We want to express how much we appreciate all of the children and families who have participated in our studies! Your participation in our visits as well as all of the forms you complete are extremely beneficial to our research, and we would not be able to collect data without your help! Your commitment to our studies has also helped many undergraduate students receive credit for an internship and/or independent study and has provided them with the experience of a lifetime! Thank you for taking the time to travel here, and for your patience with the construction around the Waisman Center. Have a great end of your summer and good luck to all the children starting Preschool or Kindergarten in the fall!

The Infant-Parent Interaction Lab Team from Spring 2008:
First Row: Rachael Warner, Ashley Mellenthin, Sarah Janus, Melissa Vollbrecht, Sarah Felde, Sarah Slusarek, Emma Spath, Eve Nommensen.
Second Row: Gina Aguglia, Kyle Miller, J.P. Bianchi, Emily Hahn, Gillian Vig
Not Pictured: Dr. Poehlmann, Dr. Dilworth-Bart, Katie Bleier, Jenna Lequia, Sarah Tabaska, A.J. Miller Schwichtenberg

Congrats to A.J.!
We are happy to announce that one of our Research Assistants, Dr. A.J. Miller Schwichtenberg, gave birth to a baby boy, Myron Harlan Miller, on February 5, 2008. Both mom and baby are doing well and enjoying their summer together. A.J. will be moving to California to begin her postdoctoral training in Developmental Disabilities Research at the M.I.N.D. Institute of the University of California Davis. There, she will work on a community screening project to identify autism and other developmental disabilities early in development and will continue with her writing about sleep in preterm infants. A.J. received her undergraduate degree at Hamlin University in Minnesota and both her MS and PhD at the University of Wisconsin. She also headed a special sleep portion of our study, which was the foundation of her recently completed dissertation. She has been a member of the lab for 6 years and we are sad to see her go, but extremely proud of her accomplishments!

We are very excited that our Lab Website is up and running!
http://www.waisman.wisc.edu/preterm/

On the website you can find information about:
♦ The aims of our study
♦ The latest happenings in our lab
♦ Pictures and information about our lab staff
♦ Past Newsletters in PDF format
♦ A few of Dr. Poehlmann’s publications
♦ Maps, directions, and lab phone numbers
The Importance of Spit! by: Gina Aguglia et. al.

The recent addition of saliva collection to our study is designed to provide further insight into the genetic origins of emerging attention problems in high risk infants. While there is currently no known cause of attention problems such as Attention-Deficit Hyperactivity Disorder (ADHD), there are many proposed factors that may contribute to its development. Studies have shown that ADHD can be brought on by a combination of environmental, biological, and genetic factors that all contribute to certain behaviors seen in children. ADHD is not generally diagnosed until a child is in school (about seven years old), and the symptoms must be present for at least six consecutive months before any diagnosis can be made. Because preterm infants experience some risk for developing attention problems, they have a greater possibility of developing behaviors associated with ADHD. That is why we are studying possible links between certain genes and emerging attention problems.

There are a few different ways we are collecting data on behaviors that reflect a child’s attention skills, impulse control, and activity level. One way is by asking mothers to report about their children’s behaviors on the Child Behavior Check List (the long, blue questionnaire you have all seen at the 16, 24 and 36 month visits). However, it is important to keep in mind that behavior issues are only a problem if they are affecting the family unit or the child’s social behaviors or learning in school. It is normal for 2 and 3 year olds to show inattention and high activity!

There are also a number of games we play with your child during the visits that help us look at your child’s ability to focus their attention and wait for things. At 36 months, we ask your child to wait for a cookie in a plastic bag, and wait to play with a big Magic Mountain toy. We look at how your child deals with the temptation of the toy and the cookie. Difficulty waiting for things is a potential symptom of ADHD, but is fairly common in 2 and 3 year olds; especially when they are waiting for things as attractive as a cookie or a big toy!

The genetic correlates of these behaviors can be examined through analysis of saliva samples. The saliva sample that we collect from each family member allows us to measure genetic factors that may contribute to attention problems, which cannot be observed in our lab. There are a few identified genes that have been linked to the diagnosis of ADHD, but research has not yet confirmed anything. This is why we are interested in the saliva of both the child and the parent(s), to see if we can find these identified genes. We also ask you to fill out a current symptoms scale to see if you yourself have been experiencing any symptoms that are associated with ADHD. Looking at the saliva samples will help us understand emerging symptoms of inattention in preterms and hopefully create a better understanding of what interventions might be helpful for children who are at risk for developing ADHD.

