

Featured Research Project

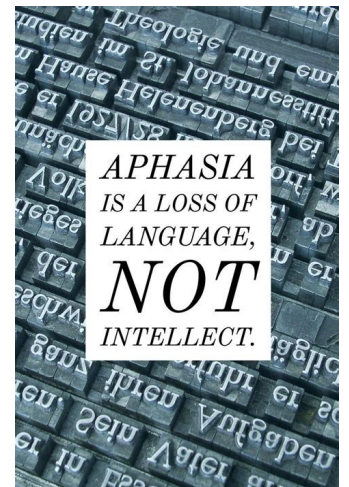
Every year approximately 15,000 Veterans are hospitalized for stroke, and up to 40% of those Veterans will be left with the devastating impacts of long-term language impairment (aphasia). Difficulty saying the right word at the right time is one of the most common complaints among people with aphasia. Communication difficulties can reduce independence and negatively impact well-being and health outcomes. The negative social and economic effects of aphasia are felt by Veterans, their families, their friends, and society. The good news is that Veterans with aphasia may improve their word retrieval with the right treatment.



Amy Rodriguez, PhD

Dr. Amy Rodriguez is a speech-language pathologist and research scientist who has been working in aphasia research for 18 years. Dr. Rodriguez and her team are enthusiastic about developing ways for Veterans to benefit more from existing aphasia treatments. Phonomotor Treatment (PMT) is an exciting new treatment that improves word retrieval in aphasia, but PMT is not offered clinically in most settings because of the lack of resources for intensive treatments that require more hours than traditional therapy. Transcranial direct current stimulation (tDCS) is a safe way to give

the brain a boost, and the results from some studies combining tDCS with aphasia treatment are promising. Dr. Rodriguez and her team will be testing whether combining PMT with tDCS can be used to get positive treatment effects in a shorter amount of time. They will also be exploring how tDCS affects the brains of individuals with aphasia and who benefits most from this combined treatment approach.



This research is important for helping to reach our goal of giving Veterans with aphasia access to the best treatments for improving their language function and quality of life. For more information about this study, please contact Dr. Rodriguez at (404) 321- 6111, ext 204201.

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This publication is for information purposes only and may not apply to your situation.

New VA Funding



Jeffrey H. Boatright, PhD received funding for a VA Rehabilitation Research & Development Merit Award "A TrkB Activator for Treatment of Glaucoma." Glaucoma is a leading cause of blindness and inordinately affects Veterans. Brain-Derived Neurotrophic Factor (BDNF) keeps our brain and retina cells healthy. However, as we age, or in diseases such as glaucoma, BDNF levels decline. Dr. Boatright is developing drugs to be taken orally that supplement declining BDNF levels with the hopes of protecting vision. Additionally, he serves as the Director of the CVNR's Molecular Biology Core and the Chair of the Atlanta VA's Institutional Animal Care & Use Committees (IACUC).



Keith McGregor, PhD has also been awarded VA Rehabilitation Research & Development Merit funding. Dr. McGregor's project, "Effects of Aging on Cortical Excitability During Motor Learning" will be focused on the effects of aging on the brain's ability to learn new tasks. Using technologies including magnetic resonance spectroscopy, functional magnetic resonance imaging and transcranial magnetic stimulation, this project will attempt to discern the patterns of brain activity associated with optimal motor learning in older adults. Dr. McGregor serves as the Director of the CVNR's Telerehabilitation Core and manages the Transcranial Magnetic Stimulation (TMS) laboratory.



Lisa Krishnamurthy, PhD received a near perfect score on her VA Rehabilitation Research & Development Career Development Award "Beyond lesion-language mapping in aphasia: A novel imaging-based prediction model." This project will create a more complete imaging methodology that contains both anatomical and physiological correlates of language behavior, highlighting key brain areas to target for rehabilitation after stroke. Dr. Krishnamurthy has been collaborating with the CVNR for several years, and her efforts have culminated with this VA award. She will be joining the CVNR as a Principal Investigator this Fall. Welcome!

