

EDULANG

Fall 2022 Training Workshop
University of Connecticut



 **NTNU**
Norwegian University of
Science and Technology



UConn
UNIVERSITY OF CONNECTICUT



Download program:
<https://slac.uconn.edu/edulang-2022>

LOCATIONS FOR ATTLIS & EDULANG

Dodd Center

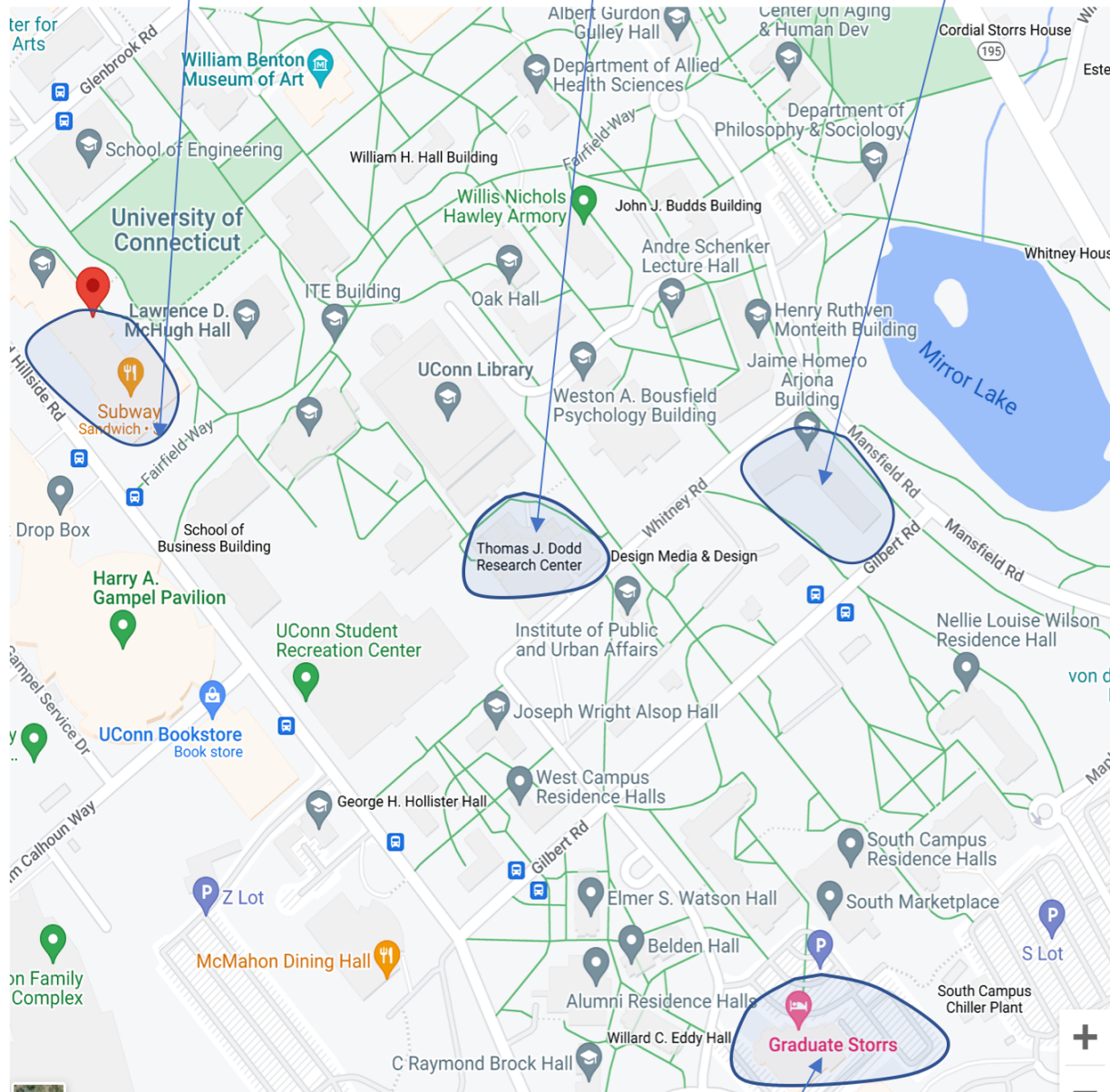
AttLis spoken sessions

Student Union

AttLis lunch (rm. 104) on 10/27
EDULANG workshop 10/25-26

Ariona

EDULANG workshop afternoon of 10/26



The Graduate

Campus hotel;
AttLis dinner 10/27

EDULANG 2022 Code of Conduct*

EDULANG is dedicated to providing a harassment-free conference experience for all, regardless of gender, gender identity and expression, sexual orientation, disability, physical appearance, body size, race, age, religion, or nationality. We will not tolerate harassment of conference participants in any form. Conference participants violating these rules may be sanctioned or expelled from the conference without a refund, at the discretion of the conference organizers. Harassment includes, but is not limited to:

- Verbal comments that reinforce social structures of domination related to gender, gender identity and expression, sexual orientation, disability, physical appearance, body size, race, age, religion, nationality
- Sexual images in public spaces
- Deliberate intimidation, stalking, or following
- Behaviors intended to make a person or group feel unwelcome, or to encourage ostracism of any individual or group
- Harassing photography or recording
- Sustained disruption of talks or other events
- Inappropriate physical contact
- Unwelcome sexual attention
- Advocating for, or encouraging, any of the above behaviors
- These behaviors are unacceptable both during in-person interactions and on social media.

Enforcement

Participants asked to stop any harassing behavior are expected to comply immediately. If a participant engages in harassing behavior, event organizers retain the right to take any actions to keep EDULANG a welcoming environment for all participants. This includes warning the offender, expulsion from the conference with no refund, barring from participation in future conferences or their organization, reporting the incident to the offender's local institution or funding agencies, or reporting the incident to local law enforcement. Organizers may take action to redress anything with the intent or clear impact of disrupting the event or making the environment hostile for any participants. We expect participants to follow these rules at all event venues and event-related social activities. We think people should follow these rules outside event activities too!

