



Operation Re-Entry NC East Carolina University

ORNC Brief

North Carolina Institute of Medicine
Task Force on Behavioral Health Services for
Military and their Families

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What is ORNC?

a university-military partnership in support of
combat veterans and their families

Focus Area

research and advanced technology development at the
intersection of rehabilitation, behavioral health
and telemedicine



Pending DoD Funding

\$2.4M Federal Appropriation for ORNC

**FY 2010 Defense Appropriations Act
Signed into law by President on 12/19/2009
Account: Army, RDT&E
Line Title: Medical Advanced Technology**

Status:



Peer-reviewed Grant Submission

**DoD Broad Agency Announcement 10-1
US Army Medical Research & Materiel Command
Fort Detrick, Maryland
Host agency: TATRC**

**in
progress**

Anticipated funding date: December 1, 2010



Operation Re-Entry NC East Carolina University

Remainder of talk

1. Rationale for ORNC
2. What ECU brings to the table
3. Overall objective and specific aims
4. Strategic implementation
video: biofeedback, Marines from WWB
5. Discussion and Feedback



The DoD and VA face many challenges

**The military medical system is “underfunded,
understaffed and overwhelmed”**

**--Dr. John H. Chiles (COL, US Army, Ret.),
Fmr. Chief of Anesthesiology at Walter Reed Army Hospital,
Chief of Staff, US Army Hospital in Bagdad
President’s Commission on Care for America’s Wounded Warriors**

**The Army’s physical disability caseload has
increased 80% since 2001**

--Washington Post, 25 Feb 2007

“The tsunami has arrived.”

**-- CDR James Hancock, M.D.
Chief of Medical Service,
Naval Hospital at Camp Lejeune, May 2009**



Many challenges lie within the TBI and behavioral health arena

**52% of injured soldiers returning from Iraq and Afghanistan to Walter Reed Army Hospital have been diagnosed with TBI –
33% increase in TBI cases since end of 2008
Defense and Veterans Brain Injury Center study, July 2009**

**Four out of 10 active duty licensed clinical psychologist slots in the Army and Navy are not filled
-American Psychology Association, February 2007**

**The psychological health needs of America's military service members, their families and their survivors pose a daunting and growing challenge to the Department of Defense
-DoD Task Force, 2007**



Meeting the Challenge...

Military and VA programs are expanding and improving rapidly (DCoE, DVBIC, TATRC, etc.)

EVEN SO...

effective partnerships with the civilian sector are needed to address critical needs and fill gaps

ORNC mobilizes university resources to help address the concerns of combat veterans and their families



A solemn obligation...

“We have a *solemn obligation* to offer the very best care – not only to the wounded we see now, but to the next wave as well...

We are in a unique window in time to collect data and analyze this population of returning warriors...

To do this, we must build strong and effective partnerships with academic institutions.”

**COL Chris Macedonia (US Army)
Office of the Joint Chiefs of Staff**



What does ECU bring to the table?

1. Geographical proximity

centered in a dense military corridor





What does ECU bring to the table?

2. Military-friendly campus

G.I. Jobs Magazine:

**ECU designated a “2010 military-friendly university”
<15% of universities nationwide**

Strong ROTC training programs:

**ECU AF ROTC dates back 1948,
Army ROTC 1st/2nd in Ranger Challenge**

Active Military Affairs Office:

**leader in establishing military-friendly programs
and benefits for ECU and UNC system**

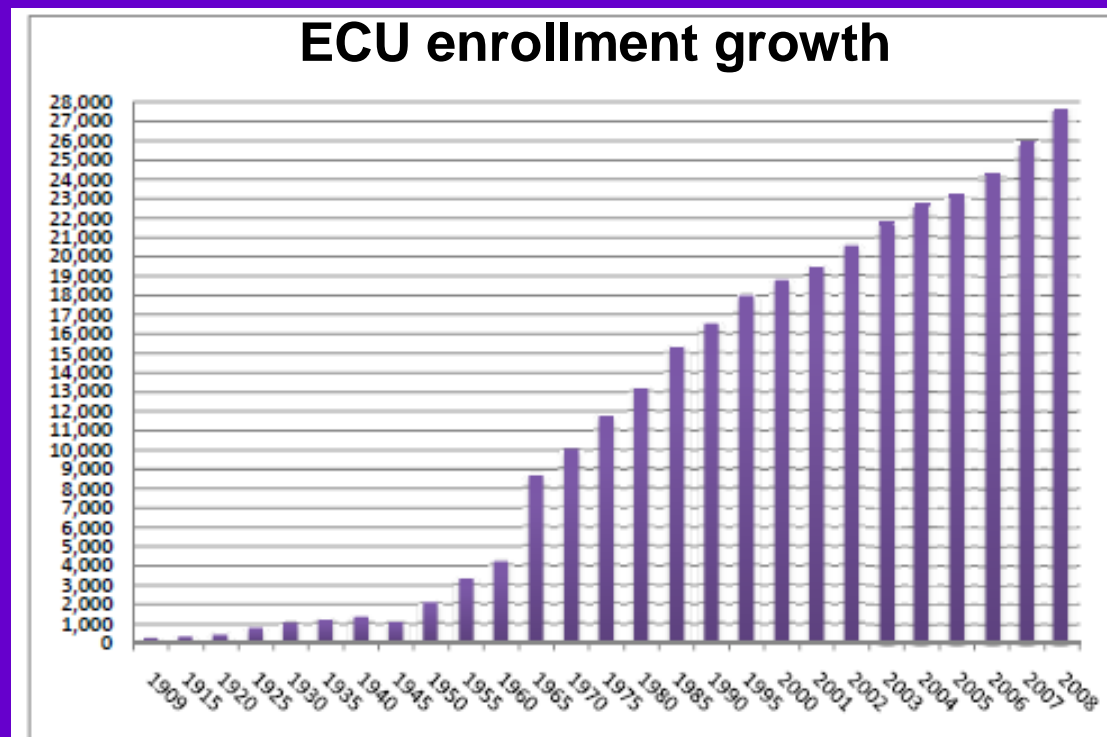
**ECU Physicians recently recognized by TRICARE
for ongoing and exemplary service to military**



What does ECU bring to the table?

3. Large faculty and student body

fastest-growing member of 16-campus UNC System:
28,000 students (>7K graduate students)
>1,800 faculty members





What does ECU bring to the table?

4. Large health sciences center

**ECU trains the largest number of primary care providers, nurses and allied health professionals in NC:
MD, DPT, Aud/PhD, RN, LNP, MS-SLP, MS-OT, MFT, MS-SAC, Ph.D., etc.**

ECU houses one of the two UNC-system medical and dental schools and the only UNC physician assistant program

ECU Physicians: the largest group practice in eastern North Carolina





What does ECU bring to the table?

5. Rapidly growing research enterprise

institutional strength in
rehabilitation, behavioral health, telemedicine,
advanced technology, cardiovascular disease,
robotic surgery, diabetes, obesity research,
Human Performance Laboratory

