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FROM THE DIRECTOR

Last week the Principal Investigators of the CTSA Institutions had their annual meeting with NIH staff in Rockville, MD. The two-day affair was information-dense, particularly for me and the other representatives from the newly funded CTSA's. Two inter-related themes dominated the meeting: 1) building a national network of collaborating institutions across the entire spectrum of clinical and translational research; and 2) accelerating the process of protocol development and regulatory review so that clinical trials can be implemented across institutions in a timely manner.

There are five strategic goals of the CTSA Consortium, as illustrated in Figure 1. Each of these has a UF CTSA representative. Key Function Committees are also represented by UF faculty members. The overall CTSA Steering Committee is composed of the CTSA PIs and the Executive Committee is a rotating group from that membership. The relationship of these investigator-led groups to the National Center for Research Resources (the NIH Center that oversees the CTSA's) is illustrated in Figure 2.

Figure 1.



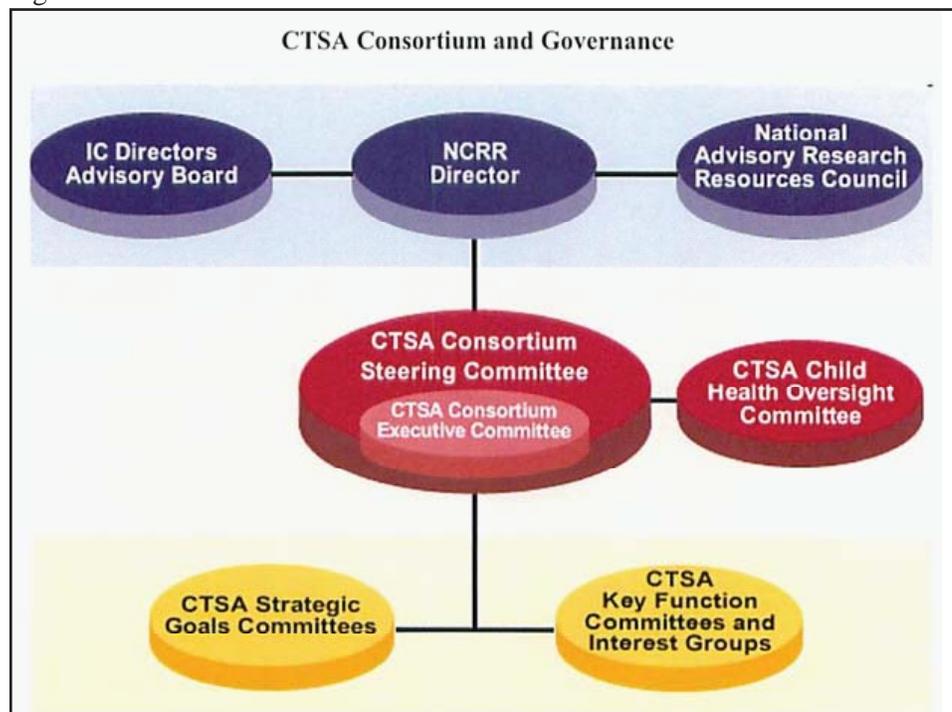
How is UF's CTSI doing in addressing these strategic goals and key functions of the CTSA Consortium? Despite our youth, we have made progress in a number of areas, including the recent \$12.3M U24 grant award to Dr. Michael Conlon, Interim Director of Biomedical Informatics, to enhance IT resources that will connect scientists across the US and facilitate research collaborations. In addition, CTSI Investigators are already participating in two CTSA-driven national clinical trials, one involving

FROM THE DIRECTOR

a cardiac device for arrhythmias (local PI: Carl Pepine, MD), and a randomized clinical trial assessing the safety and effectiveness of statin administration in patients admitted with influenza to pediatric and medical intensive care units. For this trial, UF participants include ICUs in Gainesville, Jacksonville and a hospital affiliated with A.G. Holley Tuberculosis Hospital.

