ROGER W. STRONG

Laboratory for Brain and Cognitive Health Technology
Institute for Technology in Psychiatry, McLean Hospital

Email: rstrong@mclean.harvard.edu
Website: rogerstrong.weebly.com

ACADEMIC APPOINTMENTS

- Postdoctoral Research Fellow (07/2019-present)
  - Institute for Technology in Psychiatry, McLean Hospital
  - Department of Psychiatry, Harvard Medical School
  - Sponsor: Laura Germine

EDUCATION

- Harvard University – Cambridge, MA (05/2019)
  - Ph.D. in Psychology
  - Advisor: George A. Alvarez

- Washington and Lee University – Lexington, VA (05/2012)
  - B.S. in Neuroscience, *magna cum laude*
  - Advisor: Tyler S. Lorig

FELLOWSHIPS AND AWARDS

- George W. Goethals Teaching Award (Harvard University) (05/2018; 05/2020)

- Derek Bok Certificate of Distinction in Teaching (Harvard University) (10/2018)

- National Defense Science and Engineering Graduate Fellowship (09/2013-08/2016)

- Phi Beta Kappa Honor Society (03/2012)

- Elmes Pathfinder Prize in Psychology – Washington and Lee University (11/2011)

- A. B., Dolly, and Ralph Cohen Honor Scholarship (09/2008-05/2012)

PUBLICATIONS

- Passell, E., **Strong, R.W.**, Rutter, L.A., Kim, H., Scheuer, L., Martini, P., Grinspoon, L., & Germine, L. (in press). Cognitive test scores vary with choice of personal digital device. *Behavior Research Methods*.

- Germine, L., **Strong, R. W.**, Singh, S., & Sliwinski, M. J. (2021). Toward dynamic phenotypes and the scalable measurement of human behavior. *Neuropsychopharmacology, 46*, 209–216.

- **Strong, R. W.**, & Alvarez, G. A. (2020). Hemifield-specific control of spatial attention and working memory: evidence from hemifield crossover costs. *Journal of Vision 20(*8):24, 1-21.

- Blankenship, T. L., **Strong, R. W**., & Kibbe, M. M. (2020). Development of multiple object tracking via multifocal attention. *Developmental Psychology, 56*(9), 1684-1695.

- **Strong, R. W.**, & Alvarez, G. A. (2017). Training enhances attentional expertise, but not attentional capacity: evidence from content-specific training benefits. *Journal of Vision*, *17*(4):4, 1-11.

MANUSCRIPTS (under review or in prep.)

- Pozo, E., Scheuer, L., Germine, L., & **Strong, R. W.** (2021, June 2). Evaluating the Reliability and Validity of the Famous Faces Doppelgangers Test, a Novel Measure of Familiar Face Recognition. **https://doi.org/10.31234/osf.io/7tg2q**

- Singh S., **Strong, R. W.**, Jung, L., Li, F. H., Grinspoon, L., Scheuer, L. S., Passell, E. J., Martini, P., Chaytor, N., Soble, J. R., & Germine, L. The TestMyBrain Digital Neuropsychology Toolkit: Performance Validity and Psychometric Properties.

- Blankenship, T. L., **Strong, R. W.**, & Kibbe M. M. Evidence of multifocal attention in middle childhood.

- **Strong, R. W.**, & Alvarez, G. A. Successful information transfer between hemifields during focal, but not divided attention.

- **Strong, R. W.**, Passell, E., Grashow, R., Cohan, S., Scheuer, L., Roberts, A. L., Terry, D., Zafonte, R., Weisskopf, M. G., Pascual-Leone, A., & Germine, L. Cognition in former NFL players: Associations with football exposure and comparisons with nonplayers.

- **Strong, R. W.**, Germine, L., Nakayama, K., Martini, P., & Wilmer, J.W. Multiple object tracking predicts STEM-related abilities and career outcomes.

- **Strong, R. W.**, Germine, L., & Alvarez, G. A. Using simulation to guide experimental design.

- Kim, H., Kaduthodil, J., Germine, L., Cohan, S., Spitzer, B., **Strong, R. W.**, & Wilmer, J. B. Multiracial Reading the Mind in the Eyes Test (MRMET): validation of a stimulus-diverse and norm-referenced version of a classic measure.

- Carey, C. E., Huang, Y., **Strong, R. W.**, 23andMe Research Team, Aslibekyan, S., Gentleman, G., Smoller, J. W., Wilmer, J. B., Robinson, E. B., & Germine, L. Shared genetic contributions to cognition and psychiatric disorder risk based on genome-wide data.

CONFERENCE PRESENTATIONS

- **Strong, R. W.**, Germine, L., & Wilmer, J. B. (2021). Human talent and career development: Distinct cognitive profiles of STEM versus non-STEM professionals and college majors. Poster presented virtually at the 21st annual meeting of the Vision Sciences Society.

- Blankenship, T. L., **Strong R. W.**, & Kibbe, M. M. (2021). Development of split foci of attention. Poster presented virtually at the Society for Research in Child Development's Conference biennial meeting.

- Blankenship, T. L., **Strong, R. W.**, & Kibbe, M. M. (2020). *Split foci of attention in middle childhood.* Poster presented virtually at the 20th annual meeting of the Vision Sciences Society.

- **Strong, R. W.**, Carey, C. E., Huang Y., 23andMe Research Team, Aslibekyan S., Smoller J. W., Wilmer J. B., Robinson E. B., & Germine, L. Shared genetic contributions to cognition and psychiatric disorder risk based on genome-wide data (2019). Talk presented at the 33rd Annual Meeting of the Society for Research in Psychopathology, Buffalo, NY.

