MEGHAN BROADBENT

395 1500 E #111 RM128, Salt Lake City, UT 84112

(801) 866-8631 · meghan.broadbent@utah.edu · meghanbroadbent@gmail.com

EXPERIENCE

2018—PRESENT Salt Lake City, UT

SOCIAL RESEARCH INSTITUTE (SRI), COLLEGE OF SOCIAL WORK, UNIVERSITY OF UTAH RESEARCH ASSISTANT PROFESSOR (NOV 2023–PRESENT)

- PI, co-PI, and lead on various social service research and evaluation contracts
- Oversee state-wide implementation and outcome evaluation strategies
- Expertise on Family First Title IV-E Prevention Services Clearinghouse measures
- Administrative duties including managing project scopes, timelines, budgeting, staffing, training, reporting, and dissemination of findings
- Biostatistical and machine learning modeling of state-level administrative and secondary data

ASSOCIATE DIRECTOR (JUN 2022-PRESENT)

- Assist SRI Director with oversight of daily operations
- Procurement, development, and management of project budgets and contracts
- Review organizational accounting and forecasting
- Oversee personnel performance, staffing, training, and distributions
- Review project proposals, IRBs, reports, and publications
- Ongoing coordination and engagement with stakeholders and community partners

INTERIM ASSOCIATE DIRECTOR (JUN 2021–JUN 2022)

• Held same responsibilities as current Associate Director position

BIOSTATISTICIAN III (DEC 2019-NOV 2023)

- Held same responsibilities as Biostatistician II
- Consulting statistician for the College of Social Work
- Representative for Casey Family Race/Equity Teams, DHHS EDIA Steering Committee
- PI, co-PI, and lead on various social service research and evaluation contracts
- Oversee state-wide implementation and outcome evaluation strategies
- Expertise on Family First Title IV-E Prevention Services Clearinghouse measures
- Title IV-E Prevention Services Clearinghouse well-supported rating of FFUYV
- Administrative duties including managing project scopes, timelines, budgeting, staffing, training, reporting, and dissemination of findings

BIOSTATISTICIAN II (MAY 2018-DEC 2019)

- co-PI and lead on various state-contracted research projects
- Supervising statistician on study design, data management, and reporting
- Data-driven outcomes using multi-level Bayesian methods in R

2019–2019 Salt Lake City, UT

UTAH DIVISION OF SUBSTANCE ABUSE & MENTAL HEALTH

STATISTICAL CONSULTANT

• Level of Service Utilization Inventory tool using multinomial logistic regression and neural networks, prediction modeling of mental health service utilization

2016–2018 Salt Lake City, UT

INTERNATIONAL ACADEMIES OF EMERGENCY DISPATCH (IAED)

STATISTICIAN/RESEARCH DATA ANALYST (2017–2018)

- Held same responsibilities as Research Data Analyst
- Oversight on study design, analysis plans, data management, statistical processes
- Translational research for use in College of Emergency Dispatch curriculum
- Created new IRB forms for submission and review process now in use at IAED

RESEARCH DATA ANALYST (2016–2017)

- Data management and statistical procedures in SQL, R, Stata, Python
- Collaborative research collaboration in emergency services

2017–2018 Salt Lake City, UT

OBSTETRICS & GYNECOLOGY, UNIVERSITY OF UTAH SCHOOL OF MEDICINE

CONSULTING PROGRAMMER

- NIH-funded grant focusing on women's health
- Data preprocessing pipeline development using SAS, PostgreSQL, and Python

2010–2016 Salt Lake City, UT Price, UT

PROJECT DISCOVERY

INSTRUCTOR

- Helped develop a non-profit program providing alternative high school credit for various schools across the state in conservational archaeology
- Assistant instructor, field archaeologist, and host for community events

EDUCATION

2020-PRESENT PHD IN LEARNING & COGNITION

UNIVERSITY OF UTAH | DEPARTMENT OF EDUCATIONAL PSYCHOLOGY

MAY 2018 Cum. GPA 3.9 **MASTER OF SCIENCE IN BIOSTATISTICS**

UNIVERSITY OF UTAH SCHOOL OF MEDICINE | DIVISION OF PUBLIC HEALTH

MAY 2016

BACHELOR OF SCIENCE IN MATHEMATICS, STATISTICS EMPHASIS

UNIVERSITY OF UTAH COLLEGE OF SCIENCE

PROFESSIONAL ACTIVITIES & SERVICE

2021—PRESENT EQUITY, DIVERSITY, INCLUSION, AND ACCESS (EDIA) STEERING COMMITTEE | DHHS

MEMBER

SRI representative for the DHHS EDIA Steering Committee. Guidance and insight on EDIA

in child and social welfare services research, policies, and practices

2020-PRESENT CASEY FAMILY EXTENDED AND CORE RACE EQUITY TEAM | DHHS

MEMBER

SRI representative for both the Casey Family Extended Race/Equity Core Team and Extended Team. Collaboration with national and other state agencies on EDIA in child and

social welfare services research, policies, and practices

2018–PRESENT INSTITUTIONAL REVIEW BOARD | IAED

MEMBER

Guidance and correspondence to investigators through the review of protocols and study submissions in emergency services