e.g., Greenville bypass, SpeechEasy device, Telemedicine Center

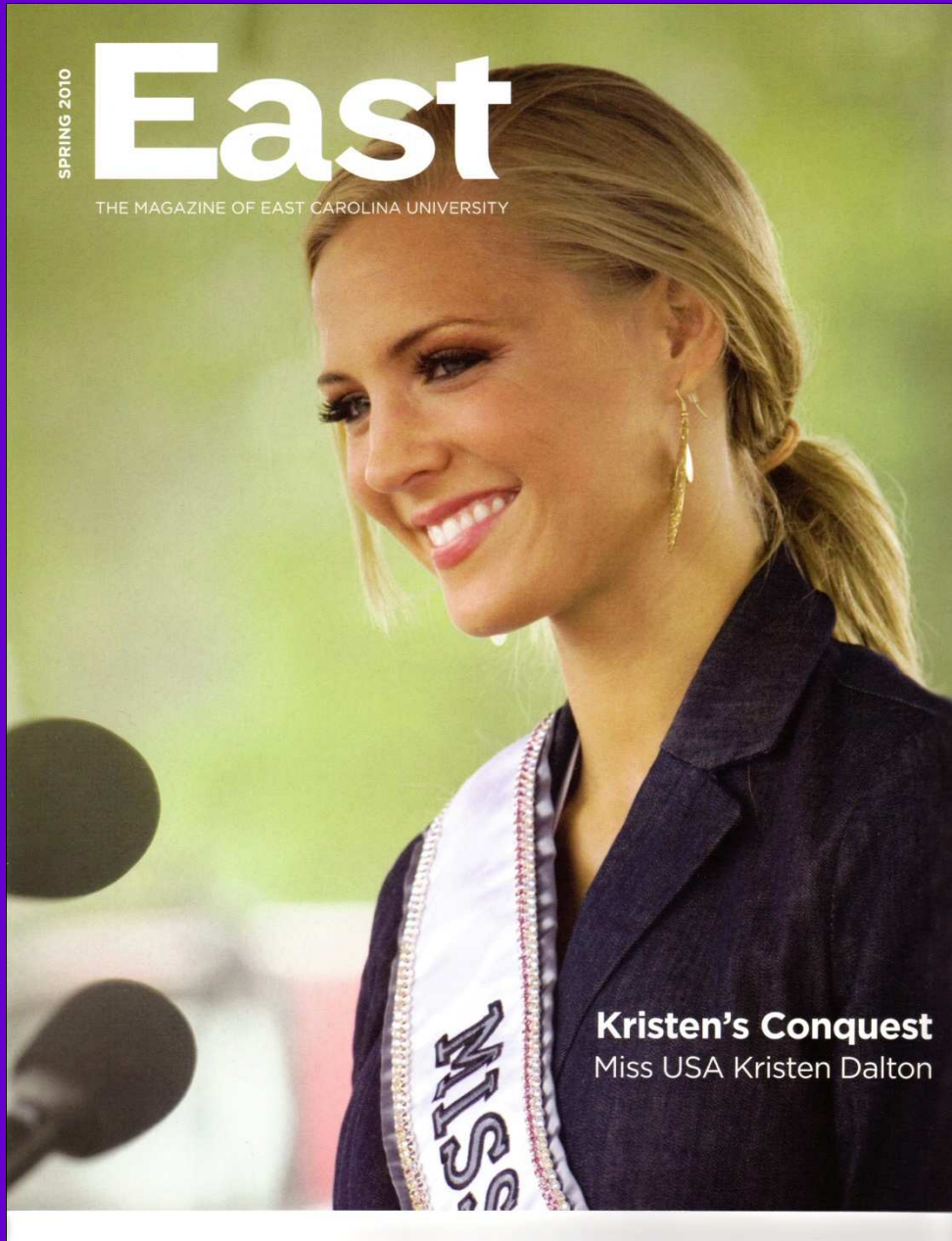




SPRING 2010

East

THE MAGAZINE OF EAST CAROLINA UNIVERSITY



Kristen's Conquest
Miss USA Kristen Dalton



Operation Re-Entry NC:

Overall Objective:

To mobilize university resources in support of combat veterans and build effective partnerships with regional and national military organizations

Specific Aims:

- 1. Stimulate innovation through pilot research projects**
- 2. Build the research infrastructure needed for effective university-military collaboration**
- 3. Train faculty and students to work effectively with military subjects and collaborators**
- 4. Disseminate the latest advances through a speaker series and annual symposium**
- 5. Lead UNC system and statewide efforts to build effective partnerships with DoD and VA organizations**



Specific Aims, Short Version:

Aim 1: Research Projects

Aim 2: Research Infrastructure

Aim 3: Research Training

Aim 4: Research Dissemination

Aim 5: Research Leadership



ORNC: Strategic Implementation

Aim 1: Research Projects

Call for Pilot Pre-Proposals: January 2010

Ranked by Review Panel: February 2010

Review Panel:

Patricia Anderson, LNP (BG, US Army, ret.)

