunge**, S.A., Lee, J., Pospisil, J., Ross, J., & Ghetti, S. (2016) Age- and Performance-related Differences in Hippocampal Contributions to Episodic Retrieval. *Developmental Cognitive Neuroscience* 19:42-50.
73. Lee, J.K., Wendelken, C., **Bunge**, S.A., & Ghetti, S. (2015). A Time and a Place for Everything: Building Blocks of Episodic Memory. *Child Development*. Oct 23. [Epub ahead of print]
72. Mackey, A.P., Miller Singley, A.T., Wendelken, C., & **Bunge**, S.A. (2015). Characterizing transfer: How practicing reasoning skills influences brain and behavior. *PLoS One*, Sep 14;10(9):e0137627. doi: 10.1371/journal.pone.0137627
71. Luerksen, A., Gyurak, A., Ayduk, A., Wendelken, C., & **Bunge**, S.A. (2015). Delay of Gratification in Childhood Linked to Cortical Interactions with the Nucleus Accumbens. *Social, Cognitive, and Affective Neuroscience*. Jun 5. pii: nsv068. [Epub ahead of print]
70. Tharp, J., Wendelken, C., Schreier, H., Marco, E., & **Bunge**, S.A. (2015) Explaining individual variability in tic severity among children with Tourette Syndrome: Insights from a novel eyetracking paradigm. *Frontiers in Psychiatry* (section: *Child and Neurodevelopmental Psychiatry*). Published: 29 June 2015 doi: 10.3389/fpsyt.2015.00095
69. Wendelken, C., Ferrer, E., & **Bunge**, S.A. (2015) Fronto-parietal network reconfiguration supports the development of reasoning ability. *Cereb Cortex*. 26(5):2178-90
68. Vendetti, M.S.\*, Johnson, E.L.\*, Lemos, C.J., & **Bunge**, S.A. (2015). Hemispheric Differences in Relational Reasoning: Novel Insights based on an Old Technique. *Frontiers in Human Neuroscience*, Special Issue on "The Reasoning Brain". (\*shared first authorship). Feb 9; 9:55
67. Blais, C., Harris, M.B., Sinanian, M.H., & **Bunge**, S.A. (2015). Trial-by-trial adjustments in control triggered by incidentally encoded semantic cues. *Quarterly Journal of Experimental Psychology*. 68(9):1920-30.

66. Chen, S.H., Main, A., Zhou, Q., **Bunge**, S.A., Lau, N., & Chu, K. (2015) Effortful Control and Early Academic Achievement of Chinese American Children in Immigrant Families. *Early Childhood Research Quarterly*. doi:10.1016/j.ecresq.2014.08.004.
65. Vendetti, M.S., Matlen B.J., Richland, L.E., & **Bunge**, S.A. (2015) Analogical Reasoning in the Classroom: Insights from Cognitive Science. *Mind, Brain, and Education*, 9(2):100-106.
64. Vendetti, M.S. & **Bunge**, S.A. (2014). Evolutionary and developmental changes in the lateral frontoparietal network: A little goes a long way for higher-level cognition. *Neuron* 84(5):906-917.
63. Chen, S.H., Zhou, Q., Uchikoshi, Y., & **Bunge**, S.A. (2014) Variations on the bilingual advantage? Links of Chinese and English proficiency to Chinese American children's self-regulation. *Frontiers in Psychology*. Sep 30;5:1069. doi: 10.3389/fpsyg.2014.01069.
62. Miller Singley, A.T. & **Bunge**, S.A. (2014). Neurodevelopment of Relational Reasoning: Implications for Mathematical Pedagogy. *Trends in Neuroscience and Education*, 3(2):33-37.
61. Wendelken, C., Lee, J., Pospisil, J., Sastre III, M., **Bunge**, S.A., & Ghetti, S. (2014). White Matter Tracts Connected to the Medial Temporal Lobe Support the Development of Mnemonic Control. *Cerebral Cortex*. Mar 27. E-pub ahead of print.
60. Johnson, E.L., Miller Singley, A.T., Peckham, A., Johnson, S., & **Bunge**, S.A. (2014). Task-evoked pupillometry provides a window into the development of short-term memory capacity. *Frontiers in Developmental Psychology*. Mar 13;5:218.
59. Guerra-Carrillo, B., Mackey, A.P., & **Bunge**, S.A. (2014) Resting-state fMRI: A window into human brain plasticity. *The Neuroscientist*. Feb 21. Epub ahead of print. PMID: 24561514
58. Ferrer, E.\*, Whitaker, K.J.\*, Steele, J., Green, C.T., & **Bunge**, S.A. (2013) White matter maturation supports the development of reasoning ability through its influence on processing speed. \* = joint first authors. *Developmental Science*. 16(6):941-51
57. Paz-Alonso, P.M.\*, **Bunge** S.A.\*, Anderson, M.C., & Ghetti, S. (2013) Strength of coupling within a mnemonic control network differentiates those who can and cannot suppress memory retrieval. *Journal of Neuroscience* 33(11): 5017-5026. \* = **joint first authors**
56. Mackey, A.P., Miller Singley, A.T., & **Bunge**, S.A. (2013) Intensive reasoning training alters patterns of brain connectivity at rest. *Journal of Neuroscience* 33(11): 4796-4803.
55. Mackey, A.P., Whitaker, K.J., & **Bunge**, S.A. (2012) Experience-dependent plasticity in white matter microstructure: Reasoning training alters structural connectivity. *Frontiers in Neuroanatomy*, Special Issue on "Mapping Connectivity of the Human Cerebral Cortex", hosted by Michael Petrides and Daniel S. Margulies.

54. Wendelken, C.\*, Munakata, Y.\*, Baym, C., Souza, M., & **Bunge**, S.A. (2012) Flexible Rule Use: Common Neural Substrates in Children and Adults. *Developmental Cognitive Neuroscience* 2(3):329-39 \* = joint first authors.
53. Ghetti, S. & **Bunge**, S.A. (2012) Neural changes underlying the development of episodic memory during middle childhood. *Developmental Cognitive Neuroscience*. 2, 381-395.
52. **Bunge**, S.A. & Whitaker, K.J. (2012) Brain Imaging: Your MRI scan doesn't lie about your age. *Current Biology* 22(18):R800-1.
51. Wendelken, C., O'Hare, E.D., Whitaker, K.J., Ferrer, E., & **Bunge**, S.A. (2011) Increased Functional Selectivity over Development in Rostrolateral Prefrontal Cortex. *Journal of Neuroscience*. 31(47):17260-8.
50. Wendelken, C., Chung, D., & **Bunge**, S.A. (2011) Rostrolateral Prefrontal Cortex: Domain-General or Domain-Sensitive? *Human Brain Mapping*. doi: 10.1002/hbm.21336. [Epub ahead of print]
49. Wendelken, C., Baym, C. L., Rubens, M., Gazzaley, A., & **Bunge**, S.A. (2011) Neural indices of improved attentional modulation over middle childhood. *Developmental Cognitive Neuroscience*. Apr 1;1(2):175-186.
48. Mackey, A.P., Hill, S.S., Stone, S.I., & **Bunge**, S.A. (2011) Dissociable effects of reasoning and speed training in children. *Developmental Science*, May;14(3):582-90
47. Liao IH, Corbett BA, Gilbert DL, **Bunge** SA, Sharp FR. (2010) Blood gene expression correlated with tic severity in medicated and unmedicated patients with Tourette Syndrome. *Pharmacogenomics*. 11(12):1733-41.
46. Ghetti S, DeMaster DM, Yonelinas AP, **Bunge** SA. (2010) Developmental differences in medial temporal lobe function during memory encoding. *Journal of Neuroscience* 30(28):9548-56.
45. Blais C, Harris MB, Guerrero JV, **Bunge** SA. (2010) Rethinking the role of automaticity in cognitive control. *Quarterly Journal of Experimental Psychology* 29:1-9.
44. Baldo JV, **Bunge** SA, Wilson SM, Dronkers NF. (2010) Is relational reasoning dependent on language? A voxel-based lesion symptom mapping study. *Brain and Language* May;113(2):59-64. Epub 2010 Mar 5.
43. Ferrer, E., O'Hare, E.D., & **Bunge**, S.A. (2009) Fluid reasoning and the developing brain. Focused review for *Frontiers in Neuroscience*, 3(1), 1-6.
42. Blais, C., Risko, I., & **Bunge**, S.A. (2009) Item-specific cognitive control. *Journal of Cognitive Neuroscience* Nov 19.
41. Paz-Alonso, P.M., Ghetti, S., Matlen, B.J., Anderson, M.C., & **Bunge**, S.A. (2009) Memory Suppression is an Active Process that Improves over Middle Childhood. *Frontiers in Human Neuroscience* 3:24.