2

2018–2020 COUNCIL OF RESEARCH | IAED

MEMBER

Insight on study design, analysis planning, and data collection/management for research

in emergency services

2017–2018 ARTIFICIAL INTELLIGENCE COMMITTEE | IAED

MEMBER

Advice on the integration of machine learning in an emergency dispatch setting

ACADEMIC ACTIVITIES

2020-PRESENT SAFEUT | 1U4U

RESEARCH MEMBER

Project funded by the One U for Utah Initiative (1U4U) focused on supporting the quality of SafeUT by evaluation of text-based crisis counseling using machine learning methods

2020—PRESENT DIGITAL EXPLORATION OF PSYCHOTHERAPY (DEPTH)

RESEARCH MEMBER

NIH funded project with the UofU Counseling Center for the development and implementation of spoken language technologies to assist training, supervision, and quality assurance monitoring of counseling, focusing on motivational interviewing

SKILLS & EXPERTISE

MANAGEMENT

- Management of daily research institute operations
- Overseeing and forecasting department and contract budgets, timelines, and staffing
- Leading creative decisions, organizational plans, and policies
- Research project management of grants and state-contracted research
- Staff development, training, and performance review

RESEARCH

- Execution of observational, quasi-experimental, and RCT research studies
- Consultation on study design, data management, protocol development, program evaluation (process and outcomes), interpretation and dissemination of findings
- Bayesian and frequentist multi-level modeling, mixed methods
- Causal inference, survival analysis, time-varying, propensity scores
- Graphical modeling, KNN, psychometrics, and more

PROGRAMMING

- Proficiency in R for data preprocessing, transformation, statistics, and visualization
- Working knowledge of Python, SQL
- Familiarity with Stata, SAS

AREAS OF INTEREST

RESEARCH

- Child and social welfare, public health
- Equity, diversity, inclusion, and access in social and health services
- Ethics in AI implementation in social, behavioral, and health services
- Cognitive load among crisis line workers
- Implementation of AI in assisting mental health clinicians in identifying risk of suicide

- Mental health services utilization and fidelity
- Social service program evaluation; process and outcomes evaluation

STATISTICS

- Quasi-experimental methods, propensity scores, causal inference
- Bayesian methods, multi-level modeling, time-varying, longitudinal
- Psychometrics, survey methods, qualitative and mixed methodology
- Unique methods for visualization of statistical findings

AWARDS & HONORS

APR 2019

MSTAT STUDENT OF THE YEAR

UNIVERSITY OF UTAH SCHOOL OF MEDICINE | DIVISION OF PUBLIC HEALTH Received the MSTAT/Biostatistics Track 2018 Student of the Year award for the Biostatistics Track from the Division of Public Health.

TEACHING

SPRING 2020

INSTRUCTOR | STAT PKGS 5003/6003

UNIVERSITY OF UTAH

5-week course covering the use of R for data processing, visualization, and statistics

OCT 2017

GUEST LECTURER | FPMD 6107 SURVIVAL ANALYSIS

UNIVERSITY OF UTAH SCHOOL OF MEDICINE

Workshop on inverse probability weighting and marginal structural models

FUNDING

2022-2027

UTAH DIVISION OF CHILD AND FAMILY SERVICES

TITLE IV-E RESEARCH

Role: Principal Investigator

\$2,843,392

2023-2024

UTAH DIVISION OF CHILD AND FAMILY SERVICES

GRANDFAMILIES KINSHIP NAVIGATION EVALUATION

Role: Principal Investigator

\$211,185

2022-2024

UTAH DEPARTMENT OF HEALTH AND HUMAN SERVICES

CHILD ABUSE AND NEGLECT PREVENTION NEEDS ASSESSMENT (CBCAP)

