OMB No. 0925-0001 and 0925-0002 (Rev. 10/2021 Approved Through 01/31/2026)

BIOGRAPHICAL SKETCH

Provide the following information for the Senior/key personnel and other significant contributors.  
Follow this format for each person. **DO NOT EXCEED FIVE PAGES.**

NAME: Cole Brokamp

eRA COMMONS USER NAME (credential, e.g., agency login): brokampr

POSITION TITLE: Associate Professor

EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)

| INSTITUTION AND LOCATION | DEGREE  (if applicable) | Completion  Date  MM/YYYY | FIELD OF STUDY |
| --- | --- | --- | --- |
| University of Cincinnati; Cincinnati, OH | B.S. | 06/2010 | Biomedical Engineering |
| University of Cincinnati; Cincinnati, OH | Ph.D. | 04/2016 | Biostatistics and Bioinformatics |
| Cincinnati Children’s Hospital Medical Center; Cincinnati OH | Postdoctoral Research Fellow | 10/2017 | Biostatistics and Bioinformatics |

**A. Personal Statement**

As a biostatistician, epidemiologist, and geospatial data scientist, I have specialized myself in the areas of informatics and machine learning with applications to population-level environmental, community, and health outcome data. I develop new methods and technologies to support environmental and population health research, including tools for geocoding and geomarker assessment, high resolution spatiotemporal exposure assessment models, and causal inference machine learning methods. I lead research on the roles of environmental exposures and community characteristics on pediatric psychiatric health by applying these methods and tools to large databases of electronic health records, observational cohort studies, clinical registries, and vital records.

***Ongoing projects I would like to highlight include:***

NIH/NHGRI R01HG011411  
Mersha T (PI)  
9/1/21 - 6/30/26  
*Epigenome-wide variations and socio-environmental exposures in African American asthmatic children*

AHRQ  
Beck A (PI)  
11/1/21 - 10/31/26  
*Achieving Pediatric Health Equity by Responding to Identified Sociomedical risks with Effective Unified Purpose – Co-design and Evaluation of the RISEUP System*

NIH/NIEHS R01ES031621  
Yolton K, Ryan P, Cecil K (PI)  
3/3/21 - 12/31/25  
*Longitudinal Impact of Air Pollution on Mental Health and Neuroimaging Outcomes during Adolescence in the Cincinnati Combined Childhood Cohorts (C4)*

NIH/NLM R01LM013222  
Brokamp C (PI)  
8/1/20 - 7/31/24  
*A Framework for Automated and Reproducible Geomarker Curation and Computation at Scale*

NIH/NIEHS R01ES031054  
Brunst K (PI)  
7/1/20 - 4/29/25  
*Epigenetics, Air Pollution, and Childhood Mental Health*

*Peer-reviewed publications I would like to highlight include:*

**B. Positions, Scientific Appointments, and Honors**

***Positions***

2022 – Present Associate Professor, Division of Biostatistics and Epidemiology, Cincinnati Children’s Hospital Medical Center, Department of Pediatrics, University of Cincinnati, College of Medicine

2017 – 2022 Assistant Professor, Division of Biostatistics and Epidemiology, Cincinnati Children’s Hospital Medical Center, Department of Pediatrics, University of Cincinnati, College of Medicine

***Scientific Appointments***

2023 NIH ZES1 BWD-D (HS)

2023 NIH ZES1 LWJ-W (K)

2023 NIH ZES1 LKB-K (P2)

2023 NIH ZRG1 MCST – B (14)

2023 NIH ZCTA1 TCRB-J (M2)

2022 NIH ZES1 WL-W (K)

2022 NIH ZES1 LWF-S (K9)

2022 NIH ZES1 LKB-S (KS)

2019 NIH SIEE study section, early career reviewer

**C. Contributions to Science**