EDITOR'S NOTE

Dear Friends,

It's that time of year again! The holidays are upon us and there's talk of turkey and pumpkin pies, holiday decorations, and lots of good cheer!

This has been a busy Fall for us, with many projects and trips to conferences to present our research findings. Ana Soper has been working to find out if strokes in different brain areas might make a person more susceptible to depression. Shira has almost finished her dissertation work and will soon have her Ph.D.! Juliana Baldo presented work on the brain areas that help to process the meanings of words versus pictures. Analia Arevalo showed how language relates to motor functioning, and And Turken revealed the fiber pathways that connect language areas of the brain to each other (see story on p. 2). It's all been very exciting and the work has been very well received.

We have a new addition to our lab! Cami Bebarta, a speech-language pathologist who used to work at the VA, has come back to help us with our projects. Cami had taken a few years off to begin raising three beautiful children, and will now be spending a few days a week with us. We love having her at the VA again, and expect that you will all get to meet her sometime soon.

Don't forget our holiday party this year! It will be on December 8th, from 12:30 to 3 pm. It is a highlight of the year for us, so we hope many of you will be able to make it. We'll have good food, great company, and of course, a holiday song or two. We look forward to seeing you there.

Have a wonderful holiday season and may you and your loved ones have a happy new year.

Sincerely,

Nina Dronkers, Ph.D.

Director

Center for Aphasia & Related Disorders
Newly Identified Brain Pathways for Language Comprehension

The question of how the brain understands language has puzzled scientists for generations. Attempting to address this question, Dr. And Turken and Dr. Nina Dronkers presented their latest research on language and the brain at the Society for Neuroscience conference in November in San Diego.

In this latest research, sixty-four individuals with problems understanding language due to brain injury were scanned with magnetic resonance imaging (MRI). The MRI images were used to determine the brain regions most associated with impaired language comprehension. Drs. Turken and Dronkers then merged this information with new MRI scans from 25 healthy volunteers in order to determine the physical pathways that connect these different brain regions critical for language comprehension. They found rich connections throughout the brain regions not traditionally been associated with language.

The results revealed a far more extensive network for language functions than current models would predict. The network included a core region within the left middle temporal gyrus of the brain that extended to the frontal and parietal cortex in both hemispheres of the brain -- all connected by long distance communication pathways.

The figure above right shows the physical nerve pathways connecting a series of brain regions critical for language comprehension with the rest of the brain. These brain regions include the middle temporal gyrus (MTG), Brodmann’s Area 47 in the frontal lobe (BA47), the anterior superior temporal (ant STG) and Brodmann’s area 39 in the parietal lobe (BA39). As you can see, the MTG showed the most extensive connections with the rest of the brain, suggesting this brain region is most critical for language comprehension. The next step for scientists is to determine the underlying networks for other language abilities, such as speaking out loud, reading, and writing.

This research was supported by the Department of Veteran Affairs’ Office of Clinical Sciences Research and Development and the National Institutes of Health.
Every stroke is unique. The effect a stroke has on your thinking abilities depends on where and how the stroke affected your brain and your overall health. Some strokes, mini-strokes (TIAs), and tumors can cause “verbal memory” problems—the ability to remember things having to do with words. This can affect your ability to remember to take medications consistently, to remember conversations, and to attend appointments. Other strokes (particularly on the right side of the brain) can cause difficulty with visual memory, such as memory for routes and things you see. Strokes on either side of the brain can cause difficulty staying organized, which then starts to feel like a memory problem.

Do you have trouble remembering to attend appointments, pay bills, or take medications? Has it become more difficult to keep track of appointments? Are you feeling more disorganized in keeping track of your weekly to-dos generally? Would you like to hear more about ways to compensate for these and other memory lapses? Would you like to understand more about the impact of medical issues on memory loss?

The VA in Martinez is now regularly offering 5-week short courses for small groups of veterans that provide an introduction to strategies used to compensate for memory lapses, with some suggestions to improve organization, attention and keep track of multiple tasks in a day. Each 5-week course has a component that introduces new skills, taught by Dr. Ana Soper, a neuropsychology postdoctoral fellow, who is the class instructor. People who work in neuropsychology help diagnose and treat changes in memory after a stroke and other medical conditions.

Through the course, you will also be introduced to a variety of technologies and aides that can help prevent memory lapses. We will give you memory “exercises” or homework to do at home during the week in order to practice newly learned strategies.

The 5-week course also follows a “veterans helping other veterans” model, where veterans are encouraged to share strategies with each other that they have used to compensate for memory lapses. You would be amazed at how much you might learn from other veterans who have struggled with similar difficulties! Veterans in the class provide support and encouragement to each other to persist through the frustration associated with memory lapses. This also provides a wonderful opportunity to practice your speech in a small group of fewer than 10 veterans.

The next course will begin in January 2011, and meets once per week for 60 minutes each time (usually a Tuesday or Thursday afternoon).

Pre-requisites for the course: This service is available to all U.S. veterans. Veterans who participate in the class must be able to comprehend speech, to read through lecture handouts fluently, and to be able to mentally recall their memory lapses just remembering is the important part. No one expects your speech to be perfect, but you must be willing to try to communicate with others using speech in the class. You must be able to provide your own transportation to the class.

If you are interested in participating, please contact Dr. Soper at (925) 372-2000, extension 5651, to discuss whether the class would be a good match for you, and to be placed on the wait list.
Stroke Recovery Resources in the Bay Area

**Project Recovery**
This is an adaptive physical exercise program for those with physical disabilities including moderately self-ambulatory, ortho-multi-handicapped, and other health impairments. The program will increase fitness, balance, strength, and range of motion.