- **Strong, R. W.**, & Alvarez, G. A. (2019). Hemifield-specific information is exchanged as targets move between the hemifields. Talk presented at the 19th Annual Meeting of the Vision Sciences Society, St. Pete Beach, FL.

- Blankenship, T. L., **Strong, R. W.**, & Kibbe, M. M. (2019). Multiple object tracking via sustained attention in children. Poster presented at the 19th Annual Meeting of the Vision Sciences Society, St. Pete Beach, FL.

- Blankenship, T. L., **Strong, R. W.**, & Kibbe, M. M. (2019). Development of multiple object tracking via sustained multifocal attention. Poster presented at the 2019 Society for Research in Child Development Biennial Meeting, Baltimore, MD.

- **Strong, R. W.**, & Alvarez, G. A. (2018). Hemifield-specific control mechanisms for spatial working memory and attention: evidence from hemifield crossover costs. *Journal of Vision, 18*(10), 191. Talk presented at the 18th Annual Meeting of the Vision Sciences Society, St. Pete Beach, FL.

- Blankenship, T. L., **Strong, R.W.**, & Kibbe, M. M. (2018). Multiple object tracking via sustained multifocal attention in children. *Journal of Vision, 18*(10), 780. Poster presented at the 18th Annual Meeting of the Vision Sciences Society, St. Pete Beach, FL.

- **Strong, R. W.**, & Alvarez, G. A. (2017). Hemifield-specific attentional spotlights are dependent on a common global tracking template. *Journal of Vision, 17*(10), 1315. Poster presented at the 17th Annual Meeting of the Vision Sciences Society, St. Pete Beach, FL.

- **Strong, R. W.**, & Alvarez, G. A. (2016). Evidence that hemifield-specific attentional spotlights are dependent on a common high-level control mechanism. Poster presented at the 24th Annual Workshop on Object Perception, Attention, and Memory, Boston, MA.

- **Strong, R. W.**, & Alvarez, G. A. (2016). Training enhances attentional expertise, but not attentional capacity: evidence from content-specific training benefits. Poster presented at the 30th University of Rochester Center for Visual Science Symposium: The Future of Visual Attention, Rochester, NY.

- **Strong, R. W.**, & Alvarez, G. A. (2016). Evidence for successful transfer of information between the hemifields during focal, but not divided attention. *Journal of Vision, 16*(12), 191. Talk presented at the 16th Annual Meeting of the Vision Sciences Society, St. Pete Beach, FL.

- **Strong, R. W.**, & Alvarez, G. A. (2015). Multiple-object tracking training benefits display incomplete transfer across motion type and retinotopic location. *Journal of Vision, 15*(12), 1136. Poster presented at the 15th Annual Meeting of the Vision Sciences Society, St. Pete Beach, FL.

TEACHING POSITIONS

- **Harvard University Seminar Instructor (designed syllabus and conducted weekly seminar)**
  - *Contemporary Issues in Psychology: Intensive Cross-level Analyses – PSY 971*   (Spring 2020)
    - George W. Goethals Teaching Award
  - *Contemporary Issues in Psychology: Intensive Cross-level Analyses – PSY 971*   (Spring 2018)
    - George W. Goethals Teaching Award
    - Derek Bok Certificate of Distinction in Teaching
  - *Contemporary Issues in Psychology: Intensive Cross-level Analyses – PSY 971*   (Fall 2017)
- **Harvard University Teaching Fellowships**
  - *Psychological Science – SLS-20 (*w/ Steven Pinker)   (Spring 2017)
  - *Methods of Behavioral Research – PSY 1901* (w/ Ken Nakayama)   (Fall 2016)
  - *Psychological Science – SLS-20 (*w/ Daniel Gilbert)   (Fall 2015)
- **Washington and Lee University Teaching Assistantships**
  - *Research Design and Analyses – PSYC 250* (w/ Dan Johnson)   (Fall 2011)
  - *Quantitative Literacy in the Behavioral Sciences – PSYC 120* (w/ Dan Johnson)   (Winter 2011)

STUDENTS SUPERVISED

- Elizabeth Tran (02/2014 – 05/2016) – after: Biomedical Informatics Trainee, Stanford University

- Miranda Petty (Summer 2015) – after: PhD candidate, University of Washington Psychology

- Chris Hamblin (09/2016 – 05/2017) – after: PhD candidate, Harvard University Psychology

- Michael DiCalogero (09/2017 – 12/2017) – after: Lab Manager, FSU Neuroscience (Nee Lab)

- Shenyece Ferguson (09/2017 – 05/2019) – after: MD candidate, Temple University School of Medicine
    - Senior Thesis: An Exploration of the Effects of Attention on Neural Processing of Visual Information
    - Received Harvard's 2019 Hoopes Prize for outstanding undergraduate research

- Lindsey Glass (Summer 2018) – after: Associate at Notch Partners, LLC

- Heesu (Ally) Kim (09/2019 – 09/2020) – after: Associate Computational Biologist at Broad Institute of MIT and Harvard
    - Project: Multiracial Reading the Mind in the Eyes Test (MRMET): Validation of a stimulus-diverse and norm-referenced version of a classic measure

- Emilia Pozo (03/2020 – 06/2021) – after: Sales Development Representative at Benchling
    - Project: Evaluating the Reliability and Validity of the Famous Faces Doppelgangers Test, a Novel Measure of Familiar Face Recognition. https://doi.org/10.31234/osf.io/7tg2q

RESEARCH POSITIONS

- Lab Manager, Virginia Tech Measurement of Episodic Memory Lab (w/ Rachel Diana)   (06/2012-06/2013)

TECHNICAL SKILLS

- Advanced: R (data analysis and visualization), Matlab (programming experiments, data analysis)
- Intermediate: SQL, JavaScript (programming experiments, web scraping)
- Basic: Python (web scraping)