

MEGAN HALL

Professional Networks: [Google Scholar](#), [ResearchGate](#), [GitHub](#), [LinkedIn](#), [Website](#), [Twitter](#), [Bluesky](#), [Mastodon](#)
Email: megan.hall@boystown.org

Motivated researcher with diverse experiences in psychology and neuroscience research interested in understanding more about aging and the role of neuropsychology in public health

EDUCATION

Barrett, the Honors College

Arizona State University

Aug. 2018-May 2022

Psychology (Psychological Science), Bachelor of Science

Anthropology, Bachelor of Science

Certificate in Cross-Sector Leadership

Certificate in Evolutionary Medicine

Cumulative GPA: 3.97/4.00, *summa cum laude*

Honors Thesis: The Effects of a Brief Exposure to Nature or Social Media on Psychological Well-Being

Supervisors: Dr. Virginia S.Y. Kwan, Dr. William Corbin, Dr. Douglas Kenrick, and Samantha L. McMichael

HONORS AND SCHOLARSHIPS

- **APA Society Convention Research Award - \$300** **Aug. 2022**
 - o *Psi Chi, the International Honor Society in Psychology and the APA Committee on Associate and Baccalaureate Education (CABE)*
- **Division 52 Student Member APA Convention Registration Award - \$100** **Apr. 2022**
 - o *APA Division 52 Student Committee*
- **Nominated to Present Research for Oral Presentation Award - \$250** **Aug. 2021**
 - o *Translational Genomics Research Institute, a part of City of Hope and the Helios Education Foundation*
- **Nominated for Research/Internship Gold Standard Award** **May 2020**
 - o *Barrett, the Honors College at Arizona State University*
- **Dean's List** **Dec. 2018-May 2022**
 - o *Arizona State University*
- **New American University Provost's Scholarship – Partial Tuition Remission** **Aug. 2018**
 - o *Arizona State University*

RESEARCH EXPERIENCE

The Dynamic Imaging of Cognition and Neuromodulation Laboratory

Omaha, NE

The Institute for Human Neuroscience at Boys Town National Research Hospital

Supervisors: Dr. Tony Wilson, Maggie Remp

Located in the Institute for Human Neuroscience, the DICO N Lab is focused on the use of magnetoencephalography (MEG) for precision neuroimaging

Research Assistant,

Oct. 2023-Present

- Preprocessed and coregistered MEG and MRI data using BESA Research, BESA MRI, and MATLAB
- Created spectrograms using MATLAB
- Completed t-tests and correlations for behavioral and neural data through MATLAB tools such as NII Wizard and Neuroelf in addition to R
- Ran moderation analyses, linear mixed effects models, exploratory factor analyses, and virtual sensor analyses on neuroimaging data
- Shadowed neuropsychological assessments

Translational Genomics Research Institute, a part of City of Hope,

Phoenix, AZ

Supervisors: Dr. Kendall Van-Keuren Jensen, Dr. Eric Alsop, Dr. Elizabeth Hutchins

This lab is in the Neurogenomics department and is focused on the characterization of RNA-seq across different

biofluids, extracellular vesicles, and determining potential biomarkers for neurological disease using RNA in accessible biofluids

Associate Bioinformatician,

Jun. 2022-Aug. 2023

- Analyzed long and smallRNA in various biofluids, such as plasma, urine, and cerebrospinal fluid, and in tissue samples from patients diagnosed with neurological diseases, including schizophrenia, Alzheimer's disease, and Parkinson's disease in the format of heatmaps, stacked barplots, volcano plots, upset plots, waterfall graphs, PCA plots, and many other graphs
- Improved a bioinformatics pipeline through the addition of deeptools, umitools, and cutadapt
- Compiled metadata from cognitive assessments for a dataset that includes patients diagnosed with Alzheimer's disease, Parkinson's disease, ALS, FTD, and healthy controls

Bioinformatics Intern,

Aug. 2021-Jun. 2022

- Coded the force of hits on football players' helmets for a collaborators' dataset
- Utilized UpSetR to create upset plots of transposable elements across different kits used to test water controls
- Uploaded data from healthy tissue samples to an open-source repository for exRNA to increase access to biological sample information for researchers
- Helped integrate two existing pipelines that use Jinja2 and slurm via jetstream to facilitate data processing and analysis
- Made heatmaps using z-scores using ComplexHeatmap to better illustrate findings from DESeq2 in both small RNA and bulk RNA