40. Wendelken, C., Ditterich, J., **Bunge**, S.A., & Carter, C.S. (2009) Stimulus and Response Conflict Processing During Perceptual Decision-Making. *Cognitive, Affective, and Behavioral Neuroscience*. Dec;9(4):434-47.
39. Bhanji, J.P., Beer, J.S., & **Bunge**, S.A. (2009) Taking a Gamble or Playing by the Rules: Dissociable Prefrontal Systems for Probabilistic versus Deterministic Rule-based Decision Making. *NeuroImage* 49(2):1810-9.
38. Wendelken, C. & **Bunge**, S.A. (2009) Transitive Inference: Distinct Contributions of Rostrolateral Prefrontal Cortex and the Hippocampus. *Journal of Cognitive Neuroscience*, Mar 25.
37. **Bunge**, S.A., Hauk-Helskog, E., & Wendelken, C. (2009) Left, but not right, rostromedial prefrontal cortex meets a stringent test of the relational integration hypothesis. *NeuroImage*, 46(1), 338-342.
36. Souza, M.J., Donohue, S.E., & **Bunge**, S.A. (2009) Controlled retrieval and selection of action-relevant knowledge mediated by partially overlapping regions in left ventrolateral prefrontal cortex, *NeuroImage*, 46(1), 299-307.
35. Crone, E.A., Wendelken, C., van Leijenhorst, L., Honomichi, R.D., Christoff, K., **Bunge**, S.A. (2009) Neurocognitive Development of Relational Reasoning. *Developmental Science*, 12(1):55-66.
34. **Bunge**, S.A. & Wendelken, C. (2009) Comparing the Bird in the Hand with the Ones in the Bush. *Neuron* 62, June 11.
33. Corbett, B.A., Mendoza, S.P., Baym, C.L., **Bunge**, S.A., & Levine, S. (2009) Examining cortisol rhythmicity and responsiveness to stress in children with Tourette Syndrome. *Psychoneuroendocrinology*, 33(6):810-20.
32. Wright, S.B., Matlen, B.J., Baym, C.L., Ferrer, E., & **Bunge**, S.A. (2008) Neural correlates of fluid reasoning in children and adults. *Frontiers in Human Neuroscience*.
31. Paz-Alonso, P.M., Ghetti, S., Donohue, S.E., Goodman, G.S., & **Bunge**, S.A. (2008) Neurodevelopmental correlates of true and false recognition. *Cerebral Cortex*, 18(9):2209-16.
30. Baym, C.L., Corbett, B.A., Wright, S.B. & **Bunge**, S.A. (2008) Neural correlates of tic severity and cognitive control in children with Tourette Syndrome. *Brain*, 131:165-79.
29. Wendelken, C., Nakhachenko D., Donohue, S.E., Carter, C.S. & **Bunge**, S.A. (2008) 'Brain is to Thought as Stomach is to...?' – Investigating the role of rostromedial prefrontal cortex in relational reasoning. *Journal of Cognitive Neuroscience*, 20:682-93.
28. Donohue, S.E., Wendelken, C. & **Bunge**, S.A. (2008) Neural correlates of preparation for action selection as a function of specific task demands. *Journal of Cognitive Neuroscience*, 26:11239-47.

27. Wendelken, C., **Bunge**, S.A., & Carter, C.S. (2007) Parietal and prefrontal roles in maintaining structured information. *Neuropsychologia*, Oct 6; [Epub ahead of print]
26. Mauss, I.B., **Bunge**, S.A. & Gross, J.J. (2007) Automatic Emotion Regulation: Neuroscientific Considerations. *Social and Personality Psychology Compass*.
25. **Bunge**, S.A. & Wright, S.B. (2007) Neurodevelopmental changes in working memory and cognitive control. *Current Opinion in Neurobiology*, 17(2), 243-50.
24. Crone, E.A., Donohue, S., Honomichl, R., Wendelken, C., & **Bunge**, S.A. (2006) Brain regions mediating flexible rule use during development. *Journal of Neuroscience*, 26(43): 11239-47.
23. Crone, E.A., Donohue, S.E., van Leijenhorst, L., Wendelken, C. & **Bunge**, S.A. (2006) Neurocognitive development of the ability to manipulate information in working memory. *Proceedings of the National Academy of Sciences*, 103(24):9315-20.
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stimulation in *Aplysia* sensory neurons. *Neurobiology of Learning and Memory*, 67:259-263.

### **Peer-reviewed papers under review or in revision**

Schwarze, S.A., Laube, C., Khosravani, N., Lindenberger, U., **Bunge**, S.A., Fandakova, Y. (under review) Does prefrontal connectivity during task switching help or hinder children's performance?

Willbrand, E., Yao, J., Voorhies, W., **Bunge**, S.A.\* & Weiner, K.\* (under review) Development of sulcal morphology in lateral prefrontal cortex and relation to higher-level cognition  
\* *joint senior authors*

Galeano Weber, E.M., Pakzdad, S., Brod, G., & **Bunge**, S.A. (in revision for *JECP*) Physiological indicators of working memory precision: Differential attentional allocation in children and adults.

Mauer, E., Uchikoshi, Y., **Bunge**, S.A., Zhou, Q. (minor revision for *JECP*). Longitudinal Relations Between Self-Regulatory Skills and Mathematics Achievement in Early Elementary School Children in Chinese American Immigrant Families.

Leib, E., Starr, A., Younger, J., Project iLead Consortium, **Bunge**, S.A., Uncapher, M., & Rosenberg-Lee, M. (in revision for *Dev Psych*) Testing the whole number bias hypothesis: contributions of inhibitory control and whole number knowledge to fraction understanding. <https://psyarxiv.com/rwnbh>

Younger, J.W., O'Laughlin, K.D., Anguera, J.A., **Bunge**, S.A., Ferrer, E., Hoefft, F., McCandliss, B.D., Mishra, J., Rosenberg-Lee, M., Gazzaley, A., & Uncapher, M.R. (in revision for *Child Dev*) More alike than different: Novel methods for measuring and modeling executive function development. <https://www.researchsquare.com/article/rs-1032581/latest>

Wang, W.-C., Taniguchi, L., & **Bunge**, S.A. (in revision). Which factors support memory formation during childhood? Probing the contributions of effort and prior knowledge

Wang, W.-C., Brod, G., Ghetti, S., & **Bunge**, S.A. (in revision) Does a lion belong in a city? Neurodevelopmental differences in the use of knowledge to evaluate semantic associations.

### **Manuscripts in progress**

Ellwood-Lowe, M., Bernstein, M., Bunge, S.A.\* & Srinivasan, M.\* (in prep.) Re-examining selective attention: Children show neural processing and learning from distracting information. \* *joint senior authors*

Klegowits, H., Eckstein, M., Galeano Weber, E., Christian, P., & **Bunge**, S.A. (in prep.) Stay to one side: hemispheric laterality effects on the ability to infer rules.

## **Chapters, commentaries, and other publications**

Lingyan Hao, Shunxing Bao, Yucheng Tang, Riqiang Gao, Prasanna Parvathaneni, Jacob Miller, Willa Voorhies, Jewelia Yao, Silvia **Bunge**, Kevin Weiner, Bennett Landman, Ilwoo Lyu (2020) Automatic Labeling of Cortical Sulci Using Spherical Convolutional Neural Networks in a Developmental Cohort. Peer-reviewed conference proceeding, IEEE 17th International Symposium on Biomedical Imaging (ISBI).

National Scientific Council on the Developing Child, Working Paper #14. Understanding Motivation: Building the Brain Architecture that Supports Learning, Health, and Community Participation. Co-authored with faculty and staff members of the Council.

**Bunge**, S.A. (2018) Your eyes reveal more than you know. NPJ Science of Learning Community. <https://npjscilearncommunity.nature.com/posts/39983-your-eyes-reveal-more-than-you-know>

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Paz-Alonso, P., **Bunge**, S.A., & Ghetti, S. (2013) Emergence of higher cognitive functions: Reorganization of large-scale brain networks during childhood and adolescence. In: Oxford Handbook on Higher Cognitive Functions. Edited by Steven Kosslyn and Kevin Ochsner. Oxford University Press. *Appeared online only due to editorial error.*

**Bunge**, S.A. (2013) Ain't No Mountain High Enough: A Review of "How Children Succeed: Grit, Curiosity, and the Hidden Power of Character" by Paul Tough. *Cerebrum*, The Dana Foundation. <http://www.dana.org/news/cerebrum/detail.aspx?id=40904>

Blakemore, S.J. & **Bunge**, S.A. (2012). At the nexus of neuroscience and education. Supplement on Neuroscience and Education, *Developmental Cognitive Neuroscience*. Feb 15;2 Suppl 1:S1-5

Mackey, A., Raizada, R., & **Bunge**, S.A. (2012). Environmental influences on prefrontal development. In: Principles of Frontal Lobe Functions, 2<sup>nd</sup> Edition. Edited by Donald Stuss & Robert Knight. Oxford University Press, 2012.