Ted Morris, Ph.D., Associate Vice Chancellor for Economic Development

Al Schreier, Ph.D., Director of Program Development,
Division of Research and Graduate Studies, ECU

Margie Gallagher, Ph.D., Prof./Associate Dean for Research,
College of Human Ecology, ECU

David P. Cistola, M.D., Ph.D., Associate Dean for Research,
College of Allied Health Sciences and Prof., Brody SOM, ECU



ORNC: Strategic Implementation

Aim 1: Research Projects

Selection Criteria:

Military relevance – alignment with priority areas

Military/VA collaborators

Novelty and innovation

Scientific quality and clarity

Potential for future grants

19 proposals received, 10 selected for submission to DoD



ORNC: Strategic Implementation

Aim 1: Research Projects

**Carmen Russoniello -- Health & Human Performance
Efficacy of Heart Rate Variability Biofeedback Combined with
Neurofeedback in Reducing Symptoms of PTSD**

**Elizabeth Carroll – Child Development & Family Relations
Essential Life Skills for Military Families –
Single Servicemember Version**

**Sherri Jones – Communication Sciences & Disorders
Leslie Allison – Physical Therapy
Sensory Reweighting in Trauma- or Blast-induced Dizziness**



ORNC: Strategic Implementation

Aim 1: Research Projects (continued)

Carmen Russoniello -- Health & Human Performance

**Development of a Personal Telemedicine Device for
Health Assessment and Improvement**

Leonard Trujillo -- Occupational Therapy

Effective Use of Interactive Metronome with Marines Suffering from TBI

Baohong Zhang – Biology

Identification of Blood microRNA Biosignature for TBI

Angela Lamson – Medical Family Therapy

Integrated Care for Military Families



ORNC: Strategic Implementation

Aim 1: Research projects (continued)

Irene Hamrick – Family Medicine

Virtual reality-based home safety inspection system

Jason Yao – Engineering; Gregg Givens – Audiology

Heal the hearing: from combat to re-entry

Paul Toriello – Rehabilitation Studies

Re-Entry with recovery: Supporting veteran recovery from substance abuse, mental illness and mild TBI

ECU - Web Feature - Basic Retraining - Windows Internet Explorer

http://www.ecu.edu/cs-admin/mktg/basic_retraining.cfm

Google

ECU - Web Feature - Basic Retraining

Basic ReTraining

[View feature video presentation -->](#)

To view a smaller video size for slower internet connections [click here](#)

CURRENT WEB FEATURES Revolution through Education | Service Oriented

Featured Links



- Article
- Feature Video
- Video Transcript

Related Links

- Biofeedback at ECU
- College of Health and Human Performance

For their sacrifices made in the defense of our nation, wounded war veterans hold a special place of honor in America. There is a deep, abiding respect for those who carry the physical reminders of war so that the rest of us need not. They are remembered on national holidays observed in their honor. Seats are given up for them on buses and at ball games. Hollywood makes movies celebrating their deeds.

But for as long as the machinery of war has injured, the psychology of war has exacted a toll of its own, even from those otherwise spared by bullet, blade, or shrapnel. These are the hidden injuries of war. They can be difficult to recognize, and as a result, ...



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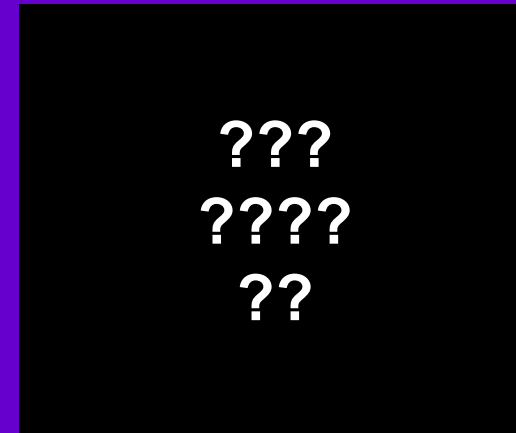
http://www.ecu.edu/cs-admin/mktg/basic_retraining_video.cfm

