# **Family and Child Neuroscience Lab**

# Newsletter

Summer 2019 Edition

Guest Editors: Samantha Buxbaum & Isabella Jaramillo

# **RISE PROJECT**

We have an exciting new study we are conducting called **the RISE project**! This study is all about better understanding how everyday stress impacts mental and emotional demands related to pregnancy and parenting in mothers and how a newborn's body and brain develops. The project is going well among families who have already participated. Thus far in the study we have 91 families enrolled, 44 babies have arrived, and we have scanned 41 mother infant pairs. We are now starting one year follow up visits with families. The study consists of visits to your home and you receive an image of your brain along with your baby's brain when participating! Interested in learning more? We would love to have you, your loved ones and friends enroll in our study! We are currently enrolling **pregnant women up to 16 weeks pregnant**. We are recruiting women using marijuana throughout their pregnancy. We are also committed to integrating the Latino-Hispanic Spanish only speaking community into our research. The lab completed translating the entire RISE Project

in Spanish and will start recruiting participants this summer. Nosotros nos comprometemos a integrar a la comunidad hispana en nuestra investigación. El laboratorio completó la traducción de todo el Proyecto RISE en español y reclutara a participantes este verano.

Give us a call for more information and for participation eligibility!



Meet our lab! From left to right, starting at the top: Akram, Andrew, Alex, Rebekah, Aviva, Melissa, Leah, Isabella, Claire, Jackie, Hana, Samantha, and Dr. Pilyoung Kim.

## **INSIDE THIS ISSUE:**

- 1. Greetings, RISE study, free summer events
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- 3. Get to know us!
- 4. Meet our new lab members!



## FREE SUMMER EVENTS

## Denver Zoo

♦ Kids 2 and under are always free! **Denver Art Museum** 

- ♦ Kids 18 and under are always free!
- General admission is free on the first Saturday of every month

## Denver Children's museum

- ♦ Kids under 1 are always free
- Play for free the first Tuesday of every month from 4 8 pm!

## Denver Museum of Nature and Science

Free days: Monday, August 26; Sunday, September 29; Monday, October 14; Sunday, November 17; Sunday December 8.

## Denver Botanical Gardens

Free days at York Street:

Wednesday, July 10; Tuesday Sept.3; Monday, Nov 11 (Veterans Day)

Free days at Chatfield Farms:

- ♦ Tuesday, August 6\*; Tuesday, Nov 5.
- \*Butterflies at Chatfield Farms will be open during these Free Days with paid admission for the butterfly house.

Free days at Plains Cons. Center:

♦ Thursday, July 18; Thursday, August 15

## Red Rocks Par and Amphitheater

free admission to the public when events aren't being held. Check out the towering sandstone rock formations in the amphitheater or walk a hiking trail in the park.

Please check out this link for some additional SENSORY FRIENDLY activities to do in Denver! https://emergeprofessionals.com/2018/06/18/ sensory-friendly-summer-activities-for-coloradofamilies/

## Bringing Back the Family Dinner By Melissa Hanson

For many parents, the idea of a family meal seems like a burden with long days at work and the busyness of afterschool activities. More research is emerging showing that eating a meal as a family can have positive impacts on families, including benefits to the mental and physical health of each family member as well as strong family relationships.

Families that eat meals together tend to build strong relationships and create a sense of belonging within the family. These families report feeling a strong bond with each other.

Family members gain communication and social skills that can boost their self-esteem and mental health. Mealtimes with families can also lower stress in individuals in the family because of the time away from worrying about work or school and replacing that with a positive experience.

Even physical benefits exist. Families tend to eat more slowly as they are talking at the dinner table, helping children to realize sooner when they are full and not overeat. It also can help expose them to foods they would not normally eat.

If it seems overwhelming, here are some practical tips and tricks to help:

1. Take small steps- make one Friday night family pizza night and build more nights from there.

2. Have kids participate, help pick out the meal, grocery shop, and even prepare the meal.

3. It doesn't have to be fancy. Dinner could be as simple as pouring a box of chicken nuggets onto a plate to be micro-waved.

If you have older kids, here are some examples of questions and conversation to make the time at the dinner table fun:

"If you could make any animal talk – what animal would you pick and what do you think that they would say?" or "What is your favorite memory?"

Enjoy your meal!