The CTSA Network has generated a number of regional consortia, including one that has just formed in the southeastern United States. The participant institutions are UF, Arkansas, Alabama, Emory/Morehouse, UNC, Duke, Medical University of South Carolina and Vanderbilt. Several of the PIs from the Southeastern CTSA Consortium met last week to discuss the possibility of organizing a concerted effort in research and training emphasizing underrepresented minorities in our region. Clearly, that impacts a number of different Programs within UF's CTSI, as well as a multi- and interdisciplinary spectrum of UF investigators. I will keep you updated on the progress of these discussions.

Figure 2.



Speaking of research and training opportunities, the remainder of this Newsletter is dedicated to alerting you to the many opportunities offered through the Malcom Randall VA Medical Center, flagship of the North Florida/South Georgia VA Healthcare System and a partner in the CTSI.

Happy Reading!

Peter W. Stacpoole, PhD, MD
Director, Clinical and Translational Science Institute
Associate Dean for Clinical Research and Training

OVERVIEW OF RESEARCH OPPORTUNITIES AT THE MALCOM RANDALL VAMC BY MICHAEL R. BUBB, MD, ASSOCIATE PROFESSOR MEDICINE, BIOCHEMISTRY AND MOLECULAR BIOLOGY

The Department of Veterans Affairs (VA) was elevated to Cabinet-level status on March 15, 1989, and is the second-largest of the 15 Cabinet departments. As Secretary of Veterans Affairs, Eric K. Shinseki oversees the Veterans Health Administration (VHA) system that provides benefits and services to nearly 24.5 million veterans and their families. About a quarter of the nation's population is potentially eligible for VA benefits and services because they are veterans themselves, or are family members or survivors of veterans. The VA's fiscal 2009 spending is approximately \$93.4 billion, including \$40 billion for health care, \$46.9 billion for benefits, and \$230 million for the memorial benefits. This amounts to a more than 7% increase compared to fiscal 2008.

The North Florida/South Georgia Health System

The Veterans Health Administration System is organized into 21 regions called Veterans Integrated Services Networks, or VISN. Each VISN coordinates clinical and research activities within its specified region of the country. Our local VISN 8 is the VA Sunshine Healthcare Network. Geographically, our network spans approximately 63,400 square miles that includes more than 1.8 million veterans throughout Florida, Southern Georgia, Puerto Rico, and the U.S. Virgin Islands with medical centers in Gainesville and Lake City. Three satellite outpatient clinics and six community-based outpatient clinics are distributed across North Florida and South Georgia.

Research in the VHA system

The Department of Veterans Affairs is one of the 10 largest research and development (R&D) funding agencies in the federal government. VA research has been responsible for several key advances in health care. For example, VA researchers invented the implantable cardiac pacemaker, performed the first successful liver transplant, were responsible for the development of the nicotine patch, and provided

the groundwork for the first oral vaccine for smallpox. The VA continues to encourage and facilitate research, recognizing that participation in novel investigation may lead to developments that improve quality of care, increases access to the new treatments and more closely supervised medical care for veterans, and ensures that the veteran population is well-represented in studies that eventually lead to new approved therapies.

By congressional mandate, research programs within the VHA are conducted in order to enhance the quality of medical care. While VA research emphasizes topics relevant to military service-connected disabilities and illness, this mandate historically has been interpreted quite broadly so as to include basic science. Funding for VHA research is separated into four main divisions: Biomedical Laboratory, Clinical Science, Health Services, and Rehabilitation.

The Biomedical Laboratory division supports basic science and preclinical research. The Clinical Science division is oriented toward therapeutics and clinical trials for medical conditions relevant to veterans. The Health Services division is dedicated to issues in quality and improvement of health care, again focusing on issues relevant to veterans. The Rehabilitation division is responsible for developing research strategies for coping with serious illness and injury. As a result of the emphasis on clinical relevance, two-thirds of VA scientists are clinician-researchers.

The fiscal year 2009 budget for VHA research totals approximately \$952 million, which represents a 6.8% increase over 2008. Of this, more than half, or \$530 million, is committed to direct costs, with the remainder used to provide research support. The VA maintains its own peer review system to ensure that research grants are awarded based on merit. Most research funding is distributed to investigator-initiated research projects, with the remainder used to support centers of excellence, career development, and military service-directed research. VA investigators are eligible to apply for other federal and pharmaceutical-spon-

OVERVIEW OF RESEARCH OPPORTUNITIES AT THE MALCOM RANDALL VAMC

sored sources of support, more than doubling the overall VA research budget.