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**Bunge**, S.A., Mackey, A., & Whitaker, K. (2009) Neurodevelopmental changes in cognitive control and fluid reasoning over childhood. The Cognitive Neurosciences III, edited by Michael Gazzaniga.

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**Bunge**, S. A. & Kahn, I. "Cognition, neuroimaging", In: The Encyclopedia of Neuroscience, 4<sup>th</sup> edition. Adelman & Smith, eds. Elsevier, 2005.

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Wagner, A.D., **Bunge**, S.A. & Badre, D. (2004) Cognitive control, semantic memory, and priming: Contributions from prefrontal cortex. In: The Cognitive Neurosciences, 3rd ed.

**Bunge**, S.A. & Kahn, I. Cognition, neuroimaging. In: The Encyclopedia of Neuroscience, 3<sup>rd</sup> edition, 2004. Adelman & Smith, eds. Elsevier.

Gabrieli, J.D.E. & **Bunge**, S.A. Mechanisms of memory and amnesic syndromes. In: Diseases of the Nervous System: Clinical Neuroscience and Therapeutic Principles, 3<sup>rd</sup> Edition, ed. Asbury, McDonald, McArthur, McKhann & Goadsby. Cambridge University Press, 2003.

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Barrow, M., Jaques, R., Ponischil, K., Lengua, L., & **Bunge**, S.A. (2015) Improved cognitive flexibility after a structured play intervention with a high-risk sample of preschoolers. Available on ResearchGate.

Jenkins, W., De Ley, L., **Bunge**, S., Mann, V., & Siegler, R. (2012) What Young Children Need to Learn About Numbers: Differences in learning style and response to error correction in pre-kindergarten and kindergarten students using an adaptive iPad based learning game.

Jenkins, W., De Ley, L., **Bunge**, S. (2012) Scientific Bases for the Eddy's Doggy Diner Game. White paper for Scientific Learning Corporation.

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## Grants

### Current Support

#### **Collaborative Research: How does the brain represent abstract concepts?**

UCB 20202541 (Co-PIs Bunge, Kraemer, Holyoak)

9/1/2020 – 8/31/20

National Science Foundation

Subaward to UCB \$542,921

The major goal of this project is to use multivariate fMRI methods to examine how abstract relations are represented in the young adult brain.

#### **The role of prefrontal sulcal morphology and brain network architecture in cognitive development**

R21 636443 (Co-PIs Weiner, Bunge)

07/01/2020 – 6/30/2022

National Institutes of Health

\$104,663 (Year 1); \$154,676

The major goals of this project are to define sulci in prefrontal cortex that have been forgotten for over a century, and use modern behavioral and brain imaging techniques to elucidate their role in the emergence of higher cognitive functions.

### **Bilingual and Socio-Emotional Development in Dual Language Learners**

R01HD091154 (PI Zhou; Co-I Bunge)

12/18/2017 – 11/30/2022

NICHHD

\$2,936,591

The major goals of this project are to examine how bilingualism and cultural and environmental variables shape socioemotional development. My role is to examine the role of these factors in shaping executive functions.

### **Consultant**

#### **Integration of EF and Mathematical Training**

Principal Investigator: Michael Cohen, Cognition

EF+Math program c/o New School Ventures Fund

Period Covered: 08/01/2020 – 07/31/2023

### **Completed Grants**

#### **Investigating hidden strengths among children with dyslexia**

Principal Investigators: Silvia Bunge, Christa Watson

Schwab Dyslexia and Cognitive Diversity Center

#### **Identifying factors that promote students' understanding of physical science concepts**

Principal Investigators: Yana Fandakova, Silvia Bunge

Jacobs Foundation Science of Learning Pilot Project

The general aim of the proposed project is to examine how secondary school students learn scientific concepts; our goal at UC Berkeley is to develop eyetracking measures to predict and assess learning in a real-world context.

Period Covered: 06/01/2019 – 05/31/2021

Location of Project: Max Planck Institute on Human Development

#### **Mechanisms and Sequential Progression of Task-Switching Plasticity in Middle Childhood**

Principal Investigator: Yana Fandakova

Role: Co-Investigator

Funded by German Research Foundation (DFG)

The goal of this project is to examine brain plasticity in children as a result of intensive practice with task-switching

Period Covered: 06/01/2018 – 06/01/2021

Total Award Amount: 205,220 Euros

#### **Collaboration: The role of brain connectivity in reasoning development**

Principal Investigators: Wendelken (Research scientist in Bunge Lab) and Bunge

National Science Foundation

Period Covered: 03/01/2016-03/01/2018 – currently in no-cost extension

Description: This grant covers the analysis of multi-modal longitudinal MRI data collected in our lab at UC Berkeley, at UC Davis (Co-I Simona Ghetti), and at Vanderbilt University (Co-I Laurie Cutting), with a view to identifying the changes in structural and functional brain connectivity that support the development of reasoning ability over childhood and adolescence.

Location of Project: University of California, Berkeley

Total Award Amount: \$500,000 direct costs



### **Jacobs Foundation Advanced Career Research Fellowship**

Principal Investigator: Silvia Bunge, Ph.D.

Period Covered: 2016-2018

Description: Awarded to the most innovative mid-career researchers working on child and youth development. Proposal focused on investigating individual variability in responsiveness to different kinds of cognitive training in socioeconomically disadvantaged children, both in terms of cognitive functioning and academic achievement.

Location of Project: University of California, Berkeley

Total Award Amount: 400,000 Swiss Francs

### **Alexander von Humboldt Research Award**

Principal Investigator: Silvia Bunge, Ph.D.

Location of Project: Max Planck Institute of Lifespan Psychology in Berlin

Description: Awarded annually to 100 scholars in any field and of any nationality. This research award will support research on brain plasticity in children, assessing the effectiveness of an intervention aimed at boosting reasoning skills and strengthening the underlying brain network.

Period Covered: 2016-2018

Total Award Amount: 60,000 Euros

### **Relational reasoning: Neural mechanisms, development, & plasticity**

Principal Investigator: Silvia Bunge, Ph.D.

Source of Support: James S. McDonnell Foundation Scholar Award

Period Covered: 08/01/11-08/01/17

Location of Project: University of California, Berkeley

Description: This Scholar Award supports several new lines of inquiry in the area of relational reasoning.

Total Award Amount: \$600,000

### **Neural Development of the Fronto-Temporal Episodic-Memory Network in Childhood**

Principal Investigators: Simona Ghetti, Ph.D. and Silvia Bunge, Ph.D.

Source of Support: Submission to National Institute of Mental Health in July 2010

Period Covered: 06/07/2011-06/06/2016

Description: This project aims to examine changes in hippocampal structure, function, and connections that underlie episodic memory development.

Location of Project: UC Davis; sub-award to UC Berkeley

Total Award Amount: \$2,842,260. UC Berkeley subaward: \$711,765

### **Neural Changes Underlying the Development of Fluid Reasoning**

Principal Investigators: Silvia Bunge and Emilio Ferrer

Source of Support: NINDS R01, NS057146-01

Total Award Amount: \$1,093,750, Total Award Period Covered: 07/01/07-12/31/12

Location of Project: University of California, Berkeley

Description: This grant focuses on longitudinal changes in brain structure and function that lead to developmental improvements in fluid reasoning

### **Executive Function and Frontal Cortex**

Principal Investigator: *Mark D'Esposito*; Role: Co-Investigator

Source of Support: P01 National Institute of Neurological Disorders and Stroke NS040813

Total Award Amount: \$7,559,148, Total Award Period Covered: 12/01/07-11/30/12  
Location of Project: University of California, Berkeley  
Description: This program project covers research on the organization and functions of lateral prefrontal cortex.

### **Neural Mechanisms of Cognitive Control and Reward-based Learning in Children with Tourette Syndrome**

Principal Investigator: *Silvia Bunge, Ph.D.*  
Source of Support: Tourette Syndrome Association  
Total Award Amount: \$75,000 Total Award Period Covered: 6/18/10-7/18/11  
Location of Project: University of California, Berkeley  
Description: This grant focused on the neural basis of Tourette syndrome.