Reporting

If someone makes you or anyone else feel unsafe or unwelcome, please report it to conference staff as soon as possible (Jim Magnuson or another UConn faculty member). Harassment and other code of conduct violations reduce the value of our event for everyone. People like you make our scientific community a better place, and we want you to be happy here. You can find University of Connecticut guidelines on discrimination and harassment, as well as a form for reporting incidents that are harmful to members of the community, at this link: <https://equity.uconn.edu/discrimination/>

Our team will be happy to help you contact hotel/venue security, local law enforcement, local support services, provide escorts, or otherwise assist you to feel safe for the duration of the event. We value your attendance.

Contact information

Should you wish to report an incident, you may contact any event staff that you see, or otherwise get in touch via e-mail or phone:

- Faculty organizer: Jim Magnuson, 860-617-0853, james.magnuson@uconn.edu
- UConn police:
 - (860) 486-4800 (for non-emergencies)
 - 911 (in case of an emergency)
- UConn Title IX office resources: <https://titleix.uconn.edu/get-help/>

* This code has been adapted with permission from: <https://www.umass.edu/linguistics/cuny2020/coc/>

COVID POLICIES

COVID is still highly prevalent in Connecticut. Many attendees have expressed concern about COVID policies because they or someone they are in regular contact with is immunocompromised.

Masks. We request that you wear a mask when you are not presenting a talk, except when participating in refreshment breaks or meals. We will have a supply of masks on hand.

Vaccination. The University of Connecticut requires all its personnel to be up to date with COVID vaccinations and boosters. We cannot require that of visitors, but we encourage you to get vaccinated and/or boosted. If you are not vaccinated, we ask that you be vigilant about using a mask, and that you maintain a distance of 2 meters / 6 feet from other participants at all times.

Filtration. We have 3 DIY filtration devices (Corsi-Rosenthal boxes, <https://edgecollective.io/airbox>) that we will **try** to bring along to all events.

COVID tests. We have a supply of COVID tests. If you have symptoms, we ask that you go to your hotel / B&B / airBnB, and we will arrange to get one or more tests to you. We will do our best to assist you if you need to extend your stay and/or change transportation plans.