Mon/Wed: 1:30-2:30pm or 2:30-3:30pm
Tue/Thur: 2:00-3:00pm or 3:00-4:00pm.

**Location:**
Family YMCA, Mt. Diablo Region YMCA Office
395 Civic Drive
Pleasant Hill, CA 94523

**Contact:**
Libby Luxemberg
(925) 687-8900.

**Stroke Support Group of Contra Costa County**

**Location:**
Mt. Diablo Medical Center
Concord, CA 94520
or
John Muir Medical Center
601 Ygnacio Valley Rd.
Walnut Creek, CA 94596

**Mailing Address:**
Ann Dzuna
1174 Alta Mesa Dr.
Moraga, CA 94556-2042

**Contact:**
Ann Dzuna, B.S., MBA
(925) 376-6218
adzuna@comcast.net

**Aphasia Center of California**

**Location:**
200 Grand Ave.
Oakland, CA 94610

**Mailing Address:**
Roberta Elman, Ph.D., CCC-SLP, BC-NCD
Aphasia Center of California
3996 Lyman Rd.
Oakland, CA 94602

**Contact:**
Roberta Elman, Ph.D., CCC-SLP, BC-NCD
(510) 336-0112
rjelman@aol.com

**Website:** [http://www.aphasiacenter.org](http://www.aphasiacenter.org)

**Cal State University East Bay Aphasia Group**

**Location:**
California University - East Bay
Speech, Language & Hearing Clinic
MB# 1097A
Communicative Sciences and Disorders
Hayward, CA 94542

**Mailing Address:**
Shelley Simrin, M.A., CCC-SLP
California State University - East Bay
Dept. of Communicative Sciences & Disorders
MB# 1097A
25800 Carlos Bee Blvd.
Hayward, CA 94542-3065

**Contact:**
Shelley Simrin, M.A., CCC-SLP, Clinic Director
(510) 885-4762 or (510) 885-3233
ssimrin@csuhayward.edu

**Stroke Club San Francisco**

**Location:**
Stonestown Family YMCA Senior Annex
3150 20th Ave.
San Francisco, CA 94132

**Contact:**
Kathy Orsi
(415) 242-7117

**Stroke Communication Classes**
No-fee, non-credit stroke-communication classes offered to the San Francisco Bay Area for over 25 years.

**Location:**
City College of San Francisco
1250 Waller St.
San Francisco, CA 94117

**Contact:**
Joyce Freeman, M.S., CCC-SLP,
(415) 561-1005
jforeman@ccsf.edu
Happy Holidays from the Aphasia Center!
Stroke Support Group

Annual Holiday Party!

When
Wednesday, December 8th, 12:30-3:00 p.m.

Where
Rooms E8A&B on the 1st floor of AB21, which is the tallest building at the Martinez VA and is on your right as you enter the VA from Muir Rd.
Address: 150 Muir Rd, Martinez, CA, 94553

What to bring
A dish or drink to share if you can, and an ornament if you would like to participate in the exchange.

Questions? Call Juliana (925) 372-4649
It’s SNOW-ing!

This puzzle contains 22 words that begin with “snow-.” Find the words, then write them at the bottom of the page.

C S S S N O W M O B I L E E M S
Y I N N L P L N L X E S S N S N
S M S O O Y Y L M U E N W S N O
N R Z N W W A O S K R O S N O W
O X S O O B S E A J G W N O W M
W V N N W W R L G X E B O W D A
S S H O G I F E I P Y L W P R K
U J N G T W N A A D K O I L I E
I S S W O A S C L K E W N O F R
T N O N M P S T L L H E G W T B
R N S W Y W Q L O E H R N K G U
S P O S O Y O W Y R E W K K L L
Q N S N O W L E S S M T Z S U B
S P S K S N O W S H O E S Z N C
S N O W E D S N O W B O A R D Z
L W D O S N O W A N G E L W N X

Answers are on page 8
Aphasia News
Center for Aphasia and Related Disorders
150 Muir Road 126 (s)
Martinez, CA 94553

http://www.ebire.org/aphasia

Newsletter Information
If you would like to receive this newsletter or you have comments/suggestions, e-mail Juliana at juliana@ebire.org, call her at (925) 372-4649 or write to:

Center for Aphasia and Related Disorders
VA Northern Calif. Health Care System
150 Muir Road 126 (s)
Martinez, CA 94553

We welcome your comments and questions!

Contributors
Nina Dronkers
Jenny Ogar
Janet Patterson
Sharon Willock
Ana Lí Arévalo
Carl Ludy
Luci Varian
Juliana Baldo
Carolyn Benjamin
Patty Phaneuf
Andrea Zvinakis
Cami Bebarta
And Turken
Ana Soper

We would also like to thank the members of the Stroke Support Group and their families, the Speech Pathology staff, and the East Bay Institute for Research and Education.

Game Zone Answers:
snowfall
snowflake
snowing
snowmaker
snowman
snowmobile
snowplow
snowscape
snowshoes
snowslide
snowstorm
snowsuit
snowy
snow angel
snow tires
snowball
snowblower
snowboard
snowdrift
snowed
snowbreak
snowless

The Center for Aphasia and Related Disorders is supported by the VA Northern California Health Care System, the VA Medical Research Program, the National Institutes of Health, and the University of California at Davis and San Diego, as well as through generous donations from private foundations and individuals. Please feel free to contact Dr. Dronkers at (925) 372-2925 if you would like more information.