

Hello from the Wisconsin Intelligibility, Speech and Communication (WISC) Lab! So many exciting projects are ongoing and the team continues to grow in leaps and bounds! Out of that excitement comes this newsletter. We are so happy to share this update with our families!



Inside this issue:

Student Achievements	2
Student Projects	3
Did You Know?	3
TD Study Update	3
Welcome to...	4
In Press	4

Waisman Center
1500 Highland Ave.
Madison, WI 53705

A note from Dr. Hustad

As always, thank you to all the families who continue to give their time and commitment to this project. Your efforts are contributing ground-breaking insight into our understanding of how communication develops in children with cerebral palsy (CP).

We hope this newsletter finds you well, and that these summer months are bringing joy to your family! We have enjoyed seeing many of you over summer vacation. It's great to hear about your adventures and family travel.

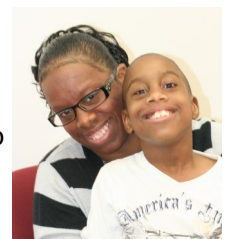


In addition to coordinating and facilitating your visits, the staff at the WISC Lab are using these summer months, and added student lab member availability, to make progress on all of our projects. A few of our speech-language pathologists are preparing to present data at the American Speech-Language Hearing Association annual meeting this fall, and we are also looking forward to submitting an application for a grant renewal towards the end of the year. There are many exciting things to come!

Dr. Hustad continues to direct the WISC lab and is enjoying her role as Chair of the Communication Sciences and Disorders Department at the UW. In addition, Dr. Hustad is serving as the co-director of the Clinical Translation Core at the Waisman Center. Her three children also keep her quite busy!

We are thrilled to announce...

Tre'Von Byrd and Regina Nance have been awarded the 2017 Friends of the Waisman Center Family Volunteer Award. Tre'Von was one of the very first participants in our research, and began coming for visits at age 4! Despite several moves over the past 12 years, Tre'Von and Regina have maintained their dedication to the project, recently making their 17th visit! Tre'Von is now 16 years old, is a member of his high school's marching band, and has a special passion for basketball. Congratulations!



Welcome to...

The WISC Lab welcomes four new members!



Jing Shen joins the team in the

position of Research Specialist. Jing will be working with participants in the study on speech development in typically developing children, as well as coordinating the adult listening study.

Jenn Soriano joins the WISC Lab as a doctoral student. Jenn has worked as a speech language pathologist in the Philippines for the past 10 years and brings a

wealth of knowledge to our project! Jenn is excited to learn more about speech-language pathology in the United States.

Alex Maloney and **Clare Koopmans** are new student lab members. They are both excited to learn more about research on developmental disabilities.



Speech Development Study Update

The Speech Development Study has really been on a roll! This study will establish normative data on speech intelligibility for children who are typically developing, providing benchmarks that will have a significant impact on our research for children with CP. Our goal is to see over 400 children between the ages of 2 ½ and 7,

and since our last newsletter, we have seen 115 children! Can you help us spread the word? We would also be thrilled if any siblings of our participants with CP were interested in participating.

Thanks for your continued support in helping us reach our goals.

<https://kidspeech.waisman.wisc.edu/dms/TDenroll/>



Exciting Work, Powerful Findings

The following two articles have recently been submitted to academic journals:

- *Receptive language growth in children with cerebral palsy between 18 and 54 months of age*

This article explores the trajectory of receptive language abilities, sometimes called language comprehension, in children with CP. Results suggest that children with CP who are able to talk, even when starting with a slight delay,

go on to develop language comprehension skills at an age appropriate rate. For children with CP who can't talk, language delays for comprehension tend to be persistent over time, highlighting the importance of augmentative communication interventions to support development.

- *Executive function in school-aged children with cerebral palsy: Relationship with speech and language*

Executive function (EF) skills are

the skills that help us make a plan, organize and manage our time, and initiate a task. Results from this study suggest that children with CP, even those who do not have impairments in speech or language, may be at risk for EF difficulties. Parents and clinicians should keep this in mind when evaluating the needs of children with CP.

