



College of Nursing's Mothers & Babies Project

Organization Name:

The Mothers & Babies Project at the UA's College of Nursing

Organization Background:

The Mothers & Babies Project is a 5-year NIH-funded randomized biobehavioral clinical trial that is currently in its final year. We enrolled 240 pregnant women who had a history of childhood adversity and randomized 215 women and their babies at birth. They were randomized into either 1) an intervention group where they were to give their baby a daily 15-minute multisensory infant massage, or 2) an attention control group where they learned safe infant care. The primary outcome was observed mother-infant synchrony (AKA engagement or bonding) measured at 3 months after birth. A secondary outcome was the oxytocin system, where we hypothesized that the intervention would promote higher levels of oxytocin and gene expression of the oxytocin receptor, and lower levels of oxytocin receptor DNA methylation (epigenetic marks). General information can be found at the study's website <https://www.nursing.arizona.edu/mothers-babies> and detailed information can be found at the NIH clinical trials website <https://www.clinicaltrials.gov/study/NCT04818112?locStr=Arizona&country=United%20States&state=Arizona&intr=Infant%20Massage&rank=1>

Internship Project Title

Calculating Pitocin Dosage in The Mothers & Babies Project

Project Description:

The project's remaining data to be collected and finalized is dosage of Pitocin (exogenous oxytocin) that participants received during labor and postpartum. Last Fall, a Public Health student intern collected screen shots of Pitocin dosing from participants' Electronic Health Records. The primary expected activity and deliverable of a student intern this Fall is to transfer the data from those screenshots into an excel file that has been prepared with formulas to calculate total dosage. We also have some hospital delivery sites (approximately 15% of all participants) that only gave us copies of the participants' medication record, versus giving us access to the EHR. Both described activities require critical thinking to properly interpret the documented dosing, as it is a bit complex. If time allows, a secondary activity is working within our REDCap database to conduct quality control audits of previously collected variables. The student intern will 1) acquire proficiency in the rigor of collecting critical data to the project, 2) be

exposed to a variety of research questions emanating from the project's database, and 3) gain an understanding of how a NIH-funded biobehavioral RCT is conducted.

Internship project keywords (check all that apply).

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|---|---|
| ☐ Health Disparities | ☒ Maternal/Infant Health |
| ☐ Public Health Preparedness | ☐ Tobacco Use |
| ☐ Collaborations with Community | ☐ Injury/Violence Prevention |
| ☐ Collaborations with University | ☐ Immunization |
| ☐ Community health service | ☐ Infectious Disease |
| ☐ Physical Activity | ☐ Oral Health |
| ☐ Substance Abuse | ☐ Evaluation |
| ☐ Mental Health | ☐ Policy Development |
| ☐ Access to care | ☐ Program Planning |
| ☐ Nutrition | ☐ Data Analysis |
| ☐ Reproductive/Sexual Health | ☐ Other Click or tap here to enter text. |
| ☐ Environmental Health | |

When: When do you want the work done? Check all that apply.

☒ **Fall Semester**

☐ Spring Semester

☐ Summer Term

☐ I want this listing to remain active indefinitely and we will accept applications from students for any upcoming semester.

☐ This listing is only for a specific semester/term: _____

Where:

Organization Mailing Address: 1305 N Martin Ave, Tucson, AZ, 85721, PO Box 210203

☒ Check here if the student may have the option to work remotely from a site not listed above for all or part of this project.

Student Characteristics:

This project requires outstanding attention to detail and organization. Besides weekly meetings with Dr. Bell, the project experience is 100% online handling of the organization of protected health data.

Level of Expertise Needed:

☐ MPH

☒ **Undergraduate**

☒ Either

Supervision

Aleeca Bell PhD, RN, CNM, FACNM, Associate Professor, College of Nursing, is the Principal Investigator of an NIH-funded biobehavioral clinical trial which is the basis for the internship experience.

Compensation/Benefits/Professional Development

There is no compensation, funding, or coauthorship available.

Application Contact Information

Aleeca Bell can be emailed at aleecab@arizona.edu

Please send a resume, and state why an internship with this research study is desirable.

Also state whether there is interest in 3 units (acceptable) or 6 units (preferred) for Fall 2024.