### **Effects of Early Damage to Prefrontal Cortex**

Principal Investigators: *Jacob Neufeld, M.D. and Silvia Bunge, Ph.D.*  
Total Award Amount: \$50,000  
Source of Support: Children's Hospital Oakland Research Institute  
Location of Project: Children's Hospital Oakland & University of California, Berkeley  
Description: This award provided seed funds for a new project tracking the cognitive outcomes of children with early focal brain injury

### **Effects of early damage to prefrontal cortex: Implications for criminal responsibility**

Principal Investigators: *Silvia Bunge (P.I.) & Robert Knight (co-P.I.)*  
MacArthur Law and Neuroscience Project  
Total Award Amount: \$80,500

### **Brain maturation subserving cognitive control development**

Principal Investigator: Silvia Bunge  
National Science Foundation (0448844) 04/01/2005 – 04/01/2008  
Total Award Amount: \$450,000

### **Neural Underpinnings of Deficient Cognitive Control in Developmental Disorders Affecting Frontostriatal Circuitry**

Principal Investigator: Silvia Bunge 06/04 – 06/09  
John Merck Scholarship in Developmental Disabilities  
Total Award Amount: \$300,000

### **Neural substrates of the development of recognition memory**

Principal Investigator: Simona Ghetti, UC Davis, 2007 – 2009  
R03 funded by NICHD (R03HD054636-01).  
Role: Co-PI

### **Co-Investigator or Consultant on Submitted/Completed Grant Proposals**

### **Contributions of Executive Function Subdomains to Mathematical Learning and Literacy in the Classroom: Assessment and Training**

Principal Investigators: Adam Gazzaley and Melina Uncapher, UCSF  
Role: Co-investigator  
Source of Support: NSF Science of Learning: Collaborative Network

Description: Our collaborative network aims to clarify how the multiple domains of executive functions (EFs) contribute to individual differences in learning of math and reading skills in middle childhood.

Period Covered: 10/01/15-10/01/18

Location of Project: University of California, San Francisco

UC Berkeley subaward: \$59,853

### **Bidirectional Relations: Bilingual and Socio-Emotional Development in Dual Language Learners**

Principal Investigators: Qing Zhou, Yuuko Yuchikoshi

Role: Co-Investigator

Proposed source of support: National Institute of Minority Health and Health Disparities

Period Covered: 04/01/2017-03/31/2022

### **Science-based Innovation in Learning Center for English Language Learners and Learning Disabilities**

Principal Investigator: Fumiko Hoefft

Proposed source of support: University of California Multicampus Research Programs and Initiatives

1/1/2017-12/31/2020

Role: Consultant

### **Executive function and brain maturation in children with severe congenital heart disease: A window of opportunity for intervention**

Principal Investigator: Bea Latal

Funded proposal (April 2017), Swiss National Science Foundation

Role: Project partner (i.e., collaborator)

### **The interaction of brain structure and sleep neurophysiology in regulating the neural substrates of inattention symptoms in pediatric ADHD**

Principal Investigator: Jared Saletin

Funded K01 Award (Summer 2016)

Role: Consultant

### **Cognitive and Neural Flexibility in Autism**

Principal Investigator: Lucina Uddin

Funded BRAINS R01

Role: Advisory Board member

### **Collaborative Research: Domain-General and Domain-Specific Training to Improve Children's Mathematics**

Principal Investigators: Susanne Jaeggi & Geetha Ramani

Funded NSF grant

Role: Advisory Board member

### **Analogical Reasoning in High Functioning Autism Spectrum Disorders**

Principal Investigators: Adam Green, Ph.D. and Chandan Vaidya, Ph.D.

R03 slated for resubmission

**Mesure de l'impact d'un programme d'intervention sur la réorganisation cérébrale post-TCC pédiatrique à l'aide de la connectivité fonctionnelle**

Principal Investigator: Miriam Beauchamp, Ph.D.

Quebec Bioimaging Network submission slated for submission

**A Network Approach to Study Brain Plasticity in Children with Cognitive Training**

Applicant: Olga Tymofiyeva

K99 Application to NICHD submitted in February 2013

Role: Collaborator

**Translation of Cognitive Neuroscience to Rehabilitation for Patients with Traumatic Brain Injury**

Principal Investigators: *Anthony Chen, M.D. and Mark D'Esposito, M.D.*

Department of Defense FY07 Intramural TBI Investigator-Initiated Research Award. Award Number W81XWH-08-2-0088. 08/01/2008 – 30/08/2012.

**Longitudinal effects of treatment on brain function in Tourette Syndrome**

Principal Investigator: Bradley Schlaggar

R21 funded by NIMH (R21MH091512)

**The impact of reappraisal ability in the adjustment to stressful life events in a community sample**

Principal Investigator: Iris Mauss R21 funded by NIA 04/2008 – 04/2010

**Unfunded proposals**

**How do students learn to reason like scientists?**

Principal Investigators: Silvia Bunge, Bryan Matlen (WestEd)

National Science Foundation submission

**Characterizing Effects of Inequality on Brain Development & Strengthening Resilience against Adversity**

Principal Investigators: Linda Wilbrecht, Silvia Bunge

Vice Chancellor for Research research proposal, UC Berkeley

**Pediatric Acquired Brain Injury: Cognitive Deficits and Compensatory Mechanisms**

Principal Investigators: Silvia Bunge, Ph.D., Kenneth Martin, M.D., Elysa Marco, M.D.

NIH R01 submission

**Effects of Fluid Reasoning Training on Neurocognitive Function and Academic Achievement**

Principal Investigator: Silvia Bunge, Ph.D.

NSF submission

**Longitudinal interrelations between fluid reasoning and school achievement: Mediators of trajectories of reading and mathematics**

Principal Investigators: Emilio Ferrer, Ph.D.; Co-PI: Silvia Bunge, Ph.D.

Institute of Education Sciences submission

## Talks (2008 onwards)

- 2022 NeuroSpin, CEA (French Alternative Energies and Atomic Energy Commission) Paris-Saclay (2023)  
Symposium speaker, Flux Congress, Paris (Sept)  
Speaker and co-organizer, Sulcal Workshop, Paris (Sept)  
Goethe University, Frankfurt, DIPF/Leibniz Institute for Research and Information in Education  
Max Planck Institute for Human Development, Berlin, Lifespan Psychology Group  
Neuroscience Faculty Forum, UC Berkeley  
Life Lab at the University of Gothenburg, Sweden  
Invited Discussant, UC Berkeley Tanner Lectures on Human Values  
Learning and the Brain conference, New York  
Feindel Virtual Brain and Mind Seminar Series, Montreal Neurological Institute
- 2021 Colloquium, Center for Cognitive Science, University of Kaiserslautern, Germany  
Plenary Speaker, Sociedad Argentina de Investigación en Neurociencias  
Co-Chair, Symposium at Flux Congress  
UCLA Department of Psychology colloquium  
Analogy colloquium series (an international group of researchers)  
UC Merced Department of Psychology Colloquium
- 2020 Helen Wills Neuroscience Institute conference
- 2019 Child Development Center, University Children's Hospital, Zürich  
Distinguished Speaker, Psychology Day, Vanderbilt University  
Co-Chair, Symposium at Cognitive Neuroscience Society
- 2018 UC-Stanford Precision Learning Center IMBES 2018 Satellite Symposium  
Symposium at International Mind, Brain & Education conference  
Early Learning Summit, Peninsula Family Leaders, San Mateo County  
Science of Learning Workshop, Max Planck Institute in Berlin  
Latin American School on Education, Cognitive and Neural Sciences  
Keynote speaker, McGill Healthy Brains for Healthy Lives Initiative  
Inaugural symposium  
Jacobs Foundation Research Fellows meeting, Marbach, Germany  
Invited address, Association for Psychological Sciences
- 2017 Robert and Russell Moody Lecture Series, Galveston, Texas  
Ambassadors School presentations, Galveston, Texas  
Webinar for Directors of California's Temporary Assistance for Needy Families program (CaWORKS 2.0)  
Symposium, Society for Research on Child Development  
Round-table Discussion, Society for Research on Child Development  
Jacobs Foundation Research Fellows Meeting, Austin  
Society of Experimental Psychologists, Vanderbilt University  
Learning and the Brain Conference
- 2016 Conte Center Outreach series, Harvard University  
Max Planck Institute for Human Development, Berlin  
Wertheimer Colloquium, Goethe Institute, Frankfurt  
Symposium, International Mind, Brain, and Education Society