Helios Scholar,

Jun. 2021-Aug. 2021

- Utilized existing GitHub repositories to create a pipeline that would run via jetstream with Jinja2 templates
- Used shell-scripting in BASH to navigate between computer nodes and submit jobs via slurm
- Conducted data analysis, mainly DESeq2 from Bioconductor, in R/RStudio to complete biostatistical analyses of transposable elements
- Utilized pheatmap, EnhancedVolcano, ggplot2, and others to create graphs of transposable elements in R/RStudio

**Culture and Decision Science Network Laboratory,
Arizona State University**

Tempe, AZ

Supervisors: Dr. Virginia Kwan, Samantha McMichael, Dr. Cameron Bunker

This lab is related to personality characteristics and interventions, cyberpsychology, and characteristics of personality applied to the temporal self; one of their major projects is the "Me in 10" project, a longitudinal study of Arizona State University students who began as freshmen in 2016; the study is gathering data on how youth view their future and how this impacts them

Research Assistant,

Sep. 2019-Apr. 2022

- Coded qualitative statements written by students to themselves in ten years, specifically on how vivid their depiction of their future is, resulting in further progress in research for a graduate student's project
- Utilized SPSS Statistics for correlation tables, moderation analyses, and ANOVA
- Developed an experimental design and manipulation that utilized a survey via Qualtrics, and collected data using an online platform called Amazon Mechanical Turk for an independent thesis

**Memory, Attention, and Control Laboratory,
Arizona State University**

Tempe, AZ

Supervisors: Dr. Gene Brewer, Caleb Jerinic-Brodeur

Research in this lab focuses on memory and attention through data such as EEG, pupillometry, and other types of cognitive research

Research Assistant,

Mar. 2022-Apr. 2022

- Helped with pupillometry data collection for value-based memory and learning
- Read participants' instructions for tasks and ensured they understood the task
- Set up the computers for each participant with preprogrammed tasks that used PsychoPy and/or Gazeport
- Provided participants with credit for their participation on SONA systems

**Evolution, Ecology, and Social Behavior Laboratory,
Arizona State University**

Tempe, AZ

Supervisors: Dr. Steven Neuberg, Dr. Douglas Kenrick

Research in this lab uses social psychology from an evolutionary viewpoint. Hypotheses are drawn from anthropological data in the historical record. Stereotypes and prejudices are studied as a form of adaptation to threat, as one example

Research Assistant,

Jul. 2020-Dec. 2021

- Interviewed participants over Zoom, resulting in further data collection for a study
- Conducted literature reviews and learned to articulate what was stated in evolutionary science journals
- Coded qualitative data for graduate students' research projects
- Helped with data collection in-person by reading instructions to participants, keeping the environment controlled, and sanitizing between data collection due to pandemic protocols

**Culture of Context and Positive Development Laboratory,
Arizona State University**

Tempe, AZ

Supervisor: Dr. Monica Tsethlikai

This lab uses developmental and biological perspectives to understand how Indigenous youth use cultural practices as a method of blocking stress, and how these factors play a role in executive function development

Barrett Fellow,

Aug. 2019-Dec. 2019

- Read research papers on executive function development, specifically pertaining to Indigenous adolescents
- Graded executive function tests, such as the BRIEF, happy/sad, etc. and input scores to SPSS
- Compiled qualitative information from interviews for a presentation to the Indigenous community

**REACH Institute,
Arizona State University**

Tempe, AZ

Supervisor: Dr. Nancy Gonzalez

This lab broadly studies Mexican American youth. I worked on a project funded by the NIH, more specifically on a longitudinal intervention-based study meant to find out how to help Mexican American youth by looking at familial and genetic influences

Research Assistant,

Jan. 2019-May 2019

- Interviewed youth and adults in-person and over the phone, increasing the amount of mass data collection
- Completed various office tasks, such as organization of folders and data, resulting in a more thorough collection of data

PUBLICATIONS

Hall, M.C., McMichael, S.L., & Kwan, V.S.Y. (2023). Effects of a Brief Exposure to Nature or Social Media on Psychological Well-Being. *Modern Psychological Studies*, 29(1). <https://scholar.utc.edu/mps/vol29/iss1/3/>

