

Curriculum Vitae

David M. Cole

June 2020

Interdisciplinary Program in Neuroscience
Utah State University
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EDUCATION

- 2015 St. Cloud State University
M.S. in Applied Psychology: Behavior Analysis
Thesis Advisor: Benjamin Witts
- 2007 Washington University in St. Louis
B.A. in English Literature
Minors: Environmental Studies, Political Science

GRANTS AND FELLOWSHIPS

Extramural

- 2020 Student Grant, \$500, Association for Psychological Science
- 2020–2019 Research Training Fellowship, \$2,700, Society For Psychophysiological Research
- 2019 Unrestricted Travel Grant, \$1,207, Psi Chi

Intramural

- 2020–2019 Graduate Research and Creative Opportunities Grant, \$1,000, Student Involvement and Leadership Center/Office of Research and Graduate Studies, Utah State University
- 2018–2017 Graduate Student Research Award, \$2,953, College of Education & Human Services/Department of Psychology, Utah State University

Mentored

- 2020–2019 Jessica Harrison, Undergraduate Teaching Fellowship, \$500, Office of the Provost/Department of Kinesiology and Health Science, Utah State University
- 2019–2018 Mahmoud Mansour, Undergraduate Research and Creative Opportunities Grant, \$2,000, Student Involvement and Leadership Center/Office of Research and Graduate Studies, Utah State University

Current Proposals

- 2020 Graduate Research Grant, \$1,500, Psi Chi

AWARDS AND HONORS

Extramural

- 2020 Early Career Policy Ambassadorship, Society for Neuroscience
- 2019 Best Talk by a Trainee, \$750, World Congress of the International Society of Posture & Gait Research, Edinburgh, United Kingdom
- 2019 Finalist, Psychological Science Video Festival, American Psychological Association
- 2017 Student Video Award, \$1,000, Noba Psychology/The Diener Education Fund/Psi Chi
- 2017 Distinguished Scholar, Cambridge Center for Behavior Studies

Intramural

- 2020 Academic Opportunity Fund Award, \$500, Student Association, Utah State University
- 2020 Anthony LaPray Scholarship, \$1,000, Department of Psychology, Utah State University
- 2018 Graduate Student Travel Award, \$800, Office of Research and Graduate Studies, Utah State University
- 2017 Graduate Student Travel Award, \$500, Office of Research and Graduate Studies, Utah State University

PUBLICATIONS AND MANUSCRIPTS

Peer-Reviewed Articles

- Ruddy, K. L., **Cole, D. M.**, Simon, C., & Bächinger, M. T. (2020). Neuronal response variability as a product of divisive normalization: Neurobiological implications at a macroscale level. *HRB Open Research*, 3(34).
<https://doi.org/10.12688/hrbopenres.13062.1>
- Cole, D. M.**, Rung, J. M., & Madden, G. J. (2019). Assessing susceptibility of a temporal discounting task to faking. *Journal of Clinical Psychology*, 75(10), 1959–1974. <https://doi.org/10.1002/jclp.22831>
- Rung, J. M., **Cole, D. M.**, & Madden, G. (2018, April 30). *Faking discounting rates* [Data set]. Retrieved from <https://osf.io/mnsxh>
- Bolton, D. A. E., **Cole, D. M.**, Butler, B., Mansour, M., Schwartz, S., McDannald, D. W., and Rydalch, G. (2019). Motor preparation for compensatory reach-to-grasp responses when viewing a wall-mounted safety handle. *Cortex*, 117, 135–146. <https://doi.org/10.1016/j.cortex.2019.03.001>
- Bolton, D. A. E., **Cole, D. M.**, Butler, B., Mansour, M., Rydalch, G., McDannald, D. W., and Schwartz, S. (2019, February 5). *Motor preparation for compensatory reach-to-grasp responses when viewing a wall-mounted safety handle* [Data set]. Retrieved from <https://osf.io/9z3nw/>
- Goode, C., **Cole, D. M.**, & Bolton, D. A. E. (2019). Staying upright by shutting down? Evidence for global suppression of the motor system when recovering balance. *Gait & Posture*, 70, 260–263. <https://doi.org/10.1016/j.gaitpost.2019.03.018>
- Cole, D. M.**, & Witts, B. N. (2015). Formative graphing with a Microsoft Excel 2013 template. *Behavior Analysis: Research and Practice*, 15(3-4), 171–186. <https://doi.org/10.1037/bar0000021>
- Cole, D. M.** (2017). Formative Grapher (Version 1.11) [Computer software].
<https://dx.doi.org/10.13140/RG.2.2.18860.67208>