- Jacobs Foundation Research Fellows Meeting: Early Experience and Sensitive Periods in Development, Sicily  
 Ment e y Cerebro: Homenaje a Pio Tudela. De la Psicología Experimental a la Neurociencia Cognitiva. University of Granada  
 Latin American School on Education, Cognitive, and Neural Sciences, Argentina
- 2015  
 Lawrence Hall of Science, Berkeley  
 Institute of Human Development, UC Berkeley  
 Max Planck Institute for Human Development, Berlin (two talks)  
 Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig  
 Center for Lifespan Psychology, Max Planck Institute for Human Development, Berlin  
 Latin American Society of Neuropsychology, 14<sup>th</sup> International Congress, Medellín, Colombia  
 Webinar for Center on Budget and Policy Priorities, Washington, D.C.  
 Excellence in Teaching Day, Boston College  
 Cell Press LabLinks conference, UCSF  
 Minisymposium at Cognitive Neuroscience Society  
 Latin American School on Education, Cognitive & Neural Sciences, Chile  
 UT Dallas Center on Vital Longevity  
 Keynote address, Spring 2015 Teaching Conference for Graduate Student Instructors, UC Berkeley
- 2014  
 Webinar for Frontiers of Innovation  
 Symposium chair, International Mind, Brain, & Education Society  
 Neuroplasticity and Education conference, Vancouver  
 Jacobs Center Symposium on Productive Youth Development, University of Zurich  
 Webinar for Center on Budget and Policy Priorities, Washington, D.C.  
 UC Berkeley Campus Shared Services Brown Bag  
 UC Office of the President Family Group  
 4<sup>th</sup> Latin American School for Education, Cognition, and Neural Sciences, Uruguay  
 Public lecture, Universidad de la República, Montevideo Uruguay  
 Learning and the Brain Conference, San Francisco  
 U.S. Department of Health and Human Services meeting  
 Lecture for Psychology Graduate Student Instructors, UCB  
 University of Texas at Austin, Imaging Research Center  
 Instructor in 1<sup>st</sup> Summer School, Swiss Graduate School for Cognition, Learning, and Memory, Weggis, Switzerland  
 University of California Emeritus Association Luncheon
- 2013  
 Flux: The International Congress for Integrative Developmental Cognitive Neuroscience, Pittsburgh, PA  
 Max Planck Institute for Human Development, Berlin (2 talks)  
 ZiF Center for Interdisciplinary Research workshop, Bielefeld, Germany: “Task-driven control of thought and action by working memory”  
 Expert Consensus on Brain Health, sponsored by the Stanford Center on Longevity & Max Planck Institute for Human Development  
 Symposium presentation, Society for Research on Child Development  
 U Illinois at Urbana-Champaign, Psychology & Beckman Institute

Temple Institute for Learning and Education Sciences & Neuroscience  
 Program, Temple University  
 3<sup>rd</sup> Latin American School for Education, Cognitive, & Neural Sciences,  
 Brazil  
 Learning and the Brain Conference, San Francisco  
 Distinguished Speaker, Children's Learning Institute, University of Texas  
 Health Science Center, Houston  
 2012 Stanford University School of Education Colloquium  
 NIMH Early Experience, Stress & Neurobehavioral Development Center  
 Distinguished Scientist Lecture, U Pittsburgh Dept of Psychiatry  
 Princeton University Department of Psychology  
 Workshop on "Micro- and Macro-perspectives of Cognitive Control",  
 Humboldt University, Berlin  
 Leadership Summit, Association of California School Administrators  
 Region 6: Cultivating Educational Leaders for Today and Tomorrow  
 University of Oregon, Department of Psychology Colloquium  
 Children's Home Society and ChildHaven, Seattle  
 2<sup>nd</sup> Latin American School for Education, Cognition, and Neural Sciences,  
 Argentina  
 Sociedad Científica de Argentina, Buenos Aires  
 2011 Building Caregiver Capacities meeting with healthcare providers and  
 policymakers from the State of Washington, Seattle  
 37<sup>th</sup> Minnesota Symposium on Child Psychology: Developing Cognitive  
 Control Processes: Mechanisms, Implications, and Interventions  
 Aspen Brain Forum/New York Academy of Sciences meeting  
 Margaret and Paul Baltes Memorial Conference on Life-Span Brain  
 Plasticity and Cognition, Wayne State University  
 Seminar, Lifespan Psychology Group, Max Planck Institute for Human  
 Development, Berlin  
 Nobel Forum symposium, "Boosting the Brain", Stockholm  
 Basque Center on Cognition, Brain, and Language, San Sebastian  
 International Scientific Meeting on Attention (RECA VIII), Sevilla  
 UCSD Cognitive Science Colloquium  
 Contra Costa Office of Education  
 Vanderbilt Kennedy Center Lecture Series on Human Development and  
 Developmental Disabilities  
 Pennsylvania State University Neuroscience Seminar Series  
 Learning and the Brain Conference, San Francisco  
 Duke Institute for Brain Sciences' Cognitive and Affective  
 Control, Seminar series  
 Cambridge University Neuroscience seminar  
 Experimental Psychological Society, London  
 2010 National Scientific Council on Child Development  
 Seminar at the University of Frankfurt Department of Psychology  
 International Max Planck Research School LIFE, Berlin  
 Symposium speaker, Society for Neuroscience  
 Symposium speaker, Child Neurology Society  
 2009 Invited talk at National Institute on Mental Health  
 Expert meeting, "Methods and Challenges in Developmental  
 Neuroimaging", Amsterdam (*unable to attend*)

Neuroscience Institute seminar, Princeton University  
 Neuroscience and Cognitive Sciences seminar, U Maryland, College Park  
 Learning and the Brain Conference, “The Social Brain and Learning”  
 Colloquium, Max Planck Institute for Human Development, Berlin  
 Pediatric Neuropsychology Seminar, UCSF  
 2008 Cognitive Science Colloquium, University of Arizona, Tucson  
 Symposium, Memory Disorders Research Society, St. Louis  
 Tamagawa Research Institute, Tokyo  
 Speaker, Summer Institute in Cognitive Neuroscience (for contributors to  
 “The Cognitive Neurosciences III”, edited by Michael Gazzaniga), Tahoe  
 RAMBLE Cognitive Neuroscience group meeting, UC Berkeley  
 Discussant, Peter Thiel’s Cartesian Club, San Francisco  
 Days of Molecular Medicine symposium, Stockholm (*declined*)  
 International Summer Campus, Korea University (*declined*)  
 Washington University, Neuroscience seminar series  
 University of Michigan, fMRI Seminar Series  
 San Lorenzo School District meeting for elementary school principals  
 Parent-Teacher Association, Rosa Parks Elementary School, Berkeley  
 Learning and the Brain Conference, San Francisco  
 Neuropsychology Brown Bag Lunch, Martinez VA  
 Learning Brain Expo, San Francisco

### **Conference and Workshop Leadership/Involvement**

2022 Sulcal conference, Université de Paris  
 2017 – 2020 Secretary of International Mind, Brain, and Education Society  
 2017 – 2018 Co-organizer, Latin American School on Education, Cognitive & Neural  
 Sciences  
 Co-Chair, Flux Conference program committee; Meeting co-organizer  
 2015 Co-Organizer, Social Issues Roundtable at the Society for Neuroscience  
 2014 – 2017 Board of Directors, Flux: Developmental Cognitive Neuroscience Society  
 2014 – present Board member, International Mind, Brain, & Education Society  
 Symposium Chair, International Mind, Brain, & Education Society  
 2014 – present Steering Committee for Latin American School of Education,  
 Cognitive and Neural Sciences  
 2013 Panel host, Science Communication and Science Policy, Beyond  
 Academia conference for UCB graduate students  
 2012 – Organizer, CHILD Research Center Public Lecture series  
 2011 Course Director for Week 2 of Summer Institute in Cognitive  
 Neuroscience, with 70+ fellows from the U.S. and abroad, and multiple  
 invited faculty. Topic: “Numerical and relational processing.”  
 Frontiers of Innovation Workshop, Harvard  
 2010 Frontal Lobes Conference 2010, Rotman Institute, Toronto; Speaker &  
 Co-organizer of symposium on Prefrontal Development  
 Gordon Research Conference on Neurobiology of Cognition  
 “Reprogramming the Human Brain” Conference, Dallas  
 Robert Wood Johnson Foundation Forum on the Future Impact of  
 Neuroscience and Behavior Change  
 2009 Organizer, UCB Conference on Neurocognitive Development (over 200  
 participants and 60 presentations)