Collaborating with the VA

All scientists who apply for and receive Veterans Affairs funding must be employees of the agency, although many investigators hold joint appointments with academic institutions, and much VA research is collaborative with other institutions. VA investigators have several options for collaboration with non-VA supported investigators. For VA sponsored research, a number of contracting options are possible that can provide either salary support to individuals or can specify services or products to be provided. Specific guidelines and oversight ensures that the contracting mechanism complies with all VA requirements. Generally, any use of VA facilities by a collaborator requires that the individual go through a federal screening process leading to a non-compensated (without compensation or WOC) VA appointment.

For collaborations in which a VA investigator participates in university-sponsored research, it is expected that the VA will be compensated for any use of its resources. To facilitate this process, subcontracts to the VA can be managed by a nonprofit research corporation and education foundations affiliated with VHA facilities. Our local nonprofit corporation is the North Florida Foundation for Research and Education (NFFRE). Joy Mitchell serves as its executive director.

Key points for any research using VA resources are the requirements that the research must include the participation of a VA-supported investigator and must be recommended for approval by the local VA facility at the level of the VA R&D committee. For an investigator who is interested in access to VA resources, including our veteran patient population, there are several ways to screen for opportunities and identify potential collaborations. The nonprofit corporation has a staff that serve as an excellent source of

information as well as providing help with VA-specific IRB issues. Other individuals to contact for information include members of the R&D subcommittee for Research Support or the R&D committee itself. Please see <http://www.northflorida.va.gov/research/rdcomm.asp> for additional details; see <http://www.northflorida.va.gov/research/current.asp> for a list of current research investigators.

VA facilities

The availability of funding earmarked for research support has led to the development of state-of-the-art facilities at the Malcom Randall VAMC. Shared resources that are expertly maintained are the norm. A newly renovated animal facility includes remote monitoring capabilities for rodents. Microscopy facilities include a Zeiss two-photon system and a second Zeiss laser scanning confocal system, as well as independent stations for microinjection, ratiometric fluorescence imaging analysis and laser dissection microscopy. The most recent acquisitions in 2009 include a Vevo 2100 Imaging System from VisualSonics that does non-invasive, real-time, high resolution in vivo imaging. A Noldus video and optical behavioral tracking system with EthoVision and Catwalk is used for Morris water maze (memory and learning), anxiety like behavior, activity motoring, social behavior, pain, and gait analyses. From the standpoint of clinical research, it should be noted that the VA utilizes the award-winning Veterans Health Information Systems and Technology Architecture (VistA) for computerized patient records. Moreover, this is a no-cost, open-architecture system available to hospitals. If it could be adopted by UF/Shands, archived data could be accessed with identical parameters at both of institutions, thus enhancing collaborative research.

An initiative in genomics

In 2006, the Department of Veterans Affairs launched the Genomic Medicine Program to examine the potential of emerging genomic technologies, to optimize medical care

OVERVIEW OF RESEARCH OPPORTUNITIES AT THE MALCOM RANDALL VAMC

for veterans, and to enhance the development of tests and treatments for relevant diseases. VA funds 142 investigator-initiated Merit Review projects related to genetics/genomics for a wide spectrum of conditions prevalent in veterans such as schizophrenia, Post Traumatic Stress Disorder or PTSD, bipolar disorder, Alzheimer's, cardiovascular disease, diabetes, cancer (prostate, breast, colon, bladder, and lung), substance abuse, stroke, chronic viral infections, autoimmune disorders, and Gulf War Illness. These studies cover the spectrum of genetic-association, pharmacogenomics, candidate gene analysis, single-nucleotide polymorphism (SNP) analysis, linkage studies, and proteomics/metabolomics. Blood and tissue storage facilities include a DNA bank/biorepository at the Boston VA with about 30,000 blood samples and 6,000 DNA samples collected during multi-site VA clinical trials, a DNA coordinating center at the Palo Alto (Calif.) VA linking clinical information with data analysis and a tissue repository at the Tucson VA.

