

AUTUMN 2016 NEWSLETTER



Director:
Dr. Cynthia K. Thompson

Newsletter Contents:

| | |
|--|---|
| Lab News & Updates | 1 |
| Community & Current Events | 2 |
| People to Know & Support Group Information | 3 |
| Activities Corner | 4 |

NU/BLCU Collaboration will Help Chinese Individuals with Aphasia

Dr. Cynthia Thompson, together with members of the NIH-supported Center for the Neurobiology of Language Recovery (CNLR) and Communication Sciences and Disorders (CSD) clinical faculty member, Aaron Wilkins, visited Beijing, China in September 2016 to develop and implement a joint research project addressing language and brain recovery in Mandarin-speaking people with chronic aphasia. The project, focused on recovery of sentence processing in a tonal language, is the first of a series of joint research and clinical projects to be undertaken as part of the NU/BLCU Joint Centre of Aphasia at Beijing Language and Culture University (BLCU) that will lead to improved outcomes for Chinese people with aphasia.



Pictured from left to right: Dr. Elena Barbieri (Post-doctoral Fellow, CNLR), Dr. Xue Wang (Research Assistant Professor, CNLR), Dr. Jennifer Mack (Research Assistant Professor, CNLR), Eduardo Europa (Doctoral Candidate, CNLR), Dr. Min Liao (Post-doctoral Fellow, CNLR), Aaron Wilkins (Clinical Faculty, NU), Prof. Dr. Cynthia Thompson (Director, CNLR), Dr. Mathew Walenski, Research Associate, CNLR), Yuming Li, Secretary of the Party Committee, BLCU), Prof. Dr. Todd Parrish, Director, Center of Translational Imaging, CNLR), Prof. Dr. Liqun Gao, Dean, Allied Health School, BLCU), Zengzhi Yu, Director Therapist, Rehabilitation Medical Center, People’s Liberation Army Hospital), Dr. Li Guo, Director, International Education Center, BLCU), Qiushen Wang, Deputy Director of Scientific Research, BLCU), Dr. Lingzhi Kong, Faculty, Allied Health School, BLCU).

CURRENT EVENTS & SUPPORT GROUP INFO

Aphasia Support Group Meetings

GENERAL INFORMATION:

Aphasia Support Group Meetings are held the first Thursday of each month (except for January and August) from 12:00pm to 1:00pm in Room 1-530 of the Center for Audiology, Speech Language, and Learning Building - 2315 Campus Drive. Please contact Mary Cosic for more information at 847-467-7591 or m-cosic@northwestern.edu

PUBLIC TRANSPORTATION:

The lab is located three blocks east of the Noyes Stop on the Purple Line.

CTA: 1-888-968-7282
www.transitchicago.com

RTA: 1-312-836-7000
www.rtachicago.com

UPCOMING MEETINGS:

February 2nd

March 2nd

April 6th

May 4th

June 1st

July 6th

Do you have a story to tell?

We'd like to know!

If you would like submit a piece to be featured in an upcoming ANRL newsletter, please contact Kat or Brianne at 847-467-7591. Possible topics include: tips and advice, hobbies (e.g. cooking, crafts, etc.), health, research, and your personal experience with aphasia.



IN THE NEWS:

Aphasia patients to benefit from game being developed at Univ. South Carolina

Researchers at the University of South Carolina have developed a computer game that allows patients with aphasia to repeat words in a rhythmic pattern and receive immediate feedback on their pronunciation. Pilot studies must be completed before the game can be ready for public and clinical use. (<http://www.postandcourier.com/20160725/160729780/aphasia-patients-to-benefit-from-game-being-developed-at-usc>)

Brain's hippocampus helps fill in the blanks of language

Scientists from the University of California Berkeley have shown that answering fill-in-the-blank questions activates the hippocampus, which is a region of the brain that plays a huge role in linking related memories. This is one of the first studies to explore a neural link between memory and language. (<https://www.sciencedaily.com/releases/2016/09/160921103427.htm>)

Stimulating neurons may prevent brain damage after stroke, trauma

Newly observed neuronal networks react to spreading toxicity in brain cells and seem to serve as a protective measure by signaling other areas of the brain. Research-

ers in Scotland hope to be able to stimulate these neural networks to prevent further brain damage after trauma. (http://www.upi.com/Health_News/2016/09/22/Stimulating-neurons-may-prevent-brain-damage-after-stroke-trauma/6301474540929/)

Stem Cells Could Improve Stroke Recovery

Researchers in South Korea have found a promising cellular therapy for post-stroke tissue regeneration that involves stem cells. The researchers injected preconditioned mesenchymal stem cells (MSCs) into the brains of rat models of strokes and non-injured rat brains and found both groups had improved neurological and behavioral outcomes as a result of treatment. This study adds to the accumulating body of evidence for the clinical benefits of stem-cell approaches. (<http://www.hcplive.com/medical-news/stem-cells-could-improve-stroke-recovery-study-finds>)

Humans may speak a 'universal' language

A team of researchers from Cornell University has found that basic concepts, like body parts or objects found in nature, are described using the same sounds across languages. This finding could aid future research on how our brains learn and process words. (<http://www.wired.co.uk/article/humans-speak-universal-language>)

PEOPLE TO KNOW: 2016-2017 ANRL VOLUNTEERS

Ashley Antony

Ashley is a sophomore majoring in psychology here at Northwestern University. She has been working in the Aphasia and Neurolinguistics Research laboratory in January, 2016.



She is currently working on a project that is studying whether patients with Broca's Aphasia are able to detect violations in sentences, such as when the subject and verb or the verb and object don't make sense.