http://www.youtube.com/watch?v=kDIKRA_vURk



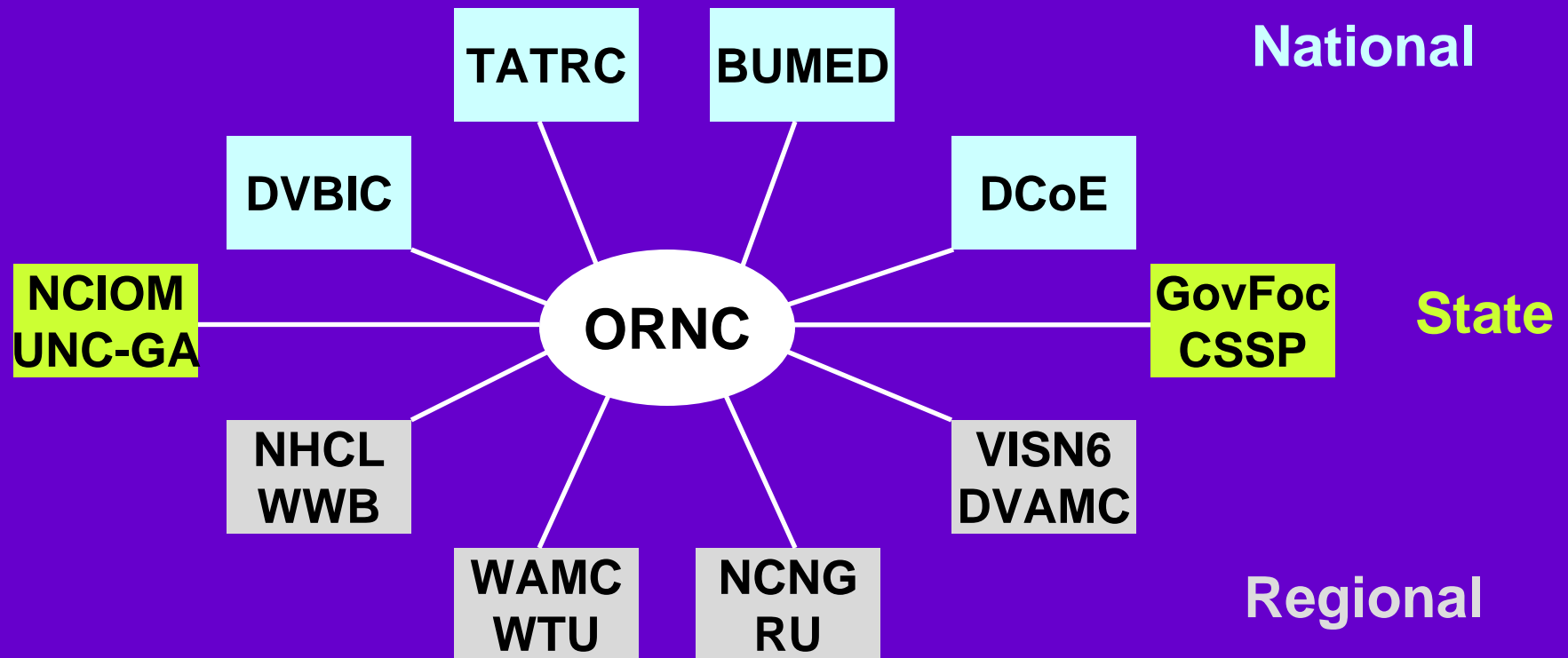
Current impediments to university-military collaboration