El laboratorio de FCN se compromete a integrar a la comunidad latina / hispana en nuestra investigación. En nuestro laboratorio, contamos con un equipo quien están traduciendo todo el Proyecto **RISE** en español. Hemos completado el 90% del trabajo y esperamos comenzar a reclutar familias a principios del verano del 2019. ¡Estamos muy contentos de comenzar este nuevo capítulo en nuestro laboratorio y, además, ver los resultados que traerá a este increíble proyecto! ¡En el Laboratorio de Neurociencia para Familia y Niños hablamos español!

## Project SIMBA



Aviva Olsavsky, the postdoctoral research fellow in the lab, is currently about halfway through recruitment of participants for Project SIM-BA, which stands for "Stress in Moms and Babies." This pilot project seeks to understand the ways in which mothers process infant-

related stimuli, how this neural processing might lead them to engage with their babies, and how these processes are altered based on different life experiences. Aviva's favorite part of working on the

project is getting to know mothers and their babies. Aviva is planning to complete her recruiting within the coming year, and is excited to see what she can learn from mothers and babies! Thanks to all the mothers and babies involved in the study.



## **GET TO KNOW US!**

#### Samantha Buxbaum, Research Assistant



Samantha completed her Bachelor of Arts at Colorado College with a major in Psychology, minor in Feminist and Gender Studies. Following graduation, she taught outdoor education to middle school aged children, and received her Yoga Teacher Certification. She is

currently pursuing her Masters degree in sport and performance psychology at the University of Denver, and hopes to pursue working with adolescents in the field of performance psychology. In her free time, she likes to ski, cook, and do yoga!

#### Isabella Jaramillo, Research Assistant



Isabella completed her Bachelor of Science at the University of Central Florida in Psychology. After graduating from UCF in 2015, Isabella worked as a Behavioral Therapist (BT) practicing Applied Behavioral Analysis (ABA) techniques with children with Autism Spectrum Disorders (ASD) and other special populations/children

with special needs. She is currently working on her master's degree in Child, Family and School Psychology at the Morgridge College of Education at the University of Denver. Isabella will start to work towards her PhD in Child, Family and School Psychology in the fall of 2019. She hopes to continue working in academia and eventually become a full-time faculty at a university as well as continue with research.



#### ANDREW ERHART, Graduate Student

Currently Andrew is working on a project that examines how infants process their mother's voice speaking in different emotional tones, using the data from the SHINE project.

We found there were several areas of the brain that were particularly responsive to own mother's emotional voice. These brain areas are responsible for social and emotional processing, such as the orbitofrontal cortex and the fusiform gyrus. Infants' brain activation were highest in response to mother's happy voice, and the higher social competence the infants have, the more sensitive to their mother's happy voice these brain areas were. I'm currently seeking to understand whether differences in parenting are related to infant's processing of happy emotional tones in mother's voice.

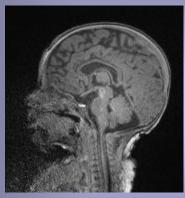


#### LEAH GRANDE, Graduate Student

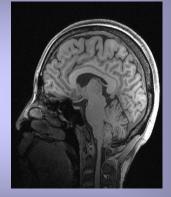
Leah is currently a 4th year graduate student in the clinical child psychology program at DU. She is interested in understanding how new mothers' brains

change to help them adapt to parenting, and is analyzing the data from the IDEA project. She found that the feeling of being overwhelmed after the baby's arrival may be associated with differences in mothers' brain response when regulating negative emotion. These differences in the brain may further be related to how mothers feel about parenting, such as more challenges in adjusting to the change as new parents.

## Dr. Pilyoung Kim (Lab director) and her son Isaac



An MRI scan of baby Isaac's brain!



An MRI scan of Dr. Pilyoung Kim's Brain!





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Did you move or change your phone number?

# raphy, and finding new places to eat. pregnancy.

If you have done so in the past year, please send us your updated address and phone information. We want to keep you in the loop about new studies and happenings in the lab.

Give us a call at 303-871-3096 or email us at fcnlab@du.edu

## MEET OUR NEW LAB MEMBERS!

## Akram Ibrahim, Research Assistant

sity of Denver. He hopes to work with adolescents

and emerging adults in a clinical setting. Outside

of school he enjoys boxing, video games, photog-



Akram Ibrahim graduated with his BA in Psychology from the University of Illinois, Urbana Champaign. He is currently a first year masters student in the Counseling Psychology program at the Univer-

## Shannon Powers, Graduate Student

er. Shannon hopes to one day work in academia

studying maternal brain changes during



Shannon Powers is an incoming graduate student in Development Psychology at DU. In her downtime, Shannon enjoys running, cheering on UNC basketball, and hiking with her dog, Tuck-