

Publications

JOURNAL ARTICLES

1. Khante, P., Thomaz, E., & Barbaro, K. de. (2023). Auditory chaos classification in real-world environments. *Frontiers in Digital Health*, 5. <https://doi.org/10.3389/fdgth.2023.1261057>
2. Barbaro, K. de, Khante, P., Maier, M., & Goodman, S. (2024). Maternal contingent responses to distress facilitate infant soothing but not in mothers with depression or infants high in negative affect. *Developmental Psychology*, 60(2), 294–305. <https://doi.org/10.1037/dev0001607>
3. Madden-Rusnak, A., Micheletti, M., Dominguez, A., & Barbaro, K. de. (2023). Spontaneous infant crying modulates vagal activity in real time. *Developmental Psychobiology*, 65(7). <https://doi.org/10.1002/dev.22428>
4. Barbaro, K. de, Micheletti, M., Yao, X., Khante, P., Johnson, M., & Goodman, S. (2023). Infant crying predicts real-time fluctuations in maternal mental health in ecologically valid home settings. *Developmental Psychology*, 59(4), 733–744. <https://doi.org/10.1037/dev0001530>
5. Micheletti, M., Yao, X., Johnson, M., & Barbaro, K. de. (2022). Validating a model to detect infant crying from naturalistic audio. *Behavior Research Methods*, 55(6), 3187–3197. <https://doi.org/10.3758/s13428-022-01961-x>
6. Morshed, M. B., Kulkarni, S. S., Saha, K., Li, R., Roper, L. G., Nachman, L., Lu, H., Mirabella, L., Srivastava, S., Barbaro, K. de, Choudhury, M. de, Plötz, T., & Abowd, G. (2022). Food, mood, context: Examining college students' eating context and mental well-being. *ACM Transactions on Computing for Healthcare*, 3(4), 1–26. <https://doi.org/10.1145/3533390>
7. Barbaro, K. de, & Fausey, C. M. (2022). Ten lessons about infants' everyday experiences. *Current Directions in Psychological Science*, 31(1), 28–33. <https://doi.org/10.1177/09637214211059536>
8. Levin, H. I., Egger, D., Andres, L., Johnson, M., Bearman, S. K., & Barbaro, K. de. (2021). Sensing everyday activity: Parent perceptions and feasibility. *Infant Behavior and Development*, 62, 101511. <https://doi.org/10.1016/j.infbeh.2020.101511>
9. Wu, C., Fritz, H., Bastami, S., Maestre, J. P., Thomaz, E., Julien, C., Castelli, D. M., Barbaro, K. de, Bearman, S. K., Harari, G. M., Cameron Craddock, R., Kinney, K. A., Gosling, S. D., Schnyer, D. M., & Nagy, Z. (2021). Multi-modal data collection for measuring health, behavior, and living environment of large-scale participant cohorts. *GigaScience*, 10(6). <https://doi.org/10.1093/gigascience/giab044>
10. de Barbaro, K. (2023). Understanding postpartum parents' experiences via two digital platforms. *Proceedings ACM on Human-Computer Interactions*.

PREPRINTS

BOOKS

BOOK CHAPTERS

1. de Barbaro, K. (2023). Mobile sensing in developmental science: A practical guide for researchers. In *Mobile sensing in psychology: Methods and applications*.

Professional Presentations

Examining the dynamics and real-time effects of mother-infant heart rate synchrony across episodes of naturalistic infant distress.

INTERNATIONAL CONGRESS OF INFANT STUDIES. OTTAWA, CANADA.

2022

Why study everyday interactions in development? Insights from a mobile sensing study.

WHOLE COMMUNITIES WHOLE HEALTH RESEARCH SHOWCASE. AUSTIN, TEXAS.

2022

Big Data for Rich Insights into Maternal Depression

SPAM MEETING. AUSTIN, TEXAS.

2021

Big data for rich insights into postpartum depression: Leveraging behavioral sensing and natural language processing for assessment, modeling and intervention.

KEYNOTE PRESENTATION AT THE CONFERENCE ON INTERACTIVITY, LANGUAGE AND COGNITION. VIRTUAL MEETING.

2021

Automated sensing of daily activity: A new lens into development.

KEYNOTE PRESENTATION AT THE SENSORIMOTOR INTERACTION, LANGUAGE AND EMBODIMENT OF SYMBOLS (SMILES) WORKSHOP.
VIRTUAL MEETING.

2021

Automated sensing of daily activity: A new lens into development.

UCSD COGNITIVE SCIENCE DEPARTMENT COLLOQUIUM. SAN DIEGO, CALIFORNIA.

2021

Behavioral risks for maternal depression: Automated sensing technology for assessment, modeling and intervention.

ANXIETY AND DEPRESSION ASSOCIATION OF AMERICA CONFERENCE. VIRTUAL MEETING.

2021

Detecting Everyday Activity from Audio: Challenges and Progress across the research pipeline.

ALEX CRISTIA LAB MEETING. ECOLE NORMALE SUPÉRIEURE. PARIS, FRANCE.

2021

Conference Abstracts

Variation in everyday caregiver sensitivity predicts infants' real-time physiological regulation.

SOCIETY FOR RESEARCH IN CHILD DEVELOPMENT

2023

Evaluating Objective Assessment of Auditory Household Chaos as a Predictor of Physiological Arousal in Infants.