When we ask you to spit, either in the lab or at home, we will have special cups for you designed durably enough to go through the mail to Prachi Shah, M.D., in Houston, Texas. Don’t be embarrassed about spitting because we are all used to it! Your child will receive a “magic lollipop” (rock candy), which will help them produce enough saliva for our analysis. If your child cannot spit we will simply “tickle” the insides of his or her mouth with six swabs. Because the fathers are asked to participate in the study for the first time, we will offer them a gift card for their participation. As always, we greatly appreciate all the families who have agreed to be part of this new addition and we are looking forward to sharing the results with you.

Want to find out more about ADHD?

Awareness of ADHD (Attention Deficit Hyperactivity Disorder) has greatly increased in recent years, but many people don’t know exactly what it is or how it can be treated. If you are interested in learning more about ADHD, we suggest visiting these two websites:

www.CHADD. Org
National Resource Center: 800-233-4050
Southeast Wisconsin Chapter: 414 -299-9442
-dedicated to improving the lives of people affected by ADHD through information and guidance.

www.russellbarkley.org
Contact Number: 843-971-0398
Fax: 843-971-8323
-provides information, facts, and courses on ADHD and what is currently being done to combat the disorder.
At your child’s two year visit you may remember AJ, Bridget, or Jessica coming out to your house to deliver a ‘present’. Inside the present was a blue ankle band with a small sensor in it. The sensor, called an actigraph, recorded your toddler’s movements during the day and at night. Using a computer algorithm, the recorded movements were translated into sleep and wake states. The figure below details how actigraphy shows sleep, activity, removals, and time the toddler spent in bed.

Figure 1. Example actigraph information starting at 6am.

Over 100 toddlers in our study wore the actigraph sensor as a part of the special sleep section of the study. This is the largest study in the United States to record toddler sleep using actigraphy in infants born early. From the actigraph information we have learned that some toddlers only took 5 minutes to fall asleep and others took about 2 hours to fall asleep. On average, toddlers took about a half an hour to fall asleep. At night, toddlers slept an average of 7 hours and 20 minutes. While asleep, all people move and actigraphy translates these movements into arousals. Arousals are low level wakings that most people do not remember or report. In our study, toddlers had (on average) 26 arousals, with a range from 9 to 46 arousals. In a 24 hour period, toddlers slept a little under 9 hours and slept around an hour and a half during the day. We are continuing to look closely at your child’s actigraph sleep information and hope to learn more about nighttime sleep habits and daytime behaviors and how they relate to other behaviors and interactions that you see in your child.

Moving?

Please let us know if you are moving or changing your contact information. This way we can get in touch with you for your upcoming visits, continue to send you newsletters, and inform you about future additions to the study. *We are planning on having a phone interview when the kids turn 6 as well as a potential lab visit when the kids are 8.* We really appreciate all your contributions and want to make sure we have your correct information for future additions to the study. Even if you are moving out of the state or country you can still help us with our research by filling out paperwork. If you prefer that we contact you via e-mail, that's great! Send your e-mail address to [pretermbabies@waisman.wisc.edu](mailto:pretermbabies@waisman.wisc.edu) stating that this is how you prefer to be contacted. Just make sure to include your child’s name and birth date. You may also contact us by phone at 608-263-6249.
Interview with Kyle Miller

Kyle has been working in the Infant-Parent Interaction Lab as a Project Assistant for a year now. We enjoy her fun sense of humor and her bright disposition. Here is what she has to say:

What is your academic background and what brought you to the lab?

I did my undergraduate schooling at Boston College where I received my B.A. in Human Development and Elementary Education. After college, I served as a Peace Corps Volunteer in Nicaragua for 2 years. There I taught at a teachers training college and spent a lot of time working with the schools and youth in the area. When I came back to the U.S., I completed my masters at Harvard University in Prevention Research and taught in a Boston Public School. Now I am in Madison working on my PhD in Human Development and Family Studies at the University of Wisconsin. I came to the lab because of my interests in prevention and academic achievement. Julie Poehlmann focuses much of her research on high risk populations and I wanted to further explore that area while working on my PhD.

What is your favorite part of the visits that you facilitate?

Well, besides collecting spit at the end of each visit (haha) I really enjoy watching the kids wait for the Magic Mountain. It is such an enticing toy and it is fun to see the different strategies kids use to avoid playing with it. I also really like seeing how excited the kids get when the trampoline is brought in. I never knew jumping could be so much fun!

What are your plans for the future?

I wish I knew! I do hope to get through school and eventually become a professor. I am open to moving anywhere after I graduate, but I do like the Midwest since I am originally from Iowa. Who knows where I will go? I am just crossing my fingers that everything will work out.

What are some of your hobbies and interests?

I am a pretty good indoor soccer player (said sarcastically)! I’m also in a book club and I love to cook. I really love to travel and hope to do more in the future.