She hopes to pursue a PhD in clinical psychology after completing her undergraduate education. Her other activities on campus include the Residential College of Cultural and Community Studies, Supplies for Dreams, Tufaan Entertainment, Best Buddies, and Chi Omega.

Jonathan Gao

Jonathan Gao is an undergraduate student in Northwestern's Weinberg College of Arts and Sciences. He is currently a junior and majoring in neuroscience. He has volunteered in the Aphasia Lab since June 2016, and is helping with the fMRI MVPA analyses.

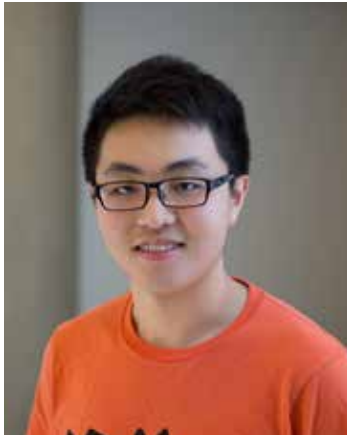


Academically he is interested in language learning and syntax, as well as neuronal signaling pathways and biochemistry. In his free time he likes to play the saxophone and listen to jazz. He also enjoys tutoring other students in his other volunteer activities. In the future, he either wants to go to medical school or pursue a degree in education.



Jiayi Lu

Jiayi is currently a sophomore majoring in ISP, Neuroscience and Linguistics. He entered the lab spring quarter 2016, and has been helping Dr. Liao with the translation of the Northwestern Assessment of Verbs and Sentences (NAVS), the Northwestern Naming



Battery (NNB), and Treatment of Underlying Forms (TUF) into Mandarin Chinese.

He is also working on an independent research project about the processing asymmetry of Mandarin object- and subject-relative clauses. He really enjoys working in the lab, and also wants to pursue a future career in scientific research (linguistics or neuroscience).

As a soccer maniac, he spends most of his free time either watching soccer matches or playing soccer. He is also coaching a youth travel soccer team for a local soccer club in Evanston.

Kathy Xie

Kathy is an undergraduate third year double majoring in Communication Sciences and Disorders and Psychology. Kathy is planning to get a PhD in either clinical psychology or cognitive neuroscience. She hopes to work with patient populations and



use neuroimaging to understand how the brain executes high-level cognitive functions like language.

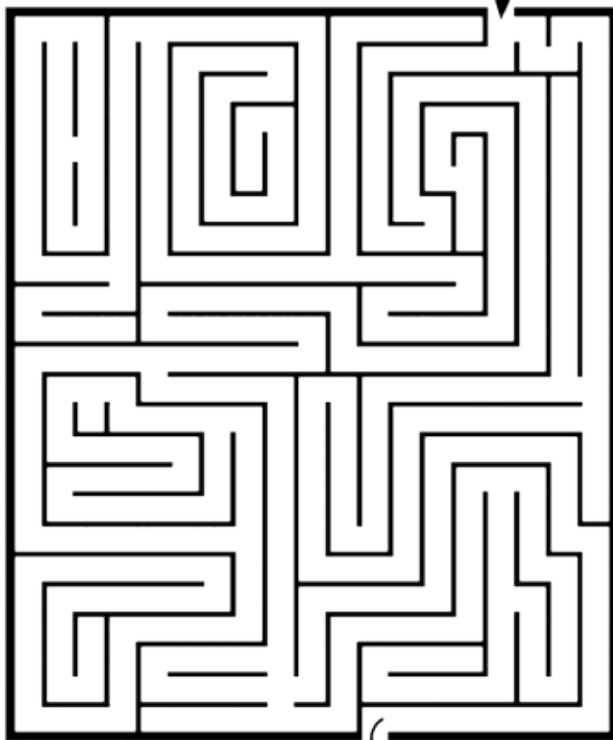
She started volunteering at the Aphasia and Neurolinguistics Lab in January of 2016 and became a work study student in September 2016. She currently works on transcribing and coding narrative samples told by aphasic individuals. In her free time Kathy likes to try different types of food, read historical fiction, and explore the neighborhoods in Chicago.

ACTIVITIES CORNER

Letter Sudoku

In Letter Sudoku, each bolded box must contain the letters 'A' through 'I'.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| I | | | | D | | B | H | |
| H | | | | G | B | | | |
| | | C | A | | | F | | |
| E | G | | | C | | A | | |
| | I | | H | B | G | | C | |
| | | B | | F | | | I | G |
| | | E | | | C | B | | |
| | | | G | H | | | A | |
| D | C | | B | | | | I | |



Can you solve these visual word puzzles?

| | |
|----|-----|
| 1. | 2. |
| 3. | 4. |
| 5. | 6. |
| 7. | 8. |
| 9. | 10. |

Jigsaw Sudoku

In this Jigsaw Sudoku, each jigsaw piece must contain the numbers 1 through 8.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 5 | 8 | | 4 | 1 | | 7 | 6 |
| 1 | | | 7 | | | | 8 |
| | | | 3 | 4 | | | |
| 8 | | 5 | | | 4 | 6 | 3 |
| 4 | 6 | 8 | | | 7 | | 2 |
| | | | 8 | 6 | | | |
| 2 | | | | 3 | | | 4 |
| 3 | 5 | | 6 | 8 | | 2 | 7 |

- Visual Word Puzzle answers:
1. A bundle of nerves
 2. Small potatoes
 3. Pinching pennies
 4. Back on one's feet
 5. The birds and the bees
 6. A finger in the pie
 7. One in a million
 8. Grey matter
 9. Too funny for words
 10. Not worth a red cent