



Children's Hospital Boston

*Children's Hospital Boston
Laboratories of Cognitive Neuroscience*

Fall 2008 Newsletter



Hello from Dr. Nelson

*Director of Research, Division of Developmental Medicine, Children's Hospital Boston
Professor of Pediatrics, Harvard Medical School*

Hello to all from the Labs of Cognitive Neuroscience! I hope you're all enjoying the first crisp days of fall! Whether you have already taken part in our studies or have recently joined our growing participant database, I greatly appreciate your interest in our research. Your support of our work and participation in our studies is invaluable to us in answering many important questions related to infant and child cognitive development.

As you'll see in this current newsletter, the LCN is busy as always with many ongoing studies and community events. Please feel free to explore our website or contact our research team directly to learn more about our studies and how you and your child might participate. Thank you again for your interest in the Labs of Cognitive Neuroscience. I look forward to meeting you at a study session in the near future!

Warm wishes,

Charles A. Nelson

Charles A. Nelson, Ph.D.

Inside the Lab:

Do you have a new addition?

This summer marked the three year anniversary of our move from Minnesota to Boston, which means that many of our families have been with us for just as long now! And, as we've heard from several parents in the past month, many have had the pleasure of welcoming a new addition to the family during that time. We'd like to say congratulations to these families, and also let everyone know that we have many new [infant studies](#) going on--if you are interested in hearing about these opportunities, please e-mail our [Recruitment Coordinator](#) to let us know about your newest family member. That way, we can be sure to keep you informed about any studies that might interest you!

Julius B. Richmond Fellowship awarded to an LCN lab member

We are very proud to say that Adrienne Tierney, a graduate student researcher here at the LCN, was recently awarded this fellowship by the [Harvard Center on the Developing Child](#). The fellowship is intended "to support [the] goal of creating a new generation of leaders who recognize the need to bring strong, interdisciplinary scientific knowledge to bear on policies and programs that support the well-being of children." For more information on Adrienne and her research interests, please visit the "[Meet the Lab Members](#)" section of our website!

Current Opportunities for Study Participation

As a registered member of our participant database, you are eligible to receive notifications by mail or e-mail when opportunities for research participation are available that fit your or your child's age range. Wondering what study opportunities might be available to you, your family members, or your friends in the near future? Browse the [Ongoing Research](#) section of our website, and take a look at the research studies in our laboratories enrolling infants, children, and adults for participation. And if you spot a study opportunity that might be of interest to someone you know, feel free to forward this newsletter or tell them about our [participant database](#)!

Featured Study:

The "Other-Species" Effect, a face perception study

Previous research with infants has shown that 6-month-olds are capable of discriminating between both human faces and monkey faces. In other words, if you show a 6-month-old two monkey or two human faces side by side, she will be able to tell them apart. However, by the age of 9 months, infants lose the ability to discriminate between the monkey (other-species) faces. This phenomenon, broadly known as *perceptual narrowing*, is the focus of the current study. We know that as babies develop, they begin to specialize in interpreting the faces that they see most often in their surroundings, while losing the ability to interpret the types of faces that they see less often, such as monkey faces. This developmental trajectory is the underlying hypothesis for why adults are much better at processing faces of their own race, gender, and species.

By using a Tobii eye-tracking system to record where infants look when shown pictures of faces, and for how long, we hope to gain insight as to why and exactly how younger infants are able to tell the difference between two monkey faces, and older infants are not. If 6-month olds employ more rudimentary looking patterns, while 10-month olds use more sophisticated, adult-like face scanning patterns, this will be reflected in the eye-tracking data. The results of this study will not only further our understanding of the typical development of facial recognition strategies, but will also provide an important baseline against which we can measure the behavior and looking patterns of children who show differences in facial recognition, such as children diagnosed with Autism Spectrum Disorders.

For more information on this study, and on how we can tell whether infants are discriminating two faces, [click here](#).

If you are interested in participating with your 10-month-old, please e-mail [Eliza Congdon](#), or call the lab at 617-355-0400.

In the News:

"Race Through a Baby's Eyes," from *Vector* magazine

Two of our current studies investigating different aspects of the "other-race" effect in both infants and adults are featured in this recent article. The on-line version also has links to a related podcast by Dr. Nelson, and a video on our current studies at the Museum of Science. To read the full article, [click here](#).

Please visit the "[In the News](#)" section of our website for more press coverage about the laboratories' research!

In the Community:

Autism Speaks, Walk Now for Autism, 10/19/08

This year, for the first time, the LCN participated in the [Greater Boston Walk Now for Autism](#) at Suffolk Downs, which raised over \$1 Million and drew 20,000 participants. In spite of the chilly weather, the turnout was incredible, and we had the opportunity to participate in the walk, as well as to talk with parents and families about our Autism Research Program as part of the event's Resource Fair. A warm thanks to everyone who stopped by our booth that day, and to everyone who took the time to sign up for our participant database. We greatly appreciate your support and your interest in our work!

"Advances in Early Identification of Autism Spectrum Disorders and New Research Findings" 7:00-9:00, November 5th, Boston Marriott Newton

In the upcoming Developmental Medicine Center forum, Dr. Nelson and Dr. Leonard Rappaport, MD, MS, and Chief of the Division of Developmental Medicine, will discuss the latest findings regarding early identification of ASD and predicting outcomes from diagnosis. The discussion will cover the latest advances in early identification using standardized behavioral tools such as the AOSI (Autism Observational Scale for Infants), as well as modern neuroscience tools. It will also cover our current understanding of follow up studies predicting outcomes for children identified in the first four years of life, and how other research can add to this knowledge base.

Registration begins at 6:15 and there will be coffee and dessert following the presentation. For more information, contact Rosetta Mojahed at rosetta.mojahed@childrens.harvard.edu

The LCN at the "Living Laboratory" at the Museum of Science! (The Human Body Connection Exhibit, Wednesdays from 10:00-2:00 and Fridays from 10:00-1:00)

We are continuing with new studies at the Museum of Science, as part of the museum's effort to make the science of cognitive development more accessible to parents and kids. Our researchers are there each week to give children the opportunity to participate in a study, as well as to help parents understand how their child learns about the world. Our current research includes some face-perception studies and two language studies where you can rearrange comic strips or listen to different songs. Please keep your eye out for us when you're there--stop by, say hello, and give our studies a try!

For more information on the "Living Laboratory," [click here](#).

To remove your information from our participant database, please e-mail brainworks@childrens.harvard.edu or call (857) 218-3011.

Children's Hospital Boston * Laboratories of Cognitive Neuroscience * One Autumn Street, 6th Floor * Boston, MA 02215