Godfrey, R.K., Alsop, E., Bjork, R.T., Chauhan, B.S., Ruvalcaba, H.C., Antone, J., Gittings, L.M., Michael, A.F., Williams, C., Hala'ufia, G., Blythe, A.D., **Hall, M.**, Sattler, R., Van Keuren-Jensen, K., & Zarnescu, D.Z. (2023). Modelling TDP-43 proteinopathy in *Drosophila* uncovers shared and neuron-specific targets across ALS and FTD relevant circuits. *Acta Neurological Communications*, 11(168). <https://doi.org/10.1186/s40478-023-01656-0>

BOOK CHAPTERS

Hall, M. (2023). COVID-19 Testing, Preventive Measures, and Ethical Issues. In H.R. Searight (Ed.), *Covid-19 Health Disparities and Ethical Challenges Across the Globe*. Springer. https://doi.org/10.1007/978-3-031-26200-5_9

SUBMITTED

Hall, M.C., Venkataramanan, V., Collins, R.Y., & Li, E.A. (under review). The International Handbook of Emotions. In Vanderheiden, E. & Mayer, C. (Eds), *Post-traumatic Growth and Emotional Resilience in Immigrants and Refugees from Africa and the Middle East*. Springer.

Rami, F. Searight, H.R., Dryjanska, L. & **Hall, M.** (under review). Modern Slavery and the United Nations Sustainable Development Goals. *Canadian Psychology*.

Silva, T.F., Hutchins, E., Zhao, W., Ciani, Y., Ko, E., Mariscal, J., Kim, M., Qiu, Z., Kittel, A., Zhou, B., Wang, Y., **Hall, M.**, Galasso, F., Reiman, R., Freeman, M.R., You, S., Parker, S., Van Eyk, J., Yang, W., Posadas, E., Guarnerio, J., Nolan, J., Théry, C., Zijlstra, A., Stott, S., Demichelis, F., Boutros, P.C., & Van

Keuren-Jensen, K. (submitted). Extracellular Vesicles heterogeneity through the lens of multiomics. *Cell*.

PRESENTATIONS

Wan, I., **Hall, M.**, & Easterling, A. (2024, June). *Culturally Competent Mental Health Support for Southeast Asia (SEA) and SEA Immigrants*. [Unconference and abstract]. Unconference presented at the Society for the Improvement of Psychological Science, Virtual.

Rader, L., Wagner, L., Amir, C., Dobler, Z., Hogan, A., **Hall, M.**, Gryshyna, A., Lim, K.Y., & Peris-Yague, A. (2024, April). *Knowing Neurons*. [Conference poster and abstract]. Poster session presented at the National Science Policy Symposium, Riverside, CA.

Wagner, L., Amir, C., Hogan, A., **Hall, M.**, Gryshyna, A., & Lim, K.Y. (2023, November). *Knowing Neurons: A creative neuroscience education and outreach organization by young neuroscientists*. [Conference poster and abstract]. Poster session presented at the fifty-second annual convention of the Society for Neuroscience, Washington, DC.

Abbasi, A., Hutchins, E., Meechoovet, B., **Hall, M.**, Garcia-Mansfield, K., Soriano, A., Calmelat, R., Ferguson, C., Jensen, K., Pirrotte, P., Porszasz, J., Casaburi, R., Stringer, W., & Rossiter, H. (2023, September). *Greater Enrichment of Biological Pathways in Circulating Extracellular Vesicles of Controls than COPD Following Exercise*. [Conference poster and abstract]. Poster session presented at the European Respiratory Society International Congress, Milan, Italy. DOI: 10.1183/13993003.congress-2023.PA2273

Hutchins, E., Reiman, R., Palade, J., Meechovet, B., Bilagody, C., **Hall, M.**, Frasier, M., Casey, B., & Van Keuren-Jensen, K. (2023, May). *Assessment of long RNAs in CSF and plasma from healthy donors or individuals with Parkinson's disease*. [Abstract and oral presentation]. Oral presentation presented at the International Society for Extracellular Vesicles, Seattle, WA.

Hutchins, E., Reiman, R., Bilagody, C., Antone, J., Meechovet, B., Palomares, D.M., **Hall, M.**, & Van Keuren-Jensen, K. (2023, May). *Characterization of mRNA, lncRNA, and circRNA in plasma and urine from participants with Alzheimer's disease, Parkinson's disease, and healthy controls*. [Abstract and oral presentation]. Oral presentation presented at the International Society for Extracellular Vesicles, Seattle, WA.

