# BABY LAB NEWS

### Dr. Zsuzsa Kaldy | Dr. Vivian Ciaramitaro | Dr. Mohinish Shukla

# The Baby Lab is expanding

Graduate student Ertugrul Uysal will join the lab this Fall to work on his PhD under Dr. Shukla in the Developmental and Brain Sciences program. With Ertugrul's addition, the Baby Lab will have 8 graduate students!

# Conferences and presentations

Baby Lab members have been busy traveling far and wide to present data and attend academic conferences in 2016. We traveled to Chicago, New Orleans, St. Petersburg, and New York to discuss our findings with other scientists. Conferences are a great way for us to share our research and learn about what our colleagues have been working on in related fields.

# Updated website

Have you checked out our new and improved website? Visit: <u>babies.umb.edu</u> for more upto-date lab news!



# Thank you, parents!

The UMass Boston Baby Lab would like to say a big thank you to all of the parent volunteers who have supported our studies over the years! Your participation is vital to our work and helps us to better understand how babies develop and learn about the world around them.

# What are we studying now?

# Language Learning Study:

It is well established that young infants can distinguish not only native speech sounds but also non-native speech sounds. But the mechanism to explain this ability is not well understood. In this study, we examine how infants (6-8 months old) learn speech sounds (e.g. phonemes) and which factors can affect this ability.



#### UNIVERSITY OF MASSACHUSETTS BOSTON DEPARTMENT OF PSYCHOLOGY



# Say hello at the Museum of Science!

Every week a team of researchers from the Baby Lab visit the Museum of Science in Cambridge to collect data and educate interested visitors about our research! We are currently conducting a study in the Living Laboratory® on how people process emotional information across the lifespan (from 8 to 90 years old) using a simple computer game. We are curious as to whether receiving emotional information (for example, from an emotional face or voice) might alter how we perceive faces later on. Feel free to come check out the exciting research being conducted at the museum!

# Did you know we also study adults?

In order to understand development across the entire lifespan, we conduct studies with adults in addition to infants and children! Our current adult research includes studies on sensory perception, attention, and face processing. To learn more click on the "Research" tab on our website.

### Language and Thinking:

How do babies understand the world around them? How do they learn about object-related events and action-related events? The purpose of this study is to investigate infants' (13-15 months olds) ability to understand these kinds of events. Furthermore, we are looking at whether these cognitive abilities are associated with language development.

## Which object is it?

This ongoing project investigates how 7-16 months olds identify objects. If we change how the object looks, do babies perceive it as the same object or a different one?



# Memory Game Studies:

In a previous Baby Lab study, we found that 10-month-olds can remember two objects and their locations over a brief delay period. In our visual and verbal memory project, we want to see if labeling the objects changes (either improves or worsens) memory performance in this age group. We're currently recruiting 9-11 month old infants to take part in this 10-minute eye tracking study, where we will show your infant an animated card game,

and then test how well they can remember the objects on the faces of the cards.

## Zebra Study: How Precise are Children's Memories?

In this study, we investigate how precise the memories are that children can form and what happens when another object distracts them while they are trying to hold onto those memories. We present children with pictures of animals with "zebra striped" patterns, and a few seconds later, they have to recall the angle of the stripes on the animal. Our preliminary results show that, compared to adults, children's memories are less precise and when they see a distracting object, it interferes with how well they can remember the pattern.

#### UNIVERSITY OF MASSACHUSETTS BOSTON DEPARTMENT OF PSYCHOLOGY

# How can you participate?

If you would like to participate, you can sign up online at <u>babylab.youcanbook.me</u> or call 617-287-6363.



# When are we open?

The Baby Lab is open Monday-Friday 9am -5pm, and some select Saturdays.

#### Learning From Other People:

When we learn about the world, we get information both from directly observing and from information gathered from other people (teachers, for example). We're interested to know how early children can use information heard from another person to learn what should happen next in an event sequence. In a Baby Lab study we published this year, we learned that this might be as early as 16 months. In our latest series of studies, we are testing how much young toddlers can learn from other people and how selective they are in which people they learn from. We are also interested in how this developmental process might differ for toddlers with Autism Spectrum Disorder. We're currently recruiting children 14.5-20 months old to take part in these studies. Your toddler will be shown video clips of events on our eye tracker and then told what comes next in the sequence. Some studies also involve a play session with one of our research assistants, where your toddler will be asked to play some problem-solving games.

## More About Infant's Memory:

We are currently recruiting 7-9 month olds and 11-13 months to participate in a study investigating why working memory develops. One possibility that has been put forward is that as we get older, we get better at protecting our memories from proactive interference. Proactive interference is when a previous but no longer relevant memory interferes with memory for a more recent event. Most of us have experience proactive interference when we misremember where we parked the car or put down the house keys. We expect that older infants will be less susceptible to interference than younger infants. Check out our website if you'd like your child to participate!



Questions or comments regarding this news edition? We'd love to hear from you! Please contact us at <u>babylab.umb@gmail.com</u> -Baby Lab Team