- 2008 – 2014 Co-Sponsor, Learning and the Brain Conference, San Francisco  
 2008 – 2011 Young Investigator Awards Committee, Cognitive Neuroscience Society  
 Talk Session Committee, Cognitive Neuroscience Society  
 2009 Reviewer for submissions to Society for Research on Child Development  
 Panel 3: Childhood: Biological and Cognitive Processes  
 2006 Judge, travel fellowships, SF Bay Area Chapter, Society for Neuroscience  
 Chair, Slide Session, Society for Neuroscience  
 2005 Chair, Minisymposium at Society for Neuroscience  
 Chair, Invited Symposium at American Psychological Society  
 2004 – 2005 Travel fellowship committee for UCD Chapter of Society for Neuroscience  
 2003 – 2004 Co-organizer, “Multiple perspectives on Decision making” conference  
 Co-organizer, Annual Psychology Department Conference  
 Representative, Local Chapter of the Society for Neuroscience (UCD)

## Service to Profession

### Editorial Service

- 2020 Guest Editor, Special Issue of *Developmental Cognitive Neuroscience* on Flux 2018: Mechanisms of learning and plasticity.  
 2016 – 2021 Associate Editor, *Mind, Brain, and Education*  
 2015 – 2016 Co-Editor with postdoctoral fellow Yana Fandakova, Special issue of *Mind, Brain, and Education: The relevance of memory research for education*  
 2015 Ad Hoc Editor, *PNAS*  
 2015 – Associate Editor, *Frontiers for Young Minds*  
 2011 – 2012 Co-Editor with Sarah-Jayne Blakemore, Special Issue of *Developmental Cognitive Neuroscience: Supplement on Neuroscience and Education*  
 2010 – 2011 Co-Editor with Arthur Toga, Book section (6 chapters) on Frontal Lobe Development for *Principles of Frontal Lobe Functions*, 2<sup>nd</sup> Edition, Edited by Donald Stuss & Robert Knight, Oxford University Press, 2012.  
 2012 – 2014 Editorial Board member, *Psychological Science*  
 2011 – Advisory Board member, *Developmental Cognitive Neuroscience*  
 2009 – Editorial Board member, *NeuroImage*  
 2009 – 2010 Guest Editor, Special Issue of *Frontiers in Human Neuroscience: The Developing Human Brain*  
 2008 – 2011 Associate Editor for *Frontiers in Human Neuroscience*  
 2007 – 2008 Consulting Editor for *Cognitive, Affective, and Behavioral Neuroscience*  
 2004 – 2005 Guest Editor for Special Issue of *Cognitive Brain Research: Multiple Perspectives on Decision Making*, 23(1): 1-151, 2005.

## Reviews

### Journal articles

*Acta Psychologica; Archives of General Psychiatry; Behavioral Neuroscience; Biological Psychiatry; Biological Psychology; Brain; Brain and Cognition; Cerebral Cortex; Child Development; Child Development Perspectives; Cognition; Cognitive, Affective & Behavioral Neuroscience; Cognitive Brain Research; Cognitive Development; Cortex; Current Biology; Current Directions in Psychological Science; Developmental Cognitive Neuroscience; Current Opinion in Behavioral Sciences; Developmental Psychology; Developmental Science; eLife; Experimental Brain Research; Emotion; European Journal of Neuroscience; Frontiers in Human Neuroscience; Frontiers in Neuroscience; Frontiers in*

*Systems Neuroscience; F1000Research; Journal of Adolescence; Journal of Child Psychology and Psychiatry; Journal of Cognitive Neuroscience; Journal of Experimental Psychology: General; Journal of Neurophysiology; Journal of Neuroscience; Mind, Brain, & Education, Monographs of the Society for Research on Child Development; Nature Human Behaviour; Nature Communications; Nature Communications Biology; Nature Neuroscience; Nature Partner Journal Science of Learning; Nature Reviews Neuroscience; NeuroImage; Neuron; Neuropsychologia; Neuropsychology; Neuroscience; Neuroscience & Biobehavioral Reviews; Quarterly Journal of Experimental Psychology; Personality and Individual Differences; Proceedings of the National Academy of Sciences; Psychological Bulletin; Psychological Review; Psychophysiology; Psychological Research; Psychological Review; Psychological Science; PLoS One; Science; Science Advances; Trends in Cognitive Sciences; Trends in Neuroscience and Education*

#### NIH Study Sections

Ad-hoc committee member for Child Psychopathology & Developmental Disabilities; Cognition and Perception; NIMH Child Interventions Review; Physiology and Modeling Review; Pediatric Functional Neuroimaging Research Network; NIMH Pathway to Independence (K99); Biobehavioral and Behavioral Processes Special Emphasis Panel; Sensory and Motor Neuroscience, Cognition and Perception Fellowship Study Section (F02B); NIH New Innovator Awards; NICHD Program Project Review; Special Emphasis panel for Cognition and Perception or Language and Communication

#### NSF grant programs

Cognitive Neuroscience Initiative; Research on Learning and Education; Perception, Action & Cognition; Behavioral Systems Cluster; CAREER award; Research and Evaluation on Science Education; Developmental and Learning Sciences; Integrative Strategies for Understanding Neural and Cognitive Systems

#### Other funding agencies

France-Berkeley Fund; Israel Science Foundation; AXA Research Fund (European funding agency); Medical Research Council (U.K.); Netherlands Organization for Scientific Research (NWO); Natural Sciences and Engineering Research Council of Canada (NSERC); Alexander von Humboldt Foundation, Germany; German Research Foundation (DFG); Templeton Foundation; Wellcome Trust Foundation; Swiss National Science Foundation; Canada First Research Excellence Fund; Canada Research Chairs Program; American Psychological Association Early Career Awards

#### Review of book proposals

Guilford Press; Cambridge University Press; Oxford University Press

#### Summaries for book jackets/endorsements

"The Agile Mind", by Wilma Koutsdaal

"Origins and Development of Recollection: Perspectives from Psychology and Neuroscience", edited by Simona Ghetti & Patricia Bauer

Executive Function: Development Across the Life Span, edited by Sandra A. Wiebe and Julia Karbach

#### **External Advisory Roles**

2018 External reviewer for 5-year review of Center for Mind and Brain, UC Davis  
2015 Invited participant, White House Office of Science and Technology Policy

- 2014 Workshop on Neuroscience and Learning
- 2014 NICHD Reasoning Work Group Meeting
- 2013 Advisory Board Member, The Synapse Project, The Aspen Brain Forum  
(aimed at mentoring aspiring female neuroscientists)
- 2012 External Consultant, DFG (German Science Foundation) Research Group  
on "Conflict as Processing Signal"
- 2010 – External Dissertation Committee Member, Humboldt University, Berlin
- 2010, 2012 External Advisor, Max Planck Institute in Human Development
- 2010, 2012 External Advisory Committee for NIMH Center on "Executive Function  
and Dysfunction" at University of Colorado at Boulder
- 2009 – 2012 Consultant on development of Academic Readiness tools, Scientific  
Learning Corporation
- 2009 Robert Wood Johnson Forum: Neuroscience & Behavior Change

### ***Expert Testimony***

- 2014 Contribution to Amicus Brief for the Supreme Court of Ohio, submitted by Drs. Luna,  
Nelson III, Bunge, Galván, and Spear (re: Ohio v. Moore)
- 2011 Expert witness in the CA Senate on adolescent brain development, CA Senate Bill 9
- 2010 Contribution to American Medical Association Amicus Brief for the Supreme  
Court on life without parole sentencing for adolescents (re: Graham v. Florida)
- 2010 Co-author of statement on adolescent brain development signed by multiple leading  
developmental cognitive neuroscientists

### **Departmental and University Service**

- 2022 Outstanding Service Award, Department of Psychology

### ***Service to Graduate Programs***

Service related to graduate admissions & recruitment, modifying program requirements, monitoring student progress through the program, advocating on behalf of students, advice on students' extramural funding applications & job applications, letters of reference, equitable distribution of funds & teaching assignments, etc.