Letters to the Editor

- Steinhauff, D., Ellwanger, J. H., Lewinska, M., Sanganyado, E., Ji, Y., Karawdeniya, B. I., Bochatay, N., Moore, E. B., Coulibaly, A., Ibrahim, S., Jansen, D. S., James, J. I., **Cole, D. M.**, Lipkin, A., Adamowicz, B. M., Cohen, C. M., Fatehi, S., Holmstrom, M. H., & Li, R. (2019). NextGen advises “Trying to Manage.” *Science*, 366(6461), 28–30.
<https://doi.org/10.1126/science.aaz5828>

Manuscripts in Preparation

- Cole, D. M.**, et al. Bursts of the brain: Rethinking the structure of extracellular potentials.
- Cole, D. M.**, et al. Balance or brace: High-speed, high-risk decisions during loss of balance.
- Cole, D. M.**, et al. Permanence of temporal-discounting rates: A Bayesian meta-analysis.
- Cole, D. M.**, et al. When to reverse: Evaluating experts in visual analysis of within-subject data against Bayesian probabilities.

CONFERENCE PRESENTATIONS

Podium Talks

- Cole, D. M.**, Butler, B., Mansour, M., Schwartz, S., Bell, H., McDannald, D. W., Rydalch, G., & Bolton, D. A. E. (2019). *An invisible hand: Automatic preparation for arresting a fall when viewing a handrail*. Paper presented at the World Congress of the International Society of Posture & Gait Research, Edinburgh, United Kingdom.
- Cole, D. M.**, Goode, C., & Bolton, D. A. E. (2019). *Response inhibition during reactive balance*. Paper presented at the 3rd Biennial International Convention of Psychological Science, Paris, France.
- Cole, D. M.**, Goode, C., & Bolton, D. A. E. (2018). *Staying upright by shutting down? Evidence for global suppression of the motor system when recovering balance*. Paper presented at the Fall Colloquium of the Disabilities Disciplines, Utah State University, Logan, UT.
- Cole, D. M.** (2018). *Adding genetically modified mice to the armamentarium of behavior analysis*. Paper presented at the 44th Annual Convention of the Association for Behavior Analysis International, San Diego, CA.
- Cole, D. M.**, Rung, J. M., & Madden, G. J. (2017). *Can temporal discounting be faked?* Paper presented at the 43rd Annual Convention of the Association for Behavior Analysis International, Denver, CO.

Posters

Cole, D. M. (2017). *Reward type predicts temporal discounting in rats: A pilot study*. Paper presented at the Annual Conference of the Utah Association for Behavior Analysis, Salt Lake City, UT. <https://observechange.org>

PROFESSIONAL SERVICE

Industry

2015–2012 Clinical Director, ACI Learning Center [behavior analysis], Colorado Springs, CO
 2012–2011 Consultant, Behavior Management Consultants [behavior analysis], Jacksonville, FL
 2010–2008 Clinical Supervisor, Wellspring Healthcare [behavior analysis], Los Angeles, CA

Research

2020–2019 Research Assistant, NIH R21 AG061688, Utah State University, Logan, UT
 2019 Visiting Researcher, Trinity College, Dublin, Ireland.
 2018 Research Assistant, Department of Kinesiology and Health Science, Utah State University, Logan, UT
 2017 Research Assistant, NIH R15 NS090283, Utah State University, Logan, UT

Teaching

2019–2018 Instructor, Utah State University, Logan, UT
 PEP 4400: Evaluation in Physical Education (Research Methods and Statistics)
 2018–2017 Instructor, Utah State University, Logan, UT
 PSY 3460: Neuroscience I (Laboratory Course)
 2017–2016 Instructor, Utah State University, Logan, UT
 PSY 1400/1410: Analysis of Behavior: Basic Principles (Laboratory Course)
 2016 Guest Speaker, Utah State University, Logan, UT
 PSY 2010: Orientation to Psychology as a Career and Profession

Editorial

2020–2016 Reviewer, Student Research Grants and Awards, Association for Psychological Science
 2019 Ad-Hoc Reviewer, Journal of Clinical Psychology
 2019 Judge, Student Research Symposium, Utah State University, Logan, UT

Chairmanships and Discussants

2020 *Bursts of the brain: Rethinking the structure and function of beta and gamma oscillations*. Symposium to be chaired and discussed at the 60th Annual Meeting of the Society for Psychophysiological Research, Vancouver, Canada. Presenters: Little, S., Longtin, A., Torrecillos, F., & Wessel, J. [postponed due to COVID-19]
 2019 *Dissociating neural mechanisms of choice: Recent developments*. Symposium chaired at the 3rd Biennial International Convention of Psychological Science, Paris, France. Co-presenters: Pattij, T. & Peters, J.
 2018 *Alternative model organisms: Alcoholic bees, mutant mice, robotic zebrafish, and T-mazing octopi*. Symposium chaired at 44th Annual Convention of Association for Behavior Analysis International, San Diego, CA. Co-presenters: Porfiri, M., Schmick, A., & Varnon, C.

