

2013 Newsletter

### Temple University Infant & Child Lab

Haines House 1<sup>st</sup> Floor 580 Meetinghouse Road, Ambler, PA 19002

Interested in scheduling or know someone who is? We currently have studies for children 10 months to 10 years old.

Give us a call at: **267-468-8610** 

Or, send us email: infantlab@temple.edu

We would love to speak with you!

We're on the Web www.temple.edu/infantlab

Like us on Facebook: Temple Infant and Child Lab



### **Congratulations!**

**Dr. Hande Ilgaz**, Post-doctoral Fellow, will be starting as a Professor of Psychology next year at Bilkent University in Ankara, Turkey!

**Max Freeman**, Lab Coordinator, will be starting the Ph.D. program in Communication Sciences and Disorders in the fall at Northwester University!

**Dr. Neha Mahajan**, Post-doctoral Fellow, will be starting a MSW program next year at Portland State University!

## We welcome several new members to the TICL family:

**Paula Yust,** Project Coordinator for Computerized Assessment

**Dr. Brenna Hassinger-Das,** Post-doctoral Fellow for Read, Play, Learn Project

**Scarlett Grace Beaver**, daughter of Dr. Jamie Jirout, born 10/12/12

**Brandon Zev Weisberg**, son of Dr. Deena Skolnick-Weisberg, born 11/14/12



# Studies in the Spotlight

## What is Eye-tracking?

If you've been to the lab recently, your infant may have participated in one of our eye-tracking studies! This methodology allows us to monitor where an infant is looking and for how long.

In one of our eye-tracking studies, we examine how infants can determine when one event ends and another begins. Unlike nouns, which correspond to a specific object, verbs describe a continuous action. Words like spinning or jumping do not necessarily have obvious boundaries that an infant can use to figure out what they mean.

In the study, infants watch a short figure skating video in which pauses have been inserted at the beginning, middle, or end of figure skating moves. We use eye-tracking to monitor how long infants look across each pause type.

We are finding that infants pay the most attention to videos when the pauses occur at the end of figure skating moves. Thus, even when viewing a complex, unfamiliar series of actions, infants detect the same boundaries as adults. This finding begins to explain how children are able to learn language that describes events.

We are still looking for some 10- to 14-month olds to participate in this study, so if this is interesting to you or someone you know, spread the word!





Brandon (left) and Scarlett (right) on their first play date!

## Hitting the slopes: studying child navigation

Research in navigation is evolving beyond thinking of vision as the central sense for processing information. The weights of other sensory cues, such as slope, are now being examined in both human and animal species. Sloped terrain is a reliable reorientation cue for rats, pigeons, and human adults, although males significantly outperform females in some conditions. This study addressed two questions: **Are 8- to 10-year-old children old enough to navigate independently using slope? When do gender differences emerge?** 

We've found that in the presence of sloped terrain, males outperform females in their use of slope in navigation. However, slope recognition-- the ability to realize that the terrain is sloped-- may be an influential factor on performance. Although males were significantly *more likely* to notice the slope, when females did notice slope, they performed equally well at the task as males in accuracy and speed.

Scarlett working hard at the office with Shana.

Detected at a young age, these findings may be linked to the varying types of play between sexes, and the impact said play has on early spatial development.

## **Contact Us:**

Check out our website: http://www.temple.edu/infantlab http://facebook.com/infantlab

Questions? Call us: 267-468-8610 Email us: infantlab@temple.edu

The Temple Infant and Child Lab is co-directed by Nora Newcombe, Ph.D. & Kathy Hirsh-Pasek, Ph.D Department of Psychology, 1701 N. 13<sup>th</sup> St Philadelphia PA 19122 Directors: Kathy Hirsh-Pasek, Ph.D. Nora Newcombe, Ph.D.

<u>Post-doctoral</u> <u>Researchers:</u> Hande Ilgaz, Ph.D. Jamie Jirout, Ph.D. Neha Mahajan, Ph.D. Wenke Möhring Ph.D

**Graduate Students:** Nathan George Corinne Holmes Junko Kanero Dani Levine Jessa Reed Rachel Snyder

#### Lab Coordinators: Max Freeman

Honors Students: Emily Daubert

Shana Ramsook

#### Summer Undergraduate Interns: Meghan Huang Jaimi Kim Dorota Maslinski Rachel Metz

Holly Przybylowski



#### Meet the Co-Directors





**Nora Newcombe** is Professor of Psychology and James H. Glackin Distinguished Faculty Fellow at Temple University. Her Ph.D. is from Harvard University. Her research focuses on spatial cognition and development, including the nature of gender differences in spatial ability. She is also interested in the development of autobiographical and episodic memory. Dr. Newcombe is the author of numerous scholarly chapters, articles, and books on aspects of cognitive development, including Making Space with Janellen Huttenlocher (published by the MIT Press, 2000). Her work has been recognized by several awards, including the George A. Miller Award and the G. Stanley Hall Award from the APA. She is a member of the American Academy of Arts and Sciences and of the Society of Experimental Psychologists. She has served as Editor of the Journal of Experimental Psychology: General and Associate Editor of Psychological Bulletin, as well as on many grant panels and advisory boards. She is currently Principal Investigator of the NSF-funded Spatial Intelligence and Learning Center, whose mission is to understand human spatial cognition, with an emphasis on the idea that spatial knowledge and skills can be improved, and to apply the resulting knowledge to foster spatial learning, especially in Science, Technology, Engineering, and Math (STEM) disciplines.

Kathryn Hirsh-Pasek is the Stanley and Debra Lefkowitz Distinguished Faculty Fellow in the Department of Psychology at Temple University, where she serves as co-director of the Infant and Child Lab and Co-Founder of the Center for Re-Imagining Children's Learning and Education (CiRCLE). Kathy received her Ph.D. at the University of Pennsylvania. Her research in the areas of early language development, literacy and infant cognition has been funded by the NSF, NICHD, and IES, resulting in 11 books and over 150 publications. With her long time collaborator, Roberta Golinkoff, she is a recipient of The APA Bronfenbrenner Award for lifetime contribution to the science of developmental psychology and the APA Award for Distinguished Service to Psychological Science. She also received Temple University's Great Teacher Award and Paul Eberman Research Award. She is a Fellow of the APA and the American Psychological Society, served as the Associate Editor of Child *Development* and treasurer of the International Association for Infant Studies. Her book, *Einstein* Never used Flashcards: How children really learn and why they need to play more and memorize less won the prestigious *Books for Better Life Award* in 2003. Kathy is deeply invested in bridging the gap between research and practice.

