



*Research and development to improve the everyday function and quality of life of aging Veterans with vision loss and their caregivers.*

### New Project Focus: Managing Medications with Visual Impairment at Home

“It took me a long time to figure out a system that would work for me, but once I did, managing my medications has been so much easier! I only wish that I had figured it out sooner!!” These were the words of a visually impaired Veteran research participant. He, like many participants in **Dr. Katharina Echt’s** prior Medication Management Study, reported using “a system” to help compensate for the limitations of visual impairment when managing medications. Most of these systems consisted of *self-generated* strategies creatively integrated with daily routines in the Veterans’ home environments.

Medication management is an everyday, primarily *home-based* activity that is fundamental to aging in place (sustained independent living at home), but is rarely evaluated in the home context. Do Veterans’ strategies help them adhere? In the study *Efficacy of Visually Impaired Veterans’ Medication Management Strategies* (funded by a Rehabilitation Research and Development Merit Award), Dr. Echt and her colleagues study medication management capacity, routines, strategies and adherence in the home environments of visually impaired and non-impaired Veterans.

Vision loss is prevalent in aging, as is the need to self-manage health conditions with medications. Last year, nearly 3000 visually impaired Veterans age 65 years and older were seen at the Atlanta VA; 234 of these were newly diagnosed with a visual impairment. Vision loss limits the use of visual cues and reminders which otherwise support cognition and medication management. This new study is an exciting opportunity to better understand Veterans’ strategic use of the home environment in aid of medication management and adherence. Those strategies that optimize medication management accuracy and adherence will inform a patient-centric toolkit to support successful medication management and adherence among newly visually impaired Veterans.

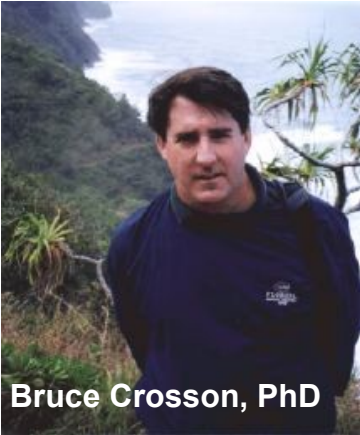
Please contact Katharina Echt, 404 321-6111 x6323, or Erica Watkins 404 321-6111, x5830, for more information about this study.



Katharina Echt, PhD

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## Featured Researcher: Bruce Crosson, PhD



The Atlanta VA Rehabilitation R&D Center enthusiastically welcomes **Dr. Bruce Crosson** as our new Associate Director. Dr. Crosson studies aging, aphasia, and dementia. His research involves neural system changes in the aging brain and their impact on cognition. Much of this work uses functional magnetic resonance imaging to map brain functions in older persons and in persons with aphasia and dementia. Developments from his research group suggest that age-related changes in the brain interact with age-related diseases. This interaction makes the cognitive and behavioral disabilities from age-related diseases worse than they would be with the disease process alone.

Dr. Crosson's long-term goals include understanding interactions between age and disease and applying the knowledge gained to rehabilitation. Much of his research focuses on language and communication. His studies on how the brain's language mechanisms change in the elderly synergistically informs his research on changing brain systems in aphasia rehabilitation. His work has successfully used behavioral strategies to engage specific brain mechanisms during rehabilitation. A better understanding of the contribution of aging to cognitive and behavioral disabilities in stroke and dementia will make it easier to develop more efficient treatments. We look forward to the many exciting projects that Dr. Crosson brings our way!

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## From Science to Life...News to use!

### Memory training strategies can help patients remember specific information



Sometimes, for all of us, it is easy to forget things, like where you put those car keys. And for those with memory disorders, like mild cognitive impairment (MCI), forgetting is a frustrating way of life. In a study published this past spring, two of our Center investigators, **Drs. Ben Hampstead**, and **Krish Sathian**, and colleagues, reported that people with MCI can benefit from **memory training**. Furthermore, this training produced a physical change in a part of their brain—the hippocampus—that affects memory.

Read about their findings on the science news website *ScienceDaily* at [www.sciencedaily.com](http://www.sciencedaily.com), March 1, 2012, edition. If you have a more scholarly bent, check out their original article: Hampstead, et.al, Mnemonic strategy training partially restores hippocampal activity in patients with mild cognitive impairment. *Hippocampus*, 2012; DOI: [10.1002/hipo.22006](https://doi.org/10.1002/hipo.22006).



## SLEEP-E Dyads- Improving Sleep in Veterans and Their Family Caregivers

Have you ever wondered how your sleep affects your partner? So have we! Phase 1 of our SLEEP-E Dyads study is the first to attempt to understand the dynamic relationship between Veteran and caregiver sleep and the impact it has on daytime functioning and well-being. This is done by interviewing the couple, giving them an Actiwatch (a device that objectively measures sleep quality), and having them complete daily sleep journals.

One of our couples—for their privacy, we'll call them Mr. and Mrs. D—shared their experience participating in the week-long study. Mrs. D expressed her belief that participating in studies was important, "I'm all for progress and for doing surveys that give you better care especially as senior citizens." Mr. D adds, "...being affiliated with the VA made us want to help [the researcher] more. They give the very best care for patients."

When asked her thoughts about the study, Mrs. D said, "The journaling really helped me to realize when I do good for my body, my body does better for me. If you go to bed on junk, you don't sleep well. I also realized it's okay to lay down and take a nap. Just



**The Actiwatch**

putting it all down on paper makes it more real. It helps you evaluate what you are doing and not doing for yourself. So, it helped me. I really liked it."

In the end, the Ds felt the study was well worth their time. They look forward to participating in the second phase of the study starting soon. Phase 2 includes an intervention to help couples sleep better without the use of medication.

*Please contact Kenna Stephens, 404 321-6111 x7093, for more information about this study.*

**"The journaling really helped me to realize when I do good for my body, my body does better for me."**

**For information about participating in research at our Center, call (404) 728-5064**



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for

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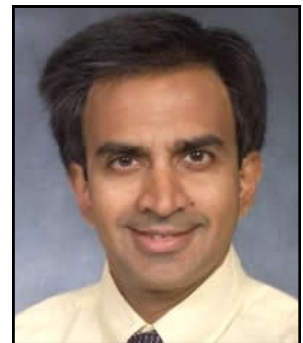
**NEWSLETTER**

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## A Word from Our Director

An important part of the mission of the Atlanta VAMC Rehabilitation R&D Center of Excellence is capacity building, in order to provide a pipeline of well-trained investigators who will be tomorrow's leaders in rehabilitation research. We are proud to have in our Center seven highly skilled investigators who are Rehabilitation R&D Center Career Development Awardees. Coming from a variety of backgrounds, they study a number of issues of critical importance to rehabilitation of Veterans' visual and/or neurocognitive health. These bright stars are Drs. Patricia Griffiths, Madeleine Hackney, Benjamin Hampstead, Keith McGregor, Christopher Mizelle, Joe Nocera and Camille Vaughan.



**Krish Sathian, MD, PhD  
Director**

**Look out for their stellar work to illuminate the skies of rehabilitation research!**