

# Laboratory for Research on Aphasia and Stroke

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## Hello Everyone!



Hello. I hope everyone had a great holiday season. We are back at work here completing projects and getting publications done. The labs are actively testing patients and collecting data for analysis! Please take some time to check out our newsletter to see what we have been up to. I look forward to seeing you soon!

Best,

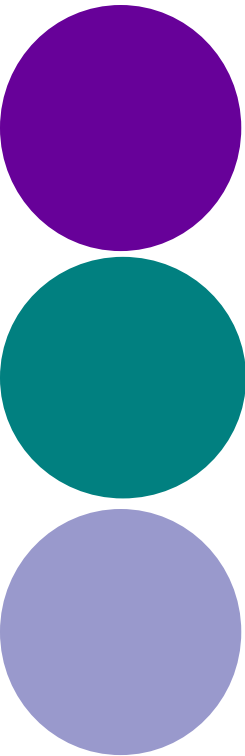
Tracy

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## Aphasia Lab Social

**Will be held in March at  
UCSD...Date TBA!**



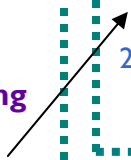
## Upcoming Driving Test?

Visiting the DMV can be a nerve racking experience, especially after a stroke. There are programs that specialize in helping stroke patients pass their driving test.

We recommend: **Sharp Hospital Adaptive Driving Program**

Contact either [Marilyn Seidler](#) or [Penny Anderson](#) at:  
**Sharp Outpatient  
 Rehabilitation and Neurology  
 Adaptive Driving**

**858-939-6966 (Office)**  
**858-939-3337 (Fax)**  
 Sharp Hospital  
 2999 Health Center Drive  
 San Diego, CA 92123

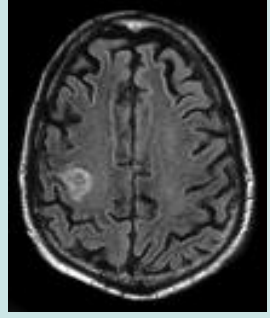


## Measuring Blood Flow

*CHECK OUT  
 RESEARCH  
 BEING DONE  
 IN OUR LAB!*

Our lab is currently investigating Cerebral Blood Flow (CBF) in stroke survivors, which is a measure of the rate of blood flow to the brain. In addition to measuring the amount of CBF among stroke survivors, we also seek to clarify the time course of CBF. These two factors are being explored with

regards to how they might affect language and other



cognitive processes. Research thus far has suggested that a slowing of or reduction in CBF may contribute to some of the linguistic and behavioral issues that stroke survivors deal with following their stroke.

## Slowing Speech Speed

Research in our Aphasia Lab has yielded interesting data on the effects of speech rate input (how fast we hear sentences) on comprehension. Data show significant improvement in comprehension in subgroups of stroke survivors with aphasia when speech is slowed down (at 50-67% of the normal speed). This improvement does not only stem from having 'more time to think about it' after having heard a sentence: In

real time, normal-like patterns of comprehension are re-established. Surprisingly, data indicate detrimental effects when speech rate input is reduced for neurologically unimpaired adults.

Using FMRI (brain scans), we investigated the neurological bases of this advantage for stroke survivors and of the disadvantage for neurologically intact adults. Both groups show differential

patterns of brain activity when rate of speech input is manipulated. Further research is being conducted to determine what brain regions are crucial for good comprehension at a normal speed and which ones are being recruited when speech is slowed down -- for better or worse

## Stroke Survivors Could Regain Nerve Control

A delicate nerve transplant surgery could actually reverse paralysis in stroke victims.

A New Jersey man is currently recovering from the rare nerve surgery that doctors hope will give him back use of his right side, which he lost after suffering a stroke.

Doctors took healthy nerves from the legs of Vinni Filipini, 44, and connected them to his right arm, which he cannot use.

"This is the first time we have done this for a stroke patient," said Dr. Andrew Elkwood, chairman of the division of Plastic Surgery Monmouth Medical.

Elkwood says only half of Filipini's brain is working, and compares it to a house where only half of the

outlets are on. Elkwood explains that by taking nerves from the legs and forming what he calls an "extension cord" of sorts, he can run that cord through Filipini's body (the so-called hallways of the house) and bypass the part of his brain that's not working.

The surgery intends to actually create a nerve tunnel across Filipini's chest to reach his bad arm and thereby bring new life to the nerves in the arm that right now don't work.