CVNR Profiles: Nick Massa, MPH

Nick Massa is a research coordinator for Dr. Erica Duncan, a CVNR investigator who is interested in the effects of psychiatric disorders on neurocognition. Previously, he worked on studies in the CVNR to determine if exercise improves thinking in those with schizophrenia. Currently the team is examining the association between *Toxoplasma gondii* and suicidal behaviors in Veterans. Growing up in the San Francisco Bay Area, he left to attend Kenyon College, a small liberal arts school in rural Ohio, where he majored in neuroscience. After college, Nick attended Emory University where he received a Master's in Public Health degree with a focus in epidemiology. In his free time, Nick enjoys coaching lacrosse at a local high school, watching basketball & soccer, cheering on the city's soccer team, Atlanta United, playing trivia, & trying out new recipes in the kitchen. Since living in Atlanta, he has also come to enjoy exploring the city and the wide variety of ethnic foods that can be found along Buford Hwy. Nick's favorite part about working at the VA? Knowing that the research we conduct has the potential to help individuals who fought to protect us. Thank you Nick for all that you do for the CVNR and our Veterans!



Nick Massa, MPH

CENTER FOR VISUAL & NEUROCOGNITIVE REHABILITATION ACTIVE RESEARCH STUDIES



U.S. Department of Veterans Affairs

Atlanta VA Health Care System

Atlanta VA RR&D



	Study Name	Contact Info
Exercise Studies	Aerobic Exercise and Cognitive Training in Older Adults	Holly Hudson 404-321-6111 x 207099
	Aerobic Training to Improve Energy Utilization and Antioxidant Capacity in Stroke	Jessica Kelleher 404-321-6111 x 206254
	Improved Mobility in Rural Veterans Using the Apple Watch	Christine Towler 404-321-6111 x 202561
	Neurovascular Regulation during Exercise in Humans with Chronic Kidney Disease (CKD)	Dana Decosta 404-727-1598
	Acute Exercise Effects on Word Learning in Aging and Stroke-induced Aphasia	Susan Murphy 404-321-6111 x 205391
Brain Stimulation Studies	Transcranial Direct Current Stimulation (tDCS) as an Adjuvant to Phonomotor Treatment for Aphasia	Dr. Amy Rodriguez 404-321-6111 x 204201
	Effects of Aging on Parameters of Gamma Amino Butyric Acid Function	Holly Hudson 404-321-6111 x 207099
	Toxoplasma gondii, the Kynurenine Pathway, and Suicidal Behavior in Veterans	Nick Massa 404-321-6111 x 205304
	Brain Activation in Humans	Dr. Andrew Butler 404-321-6111 x 202239
	Brain Stimulation Studies of Human Perception and Cognition Using Repetitive Transcranial Magnetic Stimulation (rTMS)	Dr. Daniel Dilks 404-727-8172
Medication Studies	The Effect of Dopamine on Diabetic Retinopathy	Cara Motz 404-321-6111 x 207495
	Double-Blind Placebo-Controlled Study of Lithium for Preventing Repeated Suicidal Self-Directed Violence in Patients with Depression or Bipolar Disorder	Medina Bello 404-321-6111 x 206967
	Behavioral or Solifenacin Therapy for Urinary Symptoms in Parkinson's Disease	Taressa Sargent 404-321-6111 x 205303
Pain Management Studies	Feasibility Study: fMRI Evaluation of Auricular PENFS for Fibromyalgia	Dr. Anna Woodbury 404-321-6111 x 205563 or x 206939
Spatial Training Studies	Spatial Cognitive Training in Visual Impairment	Kyle Hortman 404-321-6111 x 206566
Registry	CVNR Participant Registry	Laura Lang (404) 728-5064



Ask Monica: Navigating A Nutrition Label

Dear Monica, I constantly find myself spending hours in the grocery store trying to make healthy choices, but I am confused by all the options. What information can I find on a nutrition label to help make healthy decisions? **-Lost in Aisle 2**

Nutrition Facts	
2 servings per container	
Serving size	1 cup (140g)
Amount per serving	
Calories	160
% Daily Value*	
Total Fat 8g	10%
Saturated Fat 3g	15%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 60mg	3%
Total Carbohydrate 21g	8%
Dietary Fiber 3g	11%
Total Sugars 15g	
Includes 5g Added Sugars	10%
Protein 3g	
Vitamin D 5mcg	25%
Calcium 20mg	2%
Iron 1mg	6%
Potassium 230mg	4%

*The % Daily Value tells you how much a nutrient in a serving of food contributes to a daily diet. 2000 calories a day is used for general nutrition advice.

Great question! Below is an example of a nutrition label you may find while shopping, and some tips you can take with you to make healthy choices in the grocery store. **-Dr. Monica Serra**

Serving Size Reminder: If you eat more than one serving, you need to multiply the information below by the number of servings that you eat (in this example, if you ate the entire container (2 cups), it would be 320 calories).

Watch Those Calories: Calories are the amount of energy your body gets from the food. The amount you need is based on many things including your gender, age, height, and weight. Generally, 1600-2000 per day is recommended for healthy adult women and 2000-3000 per day for healthy adult men.