Organizations and Committees

2021–2019 Member, Committee to Promote Student Interests, Society for Psychophysiological Research
 2021–2017 Campus Representative, Association for Psychological Science
 2021–2012 Interviewer, Washington University Alumni & Parents Admission Program
 2020–2014 Treasurer ← Webmaster ← Student Director, Four Corners Association for Behavior Analysis

Undergraduate Mentorships

Molly Anderson (2020); Matthew Steffensen (2019–2020) [medical school applicant]; Jessica Harrison (2019) [Undergraduate Teaching Fellowship]; Mahmoud Mansour (2018–2019) [Undergraduate Research and Creative Opportunities Grant; M.S. Candidate, Power Electronic Lab, Utah State University]; Jennifer Henry (2018); Erikka Twinting (2018); Amand Hardiman (2016) [Ph.D. Candidate, Human Development and Family Studies, Utah State University]; Jeni Christensen (2016)

SKILLS AND CERTIFICATIONS

Professional Certifications

2021–2015 Board Certified Behavior Analyst, 15-2220-025875
 2015–2010 Board Certified Assistant Behavior Analyst, 0-10-3864

Professional Trainings

2020 *Responsible Conduct of Research*, a 1-day course satisfying National Institutes of Health (NIH) hiring requirements at Utah State University, Logan, UT.
 2015 *Getting Started as a Successful Proposal Writer*, a 1-day course by Grant Writers' Seminars & Workshops, LLC at Utah State University, Logan, UT.
 2015–2013 *Professional Crisis Management, Practitioner 2*, a 3-day course at ACI Learning Center, Colorado Springs, CO.
 2008 *Picture Exchange Communication System (PECS) Training, Basic*, a 2-day course by Pyramid Educational Consultants.
 2008 *Pivotal Response Training (PRT), Level I*, a 2-day workshop at University of California-Santa Barbara.

Clinical Experience (non-exhaustive)

Contexts: Homes, Private Centers, Schools, and State Centers funded by Private Insurers, State Agencies (e.g., California Department of Developmental Services), Tricare (US Department of Defense), and Private Pay

Demographics: Ages 2 to 70+ years, cross-cultural, spanning socioeconomic brackets; primarily Autism, but also mild to severe Mental Retardation and Down Syndrome, motor disorders like Cerebral Palsy, acquired disorders like Traumatic Brain Injury, rare genetic disorders like Angelman Syndrome, and common comorbidities like ADHD

Technologies: functional behavior assessments, including functional analyses; developmental assessments (e.g., ABLLS-R, VB-MAPP); verbal behavior, including augmentative communication systems (e.g., sign language, PECS); basic skills (e.g., toileting, feeding, sleeping) to advanced (e.g., self-management, academic); highly structured methodologies (e.g., discrete trial training) to incidentally structured (e.g., natural environment training)

Research Experience (non-exhaustive)

Humans: Electroencephalography (EEG); Electromyography (EMG); Functional Near-Infrared Spectroscopy (fNIRS); Transcranial Magnetic Stimulation (TMS); Participant Markets (e.g., Amazon Mechanical Turk)

Rodents: Colony Management and Breeding; Genotyping with Polymerase Chain Reaction and Electrophoresis; Brain Stereotaxic Injection and Intravenous Catheter Implantation; Classical and Operant Conditioning; Transcardial Perfusion and Brain Sectioning; Confocal Microscopy and Neuronal Tract Tracing

Programming Languages

Python; R; MATLAB; CSS/HTML; Visual Basic for Applications; LaTeX/Markdown

Secondary Languages

French, CEFRL Level B1

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

American Association for the Advancement of Science (AAAS) ▪ American Psychological Association (APA) ▪ Association for Psychological Science (APS) ▪ Cognitive Science Society (CSS) ▪ International Society of Posture & Gait Research (ISPGR) ▪ Organization for Computational Neurosciences ▪ Psi Chi, the International Honor Society in Psychology ▪ Society for Neuroscience (SfN) ▪ Society for Psychophysiological Research (SPR)