Career development in the VA system

The VA offers robust support for career development in clinical and translational research. Over several decades,

tiered career development grant opportunities have provided protected time for medical researchers in the early stages of their careers. This system has served to train investigators and create a supply of clinician-scientists for both VA and non-VA positions. These grants continue to be funded at a favorable level and typically provide extensive salary support. Awareness of these opportunities, however, remains low among our affiliated educational institutions. Increased involvement of the VA in academic recruitment efforts, as well as better dissemination of information to individuals leading academic departments and divisions would be expected to improve our exploitation of these opportunities.

The VA has an outstanding patient population, both in terms of patient numbers and access to care, a state-of-the-art electronic medical record system, and an administrative structure supportive of the research enterprise. These factors create an attractive environment for translational research.



VA CAREER DEVELOPMENT OPPORTUNITIES

BY REBECCA J. BEYTH, MD, MSC, PHYSICIAN RESEARCHER, NF/SGVHS GRECC, ASSOC. PROFESSOR, DEPT. OF MEDICINE

Background/overview

The Veterans Affairs career development and mentoring programs were established to provide mentoring for junior researchers so they can learn from renowned, experienced VA researchers. Graduates of this program have become national and international leaders in their research fields. Mentoring awards include pre-doctoral, disability supplements, nursing research initiatives, post-doctoral awards, and the Career Development Program (CDP).

Scope of research/mission

Awards are provided in the VA's four research areas: biomedical laboratory, clinical science, health services, and rehabilitation research. The majority of the awards are open to VA and non-VA applicants, especially those working in research areas of high priority to the VA.

Mentoring and career development programs

Pre-doctoral awards are available to graduate students who have completed doctoral course work in a rehabilitation health care profession such as rehabilitation engineering, OT/PT, audiology, speech-language pathology, nursing and psychology. Research Disability Supplements provide additional funds to existing rehabilitation centers and merit review investigators to support the development of researchers with disabilities.

The Nursing Research Initiative accepts applicants from all four research areas for those who have completed their doctoral degrees. The Initiative also funds pilot studies, as well as mentored awards for junior and senior nurse researchers.

Post-doctoral awards are available for clinicians (MD and PhDs) who have completed a geriatrics fellowship, other sub-specialty training, or clinical doctorate residency interested in improving the health outcomes of older Americans via the Geriatrics Advanced Research Fellowship. It

provides full salary support for two years with a minimum of 75% protected research time.

The CDP program has four levels of career development awards. Career Development Award 1 (CDA-1) provides research experience to applicants who work closely with mentors on funded research. This award provides up to two years of salary support.

The Career Development Award 2 (CDA-2) provides mentored research experience to applicants to support their development into independently funded VA researchers. Applicants propose their own research projects and work closely with mentors to complete and publish project findings. This award ranges from three to five years in duration, including salary support and project funds.

The Career Development Transition Award (CDTA) is open only to clinician researchers, and supports applicants no more than 10 years beyond training in the transition to become independently funded VA research scientists. It provides salary support for up to three years.

The Career Development Enhancement Award (CDEA) is open to all senior VA clinicians and non-clinician scientists providing up to six months of full salary support for educational leave to learn new research skills.

Administrative

Program guidelines, relevant resources, instructions, and application forms are available at <http://www.research.va.gov/funding>.

Existing relationship with CTSI and/or UF

Recent trainees have come from a variety of disciplines from the UF College of Medicine, Public Health and Health Professions, Nursing, Health and Human Performance, Pharmacy, and Engineering. Candidates can work with their advisors and mentors to develop training programs that incorporate the resources of the UF newly funded CTSI.

OVERVIEW OF GRECC RESEARCH

BY STEVE BORST, PH.D., GRECC ACTING ASSOCIATE DIRECTOR FOR RESEARCH

The Veteran's Affairs Medical Center (VAMC) Geriatric Research Education and Clinical (GRECC) is a center of excellence under the leadership of Director Dr. Ronald Shorr, M.D. The center's overall mission is to support and increase geriatrics in response to the needs of our growing population of older veterans.

