

Jessica Wise Younger, Ph.D.

Weill Institute for Neurosciences
University of California, San Francisco
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EDUCATION

- 2017 Postdoctoral Scholar at University of California, San Francisco
Neurology, Neuroscape
Advisors: Adam Gazzaley, M.D., Ph.D, Joaquin Anguera, Ph.D., Melina Uncapher Ph.D.
- 2018 Ph.D., Communication Sciences and Disorders, University of Texas at Austin (Austin, TX)
Advisor: James R. Booth, Ph.D.
Thesis: Role of the dorsal stream in skilled reading
- 2014 MA, Non-Clinical Communication Sciences, Northwestern University (Chicago, IL)
Advisor: James R. Booth, Ph.D.
Thesis: Developmental differences in brain activity associated with improved reading skill
- 2012 BS, Cognitive Studies, Vanderbilt University (Nashville, TN)
Advisor: Bruce McCandliss, Ph.D.,
Honor's Thesis: Effects of frequency and regularity on new learning in preference readers

GRANTS & AWARDS

External Grants and Awards

- Precision Learning Center Catalyst Award 2019
- NSF student award in STEM education, International Mind Brain and Education Society Annual Meeting 2014
- NSF Graduate Research Fellowship Honorable Mention 2014

Internal Grants and Awards

- Lee and Joe Jamail Endowed Presidential Scholarship in Speech-Language Pathology 2017-2018
- UT Austin Graduate School Continuing Fellowship 2016-2018
- UT Austin Graduate School Summer Fellowship 2016
- UT Austin Career Development Scholarship \$500 2015
- UT Austin Communication Sciences and Disorders Department Travel Grant, \$600
- Incoming Cognitive Science Fellowship Northwestern University 2013-2014
- Vanderbilt Undergraduate Research Grant, Vanderbilt University 2010 \$4000.
- Cognitive Science Award, Vanderbilt University 2012
- Highest Honors in Psychology Vanderbilt University 2012

PUBLICATIONS

- Hsu, W., Rowles, W., Anguera, J.A., Anderson, A., **Younger, J.W.**, Friedman, S., Gazzaley, A., Bove, R. A., (2021). Assessing and Improving Cognitive Function in Multiple Sclerosis with Unsupervised Digital Tools: A Randomized Controlled Trial. *Journal of Medical Internet Research*.
- Younger, J.W.**, Lee, K.W., Demir-Lira, O.E., Booth, J.R., (2019). Brain lateralization of phonological awareness varies by maternal education. *Developmental Science*.
- Gotlieb, R.J.M., Pollack C., **Younger, J.W.**, Toomarian, E. Y., Allaire-Duquette G., Mariager, N. M., (2019). Next steps for mind brain and education: Strengthening early-career development. *Mind, Brain, and Education*.
- Suarez-Pellicioni, M., Lytle, M., **Younger, J.W.**, Booth, J.R., (2019). A longitudinal neuroimaging dataset on arithmetic processing in school children. *Scientific Data*.
- Younger, J.W.**, Booth, J.R., (2018). Parietotemporal stimulation affects acquisition of novel grapheme-phoneme mappings in adult readers. *Frontiers in Human Neuroscience*.
- Younger, J.W.**, Tucker-Drob, E.T., Booth, J.R. (2017). Reading network connectivity changes related to reading skill improvement. *NeuroImage*.
- Younger, J.W.**, Randazzo-Wagner, M., Booth, J.R. (2016). Weighing the cost and benefit of transcranial direct current stimulation on different reading subskills. *Frontiers in Neuroscience*.
- Yoncheva Y., **Wise J.R.**, and McCandliss B. (2015). Hemispheric specialization for visual words is shaped by attention to sublexical units during initial learning. *Brain and Language*. 145-146C, 23-33.
- Wise J.R.**, Yoncheva Y., and McCandliss B. (2011). Effects of preference and strategy on learning to read an artificial orthography. *Indiana Undergraduate Journal of Cognitive Science*. 5, 38-46
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MANUSCRIPTS IN PREPARATION