Role: Principal Investigator

MPI: Meghan Broadbent, Troy Bennett

\$226,039

2021-2024

UTAH ADMINISTRATIVE OFFICE OF THE COURTS

CIP HEARING QUALITY Role: Co-Investigator PI: Kristen West

\$143,000

2020–2020 UTAH DIVISION OF CHILD AND FAMILY SERVICES

FAMILIES FIRST UTAH YOUTH VILLAGE

Role: Principal Investigator

\$42,148

2019–2024 UTAH DEPARTMENT OF HUMAN SERVICES

EVIDENCE BASED PRACTICE EVALUATIONS

Role: Principal Investigator

\$1,363,789

2018–2022 UTAH DEPARTMENT OF HEALTH

UTAH'S MEDICAID 1115 WAIVER DEMONSTRATION EVALUATION

Role: Principal Investigator (Assumed 2022)

\$1,385,560

2018–2020 UTAH DIVISION OF CHILD AND FAMILY SERVICES

EVALUATION OF GRANDFAMILIES

Role: Principal Investigator

\$172,538

2018–2019 UTAH DIVISION OF CHILD AND FAMILY SERVICES

CHILD FATALITY REVIEW Role: Co-Investigator PI: Michael Tanana

\$23,994

2015–2020 NATIONAL INSTITUTES OF HEALTH

DETERMINANTS OF POSTPARTUM PELVIC FLOOR SUPPORT

Role: Statistical Programming Consultant

PI: Ingrid Nygaard \$1,191,103

2013–2022 UTAH DIVISION OF CHILD AND FAMILY SERVICES

TITLE IV-E RESEARCH Role: Co-Investigator

MPI: Michael Tanana, Mindy Vanderloo

\$1,472,704

CONFERENCES & PRESENTATIONS

OCT 2023 CO-PRESENTER

Salt Lake City, UT Bennett, T., Shuppy, L., Brown, B., Broadbent, M. (2023). Utilizing a Brief Assessment of

Recovery Capital (BARC-10) to Inform Goal Setting and Case Planning. National

Association for Welfare Research and Statistics (NAWRS) Workshop. Salt Lake City, UT.

JUN 2023 PANEL SPEAKER

Dublin, Ireland Broadbent, M., Zhang, X., Axford, K., King, B., Imel, Z. (2023). Evaluating the impacts of

increasing caseloads among text-based crisis counselors. Society for Psychotherapy

Research (SPR). Dublin, Ireland.

NOV 2021

CO-PRESENTER

Virtual

Medina-Grespan, M., **Broadbent, M.**, Kious, B., Lake, A., Gould, M., Imel, Z., Srikumar, V. (2021). Machine Learning based evaluation of suicide risk assessment in text-based crisis counseling. Association for Behavioral and Cognitive Therapies (ABCT). Virtual.

AUG 2019

CO-PRESENTER

Washington, DC

Broadbent, M., West, K. (2019). Child Welfare System Analysis – A Data-Informed Methodology for Understanding Child Pathways In and Out of Care. National Child Welfare Evaluation Summit. Washington, DC.

APR 2019

PANEL SPEAKER

Salt Lake City, UT

MSTAT Students of the Year, MSTAT Program Panel. (2019). MSTAT Open House. Divison of Public Health, University of Utah School of Medicine. Salt Lake City, UT.

OCT 2017 Las Vegas, NV **PRESENTER**

Broadbent, M., Scott, G., Clawson, J., Gardett, I., Barron, T., Olola, C. (2017). Time-to-First-Compression and Barriers to Dispatcher-Assisted Cardiopulmonary Resuscitation. EMS World. Las Vegas, NV.

CO-PRESENTER

Gardett, I., **Broadbent, M.**, Scott, G., Clawson, J., Barron, T., Olola, C. (2017). Availability & Use of an Automated External Defibrillator in Emergency Medical Dispatch. EMS World. Las Vegas, NV.

PEER REVIEWING

MAR 2020

ANNALS OF EMERGENCY DISPATCH & RESPONSE

Ad Hoc Reviewer

SEPT 2017

16

15

14

WOMEN'S HEALTH ISSUES

Ad Hoc Reviewer

PEER REVIEWED PUBLICATIONS

Broadbent, M., Medina Grespan, M., Axford, K., Zhang, X., Srikumar, V., Kious, B., & Imel, Z. (2023). A machine learning approach to identifying suicide risk among text-based crisis counseling encounters. *Frontiers in Psychiatry*, 14, 1110527. https://doi.org/10.3389/fpsyt.2023.1110527

Scott, G., Olola, C., Gardett, M. I., Ashwood, D., **Broadbent, M.**, Sangaraju, S., Stiegler, P., Fivaz, M. C., & Clawson, J. (2020). Ability of Layperson Callers to Apply a Tourniquet Following Protocol-Based Instructions From an Emergency Medical Dispatcher. *Prehospital Emergency Care*, *24*(6), 831–838. https://doi.org/10.1080/10903127.2020.1718259

Gardett, I., Scott, G., **Broadbent, M.**, & Olola, C. (2019). Situational Awareness in Emergency Medical Dispatch: An Observation Study and Proposed Model. Annals of Emergency Dispatch & Response, 7(2), 16–22.

