CURRICULUM VITALE

Adam B. Weinberger

BACKGROUND

Personal Information:

Name: Adam B. Weinberger

Work Address: 302C White-Gravenor
Department of Psychology
Washington, DC 20057

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Personal Website: http://adambweinberger.com

Lab Websites: http://cng.georgetown.edu; https://neuroaesthetics.med.upenn.edu/

Education and Training:

2008 – 2012 Union College, Schenectady, NY
B.S., Neuroscience; *cum laude*
Mentor: Dr. Christopher F. Chabris

2015 – 2020 Georgetown University, Washington DC
Ph.D., Psychology, focus in Cognitive Neuroscience
Advisor: Dr. Adam E. Green

2020 – Present Post-doctoral researcher, Penn Center for Neuroaesthetics
University of Pennsylvania, Philadelphia PA
Advisor: Dr. Anjan Chatterjee

2020 – Present Post-doctoral researcher, Department of Psychology
Georgetown University, Washington DC
Advisor: Dr. Adam E. Green

Professional Experience:

2010 – 2012	Research Assistant Union College, Schenectady NY Researched inattentional blindness in real work scenarios Laboratory of Dr. Christopher F. Chabris
Spring 2011	Research Assistant National Research Council, Palermo, Sicily Investigated role of Amyloid Beta and its aggregation in the development of Alzheimer's Disease
Summer 2012	Research Assistant Department of Gastroenterology and Hepatology University of North Carolina at Chapel Hill, Chapel Hill, NC Studied relationship between the psychological profile of individuals with HCV and their ability to successfully complete treatment Laboratory of Dr. Donna M. Evon
2013 – 2015	Research Associate Evidera; Health Outcomes Research, Bethesda, MD Collected, reported, and coded qualitative data from patients; Drafted and reviewed study reports, protocols, and proposals

Teaching Experience:

Fall 2015	Teaching Fellow, Lifespan Developmental Psychology Department of Psychology Georgetown University, Washington, DC
Spring 2016	Teaching Fellow, Introductory Psychology Department of Psychology Georgetown University, Washington, DC
Fall 2016	Teaching Fellow, Abnormal Psychology Department of Psychology Georgetown University, Washington, DC
Spring 2017	Teaching Fellow, Abnormal Psychology Department of Psychology Georgetown University, Washington, DC
Fall 2017	Teaching Fellow; Recitation/Lab Instructor, Research Methods and Statistics Department of Psychology Georgetown University, Washington, DC

Spring 2018	**Head TF; Recitation/Lab Instructor**, Research Methods and Statistics Department of Psychology Georgetown University, Washington, DC
Summer 2018	Lecturer, Introduction to Psychology (Intelligence) Department of Psychology Georgetown University, Washington DC
Spring 2019	***Instructor****, The Network Neuroscience of Learning Department of Psychology Georgetown University, Washington, DC ****Designed and led this undergraduate seminar***
Fall 2019	Teaching Fellow, Introductory Psychology Department of Psychology Georgetown University, Washington DC
Fall 2020	Lecturer, Introduction to Cognitive Science (Educational Neuroscience) Department of Psychology Georgetown University, Washington DC
Spring 2021	Lecturer, Cognitive Science Research Survey (Creativity) Department of Psychology Georgetown University, Washington DC
Fall 2021	**Visiting Assistant Professor**, Behavioral Neuroscience Department of Psychology Bryn Mawr College, Bryn Mawr PA

Honors Thesis and Mentorship

Keaton, Holly. (2021). Investigating the relationship between religious orientation and mental well-being

Petty, Willa. (2020). How do individuals find meaning in life? Cognitive factors bias individuals towards different sources of explanation that provide similar presence of meaning.

SCHOLARSHIPS AND RESEARCH

External Funding:

2019-2023	Co-Principal Investigator, John Templeton Foundation, ID 61114, "Understanding how brains represent gods: A representational similarity approach" (Total costs = $924,459)

2020 Gorilla Grant, Gorilla Experiment Builder. Awarded research "tokens" to investigate the relationship between implicit learning, intuition, and explicit knowledge (Total costs = $500)

2019 Travel Award, Society for the Neuroscience of Creativity Annual Meeting; Funded by a grant from the National Science Foundation (Total cost = $1,250)

2017 Graduate Student Award, Society for the Neuroscience of Creativity Annual Meeting; Funded by a grant from the National Science Foundation (Total cost = $1,000)

Internal Funding:

2019 Conference Travel Grant; Georgetown University Graduate School (Total cost = $500)

2018 Conference Travel Grant; Georgetown University Graduate School (Total cost = $425)

2017 Conference Travel Grant; Georgetown University Graduate School (Total cost = $450)

Awards and Honors:

2020 Dr. Karen Gale Exceptional PhD Student Award.
Highest honor awarded by Georgetown University Graduate School of Arts and Sciences for doctoral students

2020 Finalist. Graduate Student Teaching Award.
Award recognizes excellence among graduate students acting as instructor of record (i.e., teaching their own course)

Undergraduate Scholarships and Honors:

2008 – 2012 Presidential Scholarship; The Union Scholarship; Sigma Xi Science Research Society; Nu Rho Psi National Honor Society; Scholars Program
Union College, Schenectady, NY

Peer-Reviewed Journal Articles and Book Chapters:

Mean citations for papers published ≥ 1 year ago: 53.3
⌘ = significant role in mentorship of undergraduate or post bac author

Weinberger, A.B., Gallagher, N.M., Colaizzi, G.⌘, Liu, N., Parrot, N., Fearon, E., Shaikh, N⌘. & Green, A.G. (2022). Analogical mapping across sensory modalities and evidence for a general analogy factor. *Cognition*, 223, 105029. https://doi.org/10.1016/j.cognition.2022.105029

Weinberger, A.B., & Green, A.G. (2022). Dynamic development of intuitions and explicit knowledge during implicit learning. *Cognition*, 222, 105008. https://doi.org/10.1016/j.cognition.2021.105008

Johnson, K.A., **Weinberger, A.B.**, Dyke, E.⌘, Porter, G.F.⌘, Kraemer, D.J.M., Grafman, J., Cohen, A.B., & Green, A.G. (In press). Differentiating personified, supernatural, and abstract views of God across three cognitive domains. *Psychology of Religion and Spirituality*.

Weinberger, A.B., Christensen, A.P., Coburn, A., & Chatterjee, A. (2021). Psychological responses to buildings and natural landscapes. *Journal of Environmental Psychology*, 71, 101676. https://doi.org/10.1016/j.jenvp.2021.101676

Chatterjee, A., Coburn, A., & **Weinberger, A.B.** (2021). The neuroaesthetics of architectural spaces. *Cognitive Processing*, 1-6.

Beaty, R.E., Cortes, R.A., Zeitlen, D.C., **Weinberger, A.B**., & Green, A.E. (2021). Functional realignment of frontoparietal subnetworks during divergent creative thinking. *Cerebral Cortex*, bhab100. https://doi.org/10.1093/cercor/bhab100

Cortes, R. A.*****, **Weinberger, A. B.***, Colaizzi, G. A.⌘, Porter, G.⌘, Dyke, E.⌘, Keaton, H.⌘, ... & Green, A. E. (2021). What makes mental modeling difficult? Normative data for the multidimensional relational reasoning task (MRRT). *Frontiers in Psychology*, *12*, 1512. https://doi.org/10.3389/fpsyg.2021.668256
***Dual lead-authorship**

Coburn, A., **Weinberger, A.B.,** & Chatterjee, A. (Forthcoming). The neuroscience of architecture: Beauty and behavior in the built environment. In M. Nadal & M. Skov (Eds.), *Routledge International Handbook of Neuroaesthetics*. Routledge.

Weinberger, A.B., Gallagher, N.M., Warren, Z.J., English, G.A., Moghaddam, F.M., & Green, A.E. (2020). Implicit pattern learning predicts individual differences in belief in God in the United States and Afghanistan. *Nature Communications*, 11(1), 1-12. https://doi.org/10.1038/s41467-020-18362-3.

Peterson, E.G., **Weinberger, A.B.**, Uttal, D.H., Kolvoord, B., & Green, A.E. (2020). Spatial activity participation in childhood and adolescence: Consistency and relations to spatial thinking in adolescence. *Cognitive Research: Principles and Implications*, 5(1), 1-13. https://doi.org/10.1186/s41235-020-00239-0.

Weinberger, A.B. (2020). Neuroscience: transcranial electrical stimulation. In M.A. Runco and S.R. Pritzker (Eds.), *Encyclopedia of Creativity* (Vol. 3). Elsevier.

