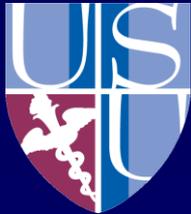


Center for Neuroscience and Regenerative Medicine

USU Discussion Group

April 27, 2010



A Catalyst For Brain Injury Research



CNRM

Director, Dr. Regina Armstrong (USU)
Co-Director, Dr. Walter Koroshetz (NIH)

Administrative
Executive Manager
Corey Hastings (USU)
Program Manager
Alex Cook (USU)

**Henry M. Jackson
Foundation**
(Nadine Shewell, Dir PM)

Diagnostics
Smirniotopoulos
Bluemke

Rehabilitation
Pasquina
Chan

Neuroprotection
McCabe
Hallenbeck

**Neuro-
regeneration**
Symes
Cameron

Neuroplasticity
Juliano
Grafman

Biomarkers
Cox
Dionne

Senior Program Manager
Sarah Fitzsimmons-Molina (HJF)

Senior Program Manager
Kirsten Youngren (HJF)

Senior Program Manager
Leslie Sawyers (HJF)

Program Manager
Eduardo Matto (USU)

Program Manager
Sarah Dhandu (USU)

Program Manager
Aras Eftekhari (USU)

Clinical Research Associate
Ine-Marie Bornman (HJF)

CNRM Goal:

“Improve Recovery from TBI in Military Service Members”

- **Optimize matching of TBI patients to available treatments** - Refine assessment tools to improve inclusion/exclusion criteria and more effectively match patients to treatment plans that are currently available.
- **Develop TBI treatment outcome measures** - Develop a set of assessment tools that can serve as surrogate indicators of clinical outcomes to facilitate evaluation of new and existing treatments.
- **Design novel therapeutic strategies** – Take advantage of pre-clinical models for mechanistic studies that can inform the design of novel treatments or more effective combinations of existing treatment plans.
- **Implement clinical applications for military patients across spectrum of TBI** - Identify promising interventional strategies and perform pre-clinical studies through clinical trials to bring improved treatment options for the range of injuries among military service members.

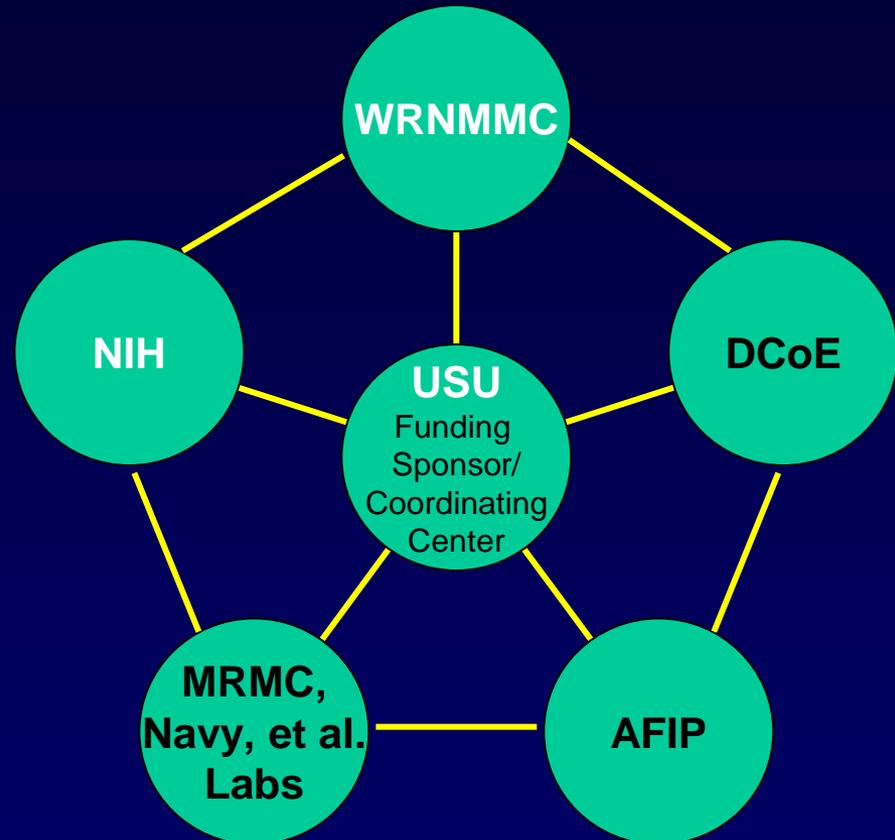
Center for Neuroscience and Regenerative Medicine