- 2021 – 2024 Cog Neuro Graduate Advisor, Neuroscience Graduate Program, UCB
- 2019 – 2021 Head Graduate Advisor, Department of Psychology, UCB
- 2016 – 2017 Advisory Committee on Graduate and Postdoctoral Professional  
Development, Graduate Council, UCB Senate Sub-committee
- 2014 – 2016 Member, Graduate Council, UCB Senate Committee
- 2011 – 2016 Head Graduate Advisor, Department of Psychology, UCB
- 2009-10, 14-15 Cog Neuro Graduate Advisor, Neuroscience Graduate Program, UCB
- 2008 – 2011 Neuroscience Program Admissions Committee, UCB  
Neuroscience Graduate Recruitment speaker
- 2004 – 2006 Graduate Student Advisor, Department of Psychology, UCD

### ***Additional Departmental & University Service***

- 2021 – Chair, Climate Change Action Committee, Psychology
- 2021 – Member, Ad Hoc Committee for proposal to Academic Senate for a  
standing Climate Change Committee
- 2017 – 2022 Member, Committee for the Protection of Human Subjects (CPHS-I)
- Jan-June 2018 Chair, Committee for the Protection of Human Subjects (CPHS-I)

2017 – 2018	Search Committee, Faculty position in Social Development
2014, 2016	Panelist, <i>Beyond Academia</i> Conference
2015	Reviewer for Summer Undergraduate Research Fellowship program
2014 – 2017(?)	Executive Committee member, Institute of Human Development
2012 –	Founding member, CHILD Research Center
2011 – 2012	Vice Chair, Committee for the Protection of Human Subjects (CPHS-I)
2011 –	Faculty Editor, PsychologiCAL newsletter
2009 – 2014	Executive Committee, Helen Wills Neuroscience Institute, UC Berkeley
2008	Search committee: Director of Institute of Human Development, UCB
2008 – 2009	Faculty search committee, Sensation & Perception, Psychology Dept.
2007 – 2009	Committee for the Protection of Human Subjects, UCB
2007 –	Faculty Merit Reviews, Psychology Department
2003 – 2004	Faculty search committee, Center for Mind and Brain, UCD
	Faculty search committee, Social-Personality area of Psychology, UCD
2004 – 2005	Faculty search committee, Developmental area of Psychology, UCD
2004 - 2006	Member, Department Chair's Advisory Committee, UCD
2003-2005	Member, Safety committee, UC Davis Imaging Research Center
2008, 2009	CUSH Regents' and Chancellor's Scholarship Subcommittee, UCB

## Teaching Experience

2022	Developmental Proseminar (PSYCH 240, with C. Kidd)
2021	Sophomore Seminar on Motivated Reasoning (PSYCH 84)
	Neuroscience Career Skills (NEURO 290B)
	Professional Development for Graduate Students (PSYCH 293)
2020	The Developing Brain (PSYCH 125)
	Developmental Proseminar (PSYCH 240, with C. Kidd)
2018	Developmental Cognitive Neuroscience (PSYCH 290)
	The Developing Brain (PSYCH 125)
	Developmental Proseminar (PSYCH 240, with M. Srinivasan & A. Gopnik)
2017	Lifestyle Influences on Brain Health (PSYCH 290)
	Professional Development for Graduate Students (PSYCH 293)
	Three-day course in Asunción, Paraguay, organized by the Asociación Paraguaya de Neuropsicología
2016	Developmental Proseminar (PSYCH 240, with M. Srinivasan)
	The Developing Brain (PSYCH 125)
2015	Sensitive Periods & Experience-Dependent Brain Plasticity (PSYCH 290, with L. Wilbrecht)
2012, 2014	Undergraduate lecture course: The Developing Brain (PSYCH 125)
2013	Developmental Proseminar (PSYCH 240, with F. Xu and M. Srinivasan)
2008 – 2014	Professional Development for graduate students (PSYCH 293)
2012	Graduate seminar: The Developing Human Brain (PSYCH 290P)
2009	Developmental Proseminar (PSYCH 240, with F. Xu and F. Theunissen)
	Neurological Disorders in Famous Artists (PSYCH 128)
2008	The Developing Brain (PSYCH 125, UCB), Fall 2008
2007	Developmental Cognitive Neuroscience (PSYCH 192)
	Developmental Proseminar (PSYCH 240, with F. Theunissen and C. Hudson Kam)
	Faculty Sponsor, Brain and Medicine DeCal course
2003 – 2006	Cognitive Neuroscience (PSC 135, Bunge, UCD; <u>4 times</u> )

2004 – 2006 Cognitive Neuroscience (PSC 261/NSC 223; co-instructor, UCD; 3 times)

### **Guest lectures**

2022 Talk to REU and ENDURE scholars (undergraduate research summer fellowship for students from other colleges), UCB  
HWNI Neuroscience Graduate Program Boot Camp  
2021 HWNI Neuroscience Graduate Program Boot Camp  
2020 Introduction to Cognitive Science, UCB (Cog Sci 1)  
2019, 2020 Introduction to Brain Imaging Analysis Methods (Psych 115)  
2017 UCSF Psychiatry Residents  
2015 Introduction to Cognitive Science, UCB (Cog Sci 1)  
2012, 2014 Cognitive proseminar: Lecture on Memory Development (Psych 290)  
2012 T32 Training Grant, 'Mental Illness: Core Principles, Mechanisms and Treatment Development', UCB (Harvey)  
2011 DeCal course for UC Berkeley Undergraduate Journal in Psychology  
2010 Max Planck Institute in Human Development, seminar for LIFE fellows  
2009 Instructor (20 hours total), Master Program in Cognitive Neuroscience, Psychology Department, University of Granada, Spain  
2008 Riken Brain Science Institute Summer Lecture Course, "Developmental Foundations of Brain Function and Dysfunction", Tokyo  
2008 Pierce College, a community college in Los Angeles  
Social/Personality Proseminar (Chen, UCB; October)  
2 lectures, Graduate course in Cognitive Neuroscience, UCSF (Gazzaley)  
2007 Developmental Psychology (Markson, UCB)  
Developmental Psychopathology (Zhao, UCB)  
2006 Cognitive Neuroscience (Wojciulik, UCD)  
2005 Medical school Neurobiology course (Kumari, UCD)  
2003 Proseminar in Psychology (PSC 200; Goodman, UCD)  
2002 Foundations of Human Memory and Learning (Wagner, MIT)  
Cognitive Neuroscience (Corkin, MIT)  
2001 Developmental Cognitive Neuroscience (Shelton and Turner, Stanford)  
1996-2001 Presentations on neuroscience in local public schools

### **Supervision of Students and Postdoctoral Fellows**

#### **Graduate students**

##### Current:

Elena Leib, Psychology

Monica Ellwood-Lowe, Psychology (with Mahesh Srinivasan)

Willa Voorhies (with Kevin Weiner), Psychology & Helen Wills Neuroscience trainee

Smriti Mehta, Psychology

##### Doctoral alumni:

Michael Souza, Psychology, 2009; Associate Professor, Department of Psychology, University of Toronto at Scarborough

Allyson Mackey, Neuroscience, 2012; Postdoctoral fellow at MIT, Assistant Professor at the University of Pennsylvania beginning in 2016  
Kirstie Whitaker, Neuroscience, 2012: Postdoc at Cambridge University  
Anna Luerssen, Psychology, 2013 (co-Advisor with Ozlem Ayduk); Assistant Professor at Lehman College, CUNY as of Summer 2013  
Zdeña Op de Macks, Psychology, 2016 (co-Advisor with Ron Dahl); Postdoctoral fellow at the University of Oregon as of Summer 2016  
Alison Miller Singley, Psychology, 2017  
Chloe Green, School of Education, 2017 (secondary advisor, with Frank Worrell); Postdoctoral fellow in San Diego as of Summer 2017  
Susan Whitfield-Gabrieli, Psychology, 2017 (reentry student)  
Belén Guerra Carrillo, Psychology, 2018; Insight Data Science Fellow; Data Scientist at Grammarly  
Maria Eckstein, Psychology (Advisor for first 2.5 years)

#### Doctoral fellowships:

Elena Leib: Berkeley Fellowship, 2018-2020  
Monica Ellwood-Lowe: NSF Graduate Fellowship, started 07/2017; Berkeley Fellowship  
Willa Voorhies: Neuroscience graduate training program; NSF Graduate Fellowship  
Belén Guerra Carrillo: NSF Graduate Fellowship, started 07/2012  
Allyson Mackey: NSF Graduate Fellowship, 07/2009-07/2012  
Sarah Munro: NSF Graduate Fellowship, 07/2009-07/2012  
Maria Eckstein: German Academic Exchange Service (DAAD) Predoctoral Fellowship  
Alison Miller Singley: Research in Cognition and Mathematics Education Fellowship  
Chloe Green: Research in Cognition and Mathematics Education Fellowship  
Kirstie Whitaker: Fulbright Foundation Graduate Fellowship

#### **Postdoctoral fellows**

##### Current

2020 - Katherine Alfred, Ph.D. from Dartmouth University; postdoctoral fellow, jointly advised with Prof. David Kraemer at Dartmouth University.

2021 - Suvi Häkkinen, Ph.D. from University of Helsinki and first postdoctoral fellowship at UCSF; jointly advised with Assistant Prof. Kevin Weiner.

##### Alumni

Elena Galeano Weber, Ph.D. from Goethe University in Frankfurt. 2018 - 2020. *Subsequent position:* Postdoctoral fellow at Goethe University, Frankfurt.