Cortes, R.A.⌘, **Weinberger, A.B.**, Daker, R.J., & Green, A.E. (2019). Re-examining prominent measures of divergent and convergent creativity. *Current Opinion in Behavioral Sciences*, 27, 90-93. doi.org/10.1016/j.cobeha.2018.09.017

Weinberger, A.B., Cortes, R.A.⌘, Green, A.E., & Giordano, J. (2018). Neuroethical and social implications of using transcranial electrical stimulation to augment creative cognition. *Creativity Research Journal*. doi: 10.1080/10400419.2018.1488199.

Weinberger, A.B., Green, A.E., & Chrysikou, E.G. (2017). Using transcranial direct current stimulation to enhance creative cognition: Interactions between task, polarity, and stimulation site. *Frontiers in Human Neuroscience*. doi: 10.3389/fnhum.2017.00246.

Weinberger, A.B., Iyer, H.⌘, & Green, A.E. (2016). Conscious augmentation of creative state enhances "real" creativity in open-ended analogical reasoning. *PLoS ONE,* 11(3). e0150773.

Green, A., Speigel, K., Giangrande, E., **Weinberger, A.B.**, Gallagher, N., & Turkeltaub, P. (2016). Thinking cap plus thinking zap: tDCS of frontopolar cortex improves creative analogical reasoning and facilitates conscious augmentation of state creativity. *Cerebral Cortex*, 27(4), 2628-2639. doi: 10.1093/cercor/bhw080.

Chabris, C.F., **Weinberger, A.B**., Fontaine, M., & Simons, D.J. (2011). You do not talk about Fight Club if you do not notice Fight Club: Inattentional blindness for a simulated real-world assault. *i-Perception,* 2(2), 150-153.

Preprints

Weinberger, A.B., Cortes, R.A., Betzel, R.F., & Green, A.G. (2022). Exploring functional brain network modularity in educational contexts. *bioRxiv*, 2022.01.06.475275. https://doi.org/10.1101/2022.01.06.475275.

Cortes, R.A., Peterson, E.G., Kraemer, D.J.M., Kolvoord, R.A., Uttal, D., Dinh, N., **Weinberger, A.B.**, Daker, R.J., Lyons, I.A., Goldman, D., & Green, A.G. (2021). Transfer from spatial education to verbal reasoning and prediction of transfer from classroom-based neural change. OSF Preprint. https://osf.io/xrfjd.

Select Abstracts and Conference Presentations:

Johnson, K., **Weinberger, A.**, Dyke, E., Porter, G., Kraemer, D., Grafman, J., Cohen, A., & Green, A. (2022). Personified, supernatural, and abstract views of God. Poster presented at Religion and Spirituality pre-conference of Society for Personality and Social Psychology.

Weinberger, A., Christensen, A., Coburn, A., & Chatterjee, A. (2021). Psychological responses to buildings and natural landscapes. Poster presented virtually at International Association of Empirical Aesthetics.

Porter, G.⌘, **Weinberger, A.,** Dyke, E.⌘, Johnson, K., & Green A. (2021). Understanding how individuals represent God: A multidimensional similarity approach. Poster presented virtually at the Cognitive Neuroscience Society Annual Meeting.

Weinberger, A., & Green, A. (2020). The role of intuitions on the emergence of explicit knowledge: Evidence from a Serial Reaction Time Task. Poster virtually presented at the Cognitive Neuroscience Society Annual Meeting.

Dyke, E.⌘, **Weinberger, A**., Johnson, K., Dameris, T.⌘, Mastrogiannis, A.⌘, & Green, A. (2020). Visualizations of God: Exploring the relationship between religious belief and mental representations of God. Poster virtually presented at the Cognitive Neuroscience Society Annual Meeting.

Weinberger, A., Cortes, R., & Green, A. (2019). Dynamic functional connectivity measures fail to predict "real world" classroom learning. Poster presented at the Cognitive Neuroscience Society Annual Meeting, San Francisco, CA.

Cortes, R., Dinh, N.⌘, **Weinberger, A.,** Peterson, E., Daker, R., Kolvoord, B., Uttal, D., & Green, A. (2019). Neural Evidence of Far Transfer from High School GeoScience Education. Poster presented at the Cognitive Neuroscience Society in San Francisco, CA.

Weinberger, A., Cortes, R., & Green, A. (2019). Cohesive flexibility of default, salience, and executive systems unreliably predicts creative performance. Poster presented at the meeting of the Society for the Neuroscience of Creativity, San Francisco, CA.

Weinberger, A., Cortes, R.⌘, & Green, A. (2018). Dynamic functional connectivity of brain networks predicts spatial thinking. Poster presented at the International Mind Brain and Education Society, Los Angeles, CA.