Focus of Research Programs

1. Diagnostics and Imaging
2. Biomarkers
3. Neuroprotection and Models
4. Neurogeneration
5. Neuroplasticity
6. Rehabilitation and Evaluation

Leadership Teams of USU/NIH investigators with administrative infrastructure developed by USU across the federal research labs in the National Capital Region

Secondary Network Connections to other universities, private entities, and public entities to collaborate using CRADAs, IPAs, and sabbaticals to transfer ideas and technologies



CNRM includes USU investigators from:

- Anatomy, Physiology and Genetics
- Pharmacology
- Neurology
- Medicine
- Surgery
- Radiology
- Biochemistry
- Obstetrics and Gynecology
- Medical and Clinical Psychology
- Psychiatry
- Pediatrics
- Pathology
- Military and Emergency Medicine
- Microbiology
- Preventive Medicine and Biometrics
- **Graduate School of Nursing**

NIH – current CNRM investigators from:



CC – Clinical Center



NINDS – National Institute for Neurological Disorders and Stroke



NINR – National Institute for Nursing Research



NIMH – National Institute for Mental Health



NICHD – National Institute for Child Health



NIDA - National Institute on Drug Abuse



NIAAA – National Institute on Alcohol Abuse and Alcoholism



NIBIB – National Institute of Biomedical Imaging and Bioengineering

CNRM is separate but complementary to Defense Centers of Excellence (DCoE) for Psychological Health and Traumatic Brain Injury



DVBIC – Defense and Veterans Brain Injury Center



CDP - Center for Deployment Psychology



CSTS - Center for the Study of Traumatic Stress



DHCC - Deployment Health Clinical Center



NICoE – National Intrepid Center of Excellence



NCTT - National Center for Telehealth and Technology

Academic and Site Partnerships

- TBI consortium agreement (CNRM/NIH/USU) following from NINDS resources at Washington Hospital Center and Suburban Hospital in collaboration with their partner institutions, Georgetown University, National Rehabilitation Center
- Subawards to collaborators on current projects
- Meetings to consider partnerships with local hospitals for patient recruitment
- Discussion of involvement of additional MTFs, Landstuhl, and in theatre sites
- DCoE – Ongoing collaboration with DVBIC at WR and with AFIP. Discussion of potential collaborations with Center for the Study of Traumatic Stress and National Intrepid Center of Excellence

Commercial Research Development Strategy - Coordination across CNRM

- CRADAs etc. to develop advance research
- Coordinated strategy across CNRM to optimize interactions of projects/protocols and use of cores
- Lead investigator presents advance plan at a CNRM Program Leader Meeting, with expertise invited as needed, and respecting any non-disclosure agreements.

Faculty Recruitment – USU/CNRM

- Neuropathology Physician Scientists
- Neurology Physician Scientist
- Translational Imaging Neuroscientist/Neuroradiologist
- Medicine/Surgery Physician Scientist
- Neural Stem/Progenitor Cell Research Neuroscientists
(molecular, cellular, electrophysiological expertise)

Announcements on USU CHR website under faculty vacancies.

Tenure track positions with full departmental affiliations.

CNRM association through TBI research collaborative interests.

CNRM offers space at Twinbrook site. On campus depends on Dept.

