

Aphasia Research Center

University of Maryland



NEWSLETTER

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CONTACT US

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Welcome to the first newsletter of the Aphasia Research Center!

Every hour, approximately 30 people develop aphasia as a result of stroke and there are about 1 million individuals with aphasia in the United States! Aphasia refers to difficulty in speaking or understanding language due neurological injury, most commonly due to stroke. Aphasia is a debilitating condition, impairing the ability to communicate normally and return to work.

At the Aphasia Research Center we study language production and comprehension of individuals with aphasia using different methods, such as language analysis, reaction time measures, grammaticality judgments, and treatment efficacy as well as brain imaging. In particular, we are interested in the following issues:

- Why do some individuals with aphasia experience difficulty in producing sentences, particularly, verbs in sentences?
- What types of treatments are most efficacious in rehabilitating individuals with difficulties in sentence production?
- What neural mechanisms are involved in the processing and production of verbs and sentences?

Current Projects

✚ Investigations of verb processing

Some individuals with aphasia find it difficult to produce verbs while speaking. They may use more general verbs, such as *She did cake* instead of *She baked a cake*. Or, they may substitute different inflectional variants of the verb, for example, *Yesterday she going to the mall* for *Yesterday she went to the mall*. In some occasions, they may not produce a verb when one is required, for example, *Tuesday...dentist... 4 o'clock*. Difficulties with producing verbs often make their speech ungrammatical and require the listener to guess the intent and fill in information. This creates difficulties in communication between the aphasic individual and communication partner.

We investigate various aspects of verb production in individuals with aphasia and compare these with individuals who do not have aphasia (matched for age and education). We are particularly interested in examining which linguistic variables exacerbate aphasic individuals' difficulty with verbs and which variables

ameliorate their production difficulties. We use a variety of experimental tasks such as picture description, sentence completion, repetition, and reaction time measures, to investigate these questions.

✚ Treatment of sentence production

A primary focus of our research is developing and testing treatment protocols for individuals with aphasia. We use the findings of our behavioral studies to learn more about specific deficits and design treatment protocols. The treatment studies will focus on verbs and sentences. Our treatment studies involve intensive individual treatment, 3-5 times a week for 2 hours each. Treatment studies typically extend between 2- 4 weeks and the duration of the study for each participant depends on progress made in therapy.

✚ Neuroimaging of verb processing

Since aphasia results from injury to the brain, we are interested in learning more about the relationship between brain damage and language production and comprehension difficulties in individuals with aphasia. We are specifically interested in examining the neural correlates of verb production, verb morphology and

sentence processing. Our research aims at documenting changes in neural activity that occur in patients who participate in our treatment efficacy studies (see above). We will use [magnetoencephalography](#) (MEG) in conjunction with Magnetic Resonance Imaging (MRI) for our studies.

Interested in Participating?

We are always interested in involving more individuals with aphasia in our research. So, if you or anyone you know has had a stroke and experience difficulty with speaking or understanding language, please contact us. We provide all speech-language evaluation and therapy free of charge. We also reimburse you for participation and transportation expenses.

We also recruit individuals without aphasia who are approximately in the same age range as our aphasic participants for comparison purposes. So if you do not have aphasia or any other neurological conditions, please contact us for more information. Most testing is conducted at the Aphasia Research Center in the University of Maryland, College Park. However, depending on availability of personnel, we may be able to make an initial home visit.

People

DIRECTOR: Yasmeen Faroqi Shah

LAB MANAGER: Stephanie Weinberg

STUDENTS/RESEARCH ASSISTANTS:

Rachel Mont	Nirali Soni
Diana Hufzinger	Heather McIntosh

Sarah Commerchero	Jessica Greenberg
Miguel Galaz	Somya Seshadri
Laura Felgendreger	Phil Torres

Upcoming Events

Maryland Speech & Hearing Association Annual Convention

WHEN: Friday, March 24, 2006, 9:00 am- noon
WHERE: Holidome Conference Center, Frederick, MD
WHAT: Keynote address by Yasmeen Shah "Neural plasticity in Aphasia Therapy", 3.0 CEU

Conference on Human Sentence

Processing, CUNY

WHEN: March 25, 2006
WHERE: CUNY Graduate Center, New York
WHAT: Conference presentation by Yasmeen F. Shah "Relation between temporal adverbs and verb morphology in agrammatic aphasia"

Cognitive Neuroscience Society

WHEN: April 8 – 11, 2006
WHERE: Hyatt Regency, San Francisco, CA
WHAT: Conference presentation by Yasmeen Shah "Priming of Morphological Production in Aphasia"

Adult Discussion Group

WHEN: Saturday, June 17, 2006, 10:30 am –noon
WHERE: 0135, Lefrak, University of Maryland, College Park, MD -20742
WHAT: Short course by Yasmeen Shah, "Advances in Aphasia Intervention: A neurobehavioral evidence-based perspective", 1.5 CEU

Maryland Day – Aphasia Research Center Open House

WHEN: Saturday, April 29, 2006, 10:00 am – 4:00 pm
WHERE: 0135, Lefrak, University of Maryland, College Park, MD -20742
WHAT: As part of University's Maryland Day celebrations, we will be open to the public to talk about our research activities, screen for aphasia, and educate the public about stroke.