Cortes, R., Dinh, N.⌘, **Weinberger, A.**, Peterson, E., Daker, R., Kolvoord, B., Uttal, D., & Green, A. (2018). Cognitive and Neural Effects of Geospatial Education on Deductive Reasoning. Poster Presented at the International Mind, Brain and Education Society at the University of Southern California in Los Angeles, CA.

Peterson, E., Dinh, N.⌘, **Weinberger, A.**, Cortes, R., Daker, R., Kolvoord, B., Uttal, D., & Green, A. (2018). Cognitive and Neural Indicators of Spatial Thinking: Effects of a High School Geoscience Course. Poster Presented at the International Mind, Brain and Education Society at the University of Southern California in Los Angeles, CA.

Weinberger, A., Gallagher, N., Cortes, R.⌘, Dinh, N.⌘, & Green, A. (2018). Collective creativity: Exploring the existence of group-level creativity in collaborative teams. Poster presented at the meeting of the Society for the Neuroscience of Creativity, Boston, MA.

Weinberger, A., Peterson, E., Lynch, C., Kolvood, R., Uttal, D., & Green, A. (2017). Spatially-based high school course alters brain network functional connectivity. Poster presented at the Annual Meeting of the Society for Neuroscience, Washington, DC.

Weinberger, A., Daker, R., Dinh, N.⌘, Sweetser, B.⌘, Peterson, E., & Green, A. (2017). The role of spatial ability in creative reasoning. Poster presented at the meeting of the Society for Neuroscience of Creativity, San Francisco, CA.

Weinberger, A., Green, A., & Giordano, J. (2017). Transcranial electrical stimulation to promote creativity: Neuroethical, legal, and social issues, tasks, and approaches. Poster presented at the meeting of The Society for the Neuroscience of Creativity, San Francisco, CA.

Peterson, E., Kolvoord, R., Kraemer, D., **Weinberger, A**., Uttal, D., Goldman, D.⌘, & Green, A. (2017). Training spatial thinking in the high school classroom impacts cognitive and neural correlates

of verbal relational reasoning. Poster presented at the Cognitive Neuroscience Society Annual Meeting, San Francisco, CA.

Weinberger, A., Gallagher, N., Goldman, D.⌘, Warren, Z., Moghaddam, F., & Green, A. (2017). Perceiving is believing: Evidence for bottom-up influences of visual perceptual biases on the strength and development of religious belief. Poster presented at the Convention of the Society for Personality and Social Psychology, San Antonio, TX.

Green, A., **Weinberger, A.**, Speigel, K., Giangrande, E., Gallagher, N., & Turkeltaub, P. (2016). Thinking cap plus thinking zap: tDCS of frontopolar cortex improves creative analogical reasoning and facilitates conscious augmentation of state creativity. Poster presented at the Cognitive Neuroscience Society Annual Meeting, New York, NY.

Academic Talks:

Weinberger, A.B. "Analogy across modality: analogical mapping across sensory and information modalities and evidence for a general analogical ability reasoning factor". (2021). Presented at the Analogy List Seminar, Virtual Presentation: https://www.youtube.com/watch?v=XQ84n-PLtUc

Weinberger, A.B. "Examining the relationship between neural modularity and academic achievement". (2020). Presented at Colloquium of Humanities and Human Flourishing and The Penn Center for Neuroaesthetics, Virtual Presentation: https://youtu.be/6VkDaZWnVKg?t=1363

Weinberger, A.B. "Effects of Training Spatial Thinking in High School Classrooms". (2018). Presented at the Workshop on Violence and Substance Abuse Among Adolescents: A Cross Cultural Perspective, Porto Alegre, Rio Grande do Sul, Brazil.

Weinberger, A.B. "Neuromodulation of creative analogical thinking and reasoning". (2016). Presented at the meeting of The Society for the Neuroscience of Creativity, San Diego, California.