Hall, M.C. (2023, March). COVID-19 Highlights International Health Disparities. In H.R. Searight (Chair). *COVID-19 Halts International Progress on the United Nations' Sustainable Development Goals*. [Symposium]. Symposium presented at the fifth Benjamin V. Cohen Peace Conference, Virtual.

Hall, M.C., Hutchins, E., Bilagody, C., Reiman, R., Antone, J., Logemann, A., Cox, L., Palomares, D.M., Bitzah-Ray, F., & Van Keuren-Jensen, K. (2022, November). *An investigation into transposable elements in the transcriptomes of patients diagnosed with neurodegenerative disease and healthy controls in urine and plasma*. [Conference poster and abstract]. Poster session presented at the fifty-first annual convention of the Society for Neuroscience, San Diego, CA, United States.

Hall, M.C., McMichael, S.L., Dryjanska, L., & Kwan, V.S.Y. (2022, August). *Effects of a Brief Exposure to Nature or Social Media*. [Conference poster and abstract]. Poster session presented at the one-hundred and thirtieth annual convention of the American Psychological Association, Minneapolis, MN, United States.

Dryjanska, L., & **Hall, M.C.** (2021, July). Addressing Healthcare in the Face of Death and Dying: Snapshots from ten countries. In L. Dryjanska (Chair). *Ethical Dilemmas and Health Care Across the Most Affected Countries During the COVID-19 Pandemic*. [Symposium]. Symposium presented at the thirty-second International Congress of Psychology, Virtual.

Rami, F., & **Hall, M.C.** (2021, July). A Multi-Country Analysis of the Impact of COVID-19. In L. Dryjanska (Chair). *Ethical Dilemmas and Health Care Across the Most Affected Countries During the COVID-19 Pandemic*. [Symposium]. Symposium presented at the thirty-second International Congress of Psychology,

Virtual.

Battista, P., & Hall, M.C. (2021, July). The Mental Health Impact of the COVID-19 Pandemic: A Multi-Country Analysis. In L. Dryjanska (Chair). *Ethical Dilemmas and Health Care Across the Most Affected Countries During the COVID-19 Pandemic*. [Symposium]. Symposium presented at the thirty-second International Congress of Psychology, Virtual.

Hall, M.C., Hutchins, E., Alsop, E., Reiman, R., Bilagody, C., Pilade, J., & Van Keuren-Jensen, K. (2021, August). *The hidden transcriptome in cerebrospinal fluid and an exploration of its role in Parkinson's disease*. [Poster, abstract, and presentation]. Poster and oral presentation presented at the Helios Scholars Intern Symposium, Phoenix, AZ.

Hall, M.C., McMichael, S.L. & Kwan, V.S.Y. (2021, February). *Familism maintains hope despite loss of relatedness to the future self during the COVID-19 pandemic*. [Conference poster and abstract]. Poster session presented at the twenty-second annual convention of the Society for Personality and Social Psychology, Virtual.

ORGANIZATIONAL AFFILIATIONS

Psi Chi, the International Honors Society in Psychology

Member

Dec. 2020-Present

American Psychological Association

Affiliate Member

Apr. 2019-Present

- Coded articles on COVID-19 and mental health from 30 countries for a literature review to increase advocacy and awareness of mental health worldwide in reaction to COVID-19; this research was utilized in the format of a symposium, research paper, and book
- Reviewed submissions for the Student International Research Award and Anastasi Research Award to provide funding for students working on projects that are internationally focused
- Reviewed submissions for the 2023 Division 45 student conference

Division 52 Handbook Committee

Dec. 2023-Present

- Compiled information on various positions within APA Division 52 to form a new handbook meant to aid new leadership in the Division
- Interviewed current and past APA Division 52 leadership to gather more accurate information

Division 52 Advocacy Committee

Mar. 2024-Present

- Working to create goals for the newly created advocacy committee for Division 52

CLINICAL EXPERIENCE

The Trevor Project

Virtual

Volunteer Counselor

Aug. 2023 – Present

- Completed 10 weeks of training on engaging with LGBTQ+ youth, including suicidal ideation and harm reduction
- Spoke with youth via text/chat and completed case records for 3 hours per week
- Collaborated with licensed counselors on child abuse, suicidal, and violent intent cases