Ariel Starr, Ph.D. from Duke University. Postdoctoral NRSA Fellow. 2015 - 2019. *Subsequent position:* Assistant Professor at University of Washington

Wei-Chun Wang, Ph.D. from Duke University. 2017 - 2019. *Subsequent position:* Data scientist at Kaiser Permanente.

Michael Vendetti, Ph.D. from UCLA. 2013-2015. *Subsequent position:* Research analyst at Oracle.

Carter Wendelken, Ph.D. from UC Berkeley. Postdoctoral fellow, 2003-2008; Staff research associate, 2008-2016. *Subsequent position: Staff research scientist at Vicarious.*

Yana Fandakova, Ph.D. from Max Planck Institute for Human Development. 2014-2016 (Co-mentors: Simona Ghetti and Silvia Bunge). *Subsequent position: Research Scientist at Max Planck Institute for Human Development*

Chris Blais, Ph.D. from University of Waterloo. NSERC Postdoctoral Fellowship from Canadian government. 2008-2010. *Subsequent position: Assistant Research Professor at Arizona State University.*

Elizabeth O'Hare, Ph.D. from UCLA. 2008-2010. *Subsequent position: Program Officer, Board on Higher Education and Workforce, National Academies of Science.*

Eveline Crone, Ph.D. from the University of Amsterdam. Postdoctoral Fellow 2003-2005. *Subsequent position: Full Professor at Leiden University, the Netherlands*

### **Visiting scholars**

Paulo Laurence, Social and Cognitive Neuroscience Laboratory and Developmental Disorders Program, Center for Health and Biological Sciences, Mackenzie Presbyterian University, São Paulo, Brazil. (remote due to the pandemic).

Natália Mota, Ph.D. student at the University of Natal, Brazil. 2-week residence in the lab.

Agnes Wiberg, Exchange student from Lund University in Sweden

Patricia Christian, Master's student at Ludwigs-Maximilians-University in Munich. 3-month residence in the lab funded by a GEO Partner Programm from LMU (2016)

Lucia Magis Weinberg, Ph.D. student at University College London. 3-month residence in lab funded by a Bogue Fellowship from UCL (2016)

Martina Stüder, Ph.D. from University of Berne. Funded by Swiss National Science Foundation Postdoctoral Fellowship. (2015-2016).

Garvin Brod, Ph.D. 3-month & 1-month residences in lab funded by the German Academic Exchange Service (DAAD). Now an Assistant Professor at the Goethe University in Frankfurt

Nils Nyberg, Exchange student from Lund University in Sweden

Maria Eckstein, Master's student at Ludwigs-Maximilians-University in Munich

Zdeña Op de Macks, Master's student at Leiden University

### **Sabbatical visitors:**

Prof. Yuko Munakata (University of Colorado at Boulder)

Prof. Pio Tudela (University of Granada)

### **Lab managers/research assistants**

Sophia Baia (Graduate student at Arizona State University), Heather Anderson (Graduate student at University of Oregon), Jesse Niebaum (NSF Graduate Fellow at CU-Boulder), Jordan Tharp (Graduate student at UC Berkeley), Maia Barrow, Susanna Hill, Chloe Green (Ph.D. from UC Berkeley); Samantha Wright; Carol Baym (Ph.D. from U Illinois), Sarah Donohue (Ph.D. from Duke University; Research Scientist at Max Planck Institute in Tübingen).

### **Graduate Student Qualifying Exam & Thesis Committee Membership**

#### **Qualifying Exam Committee Membership**

Falk Lieder, Neuroscience, UCB; Christopher Adalio, Psychology, UCB (Chair); Andrew Peckham, Psychology, UCB; Wren Thomas, Neuroscience, UCB; Kimberly Long, Neuroscience, UCB; Shawn Marks, Neuroscience, UCB; Kimberly Russo, Psychology, UCB; Joshua Sussman, School Psychology, School of Education, UCB; Amanda McKerracher, School Psychology, School of Education, UCB; Anna Luerksen, Psychology, UCB (Chair); Jenny Chai, Psychology, UCB (Chair); Linh Dang, Neuroscience, UCB (Chair); Drew Fagen, Neuroscience, UCB; Isaac Liao, Neuroscience, UCD; Chung-Hay Luk, Neuroscience, UCB; Benjamin Mullin, Psychology, UCB; Zdena Op de Macks, Psychology, UCB (Co-Chair); Stacey Seidel, Neuroscience, UCD; Shaun O'Grady, Psychology, UCB (Chair); Joe Winer, Psychology (Chair), UCB; Ruairidh Battleday, Neuroscience, UCB; Maria Eckstein, Psychology (Chair); Wan Chen Lin, Psychology (Chair); Megan Norr, Psychology (Chair); Yuan Meng, Psychology (Chair); Monica Ellwood-Lowe, Psychology, UCB (Chair); Molly Lapoint, Neuroscience, UCB; Laura Henry, Psychology, UCB; Stephanie Haft, Psychology, UCB; Leana King, Neuroscience, UCB (Chair); Benjamin Parker, Neuroscience, UCB (Chair); Samira Maboudian, Neuroscience, UCB; Milena Rmus, Psychology, UCB; Smriti Mehta, Psychology, UCB; Ezra Mauer, Psychology, UCB; Maedbh King, Psychology, UCB.

#### **Preliminary Written & Oral Exams**

Examiner for all 2<sup>nd</sup>-year graduate students in Neuroscience Program at UCD for 2004 and 2005. Approximately 30 students total, each participating in a 2-hour exam.

#### **Dissertation Committee Membership**

Christopher Adalio, Psychology, UCB; Jamil Bhanji, Psychology, UCD; Robert Blumenfeld, Psychology, UCD; Maya Cano, Neuroscience, UCB; Jenny Chai, Psychology, UCB; Lina Haldar-Chopra, Education, UCB; Maria Eckstein, Psychology, UCB; Monica Ellwood-Lowe, Psychology, UCB (Co-Chair); Kate Frankel, Education, UCB; Chloe Green, School Psychology, UCB; Anett Gyurak, Psychology, UCB; Laura Henry, Psychology, UCB; Nick Ichien, Psychology, UCLA; Bona Kang, Education, UCB; Heesoo Kim, Neuroscience, UCD; Molly Lapoint, Neuroscience, UCB; Isaac Liao, Neuroscience, UCD; Elena Leib, Psychology, UCB (Chair); Chung-Hay Luk, Neuroscience, UCB; Allyson Mackey, Neuroscience, UCB (Chair); Amanda McKerracher, School Psychology, School of Education, UCB; Samira Maboudian, Neuroscience, UCB; Yuan Meng, Psychology; Sarah Munro, Neuroscience, UCB (Chair); Zdena Op de Macks, Psychology, UCB (Co-Chair); Megan Norr, Psychology, UCB; Andrew Peckham, Psychology, UCB; Jennifer Pearlstein, Psychology, UCB; Anne Richards, Neuroscience, UCD; Milena Rmus, Psychology, UCB; Stacey Seidel, Neuroscience, UCD; Michaela Simpson, Psychology, UCB; Michael Souza, Psychology, UCB (Chair); Willa Voorhies, Psychology, UCB; Bong Walsh, Neuroscience, UCD; Kirstie Whitaker, Neuroscience, UCB (Chair); Maedbh King, Psychology, UCB.



Reader for Master's Degrees

Brian Waismeyer, Psychology, UCB; Paul Meinz, Psychology, UCB; Benjamin Mullin, Psychology, UCB; Meghan Miller, Psychology, UCB (Master's thesis); Ezra Mauer, Psychology, UCB

External Ph.D. Examiner

Yana Fandakova, Humboldt University, Berlin  
Garvin Brod, Humboldt University, Berlin  
Natália Mota, Universidade Federal do Rio Grande do Norte, Natal

Undergraduate Honor's students (a subset of all undergraduate research assistants)

Ethan Willbrand (co-advised with Kevin Weiner; Swan Award; Departmental Citation Award to the top undergraduate in Psychology in 2021), Jewelia Yao (co-advised with Kevin Weiner; Departmental Citation Award to the top undergraduate in Psychology in 2020; Swan Award), Madeleine Bernstein (secondary advisor), Lara Taniguchi, Gowri Swamy, Jeffrey Crawford, Bryan Wu (co-advised with Dr. Elysa Marco at UCSF), Orly Perlstein (Warner Brown Award for top undergraduate thesis in Psychology at UCB, 2014), Sally Bae, Layne Bernstein, Connor Lemos, Natalie De Shetler, Sasha Gupta, Justin Louie, Mehdi Bouhaddou, Sandeep Sahblock, Bryan Matlen, Michael Souza, Emily Kleinfelder.