Journal Reviewer:

Brain Stimulation
Cortex
Creativity Research Journal
Europe's Journal of Psychology
Frontiers in Psychology
Journal of Applied Research in Memory and Cognition
Neurobiology of Learning and Memory
NeuroImage
PLoS ONE
Psychology of Aesthetics, Creativity, and the Arts
Translational Issues in Psychological Science

Editorial Board:

Frontiers in Psychology; Theoretical and Philosophical Psychology
Creativity Research Journal

Service:

2016 – 2019	Committee for Psychology Ph.D. Program prospective student interview weekend
2016 – 2018	Graduate Student Representative, Georgetown Research Volunteer Program (GRVP)
2021 – Present	Sponsor Outreach; Organizing Committee Member Society for the Neuroscience of Creativity

Press Coverage and Media Outreach:

FiveThiryEight article on the feeling of coziness
Psychology today blog on psychological responses to the built and natural environment
Spark dialogue podcast on implicit pattern learning and religious belief
Nature Communications' "Behind the Paper" on implicit pattern learning and religious belief
Gorilla grant award personal statement
APA feature on Laboratory for Relational Cognition
Georgetown University feature grant from John Templeton Foundation

CURRENT SCIENTIFIC COLLABORATIONS

Mikael Avery, M.A.	Stuart Weitzman School of Design, University of Pennsylvania – examining aesthetic experiences of architects and novices
Roger E. Beaty, Ph.D.	Department of Psychology, Pennsylvania State University – examination of creativity through dynamic resting-state functional connectivity; neuromodulation to enhance creativity
Richard F. Betzel, Ph.D.	Department of Psychological and Brain Science, Indiana University – neural modularity as a predictor of academic performance and classroom based learning
Alexander Christensen, Ph.D.	Penn Center for Neuroaesthetics, University of Pennsylvania – using network science to identifying underlying dimensions of aesthetic experience
Adam Cohen, Ph.D.	Department of Psychology, Arizona State University - understanding how brains represent God: a representational similarity approach
Natalie Gallagher, Ph.D.	Department of Psychology, Northwestern University – investigation of collective creativity factor to predict group

	performance, and cross-cultural commonalities in causal relational reasoning
James Giordano, Ph.D.	Department of Neurology, and Neuroethics Studies Program-Pellegrino Center for Clinical Bioethics, Georgetown University – neuroethical issues associated with transcranial electrical stimulation for creative enhancement
Lyn Godley, M.F.A	Department of Industrial Design, Jefferson University – using light-based artwork to improve patient wellness
Jordan Grafman, Ph.D.	Department of Physical Medicine & Rehabilitation, Neurology, Cognitive Neurology and Alzheimer's Center, Department of Psychiatry, Feinberg School of Medicine & Department of Psychology, Weinberg College of Arts and Sciences, Northwestern University - understanding how brains represent God: a representational similarity approach
James Haxby, Ph.D.	Department of Psychological & Brain Sciences, Dartmouth Center for Cognitive Neuroscience - understanding how brains represent God: a representational similarity approach
Kathryn Johnson, Ph.D.	Department of Psychology, Arizona State University – understanding how brains represent God: a representational similarity approach
Sangeet Khemlani, Ph.D.	Navy Center for Applied Research in Artificial Intelligence – improving mental model formation through relational reasoning training
Juliet King, ART-BC	Art Therapy Department, George Washington University – using art therapy to improve wellness in PTSD patients
Robert Kolvoord, Ph.D.	Department of Integrated Science and Technology, James Madison University – neural effects of school- based spatial education; designing school spaces to foster creativity and inclusivity
David Kraemer, Ph.D.	Department of Education, Dartmouth College – relational reasoning in STEM-related thinking and learning; enhancement of mental models in interactive training program
Abigail Marsh, Ph.D.	Department of Psychology, Georgetown University – investigation of collective creativity factor to predict group performance
John Medaglia, Ph.D.	Department of Psychological and Brain Sciences, Drexel University – neurofeedback for enhancing creativity

Kelly Michaelis, Ph.D.	Department of Psychology, Georgetown University – neurofeedback for enhancing creativity
Fathali Moghaddam, Ph.D.	Department of Psychology, Georgetown University – cross-cultural commonalities in causal relational reasoning
Emily Peterson, Ph.D.	Department of Education, American University – relational reasoning in STEM-related thinking and learning
Chandler Rhodes, Ph.D.	National Intrepid Center of Excellence – using art therapy to improve wellness in PTSD patients
Peter Turkeltaub, M.D., Ph.D.	Department of Neuroscience, Georgetown University – creative state augmentation by transcranial direct current stimulation
Melissa Walker, ART	Art Therapist, Creative Forces, National Intrepid Center of Excellence – using art therapy to improve wellness in PTSD patients
Zach Warren, Ph.D.	Survey and Research Department for The Asia Foundation in Afghanistan – cross-cultural commonalities in causal relational reasoning