LOCAL CONTACT INFORMATION

If you find yourself in a situation where you need assistance or advice,
call Jim Magnuson at 860-617-0853.

For non-emergencies requiring police advice,
call the UConn police non-emergency line: 860-486-4800.

For emergencies, dial 911.

UConn LAND ACKNOWLEDGEMENT

We acknowledge that the land on which we gather is the territory of the Mohegan, Mashantucket Pequot, Eastern Pequot, Schaghticoke, Golden Hill Paugussett, Nipmuc, and Lenape Peoples, who have stewarded this land throughout the generations. We thank them for their strength and resilience in protecting this land, and aspire to uphold our responsibilities according to their example.

DRAFT SCHEDULE AS OF 10/19/2022

Tuesday 25 October: Student Union 304B

| | |
|------------------------|---|
| 8:30-9:00 SU 304B | Breakfast & registration |
| 9:00-9:10 SU 304B | Opening remarks and introductions |
| 9:10-9:40 SU 304B | Research overview: NTNU Mila Vulchanova & Valentin Vulchanov <i>Norwegian University of Science & Technology (NTNU)</i> |
| 9:40-10:05 SU 304B | Research overview: UConn Jim Magnuson, Inge-Marie Eigsti, Gerry Altmann, Emily Myers, Marie Coppola |
| 10:05-10:10 SU 304B | BREAK |
| 10:10-10:45 SU 304B | Student data blitz -- 1 minute per student! |
| 10:45-11:00 SU 304B | BREAK |
| 11:00-12:30 SU 304B | Introduction to fNIRS experimental design and data analysis Sara Sanchez-Alonso <i>Haskins Laboratories, Yale University</i> |
| 12:30-13:15 SU 304B | LUNCH served in the meeting room |
| 13:15-14:45 SU 304B | The literate brain: An update on neuroimaging studies of language development, reading, and reading disability Ken Pugh <i>UConn, Haskins Laboratories, Yale University</i> |
| 14:45-15:00 SU 304B | Break |
| 15:00-16:30 SU 304B | Communicating science in a polarized age Michael Lynch <i>UConn</i> |
| 16:30-17:30 | BREAK <i>Make your way to The Graduate (campus hotel) by 17:30 or to Stone Row by 19:00</i> |
| 17:40-20:00 | Dinner at Stone Row (Willimantic) <i>Departing promptly from The Graduate at 17:40, or you may drive separately and meet us at Stone Row in Willimantic promptly at 18:00 (6pm)</i> |

Wednesday 26 October *morning*: Student Union 304C

| | |
|------------------------|---|
| 8:30-9:15 SU 304C | Breakfast & discussion |
| 9:15-10:45 SU 304C | Reproducible documents using Jupyter and RMarkdown Alexandra Paxton <i>UConn</i> |
| 10:45-11:00 SU 304C | BREAK |
| 11:00-12:30 SU 304C | The Centrality of Language in Cognitive Development Marie Coppola <i>UConn</i> |
| 12:30-13:30 SU 304C | LUNCH served in the room, but we have to leave by 13:55 |

Wednesday 26 October *afternoon*: Arjona 105

| | |
|------------------------|---|
| 13:30-14:30 ARJ 105 | <i>BREAK -- Move to Arjona 105</i> <i>Locals will guide visitors</i> |
| 14:30-16:00 ARJ 105 | Investigating the effect of literacy in India: An example of research with non-WEIRD populations Falk Huettig <i>Max Planck Institute for Psycholinguistics & Radboud University</i> |
| 16:00-16:15 ARJ 105 | Break |
| 16:15-17:45 ARJ 105 | Mind monitoring in little listeners Craig Chambers <i>University of Toronto</i> |
| Evening -- TBA | <i>Student dinner -- details TBA</i> |

DETAILED SCHEDULE WITH ABSTRACTS

TUESDAY

Tuesday, Oct. 25, 9:10-9:40, Student Union 304B

Research overview: NTNU

Mila Vulchanova & Valentin Vulchanov
Norwegian University of Science & Technology (NTNU), Trondheim, Norway