The center's research focuses on frailty, and its investigators have active programs in basic, translational clinical and health service research. The mission also includes developing Clinical Demonstration Projects, which are health services-related studies conducted at the VA Geriatric Evaluation Module, a sub-acute geriatrics ward.

The GRECC offers several opportunities for those who would like to embark on a career in academic Geriatrics, including the following:

Special fellowship in Advanced Geriatrics

Each year, the center has one new position for this one- to two-year program that is designed for physicians and other clinicians who have completed a clinical fellowship and would like to begin a career in research. The program offers protected time for research, education in research methods, and a wide choice of potential mentors. For information, contact Program Director Dr. Rebecca Beyth, MD at Rebecca.Beyth@va.gov, or Co-director Dr. Connie Uphold Ph.D. at Connie.Uphold@med.va.gov.

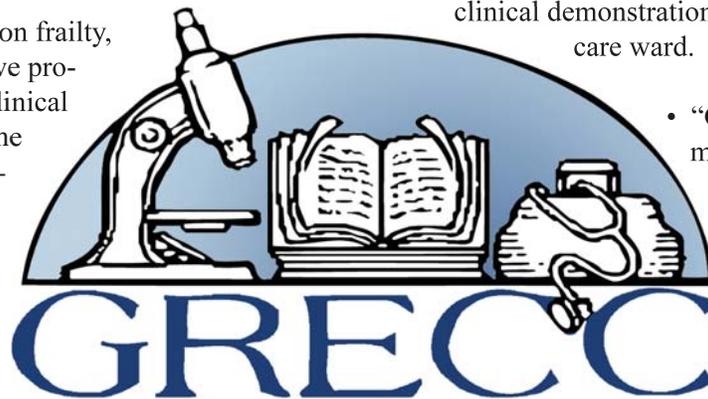
Career development award

This is a two- to five-year mentored VA award that provides salary only (CDA I) or salary plus research funds (CDA II) and is designed to provide research and other resources

needed for establishing an academic career.

Clinical demonstration projects

The GRECC runs the Geriatric Evaluation and Management (GEM) program at the VAMC and conducts clinical demonstration projects at this sub-acute care ward.



- “Gait and Balance Assessment with Live Video from computerized Patient Record System (CPRS) Interface with Vista Imaging” will videotape the gait of patients in the GEM and the Gait and Balance Clinic.

- “Intervention to improve care at life’s end in VA Medical Centers,” Gainesville, is part of a multi-center Health Sciences Research and Development (HSR&D) study using the BEACON order set. BEACON stands for Best practices for End of life care And Comfort care Order sets for our Nation’s veterans.

- “Web-based information materials for caregivers of veterans post stroke” develops materials for stroke caregivers and places them on MyHealthyVet, which is a personal electronic medical record accessible to each veteran.

- “Home safety assessment utilizing a video camera” is a project to perform home assessment remotely.

- “Implementing evidence in the detection and treatment of post-stroke decision making” is a project employing targeted screening to identify depression in stroke patients.

OVERVIEW OF GRECC RESEARCH

- “Intervention development for shared decision making in stroke prevention” This HSR&D project funded by the Quality Enhancement Research Initiative (QUERI) involves development of a video with script to aid patients with atrial fibrillation to better interact with their health provider regarding the decision to use anti-coagulation medication.

Individual research programs of GRECC investigators

- Dr. Steve Borst, Ph.D., Stephen.Borst@va.gov, is conducting basic and clinical studies to investigate mechanisms of sarcopenia and bone loss during aging and to test strategies for combating these conditions.
- Dr. Connie Uphold, Ph.D., Connie.Uphold@med.va.gov, is conducting educational and health services caregiver support for stroke and other conditions.
- Dr. Rebecca Beyth, M.D., MSc., Rebecca.Beyth@va.gov, is conducting health services and educational research in the use of anticoagulants in the elderly.
- Dr. Nihal Tumer, Ph.D., Nihal.Scarpace@va.gov, is conducting basic research in the control of blood pressure and obesity.
- Dr. Ronald Shorr, M.D., Ronald.Shorr@va.gov, is conducting clinical and health services research in the area of fall prevention.
- Dr. Kenneth Heilman, M.D., heilman@neurology.ufl.edu, is conducting clinical research in Alzheimer’s disease, neglect, and a variety of neurological conditions associated with aging.
- Dr. Miho Bautista, M.D., Miho.Bautista@med.va.gov, is conducting educational research in geriatrics.
- Dr. Lewis Randonovich, M.D., Lewis.Radonovich@va.gov, is conducting clinical research in infection control.

