mchall5@asu.edu linkedin.com/in/mhallpsych (480)-205-9578

OSF Link: https://osf.io/hqxfd/ GitHub: @PsychNStuff

#### **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

- Division 52 Student Member APA Convention Registration Award

April 2022

o APA Division 52 Student Committee

- Nominated to Present Research for Oral Presentation Award

August 2021

- 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

   Arizona State University
- New American University Provost's Scholarship

Aug. 2018

Dec. 2018-May 2022

o Arizona State University

#### RESEARCH EXPERIENCE

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

Phoenix, AZ

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

June 2022 – Present

- Analyzed long and smallRNA in plasma and cerebrospinal fluid samples from patients diagnosed with schizophrenia and healthy controls in the format of heatmaps, stacked barplots, volcano plots, and upset plots
- Running analyses for the purpose of quality control and to help characterize the transcriptome of patients diagnosed with schizophrenia and healthy controls
- Working on compiling metadata from cognitive assessments for a dataset that includes patients diagnosed with Alzheimer's disease, Parkinson's disease, and healthy controls

Bioinformatics Intern.

Aug. 2021 – June 2022

- Created heatmaps of transposable elements compared to genes in RNA for a presentation
- Coded the force of hits on football players' helmets for a collaborators' dataset
- Used 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, June 2021 – Aug. 2021

Dr. Jensen's lab is focused on the role of RNA as potential biomarkers for neurological disease

- 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
- Spoke to a group about current research on the project including the role of transposable elements, the research found on transposable elements in cerebrospinal fluid and Parkinson's disease, and future directions
- Created and presented a poster, abstract, and oral presentation summarizing the project's background, results, and goals

#### Culture and Decision Science Network Lab,

**Tempe, AZ** Supervisors: Dr. Virginia Kwan, Samantha McMichael, Cameron Bunker *Research Assistant*.

Sep. 2019-Apr. 2022

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

- 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
- Completed an independent project including statistical analysis, a written abstract, and a poster, that was presented online at the SPSP 2021 conference
- 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
- Presented data analyses in both an APA formatted paper and via a 20 minute oral presentation for an honors undergraduate thesis project

# Memory, Attention, and Control Lab (MAC Lab),

Tempe, AZ

Supervisors: Dr. Gene Brewer, Caleb Jerinic-Brodeur

Research Assistant,

Mar. 2022-Apr. 2022

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

- 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 Gazepoint
- Provided participants with credit for their participation on SONA systems

## Evolution, Ecology, and Social Behavior Lab,

Tempe, AZ

July 2020 - Dec. 2021

Supervisors: Dr. Steven Neuberg, Dr. Douglas Kenrick

Research Assistant,

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

- 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 cleaning between data collection

#### Culture of Context and Positive Development Lab,

Tempe, AZ

Supervisor: Dr. Monica Tsethlikai

Barrett Fellow, Aug. 2019-Dec. 2019

A project that utilizes developmental and biological perspectives to understand how Native American youth use cultural practices as a method of blocking stress, and how these factors play a role in executive function development

- Read research papers on executive function development, specifically pertaining to Native Americans and 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 Native American community

REACH Institute, Tempe, AZ

Supervisor: Dr. Nancy Gonzalez

Research Assistant, Jan. 2019-May 2019

A project funded by the NIH, the goal of this longitudinal intervention-based study was to find out how to help Mexican-American youth by looking at familial and genetic influences

- 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

#### **ORGANIZATIONAL AFFILIATIONS**

Accessibility Coalition at Arizona State University

Dec. 2021-Present

Member

**APA Division 40: Clinical Neuropsychology** 

Jan. 2021-Present

Student Member

Member of Association of Neuropsychology Students and Trainees (ANST)

Feb. 2021-Present

Psi Chi International Psychology Honors Society

Student Member

**APA Division 52: International Psychology** 

Apr. 2019-Present

Dec. 2020-Present

Student Member

Member of the COVID-19 Taskforce

Aug 2020-Present

- Coded articles on COVID-19 and mental health from 30 countries for a quantitative 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 and research paper

Member of the Student Committee

Aug 2020-Present

- Reviewed submissions for the Student International Research Award and Anastasi Research Award to provide funding for students working on projects that are internationally focused and (specific to Anastasi) focused on psychometrics

#### APA Division 8: Society for Personality and Social Psychology

Apr. 2019-Present

Student Member

#### PROFESSIONAL EXPERIENCE

### **HonorHealth Deer Valley**

Volunteer Generalist,

Mar. 2022 - Present

- 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

### Psi Chi at Arizona State University,

Tempe, AZ

Member, Dec. 2020-May 2022
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

## 7 Cups of Tea

Active Listener,

Sep. 2020 – Dec. 2020

This online platform is like a crisis textline, but instead it is for those who are not in dire emergency. Volunteers are taught to listen to those who contact us on this platform and help them talk and think through things; they are

not trained for crises, which are directed to a licensed therapist.

- Spent approximately 2-4 hours per week online texting with people experiencing distress

## 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

# 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 in order to facilitate their relationships

#### PRESENTATIONS AND PUBLICATIONS

- **Hall, M. C.,** McMichael, S.L., & Kwan, V. S. Y. (2022). Effects of a Brief Exposure to Nature or Social Media on Psychological Well-Being (Preprint). https://doi.org/10.31234/osf.io/bfpq6
- 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.
- 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., 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. DOI: 10.17605/OSF.IO/NYTPU

### **WORK EXPERIENCE**

- Advocated for students in Barrett, the Honors College through writing and passing legislation against Anti-Semitism, in support of the autistic community, etc. resulting in a safer community for many ASU students
- Communicated student and faculty concerns to the university clearly
- Effectively took fiscal charge of clubs through appropriations and legislation

EpiFinder Inc., Scottsdale, AZ

Marketing and Sales Intern,

May.-Aug. 2019

- Learned how to use HubSpot without official training to create leads and complete sales calls, resulting in the passing on of this knowledge to new interns
- Made cold calls, especially to old leads, essentially bringing back the marketing program
- Took charge of digital marketing for the company using AdobeSpark, Pexels, and HootSuite, without official training, resulting in the creation and maintenance of Facebook, Instagram, and LinkedIn pages
- Used MailChimp to create newsletters, without training, resulting in the passing on of this knowledge to new interns
- Wrote blogs for the company website, resulting in increased website traffic and leads
- Created training documentation, as stated, for every task completed, resulting in the passing on of lost knowledge about marketing and sales to new interns

#### TECHNICAL SKILLS

- Google Drive/Microsoft Office Proficient
- Canva Graphic Design Proficient
- IBM SPSS Statistics Proficient
- Qualtrics Surveys Proficient
- R Proficient packages: tidyverse, dplyr, ggplot2, ggpubr, pheatmap, DESeq2
- R Intermediate packages: ComplexHeatmap, UpSetR
- BASH/Shell scripting Intermediate
- Git/GitHub Intermediate

#### **CERTIFICATIONS**

- CITI (Human Subjects) Certification