Tuesday, Oct. 25, 9:40-10:05, Student Union 304B

Research overview: UConn

Jim Magnuson, Inge-Marie Eigsti, Gerry Altmann, Emily Myers, Marie Coppola
UConn

Tuesday, Oct. 25, 11:00-12:30, Student Union 304B

Introduction to fNIRS experimental design and data analysis

Sara Sanchez-Alonso
Haskins Laboratories, Yale University

This workshop will provide an overview of functional Near-Infrared Spectroscopy (fNIRS) as a neuroimaging tool to study brain function. We will discuss the theory and technology behind NIRS, the different application areas, experiment set-up and data analysis methods. The data analysis overview will include a demo of fNIRS data analysis with the software Homer3.

Recommended readings ([download link](#))

- Pinti, P., Tachtsidis, I., Hamilton, A., Hirsch, J., Aichelburg, C., Gilbert, S., & Burgess, P. W. (2020). The present and future use of functional near-infrared spectroscopy (fNIRS) for cognitive neuroscience. *Annals of the New York Academy of Sciences*, 1464(1), 5-29.
- Wheelock, M. D., Culver, J. P., & Eggebrecht, A. T. (2019). High-density diffuse optical tomography for imaging human brain function. *Review of Scientific Instruments*, 90(5), 051101.

Tuesday, Oct. 25, 13:15-14:45, Student Union 304B

**The literate brain: An update on neuroimaging studies of
language development, reading, and reading disability**

Ken Pugh

UConn, Haskins Laboratories, Yale University

Good reading skills are crucial for success in the modern world. Reading disability (RD) is characterized as a brain-based difficulty in acquiring fluent decoding skill, usually associated with problems in operating on the *phonological structures of language*. I will review research from our lab and others which indicates that atypically developing RD children fail to develop key left hemisphere brain “circuits” that, in typically developing (TD) readers, come online to support skilled reading. New discoveries on how genetic, neurobiological, and environment factors impact early language development and later reading outcomes will be discussed in this context. I will also present an overview of the latest research from our lab on the brain-basis of treatment and remediation of language and reading difficulties (in multiple languages), including new research using multi-modal brain imaging during learning with the larger goal of tailoring instruction to individual differences in brain organization. Finally, I will discuss recent research from our lab and others on how the COVID pandemic has impacted reading skills and how we can design new learning environments to address the expected reading losses.

Tuesday, Oct. 25, 15:00-16:30, Student Union 304B

Communicating science in a polarized age

Michael Patrick Lynch

UConn

Climate change isn't happening. COVID isn't real. Vaccines contain tracking devices. These and other blatant falsehoods can be found sloshing around the Internet, from its dark corners to the shiny lights of people's Instagram feeds. We live in a time, as the trope now goes, of two viruses: the one that caused the pandemic, and the other one—misinformation—that has made it, and many other problems, much worse. As a result, it is increasing more urgent, and yet also more difficult, for scientists to convey more accurate and evidence-based information to the public. In this talk, I discuss two aspects of communication in a polarized age that are important to understand in order to engage in effective science communication. The first concerns the knotty question of whether people spreading conspiracies and falsehoods like the above actually believe them. The second concerns a distinction between the literal meaning of a claim and what I'll call its political meaning.

WEDNESDAY

Wednesday, Oct. 26, 9:15-10:45, Student Union 304C

An introduction to living documents and reproducible manuscripts

Alexandra Paxton

UConn

I'll be presenting an overview of living documents and reproducible manuscripts. While definitions vary, I view "living documents" as work-in-progress documents, with documentation, live code, and results in one place. "Reproducible manuscripts," on the other hand, are documents that result in submission-ready manuscripts—formatting your text, creating your figures, and even updating your p-values in your tables automatically. During this workshop, I'll describe the ethos of these kinds of documents, try to convince you about why you should adopt them, explain how to create them in R markdown and Jupyter notebooks, walk through some examples, and work through some exercises.

