



Vanderbilt University

# Developmental Newsletter

April 2016

## Department of Psychology & Human Development

The second year cohort continues the annual tradition of presenting the developmental newsletter. In the absence of new faces this year, we will highlight one of our amazing developmental labs and summarize some of the wonderful research being conducted by the rest of our faculty and their teams. Enjoy! - Claire & Israel

### Amy Needham's Infant Learning Lab



If you haven't already noticed, Amy Needham and her team have been making headlines!

Her recent publication in *Developmental Science* demonstrated that parent guided reaching training can lead to changes in infants' exploration and

Over a period of four to six weeks for 10 minutes a day, parents facilitated reaching training with their 3 month old infants by using sticky mittens – mittens that stick to blocks covered in Velcro. The infants who got practice with the sticky mittens showed more visual interest in a toy and were less distracted. These effects were still evident a year later!

In other news, Jane Hirtle, Sarah Wiesen, and honor student Taylor Halligan recently presented posters at the Kennedy Center Science Day.

Jane and Sarah are also presenting posters at ICIS in New Orleans at the end of May! Jane will be presenting findings from her dissertation project, Two Tools. In this study infants explored a task with one tool, watched either an effective or an ineffective demonstration with another tool, and were finally given the choice between these two tools to try the task again. Would infants hold to the method(s) they had discovered on their own, or switch to copy the demonstrator?

Sarah will present her finding from her recent project, Dangly Toys. Studies have shown that older infants reach and explore more when they're in an upright position. This may not be the case with 3-month-olds, who tend to have more experience laying on their backs than sitting upright. Sarah is studying three-month-olds' object exploration when they're placed in 3 different postures: seated on a parent's lap, laying on their backs, and in a bouncy seat. In each posture, toys are hung from an overhead infant gym within infants' reach to see how much reaching and touching infants do.

Check out the Recent Study Updates on the Infant Learning Lab's website for more information!  
[my.vanderbilt.edu/infantlearninglab/](http://my.vanderbilt.edu/infantlearninglab/)

## Lab Updates



Bethany Rittle-Johnson's team is currently conducting research with Melissa Gresalfi in Teaching and Learning. One project investigates if and how digital games support transfer to traditional assessments. This December, Bethany attended a unique seminar meant to promote international conversation on Realizing Human Potential through Better Use of Assessment and Data in Education at the Salzburg Global Seminar. The fact that the exterior of the building was used as the Von Trapp family home in the Sound of Music was a nice bonus!

Jonathan Lane got his lab up and running in July and has already successfully conducted one study with 2 - 4 year olds and invisible entities and with adults examining adult temperament and theory of mind. His team is currently examining the impact of moral testimony on children's (4.5 - 8 year olds) concepts about novel social groups. Jon recently got a new dog named Patches who has a cool blue sweater!



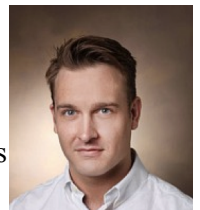
Lisa Fazio is currently running a study with 8 - 11 year olds that examines how children's math abilities relate to their memory, and another testing a game called "catch the monster" that teaches children fractions. Lisa is also happily working with her 1st year graduate student Clair and... we can't forget to mention... she recently got married!!!

Members of John Rieser's lab attended the annual meeting of the Society for Music Perception and Cognition (SMPC) in August, hosted for the first time by Vanderbilt! Members of his team presented posters on ongoing work mapping gesture onto vocalizations by Emelyne Bingham and Aysu Erdemir. Emelyne and Aysu have recently expanded their cross-modal mapping paradigm to children with autism, and they are exploring the ways that sound-gesture mapping might facilitate communication. Sara Beck also presented work on children's singing without hearing!



Georgene Troseth and her lab are currently conducting a study with 2 year-olds to examine how young children learn, or fail to learn, from screen media such as skype and pictures. In September, she was featured on NPR to discuss issues related to children and screen time. Georgene recently published an open-access paper in the *Journal of Children and Media* on the future of research on young children's media with her current graduate student Colleen Russo and previous student Gabrielle Strouse.

Gavin Price and his team have recently concluded two studies in collaboration with Dr. Laurie Cutting from the Department of Special Education, in which they examined the relation between regional grey matter volume and math competence. His graduate students Eric Wilkey and Darren Yeo have been selected to present their posters at the NIH Math Cognition Conference in Texas this summer.