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VA REHABILITATION OUTCOMES RESEARCH CENTER

BY HUANGUANG "CHARLIE" JIA, PHD, RESEARCH HEALTH SCIENTIST, VA REHABILITATION OUTCOMES RESEARCH CTR

The Rehabilitation Outcomes Research Center (RORC) at the North Florida/South Georgia Veterans Health System in Gainesville conducts interdisciplinary research to improve the health, function, and community integration of veterans challenged by disability and limited access to health related services. It is the only Research Enhancement Award Program jointly supported by core-funding from both VA Health Services Research and Development and Rehabilitation Research and Development services.

Rehabilitation and the management of disability and illness are emerging as dominate themes in the VA strategic vision, and the RORC mission directly addresses these evolving priorities through a multifaceted strategy. This includes examining how to improve the access, design, administration, management, and cost of care; by using state of the science methodologies to develop new and more precise measures across the continuum of care; and by evaluating innovative systems and processes of care through the continuum, including the psychosocial aspects of recovery, informal care-giving, and community reintegration.

The primary research focus of RORC is to evaluate rehabilitation programs and interventions that result in optimal

patient outcomes. Research in the Center is organized thematically by outcomes of interest, including health, function, independence, quality of life, community integration, access, quality, and cost.

At RORC, research programming is supported by Administrative, Methodological, Dissemination, and Career Development/Training cores. A Steering Committee of national content area experts and an advisory panel of local VA and UF leaders provide guidance and support.

The coalescence of expertise and talent among neuroscientists, interdisciplinary rehabilitation researchers, health service researchers, clinicians, and social scientists at the RORC, the Brain Rehabilitation Research Center, the Geriatric Research Education and Clinical Center, the Stroke and Polytrauma Quality Enhancement Research Initiatives, and UF provide access to unusually strong and innovative research programs aimed at improving VA rehabilitation care.

Using the depth and breadth of expertise available in the community, the RORC is uniquely positioned to strengthen existing outcomes evaluation methods and measures in rehabilitation outcomes research.

Rehabilitation Outcomes Research Center

VA HSR&D/RR&D Research Enhancement Award Program



BRAIN REHABILITATION RESEARCH CENTER OF EXCELLENCE

BY LISA DEMANUEL, RESEARCH PROGRAM SPECIALIST, BRAIN REHABILITATION RESEARCH CENTER OF EXCELLENCE

The Brain Rehabilitation Research Center of Excellence (BRRC) in Gainesville is one of 15 Veteran Affairs centers of excellence nationwide exclusively focused on rehabilitation research. Its mission is to enhance the quality of life of veterans with central nervous system injury or disease through research focused on maximizing recovery of motor or cognitive function through rehabilitation

Brain or spinal cord disease or injury produces the most handicapping of all chronic conditions in adulthood. Funded in 1999 by the Department of Veteran Affairs Rehabilitation Research and Development Service, the BRRC is located at the Malcom Randall VAMC and headed by Program Director Dr. Leslie Gonzalez Rothi, Ph.D., and Medical Director Dr. Stephen Nadeau, M.D.

The Center's research targets innovating and refining effective treatments which focus on potentiating neural plasticity and neural network reorganization via theoretically motivated behavioral and/or physiological treatment protocols and translational research projects. The program emphasizes three main goals:

- Developing and refining effective behavioral treatments of disease that maximize experience-dependent learning and specifically target motor or cognitive deficits resulting from central nervous system injury.
- Translating existing knowledge of the basic science of neural plasticity to delivery in humans.
- Developing technologic applications for measurement and prediction using functional neuroimaging and sophisticated quantitative human performance measurement.