I will also be devoting some of the time at the end of the workshop to providing guidance for folks about their own work. If you have an active project, I invite you to bring some of your work in progress (like code, text, or figures) to begin creating your own living documents or reproducible manuscripts.

Requirements for the workshop:

- Basic understanding of R and/or Python
 - For reference, if you can get through Chapters 1 and 2 of [Danielle Navarro's R for psychological science](#), you'll be good to go with R. If you code in Python and can do the same skills presented in those chapters but in Python, you'll be good to go with Python.
- A laptop with internet access and a browser of your choice

Additional requirements for those who want to work on their own works in progress:

- Some actual work in progress to create your own living document and/or reproducible manuscript (like code, text, or figures)
- Some or all of the following software installed on your laptop
 - R and RStudio ([link](#)), along with [papaja](#) and [tidyverse](#)
 - JupyterLab ([link](#))

Wednesday, Oct. 26, 11:00-12:30, Student Union 304C

The Centrality of Language in Cognitive Development

Marie Coppola

UConn

I'll report initial findings from the Study of Language and Math (SLaM) project, based at the University of Connecticut. We investigated how language modality (i.e., signed or spoken) and the timing of a child's exposure to language (beginning from birth or at some point later in development) influence performance in a number of domains of cognitive development. Even among typically hearing children, the home environment and interactions with caregivers have been found to influence many aspects of cognitive development. Deaf and hard of hearing children experience much greater variability in their language experiences; this likely affects the quantity and quality of their education and their interactions with parents, siblings, and peers.

Overall, we found that the timing of language access predicted much more variability in outcomes than did differences between children learning a sign language (American Sign Language, ASL) vs. a spoken language (English). Modality effects were rare, and tended to be associated with confounding factors, such as a child's family's socioeconomic status and the age at which they began reliably accessing language input.

We will report relatively consistent findings across a number of cognitive tasks. These tasks range from those widely agreed to depend on language input, such as vocabulary and acquiring the meanings of number words, to those that are explicitly considered to be independent of language, such as tracking small sets of objects (those containing 2 or 3 items) and standardized 'non-verbal' picture-matching tasks.

These results have both strong theoretical and practical implications. In terms of theory, these findings offer an opportunity to begin refining our theories regarding which aspects of language structure and experience are most influential in promoting development in different domains. They also highlight potential effects of language experience on domains previously considered to be independent of language. In terms of early intervention practice, these results point strongly to the need for children to experience accessible language early in development. That is, deaf and hard of hearing children must receive exposure to fully accessible sign language input as early as possible, in addition to any hearing technology aimed at improving their access to spoken language.

Wednesday, Oct. 26, 14:30-16:00, Arjona 105

**Investigating the effect of literacy in India:
An example of research with non-WEIRD populations**

Falk Huettig

Max Planck Institute for Psycholinguistics & Radboud University

The need for research with non-WEIRD populations is now discussed frequently in all areas of psychology and related sciences. Moreover, a thorough grasp of how reading acquisition and proficiency enhances cognition and changes brain networks is therefore an important prerequisite for devising effective and efficient measures to improve literacy and a more complete understanding of how the mind/brain works. I will present recent findings from research in India which suggest that literacy has a profound impact on people's lives by changing mind and brain in ways that go far beyond the ability to read and the acquisition of knowledge.

Wednesday, Oct. 26, 16:15-17:45, Arjona 105

Mind monitoring in little listeners

Craig Chambers

University of Toronto

The successful and efficient interpretation of spoken language requires listeners to draw on various contextual cues. This includes an understanding of the information known or available to the speaker as well as the speaker's situation-specific communicative goals.

In this session, I will describe a series of studies exploring young children's ability draw on perspective information to guide real-time language processing. This will include a consideration of different "kinds" of linguistic perspective-taking, such as cases involving differences in interlocutors' line-of-sight, emotional state, adherence to communicative norms, or knowledge about the identity of referential entities.

Together, the outcomes of these studies (i) provide new insights into children's ability to manage discrepancies in the information they share with a speaker, (ii) help refine our understanding of the demands of real-time language interpretation, and (iii) highlight how methodological factors play a key role in accurately capturing the abilities of young children.