Lindfors, R., Schultz, B., Scott, G., Gardett, I., **Broadbent, M.**, Sangaraju, S., Lawrence, R., Garrison, D., Smith, S., Stout, T., Gay, M., Taigman, M., Clawson, J., & Olola, C. (2019). Emergency Medical

- Dispatch Identification of Opioid Overdose and Frequency of Naloxone Administration on Scene. Annals of Emergency Dispatch & Response, 7(2), 10–15.
- Scott, G., **Broadbent, M.**, Gardett, I., Sangaraju, S., Clawson, J., & Olola, C. (2019). Barriers Significantly Influence Time to Bystander Compressions in Out-of-Hospital Cardiac Arrest. Annals of Emergency Dispatch & Response, 7(1), 17–23.
- Gardett, I., **Broadbent, M.**, Scott, G., Clawson, J., & Olola, C. (2019). Availability and Use of an Automated External Defibrillator at Emergency Medical Dispatch. Prehospital Emergency Care, 23(5), 683–690. https://doi.org/10.1080/10903127.2018.1559565
- Broadbent, M., Gardett, I., Knight, C., Clawson, J., & Olola, C. (2018). Persons Descriptions Reported to Emergency Police Dispatch. Annals of Emergency Dispatch & Response, 6(3), 21–27.
- Davis, C., Dodson, P., Pore, C., Sangaraju, S., **Broadbent, M.**, Scott, G., Gardett, I., & Olola, C. (2018).

 Predicting the Need for Extrication in Traffic Accidents Reported to 911: Is Anyone Pinned/Trapped?

 Annals of Emergency Dispatch & Response, 6(3), 5–9.
 - Faudere, D., Hutchens, J., Olola, C., Scott, G., **Broadbent, M.**, & Gardett, I. (2018). Implications of Pre-Alerts for Medical Emergency Calls. Annals of Emergency Dispatch & Response, 6(3), 10–14.

9

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- Scott, G., Olola, C., Gardett, I., **Broadbent, M.**, Sangaraju, S., Schultz, B., Burnette, L., & Clawson, J. (2018). Is Emergency Medical Dispatcher Low-Acuity Code Selection Influenced by a User-Interface Software Modification? Annals of Emergency Dispatch & Response, 6(2), 11–16.
- Scott, G., Barron, T., Gardett, I., **Broadbent, M.**, Downs, H., Devey, L., Hinterman, E., Clawson, J., & Olola, C. (2018). Can a Software-Based Metronome Tool Enhance Compression Rate in a Realistic 911 Call Scenario Without Adversely Impacting Compression Depth for Dispatcher-Assisted CPR? Prehospital and Disaster Medicine, 33(4), 399–405. https://doi.org/10.1017/S1049023X18000602
- **Broadbent, M.**, Knight, C., Warner, D., Williams, N., Scott, G., Clawson, J., Gardett, I., & Olola, C. (2018). Weapons Reported On-Scene by Callers to Emergency Police Dispatch. Annals of Emergency Dispatch & Response, 6(1), 19–25.
- Clawson, J., Gardett, I., Scott, G., Fivaz, C., Barron, T., Broadbent, M., & Olola, C. (2018). Hospital-Confirmed Acute Myocardial Infarction: Prehospital Identification Using the Medical Priority Dispatch System. Prehospital and Disaster Medicine, 33(1), 29–35. https://doi.org/10.1017/S1049023X1700704X
 - Olola, C., **Broadbent, M.**, Gardett, I., Scott, G., & Clawson, J. (2017). Characteristics of acute myocardial infarction cases coded as low acuity at dispatch. Annals of Emergency Dispatch & Response, 5(2), 8–14.
 - Olola, C., Gardett, I., & **Broadbent, M.** (2017). Applying the American Heart Association's recommended hands-on-chest time performance measures. Annals of Emergency Dispatch & Response, 5(1), 16–20.
- Olola, C., Scott, G., Gardett, I., Clawson, J., & **Broadbent, M.** (2017). Comparison of emergency medical dispatcher stroke identification and paramedic on-scene stroke assessment. Annals of Emergency Dispatch & Response, 5(1), 6–10.

Scott, G., Clawson, J., Gardett, I., **Broadbent, M.**, Williams, N., Fivaz, C., Marshall, G., Barron, T., & Olola, C. (2017). 9-1-1 Triage of Non-Traumatic Chest Pain: Association with Hospital Diagnosis. Prehospital Emergency Care, 21(4), 525–534. https://doi.org/10.1080/10903127.2017.1302530