Find Good Fats: Unsaturated fats are your best heart healthy sources of fat, and can be found in lean meats, nuts and low-fat dairy. Saturated fats should be limited to 5-6% of calories (that's about 13-15g per day), and are found in red meats or chicken with skin, cream/butter, and cheese.

Take Out Trans: Trans fats are found in fried and processed foods, and should be avoided as they increase your risk of heart disease.

Slow the Sodium: Sodium (salt) plays a big role in high blood pressure and heart disease. You should reduce your salt intake to less than 2,300mg per day (that's equal to 1 teaspoon)!

Complex Carbohydrates: Carbohydrates come from vegetables, fruits, and grains. Whole grains provide more fiber, which helps lower bad cholesterol levels and can make you feel full. You should try to eat 25g of fiber per day. Added sugars are those that do not naturally occur in the food, and should be limited.

Power in Protein: Protein is important for keeping strong muscles, and comes from animal food sources (meat and dairy) and beans. We need 0.36g of protein per every 1 pound of body weight per day (that's 73g per day for a 200 lb person).

Value in Vitamins: The vitamins and minerals listed are the four that are required to be on the food label. The following daily intake recommendations are for healthy adults. Vitamin D (recommended 15-20mcg) and Calcium (recommended 1000-1200mg) are important for bone health, and found in dairy foods. Iron (recommended 8-18mg) is found in animal food sources and beans and is important for healthy blood cells and energy levels. Potassium (recommended 4700mg) helps regulate processes in your body, as well as protect your cardiovascular health, and is found in fruits and vegetables, including bananas and spinach.

Investigator Spotlight: Todd White, PhD

Dr. Todd E. White is focused on the study of neurotrauma and development of treatment protocols. He completed his doctoral studies at The University of Florida where he used stem cells, gene therapy, and pharmacological treatments in an effort to restore anatomical connectivity and functional behavior following spinal cord injury. His postdoctoral work at Morehouse School of Medicine (MSM) expanded into the area of traumatic brain injury (TBI), genomics, and bioinformatics to better understand the common molecular and cellular mechanisms of acute brain injuries.

Dr. White joined the CVNR last year as a career development awardee. His current project at the Atlanta VA, **Molecular Characterization of a Rat Model of Chronic Mild Traumatic Brain Injury**, involves the development of a preclinical model of chronic repetitive mild TBI (rmTBI) which combines motor, cognitive, and psychological testing with identification of genes in blood in order to find a correlation between these measures in the chronic injury time period. The long term goal is the development of effective methods for diagnosing and treating chronic rmTBI. Dr. White said this about the CVNR: "I have already been able to discuss concrete plans for exciting future collaborations within the center and made connections with investigators to continue our research on new translational studies."



Todd White, PhD

Now an Assistant Professor at Morehouse School of Medicine, Dr. White would like to aid in strengthening connections between the Atlanta VA and Atlanta's historically black colleges and universities. "A stronger relationship would benefit all parties," said Dr. White.

New Endeavors: Paul Garcia, MD



Paul Garcia, MD

Congratulations and best wishes to Dr. Paul Garcia, who will be leaving the Atlanta VA and CVNR to become the Chief of Neuroanesthesiology in the Department of Anesthesiology, Vagelos College of Physicians and Surgeons, Columbia University in New York. He joined the CVNR in 2013 as a VA Career Development Awardee (CDA-2) to study the effect of medicines that fight retroviruses on the health of nerve cells. He is currently collaborating with several other CVNR investigators on a pilot study using transcranial magnetic stimulation (TMS) to see how specific receptors function in aging brains. As a CVNR investigator, Dr. Garcia has developed numerous collaborative relationships and published numerous manuscripts from his work at the CVNR and Emory. We will miss his energizing passion for research. Good luck, Dr. Garcia!



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For information about participating in research at our Center, call (404) 728-5064 or visit our website at <http://www.varrd.emory.edu/>



Did you know....

The Million Veteran Program (MVP) is a national, voluntary research program funded by the Department of Veterans Affairs Office of Research & Development. The goal of MVP is to partner with Veterans receiving their care in the VA to study how genes affect health.



To do this, MVP is building one of the world's largest medical databases by safely and securely collecting blood samples and health information from one million Veteran volunteers. Researchers will study diseases like diabetes, cancer, and military-related illnesses. For more information, contact the MVP information center at 1-866-441-6075 or visit <https://www.research.va.gov/mvp/>.

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