The surgery went as planned, but it will take months of recovery and therapy to determine the results. The nerve has to regrow along the grafted one at a rate of one inch per month. Doctors say they don't expect the arm to ever be fully restored, but certainly regaining

much more use is possible.

"He has a long road ahead of him. We won't know if the surgery was successful for about 6 months to 1 year," said Elkwood.

"We were elated. We really were. We were absolutely elated," said his wife, Kathy Filipini. "We saw him come out. I mean we had our trust in [Elkwood], but you always get worried. I believe this is all going to turn his life around."

ABC News Dec 19, 2007 From National Stroke Association

### DID YOU KNOW??

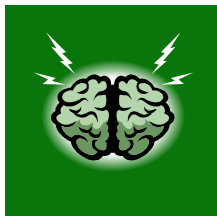
- \*About ONE MILLION people in the United States have been diagnosed with Aphasia!
  - \*There are about 80,000 new cases EVERY YEAR!
  - \*There are more people with Aphasia than there are with Cerebral Palsy, Muscular Dystrophy or Parkinson's disease!
  - \*YOU ARE NOT ALONE!
- Aphasiahope.org

### Rehabilitation Facts

**Successful rehabilitation depends on many different conditions. Here are a few.**

- Amount of damage to the brain
- Skill on the part of the rehabilitation team
- Cooperation of family and friends. Caring family/friends can be one of the most important factors in rehabilitation
- Timing of rehabilitation – the earlier it begins the more likely survivors are to regain lost abilities and skills\*

**The goal of rehabilitation is to enable an individual who has experienced a stroke to reach the highest possible level of independence and be as productive as possible.**

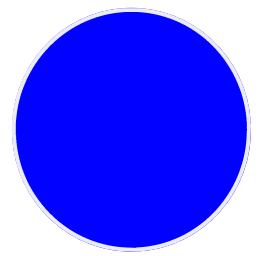
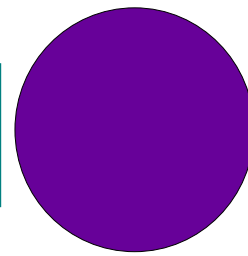


**Because stroke survivors often have complex rehabilitation needs, progress and recovery are unique for each person. Although a majority of functional abilities may be restored soon after a stroke, recovery is an ongoing process.**

National Institute of Neurological Disorders and Stroke

\*How early, however, is still being researched.

**University of California, San Diego  
Department of Psychology**



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**Department of  
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**La Jolla, California**

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**SDSU (619) 594-7880**

**Email: [tlove@ucsd.edu](mailto:tlove@ucsd.edu)**

### **Guess Who?**

**Do you know who these people are? Did you know they  
all had aphasia?**



**Emerson**

**Maurice Ravel**

**Jan Berry of Jan and Dean**

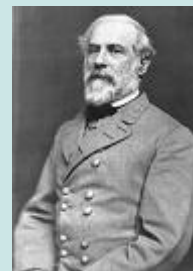
**Sven Nykvist**

**Ralph Waldo Emerson**

**Robert E. Lee**

**Joseph Chaikin**

**Sir John Hale**



**Robert E. Lee**

**Source: Wikipedia.com**

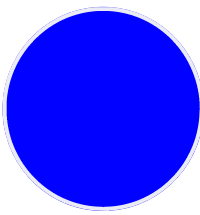
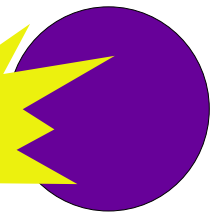
**DID YOU SEE LOUISE AND ROGER ON THE "GIFT OF GAB" ON KPBS?! THEY DID WONDERFUL ON THE PROGRAM AND WE ARE SO PROUD.**

**We are always looking into recruiting new volunteers to participate in our research. If you know of someone, please feel free to pass our information along. THANKS!**

## Updates on Old and New Friends

Please submit any photos of grandchildren, additions to the family or new haircuts! We are starting this new section so that you can share with your friends at the Aphasia Lab updates on your life or the lives of your loved ones! We will include them in our new section.

Greetings and News from our lab members



Sadly, one of our long-time research participants, Mr. O'Connor, passed away this spring. His warmth and his kind spirit, as well as his love of baseball, always added much to our lab. He will be missed.

To kick off our new section Dr. Love has submitted a picture of Alyssa. She will be turning 8 years old soon!