- Younger, J.W.**, Anguera, J. A., Bunge, S. A., Hoeft, F., McCandliss, B. D., Mishra, J., Rosenberg-Lee, M., Ferrer, E., Gazzaley, A., Uncapher, M. R. (under review). More alike than different: Novel methods for measuring and modeling executive function development
- Younger, J.W.**, Levy, A. E., Schchtner, J. N., Gallen, C.G. (under review). All the world's a stage: A guide to conducting virtual classroom-based research.
- Younger, J.W.**, Anguera, J. A., Bunge, S. A., Hoeft, F., McCandliss, B. D., Mishra, J., Rosenberg-Lee, M., Ferrer, E., Gazzaley, A., Uncapher, M. R. (in preparation). Development of executive function in middle childhood: a large-scale, in-school, longitudinal investigation. Pre-print at <https://psyarxiv.com/xf489/> (2021)
- Schaerlaeken, S.*, **Younger, J.W.***, Project iLEAD Consortium, Anguera, J. A., Gazzaley, A., (in preparation). The whole is greater than the sum of its parts: using cognitive profiles to predict academic achievement.
- Gallen, C.G., Schaerlaeken, S., **Younger, J.W.**, Project iLEAD Consortium, Anguera, J. A., Gazzaley, A. (in preparation). Contribution of attention abilities to academic skills in middle childhood.
- Starr, A., Leib E., **Younger, J.W.**, Project iLEAD Consortium, Uncapher, M.R., Bunge, S.A., (in revision). Relational thinking; an overlooked component of executive function. *Developmental Science*.
- D'Esposito Z., Geng, I.S., **Younger, J.W.**, Haft, S.L., Uncapher M. R., (in preparation). Growth mindset as a protective factor for middle school students at risk.

 INVITED TALKS

Conducting Remote Research (October, 2021). Ask Me Anything Series, International Mind Brain and Education Society.

Role of the dorsal stream in skilled reading (February, 2021). Educational Neuroscience Program Colloquium, University of Alabama

Out of the Lab and into the Wild: Considerations for Applying Neuroscience in Educational Settings (August 2019). Flux Translational Science Pre-Conference Beyond the lab: Translating developmental neuroscience, New York, NY

 CONFERENCE PRESENTATIONS

Younger, J.W., Gazzaley, A. (2020, July). Developmental differences in the role of executive function and print and sound-symbol correspondence knowledge in J.W. Younger (Chair) *The role of executive function in skilled reading* [Symposium]. Society for Scientific Study of Reading Annual Meeting, New Port Beach, CA (Conference Canceled).

Levy, A. E., Yusufzic, M., **Younger, J.W.**, Zanto, T.P., Gazzaley, A. (July, 2020). The role of audio-visual integration in the relationship between rhythm and reading skill [Poster]. Society for Scientific Study of Reading Annual Meeting, New Port Beach, CA (Conference Canceled).

Leib, E., Starr, A., **Younger, J.W.**, Uncapher, M.R., Bunge, S. (2020, April). Relational reasoning is among the cognitive abilities that predict fraction understanding in J. Fusenig (Chair) *Relational reasoning and mathematical knowledge: Exploring the connection* [Symposium]. AERA Annual Meeting San Francisco, CA (Conference Canceled).

Younger, J.W., McCandliss, B.D., Hoeft, F., Anguera, J.A., Mishra, J. Gazzaley, A., Uncapher, M.R. (2019, March). Role of domain-general cognitive skills in reading fluency skill in middle childhood [Poster]. Cognitive Neuroscience Society Annual Meeting, San Francisco, CA.

D'Esposito, Z. M., **Younger, J.W.**, McCandliss, B.D., Hoeft, F., Anguera, J.A., Mishra, J., Rosenberg-Lee, M., Gazzaley, A., Uncapher, M.R. (2019, March). Relationship between growth mindset, executive function, and academic achievement in middle childhood [Poster]. Cognitive Neuroscience Society Annual Meeting, San Francisco, CA.

Lorentz, J.A., **Younger, J.W.**, Wagner, A.D., Uncapher, M.R. (2019, March) Reciprocal relationship between media multitasking and working memory in middle childhood [Poster]. Cognitive Neuroscience Society Annual Meeting, San Francisco, CA.

Younger, J.W., McCandliss, B.D., Hoeft, F., Anguera, J.A., Mishra, J. Gazzaley, A., Uncapher, M.R. (2018, September). Predictors of reading fluency in middle childhood [Poster]. International Mind Brain and Education Society Biennial Meeting, Los Angeles, CA.

D'Esposito, Z. M., **Younger, J.W.**, McCandliss, B.D., Hoeft, F., Anguera, J.A., Mishra, J., Rosenberg-Lee, M., Gazzaley, A., Uncapher, M.R. (2018, September). Relationship between growth mindset and executive function in middle childhood [Poster]. International Mind Brain and Education Society Biennial Meeting, Los Angeles, CA.

Lorentz, J.A., **Younger, J.W.**, Wagner, A.D., Uncapher, M.R. (2018, September). Media multitasking and executive function in middle childhood [Poster]. International Mind Brain and Education Society Biennial Meeting, Los Angeles, CA.

