



Linköping University
Department of Biomedical and Clinical Sciences
Division of Sensory Organs & Communication

RESEARCH COLLOQUIUM Fall 2023
Unit for Communication Disorders/Logopedics

Meetings are held at 15:30-17:00 Swedish time and 9:30-11:00 New York time and open to everyone. The zoom link can be shared:

<https://liu-se.zoom.us/j/62024928130?pwd=SUNRbWRDTjUrUW5FdmlhREZ5Wng0dz09>

Meeting ID: 620 2492 8130
Passcode: 205679

Sept. 4 HIGHER SEMINAR

Title: Social communication and memory: Evidence from adults with and without neurological disorders

Speaker:

Si On Yoon, Ph.D., is an assistant professor in the Department of Communicative Sciences and Disorders at New York University. Her research in CoMM (Communication, Memory, and Mind) Lab examines how people use social-pragmatic information in conversation. Yoon is also interested in how this ability to use social-pragmatic cues during language processing varies across populations (e.g., younger and older adults with or without a neurodegenerative disease).

Even though communication plays an undeniably important role in our lives, the mechanisms of language processing used in conversation are largely unexplored due to the difficulties in examining natural conversational language with traditional psycholinguistic approaches. In a newly developed experimental paradigm to study conversation in the lab, Yoon has been able to examine how speakers tailor language during multiparty conversation (one speaker and two listeners). She has also expanded this paradigm to further look at how speakers balance the needs of the different partners for successful communication in conversations with up to 7 people. In another line of work, to examine the nature of the memory representations that are built and used during natural communication, Yoon tests individuals with neurological disorders (e.g., individuals with hippocampal amnesia, individuals with neurodegenerative disease such as Parkinson's/Alzheimer's disease), as well as healthy older adults. These results demonstrate the extent to which tailoring language to one's audience requires intact hippocampal-dependent memory systems. This work will have potential clinical implications on how to design efficient evidence-based social communication rehabilitation and management strategies for adults with neurological disorders.



Sept 25. HIGHER SEMINAR

Title: Next steps for technology-enhanced treatment of speech sound disorder

Speaker:

Tara McAllister is an Associate Professor of Communicative Sciences and Disorders at New York University. Her research aims to understand how speech skills are acquired in both typical and clinical populations, and why developmental speech patterns resolve in some individuals but persist in others. Dr. McAllister leads NIH-supported research investigating acoustic and ultrasound biofeedback intervention for residual speech sound disorder, and she directs the development of the staRt app for visual-acoustic biofeedback.

This talk will discuss recent advances in the use of biofeedback technology (ultrasound imaging and visual-acoustic feedback) for the treatment of residual speech sound disorders in older children and adolescents. After reviewing evidence regarding the efficacy of biofeedback, the talk will explore models of how biofeedback has its effect. The possibility of enhancing treatment outcomes by personalizing the choice of biofeedback technology to a learner's sensory profile will be discussed. Finally, the talk will address barriers to clinical uptake of biofeedback and steps that have been made to expand access to speech treatment technologies.

Oct 2. HIGHER SEMINAR (10:30 am in NYC)

Title:

Temporal processing of sentence production in Parkinson's disease

Speaker:

Fatemeh Mollaei, Ph.D. is a lecturer (Assistant Professor) at the School of Psychology and Clinical Language Sciences at University of Reading, UK. Her work focuses on understating the nature of motor speech disorders in neurological conditions and mostly neurodegenerative diseases such as Parkinson and Huntington's disease. She has completed her PhD work under the supervision of Profs. Vincent Gracco and Shari Baum at McGill University in Canada, where she investigated the speech and auditory brainstem processing in PD. Prior to joining Reading, she completed a Postdoctoral Fellowship at University of Toronto where she studied the nature of stuttering using structural magnetic resonance imaging and Magnetoencephalography.

Parkinson's disease (PD) is a multifaceted disorder with motor and non-motor symptoms. Speech deficits are one of the common symptoms with 90% of individuals with PD showing speech production impairments that span prosody, phonation, and articulation subsystem of speech. These deficits can be broken down into two main categories: hypokinetic dysarthria and neurogenic stuttering. While there has been more focus on understanding the nature of hypokinetic dysarthria in PD, there has been less focus on the nature of neurogenic stuttering in PD. Understudying the temporal processing of sentence production in PD will inform the nature of neurogenic stuttering in this population. In this presentation, I will discuss the work that we are undertaking at the School of Psychology and Language Sciences to

improve our understanding as to which factors determine online, spoken sentence production abilities of adults with PD and their relations to hypokinetic dysarthria.

Oct 16. HIGHER SEMINAR

Title:

Predictors of individual differences in non-native speech sound learning

Speaker:

Joanne Li, Ph.D. CCC-SLP, is a postdoc in the Speech & Hearing Sciences department at the University of Washington. She received her Ph.D. in Communicative Sciences and Disorders from New York University. Dr. Li's research focuses on bilingual speech perception and production, speech motor control, and speech prosody.

Adult learners who acquire a second language (L2) after childhood can rarely speak without an accent, and the degree of accent is highly variable among individual learners. The factors underlying inter-speaker variation in L2 production ability are still not well understood. Auditory and somatosensory acuity are important for speech sound learning in the native Language. In this talk, I will present my studies investigating how speakers' auditory and somatosensory acuity, together with other factors, affect L2 speech sound learning in beginners and experienced L2 learners.

Nov 27. RESEARCH/DOCTORAL SEMINAR

Title:

Same, Same, but different – Understanding the educational situation of students with DLD

Speaker:

Julia Wallman is an SLP and a doctoral student in the Department of Biomedical and Clinical Sciences at Linköping University, mentored by Anna Ekström, Christina Reuterskiöld and Olof Sandgren (Lund Univ). Julia's research interest is language difficulties in school-age children and interventions aimed at improving the school situation for these children.

In this talk, Julia will present ongoing work from the first study of her PhD thesis. The study uses a qualitative approach and explores the experiences of students with DLD and the views of different stakeholders around these students.

Dec 4. HIGHER SEMINAR

Title: Production learning of novel sound sequences

Speaker:

Hung-Shao Cheng (he/him) received his PhD in Communicative Sciences and Disorders from New York University in 2023. His research interests broadly include speech motor learning and the relationships between speech perception and production.



One important goal in the domain of speech motor learning is to understand how speakers learn to produce novel speech motor sequences. In this talk, Hung-Shao will present his research program focusing on how adults learn to achieve novel sequences as in the context of novel onset consonant clusters. He will present an earlier piece of work that addressed the content and specificity of the learned speech motor representations. Additionally, he will discuss his current work in progress examining perceptual contributions to novel cluster learning. Results of these studies will shed light on our current understanding of how adults learn to produce novel sound sequences.

Questions: christina.reuterskiold@liu.se

Välkomna! Welcome!