The BRRC encourages, advises, and supports researchers and clinicians by providing educational and research infrastructure opportunities to those who are interested in initiating clinically relevant research in rehabilitation of neurocognitive and neuromotor impairments. These include infrastructure support such as access to research clinic

rooms, research therapists, subject recruitment and screening services, IRB management, and doctoral-level biostatistical consultation. Research training opportunities include mentored awards, an expert speaker series, and annual rehabilitation research methods training courses.

The Center provides a participant recruitment infrastructure consisting of a database of individuals with stroke and spinal cord injury who are interested in referral for research participation. It also provides personnel support, including therapists, engineering, IRB, statistical, and secretarial. Currently more than 800 subjects who have been screened by a neurologist, physical therapist, neuropsychologist, and speech pathologist are included in the database. Typically two to three subjects are screened weekly and added to the database. All of these participants have given their consent to be contacted for referral to ongoing or future research studies. The BRRC also has available multiple assessments of upper extremity (UE) and lower extremity (LE) function, as well as materials for various massed-practice UE/LE rehabilitation interventions. These assessments also include numerous neurophysiological and speech-related testing.

The BRRC encompasses a 7,700-square-foot facility, which houses research laboratories, and investigator and administrative offices. Each investigator has a dedicated telephone, computer (containing a full array of Microsoft software) and connections to secured networks at both the VA and UF. Intranet connections within the VA and Internet connections to UF allow full access to library facilities and shared software (e.g., MatLab, SPSS, and SAS). The Center also has research laboratories for treatment and therapy interventions, a conference room, and data storage facilities. In addition, it houses the VA/UF Brooks Center for Rehabilitation Sciences Human Motor Performance Laboratory directed by Dr. Steven Kautz, Ph.D, and a Transcranial Magnetic Stimulation (TMS) laboratory directed by Dr. Jeffrey Kleim, Ph.D.

BRAIN REHABILITATION RESEARCH CENTER OF EXCELLENCE

BRRC Transcranial Magnetic Stimulation Laboratory

The laboratory is a 300-square-foot suite containing state-of-the-art transcranial magnetic stimulation equipment to study the neurophysiological substrates of rehabilitation-dependent recovery from stroke.

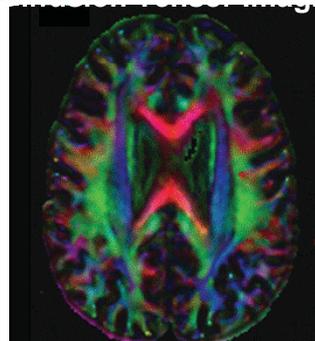


The suite includes a computerized stereotaxic neuronavigation system (Brain Sight) that integrates volumetric magnetic resonance imaging (MRI) scans with the TMS system. This allows for the precise localization of stimulation location on the cortex and ensures the reliability of repeated stimulation. The stimulation system itself also includes a 70 mm Magstim coil and Grass EMG recording apparatus. Two G5 Macintosh computers are also dedicated to the collection and analysis of EMG responses and motor map topography. The lab also provides a full time technician to run the laboratory and oversee all experimental procedures. Investigators have unlimited access to these facilities and to the expertise of the Kleim's team.

BRRC Neuroimaging Research Core

The BRRC has a Neuroimaging Core lead by Dr. Bruce Crosson, Ph.D., ABPP/cn, to support functional and structural neuroimaging for cognitive and motor studies. This core focuses on data acquisition and technology development for functional and structural neuroimaging, with an

emphasis on MRI. It consists of 15-20 people who have the knowledge and technical skills to support functional MRI, diffusion tensor imaging (DTI), mapping of white matter tracks with DTI, and lesion analysis. This core resource is available to BRRC investigators with funded projects or approved pilot studies.



VA/University of Florida Human Motor Performance Laboratory

The primary focus of the 1,800-square-foot Human Motor Performance Laboratory is to assess motor performance in individuals with injury, disease, or age-related changes in motor function. It is a joint VA/UF laboratory that is housed in the BRRC under the direction of Kautz. The laboratory is equipped with a VICON Motion Systems motion capture camera system, consisting of the VICON 612 data station with eight active video channels and a 64-channel A/D board for analog signals. There are 10, 1,000-Hz M2 cameras (digital CMOS M2 series cameras that have a resolution of 1280 x 1024) with visible infrared variable intensity DST strobes. Software includes a VICON workstation, VICON polygon, VICON Body Builder, Plug-in Gait, Plug-in Modeler, VICON Real Time II, and a VICON Plug-in to export C3D data to Motion, Muscle, Joint, and Bone file (ASCII) to use with SIMM.

