

# Jeff Mielke Colloquium and Ultrasound Workshop

**Dr. Jeff Mielke**  
University of Ottawa

**"Three uses of ultrasound tongue imaging in laboratory phonology" (plus afternoon workshop, see below)**

Wednesday, November 3, 2010

9:30am-11:00am

Chemistry & Physics, Room 303

## **Abstract**

In this presentation I will talk about three projects that have used ultrasound tongue imaging to address linguistic questions. The first part involves English /r/, which can be articulated a number of distinct tongue shapes, all of which are essentially indistinguishable to listeners. Articulatory imaging reveals inter- and intra-speaker variation, including a range of allophonic patterns which have implications for our understanding of the typology of phonological patterns. The second part is about a poorly-understood consonant found in Kagayanen and several other languages of the Philippines. This sound is remarkable because it involves tongue protrusion, but otherwise it has been difficult to describe in articulatory terms. Ultrasound imaging reveals it to be an interdental approximant with lateral airflow. The third part (time-permitting) will describe the use of ultrasound imaging as a component of a phonetic similarity metric for a set of crosslinguistically frequent and infrequent consonants and vowels.

Lunch (pizza and drinks) will be provided by Linguistics from 12:00pm-1:00pm in CPB RM 303.

Jeff will also host an Ultrasound workshop on Nov 3 for faculty and students from 1:30pm-5:30pm on Wed Nov 3. Advance registration is required for the workshop; reserve seats by sending email to [linguistics@uta.edu](mailto:linguistics@uta.edu). The workshop has limited seats; seats are prioritized for members of the department. We will run a waitlist for those outside the department interested in attending the workshop.