HonorHealth Deer Valley

Phoenix, AZ

Volunteer Generalist,

Mar. 2022 – Sep. 2023

- Spent 4 hours per week at the front desk, helping direct people to their loved ones
- Handled a variety of problems that arose in a forward-facing position in healthcare

COMMUNITY SERVICE

Knowing Neurons

Virtual

Chief Website Manager

Jun. 2023 - Present

- Helping with the integration of translated webpages in multiple languages
- Created updated training videos on how to use WordPress and format articles
- Implemented a more organized way of collaborating on many different projects within the Website Team
- Cleaned the website database and transitioned the website to a different hosting provider for a lower cost

- and improved site speed
 - Interviewed and onboarded 3 new website team members
- Website Team Member,* *Mar. 2023 – Jun. 2023*
- Removed unnecessary plugins
 - Added a hamburger menu and made certain blocks visible only on certain screen sizes to improve the user design and move towards responsive design
 - Increased the visibility of the “Language” menu through flag icons
 - Reorganized certain pages to improve navigability and accessibility

- Psychin’ Out** **Virtual**
Conference Volunteer *Jul. 2023*
- Drafted and edited emails to inform participants and presenters about the Psych for Peace and Justice conference
 - Created virtual backgrounds in Canva to help make conference moderators and presenters apparent
 - Facilitated communication and gathered materials from 2 presenters
 - Moderated 2 conference sessions

- Letters to a Pre-Scientist** **Virtual**
STEM Pen Pal, *Jul. 2022 – May 2023*
- Consists of writing 4 letters to a “pre-scientist” in middle or high school about STEM each year
 - This takes about 10 hours per year

- Next Generation Service Corps at Arizona State University,** **Tempe, AZ**
Member, *Aug. 2018-Present*
- Attended seminars and classes designed to improve leadership and thinking across the public, private, and non-profit sectors

- Member of the Disabilities and Empowerment Committee,* *Aug. 2018-May 2022*
- Created disability advocacy fliers using Canva to increase disability awareness
 - Attended service events and learned about disability awareness and advocacy, resulting in growth of my own knowledge of disability awareness and accessibility

- Mentor Coordinator,* *May 2021-Dec. 2021*
- Sorted Mentors and Mentees and matched them based on their major, campus, interests, etc., resulting in better mentor/mentee relationships
 - Created email templates that could be utilized each year to send information to mentors
 - Communicated with mentors and mentees to facilitate their relationships

- Psi Chi at Arizona State University,** **Tempe, AZ**
Member, *Dec. 2020-Present*
Director of Community Outreach, *May 2021-May 2022*
- Took charge of planning service events for Psi Chi
 - Worked with other members of the Psi Chi Board to create budgets for events and make events known via newsletters and social media

- Disability Awareness and Advocacy Committee at Arizona State University,** **Tempe, AZ**
Co-Chair, *Aug. 2018-May 2019*
- Organized documents in a Google Drive, resulting in better organization of the committee’s resources
 - Created a Google Form to ask about disability stigma, resulting in more awareness of issues on-campus
 - Acted as a go-between for Undergraduate Student Government, resulting in further advocacy of the Disability Resource Center’s programs for students with disabilities

TECHNICAL SKILLS

- Google Drive - Proficient
- Microsoft Office 365 – Proficient
- Canva Graphic Design – Proficient
- IBM SPSS Statistics - Proficient
- Qualtrics Surveys – Proficient

- Slurm Workload Manager – Proficient
- BASH/Shell scripting – Proficient
- R (Programming) – Proficient packages: tidyverse, dplyr, ggplot2, ggpubr, pheatmap, EnhancedVolcano, corrplot
- R (Programming) – Intermediate packages: ComplexHeatmap, UpSetR, DESeq2, lme4
- Git/GitHub – Intermediate
- Python – Intermediate packages: numpy, tkinter
- HTML – Intermediate
- CSS – Intermediate
- WordPress – Intermediate
- MATLAB – Intermediate
- BESA Research – Intermediate
- BESA MRI – Intermediate
- BESA Statistics - Intermediate

CERTIFICATIONS

- Responsible Conduct of Research Certification
- Human Subjects Social Sciences (Group 2) and Biomedical Sciences (Group 1) Certification
- Conflict of Interest Certification
- CPR/AED Certification

REFERENCES

- Available upon request