BRAIN REHABILITATION RESEARCH CENTER OF EXCELLENCE



The lab is also equipped with the materials necessary to complete UE or LE force measures and analyses. The laboratory houses a programmable Adept-six robotic arm, load cells to measure arm and finger/thumb forces, platform for UE/LE stabilization, the Strength-Dexterity Test System, and a split-belt treadmill. It is equipped with a Konigsberg Instruments T42, 16-channel telemetry EMG system designed to transmit on a discreet carrier frequency set between 176 and 216 MHz, and a Biodex for isokinetic strength testing. Three full-time biomedical engineers are employed to assist investigators in data collection and analysis.

BRRC Locomotor Training Laboratory

The Locomotor Training Laboratory, lead by Dr. Andrea Behrman, Ph.D, PT is a 700-square-foot facility dedicated to providing two kinds of locomotor training: using a body weight support system and treadmill with manual assistance, and also using an overhead body weight support system over ground with a 40-foot straight path and 90 degree turn with 10-foot straight path for persons with locomotor dysfunction. The lab also has a low mat for donning the body weight support harness and digital recording and editing capabilities.

For the past decade, the BRRC has focused research and capacity-building programs on discovery and development of treatments for cognitive or motor consequences of neurologic disease or injury. We hope to continue to develop the BRRC in ways that increase the potential for treatments that will alleviate the suffering experienced by those who live with these conditions and their caregivers. We are never far from the realization that our work must be measured by the impact it has on the daily lives of veterans living with these conditions.

META-ANALYSIS RESEARCH OPPORTUNITY

This upcoming Spring Semester, Drs. Jonathan Shuster and Caprice Knapp will be co-teaching (Course # GMS 6846), Meta-Analysis. We will be conducting two to three meta-analyses, one or two for randomized clinical trials and one or two for epidemiologic/observational studies. These will be done from scratch, namely this will not be a reenactment of any meta-analysis conducted to date. The instructors and students can help you bring **your question** to fruition. **Eligibility:** Topic must be health related, but any person at UF is invited to submit a proposal.

Once topics are selected, the process will be as follows:

- (1) Determine the research question the meta-analysis will address.
- (2) To the best extent possible, find the totality of studies that address the topic.
- (3) To the best extent possible, obtain the individual study effect sizes and precision. Summary data would be fine, but individual data elements would be preferred.
- (4) Conduct the analysis
- (5) Present the results in class
- (6) Publish the findings in a peer reviewed medical journal. Proposer would be first author.

Meta-Analysis plays a significant role in Comparative Effectiveness Research, an important area of interest at the NIH. If you go to PUBMED (Google), and search on Meta-Analysis you will get over 37,000 (44,000,000) hits respectively. See <http://en.wikipedia.org/wiki/Meta-analysis> for additional information about the subject.

If you are interested in a particular topic, please contact one of us. **Please provide a one paragraph summary of the proposed topic by Monday, November 23, 2009.**

Dr. Jonathan Shuster (jshuster@biostat.ufl.edu) [265-0111 ext 86503] or Dr. Caprice Knapp (cak@ichp.ufl.edu) [265-0111 ext 86087]

Employment

Did you know that there are multiple venues through which both internal and external jobs are posted?

For Job Seekers

<https://jobs.ufl.edu> - University of Florida jobs postings.

<http://www.union.ufl.edu/jobs/> - Reitz Union student job listings.

<http://www.sfa.ufl.edu/programs/workstudy> - Federal Work-Study Program.

<http://www.sfa.ufl.edu/programs/ops.html> - Other Personnel Services jobs.

<http://www.sfa.ufl.edu/programs/oce.html> - Off-Campus jobs.

<http://www.sfa.ufl.edu/programs/vaworkstudy.html> - Veteran's Affairs Work-Study.