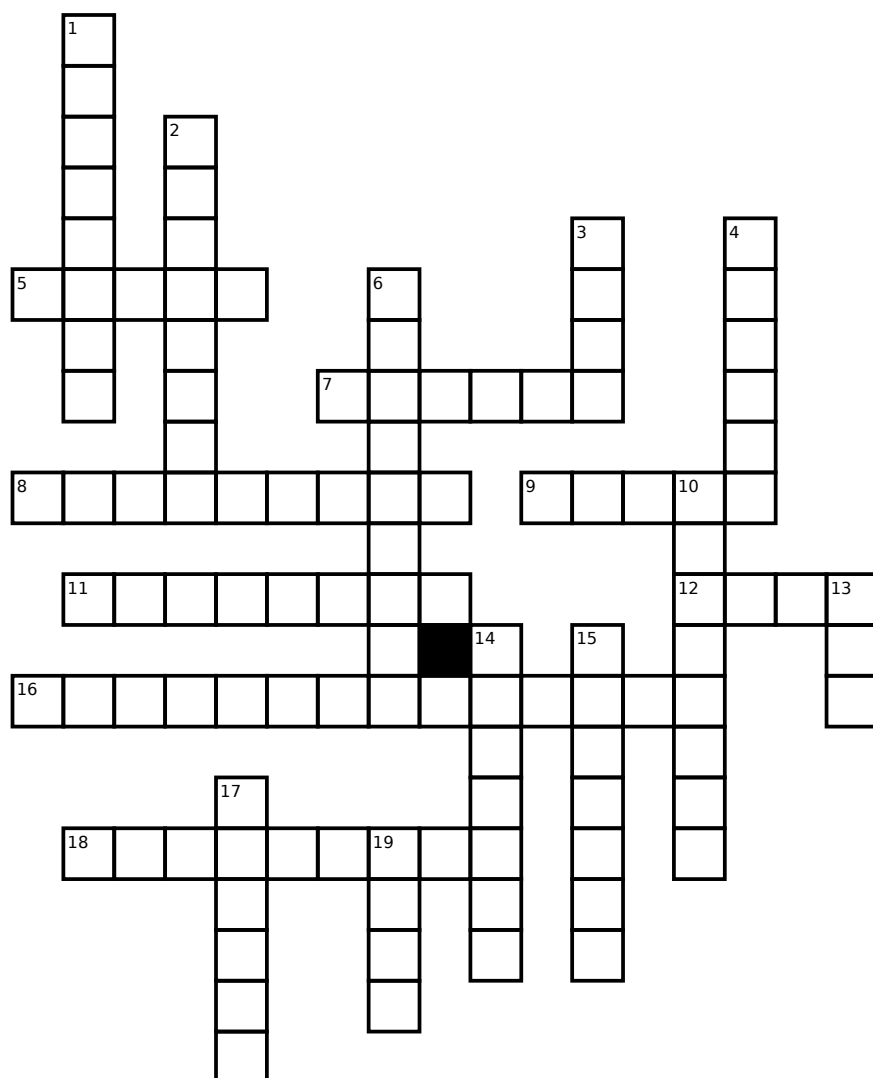


Meg Saylor's lab has a lot of new studies underway. Maria Osina, who recently received her Ph.D, is studying toddlers' understanding of ambiguous reference, looking at whether toddlers understand that different people have different preferences and whether they can use that information to understand ambiguous requests for objects. Sofia is investigating what kinds of things adults can do to help children learn words when they are reading them a storybook. Claire is conducting a follow-up to her study on children's concepts of gender.

Tedra Walden is currently studying emotional contributions to developmental stuttering in young children. She has found that emotional arousal is higher in children who stutter, while emotion regulation is lower. Negative emotion is higher just prior to instances of stuttering. She is using behavioral observations, physiological measures such as respiratory sinus arrhythmia and skin conductance, and questionnaire measures of child temperament.



## How Well Do You Know Your Colleagues?



Down:

1. A very talented ice skater
2. Get this professor a TMNT toy
3. Lisa Fazio received her Ph.D. from \_\_\_\_ Univ.
4. Megan Saylor received her Ph.D. from the Univ. of\_\_
6. John Rieser is an expert \_\_\_\_-baker
10. Georgene Troseth received her Ph.D. from the Univ. of\_\_
13. This professor receiver her Ph.D. from the Univ. of Illinois at Urbana-Champaign
14. Don't mess with this black belt
15. Tedra Walden received her Ph.D. from the Univ. of\_\_
17. Elisabeth Dykens received her Ph.D. from the Univ. of\_\_
19. Tedra enjoys this exercise that's all about integrating mind and body

Across:

5. This professor's daughter wins the award for participating in the most department studies
7. Do you know what Amy's favorite animal is?
8. John Reiser received his Ph.D. from the Univ. of\_\_
9. This professor has completed all degrees abroad
11. Jonathan Lane received his Ph.D. from the Univ. of\_\_
12. Legos rock this professor's Lab logo
16. Bethany received her Ph.D. from this University
18. Gavin Price received his Ph.D. from the Univ. of\_\_