Ineffective communication
culture clash



MOUs/CRADAs take months to execute
lack of champion

Growing Partnerships Demand Effective Communication





ORNC: Strategic Implementation

Aim 2: Research Infrastructure

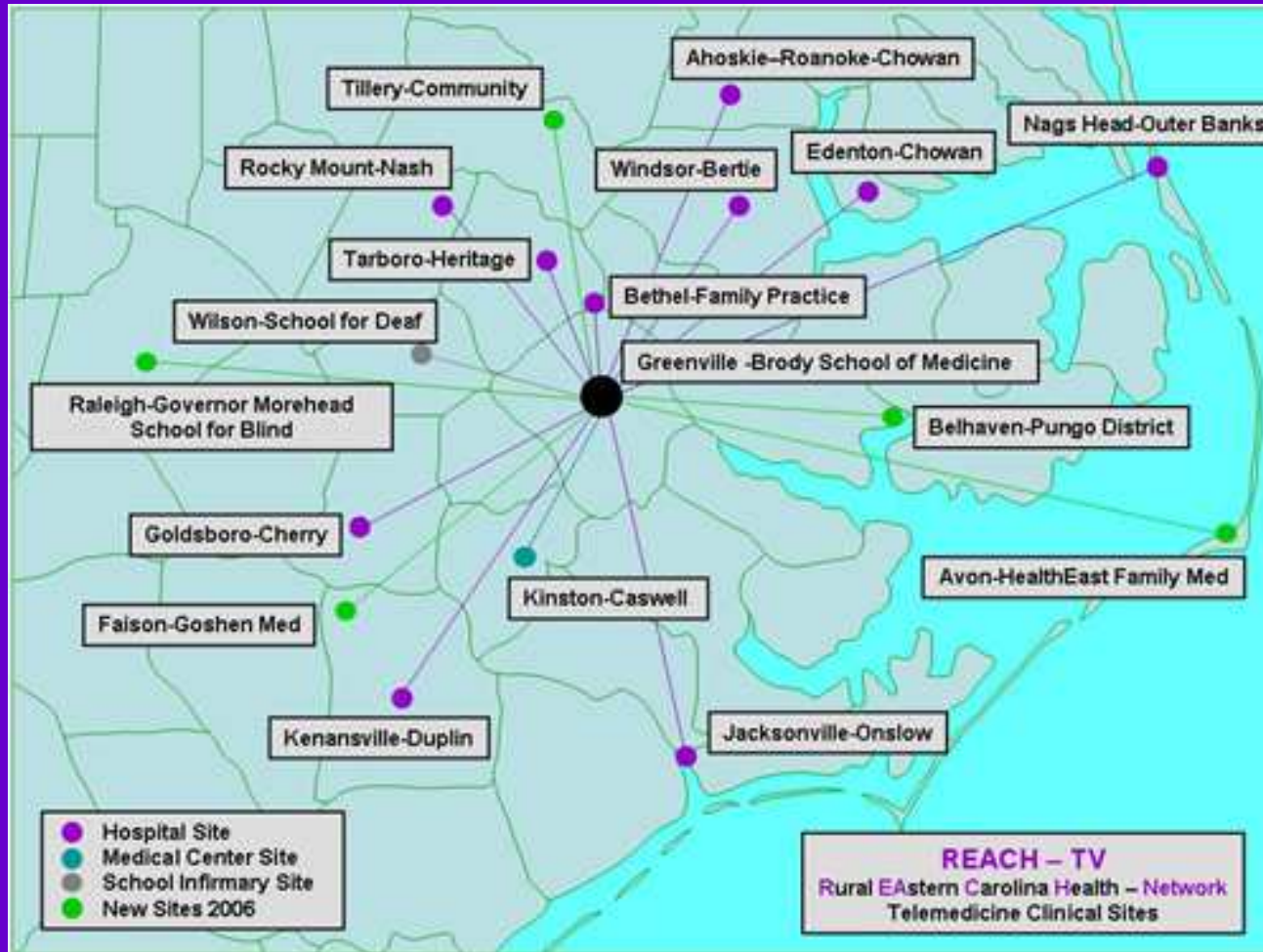
Hire a Military Research Liaison

**Expand Telemedicine Capabilities
Jacksonville, Fayetteville:**

**E-Mental Health referrals
Civilian Readiness Training**



Expanding E-Mental Health to Warriors and Their Families





ORNC: Strategic Implementation

Aim 3: Research Training

One-day Training (with CSSP)

military culture 101

experiences of OEF/OIF Veterans

overview of TBI and behavioral health issues

TRICARE

Outreach Scholars Academy – Military Edition

semester-long session for

faculty and student researchers who

work with military populations



ORNC: Strategic Implementation

Aim 4: Research Dissemination

Joint Seminar Series for University/Military Providers

**ECU affiliate faculty appointments for military
Rehabilitation, Behavioral Health, Telemedicine**

ORNC Annual Symposium – May 2011

Regional and National Partners



ORNC: Strategic Implementation

Aim 5: Research Leadership

Participate in Statewide Planning

NCIOM Task Force on Behavioral Health in Military...
Governor's Focus on Combat Veterans and Families

Mobilize UNC System Resources

establish UNC Planning Team:
recruit one representative from each of 16 UNC campuses
expand pilot research projects to other campuses



Operation Re-Entry NC

ECU and ORNC stand ready to assist you
in serving military personnel,
family members and veterans

Website:

www.ecu.edu/ornc