SOCIETY FOR RESEARCH IN CHILD DEVELOPMENT.

2023

The Effects of Caregiving Behaviors on Real-time Infant Physiological Regulation.

SOCIETY FOR RESEARCH IN CHILD DEVELOPMENT.

2023

Postpartum Support-Bot: An Ethically Co-designed Chatbox for Mothers Experiencing or at Risk of Postpartum Mood and Anxiety Disorders.

POSTPARTUM SUPPORT INTERNATIONAL 35TH ANNUAL CONFERENCE. NEW ORLEANS, LA.

2022

INFANT CRYING DETECTION IN REAL-WORLD ENVIRONMENTS

ICASSP, IEEE INTERNATIONAL CONFERENCE ON ACOUSTICS, SPEECH AND SIGNAL PROCESSING - PROCEEDINGS

2022

Differences in caregiver sensitivity related to varied patterns of infant engagement of the vagal brake during spontaneous distress.

COGNITIVE DEVELOPMENT SOCIETY (CDS) CONFERENCE. MADISON, WI.

2022

Examining the dynamics and real-time effects of mother-infant heart rate synchrony across episodes of naturalistic infant distress.

INTERNATIONAL CONGRESS OF INFANT STUDIES (ICIS), OTTAWA, CANADA.

2022

Háblame Mamá: Acoustic Detection of Vocal Affect in Spanish Speaking Mothers'.

COGNITIVE DEVELOPMENT SOCIETY. MADISON, WI.

2022

Maternal sensitivity "in the wild" is highly variable and systematically varies across contexts.

INTERNATIONAL CONGRESS OF INFANT STUDIES (ICIS), OTTAWA, CANADA.

2022

Maternal speech decreases during periods of detected ambulatory phone-use.

INTERNATIONAL CONGRESS OF INFANT STUDIES (ICIS), OTTAWA, CANADA.

2022

Testing Porges' Polyvagal Theory: Evidence for real-time RSA changes within natural infant distress.

INTERNATIONAL CONGRESS OF INFANT STUDIES (ICIS), OTTAWA, CANADA.

2022

Characterizing Mother-Infant Physiological Synchrony During Everyday Home Activities.

SOCIETY FOR RESEARCH IN CHILD DEVELOPMENT VIRTUAL BIENNIAL MEETING.

2021

Evaluating Objective Assessment of Daily Holding as a Predictor of Parasympathetic Tone in Mother-Infant Dyads.

SOCIETY FOR RESEARCH IN CHILD DEVELOPMENT VIRTUAL BIENNIAL MEETING.

2021

Maternal Mood and Contingency to Infant Distress in Everyday Settings.

SOCIETY FOR RESEARCH IN CHILD DEVELOPMENT VIRTUAL BIENNIAL MEETING.

2021

Honors

Ann Repp Teaching Award

THE UNIVERSITY OF TEXAS AT AUSTIN

Austin, US

2022

Funding

Automated Assessment of Maternal Sensitivity to Infant Distress: Leveraging Wearable Sensors for Substance Use Disorder Prevention and Research

FUNDING: \$499,296

National Institute on Drug Abuse,

R01DA059423

2023 - 2028

WCWH student funding

FUNDING: \$90,000

Bridging Barriers UT Austin Internal

funding,

2022 - 2024

One-time stipend for joining TOC

FUNDING: \$24,000

Bridging Barriers UT Austin Internal

funding,

2022 - 2024

Summer funding

FUNDING: \$10,000

Bridging Barriers UT Austin Internal

funding,

2023 - 2023

WCWH student funding

FUNDING: \$20,000

Bridging Barriers UT Austin Internal

funding ,

2022 - 2022

Postpartum support-bot: An ethically co-designed chatbot for mothers experiencing or at risk of postpartum mood and anxiety disorders

FUNDING: \$98,000

Good Systems,

2020 - 2022

High-density markers of mother-infant bio-behavioral activity “in the wild”: Developing a mobile-sensing paradigm to examine transmission of mental health risks

FUNDING: \$472,736

NIMH, K01MH111957

2017 - 2022

Service

International Conference on Development and Learning

PROGRAM CHAIR

Austin, US

2023 - 2024

Whole Communities Whole Health

MEMBER OF THE ORGANIZING COMMITTEE (TOC)

Austin, US

2022 - 2024

Data Science Task Force

MEMBER

Austin, US

2020 - 2024

Whole Communities Whole Health

MEMBER

Austin, US

2017 - 2024

Faculty Search Committee for Computational Analysis of Social Behavior Position

MEMBER

Austin, US

2021 - 2022

Mentoring and Teaching

MENTORING

Anna Madden-Rusnak

PHD ADVISOR2020 - 2024

Priyanka Khante

PHD ADVISOR2018 - 2024

Megan Micheletti

PHD ADVISOR2018 - 2023

Xuewen Yao

PHD ADVISOR2018 - 2023

Miriam Mikhelson

PHD ADVISOR2020 - 2022

TEACHING

PSY395S: Fundamentals of Developmental Psychology

INSTRUCTOR2022 - 2024

PSY395S: Fundamentals of Developmental Psychology

INSTRUCTOR2023 - 2023

PSY333D Intro to Developmental Psychology

INSTRUCTOR2022 - 2022

PSY333D: Intro to Developmental Psychology

INSTRUCTOR2021 - 2021