Younger, J.W., Booth, J.R. (2018, July). Longitudinal changes in the reading network depend on age and skill in M.A. Roe (Chair). *Neuroimaging the typical and atypical development of reading over time* [Symposium]. Society for Scientific Study of Reading Annual Meeting, Brighton, UK.

Younger, J.W., Tucker-Drob, E.T., Booth, J.R. (2017, April). Reading network connectivity changes related to reading skill improvement [Poster]. Society for Research in Child Development Annual Meeting.

- Younger, J.W.**, Booth, J.R. (2017, January). The effect of transcranial direct current stimulation and phonemic decoding skill on learning to read [Poster]. Neuromodulation NYC Annual Meeting, New York, NY.
- Younger, J.W.**, Randazzo-Wagner, M., Booth, J.R. (2016, September). Weighing the cost and benefit of transcranial direct current stimulation on different reading subskills [Poster]. International Mind Brain and Education Society Biennial Meeting, Toronto, CA.
- Younger, J.W.**, Randazzo-Wagner, M., Booth, J.R. (2015, June) Site and domain specificity of the effects of transcranial direct current stimulation for symbolic processing [Poster]. BrainSTIM and Organization for Human Brain Mapping Annual Meeting, Honolulu, HI.
- Wise, J.R.**, McNorgan, C., Booth, J.R. (2014, November) Longitudinal changes in reading network related to age and skill [Poster] International Mind Brain and Education Society Annual Meeting, Fort Worth, TX.
- Wise, J.R.**, Frishkoff, G.A., Reville K.P., Hoque, M., Pendl, S.L., Binder, J.R. (2013, June) Neural correlates of expectancy and semantic integration: ERP source modeling and validation from fMRI [Poster] Organization for Human Brain Mapping Annual Meeting, Seattle, WA.
- Wise, J.R.**, Frishkoff, G.A., Reville K.P., Hoque, M., Pendl, S.L., Binder, J.R. (2013, April) Expectancy and meaningfulness effects in sentence comprehension: Use of fMRI for cross-validation of ERP neural source modeling [Poster] presented at Cognitive Neuroscience Society Annual Meeting, San Francisco, CA.
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TEACHING EXPERIENCE

Teaching Assistant

- Language and the Brain (Spring 2015)
 - Introduction to Evaluation and Treatment of Adult Communication Disorders (Spring 2015; Spring 2016)
 - Research in Communication Sciences and Disorders (Fall 2015)
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MENTORING EXPERIENCE

Clinical Research Coordinators, University of California San Francisco

- Anna Levy
- Marium Yusufzie
- JohnDavid Lorentz
- Sophia Obergon
- Zoe D'Esposito

Summer Interns, University of California San Francisco

- Katja Jackson
- Yoseph Alsena
- Irene Geng

Graduate Student Mentor, University of Texas at Austin

- Independent Study
 - Michael Campos
 - Devangi Dave

- Amanda Lucio
- Nupur Shambharkar
- Katharine Frantes
- Gaby Dean
- Emmanuel Soriano
- Intellectual Entrepreneurship Program
 - Keun-woo Lee
 - Carolina Uzquiano

ADDITIONAL RESEARCH EXPERIENCE

Research Coordinator, Brain Electrophysiology of Language and Literacy Systems Lab (June 2012 – July 2013)

Georgia State University (Atlanta, GA)

PI: Dr. Gwen Frishkoff

Undergraduate Research Assistant, Educational Neuroscience Lab (Fall 2009 – Spring 2012)

Peabody College of Education, Vanderbilt University (Nashville, TN)

PI: Dr. Bruce McCandliss

Undergraduate Honors Thesis: Effects of Frequency and Regularity on New Learning in Preference Readers

Undergraduate Research Assistant, Clinical Neuroscience Lab (Spring 2010)

Vanderbilt University (Nashville, TN)

PI: Dr. Sohee Park

Transcriber, KidTalk Research Program (Spring 2009 – Fall 2009)

Vanderbilt Kennedy Center, Vanderbilt University (Nashville, TN)

PI: Dr. Ann Kaiser

PROFESSIONAL AND RESEARCH AFFILIATIONS

Society for Scientific Study of Reading

FLUX

Society for Research Child Development

Cognitive Neuroscience Society

Human Brain Mapping

International Mind Brain and Education Society

- IMBES Student Board Founding Member
 - Vice President 2016-2018
 - Co-President 2019
 - Past President 2020
- Organizer *Navigating Mind, Brain and Education: A Preconference for Aspiring Leaders*, September 2018

AD – HOC REVIEWING

- Mind Brain and Education
- NeuroImage
- NeuroImage: Clinical
- Brain Sciences