Access all published articles at:

<https://kidspeech.wisc.edu/our-publications/>

Student Projects

The WISC Lab is proud to report on several projects completed by undergraduate seniors. Senior thesis projects provide a mentored research experience from conception to completion and we are very proud of these students!

Karly Dierckens and Kelsy Ehr examined expressive language development in a group of 38 children with CP across the ages of 6, 7, and 8 years of age, giving three years of longitudinal information. In this 12 month endeavor, Karly and Kelsy started by identifying which participants were eligible based on the timing of the visits. They prepared

the video samples of the parent-child interactions, and completed a lengthy process of transcribing and coding the samples with a specific set of rules and conventions. Finally, Karly and Kelsy became trained on and used a computer software (Systematic Analysis of Transcripts, or SALT) to run analyses across all the visits. The data produced from their projects are now in the hands of our skilled statisticians! We look forward to learning more about how expressive language and vocabulary



changed over this span of three years.

This fall, Meredith Braza will begin a new project. In a similar vein, Meredith will explore changes across 6, 7, and 8 year olds. However, instead of examining language production, Meredith is going to examine speech production and acoustic data from children with CP. Meredith's project will seek to understand how changes in speech intelligibility are related to changes in speaking rate at these ages. Meredith will include a control group of children who are typically developing and do not have cerebral palsy.

Did You Know?



Every time a child comes to the Waisman Center and repeats all those words and sentences on the iPad ("bird house", "pour some tea for both of us"), the WISC Lab brings in two adult listeners to listen to the speech productions. These listeners (between the ages of 18 and 45) come in for a 30 minute appointment, participate in a

hearing screening, and then simply type what they hear! This is how we generate an intelligibility score for a child at that point in time. Adult listeners are also compensated \$10 cash!

Because each listener only hears the speech of one child at one point in time, the WISC Lab is always in need of new adult listeners!

Do you know anyone who might like to contribute by being an adult listener? Interested participants should complete the survey

at this link:

<https://kidspeech.wisc.edu/adult-listeners/>

A lab member will contact interested individuals after their survey response is received. The QR code below also links to the survey.



Student Achievements



Emily McFadd, MS, CCC-SLP

Emily will complete her dissertation and finish the doctoral program in August. This remarkable accomplishment comes after receiving her Masters in Speech-Language Pathology from UW-Madison in 2010 and working with Dr. Hustad since 2008. Emily has seen many of the children over the last 8 years and has been a strong fixture in the WISC lab. She will be sorely missed but we wish her all the best! Emily is excited to begin her own research program and plans to discover more about how augmentative communication technology can enhance interactions between children with communication impairments and their family and friends.



Madeleine Miller

Madeleine graduated from the UW-Madison Master's program in Speech-Language Pathology and

has joined a private practice in her hometown, San Francisco. Her three years in the WISC Lab have taught her the importance of research, and will support her ability to provide evidence-based therapy for future clients. She is grateful to all of the study participants and their families.



Kelsy Ehr

Kelsy graduated with a Bachelor of Arts in Communication Sciences and Disorders from UW-Madison, and she will be continuing her journey as a Badger in the Speech-Language Pathology Master's program at UW-Madison in the fall. Being a member of the WISC Lab has taught her the importance of research for evidence-based practice as a clinician.



Alisebeth Sandoval

Ally graduated with a Bachelors of Arts in Communication Sciences

and Disorders and a certificate in Educational Services. In the fall she will be beginning the Speech-Language Pathology graduate program at Florida State University. Ally is grateful for the many learning opportunities the WISC Lab has given her. She has developed a greater appreciation for research and early intervention that she will bring to her future schooling and clinical practice.



Karly Dierckens

Karly graduated with a Bachelor of Arts in Communication Sciences and Disorders and a minor in Gender and Women's Studies from UW-Madison. She will be starting her graduate education at Arizona State University studying Speech-Language Pathology this fall. Karly worked at the WISC Lab for 2 years and has enjoyed meeting all the families who've participated in the study. She has learned the importance of research supporting individuals with disabilities and is so thankful for her experience in the WISC Lab!