FY10 Funded 10 Pilot Projects

Basis for Prioritization:

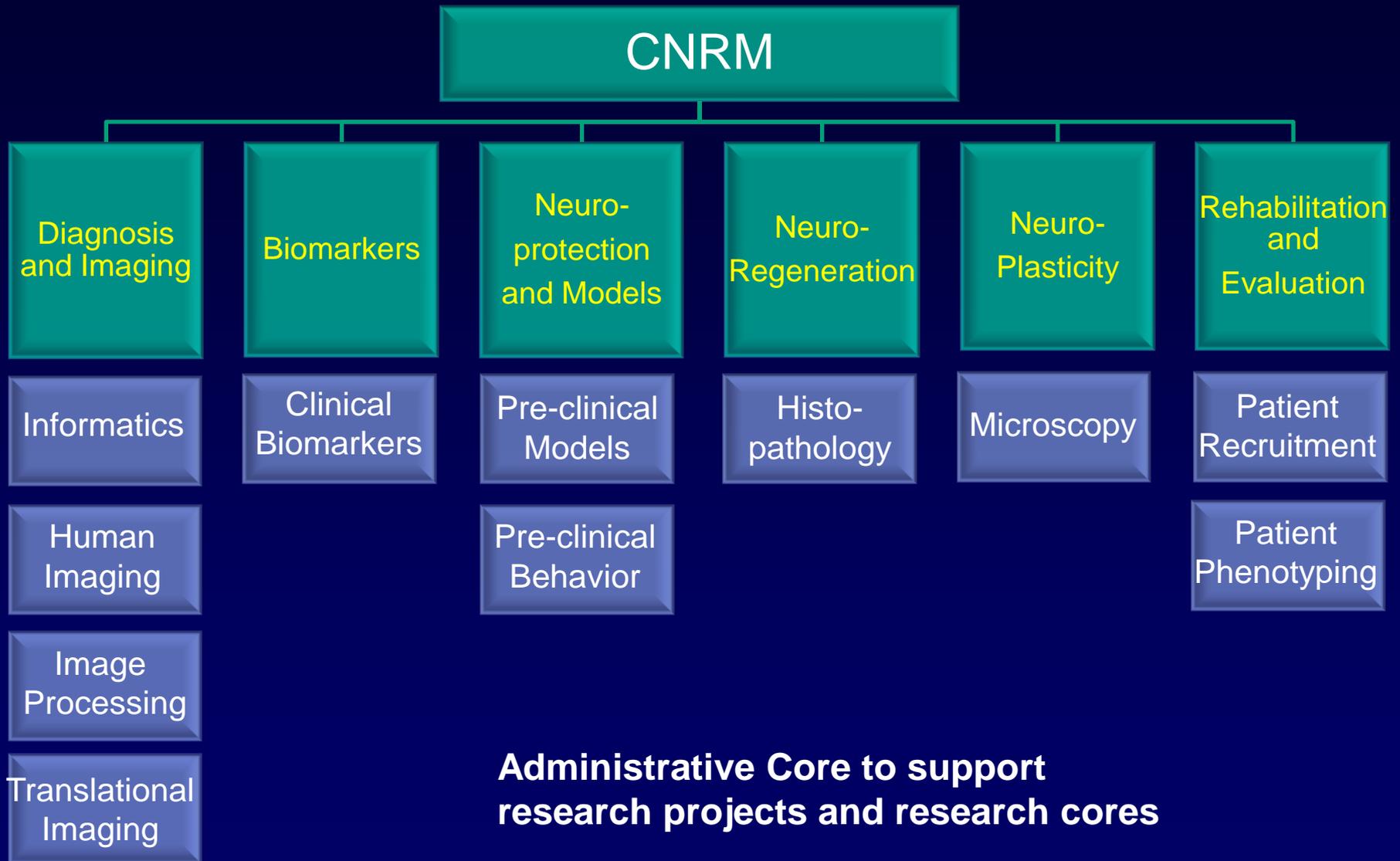
- Gaps addressed for TBI, esp relevance to:
 - military National Capital Area patients
 - neuroregenerative medicine
- Scientific merit. Potential innovation and impact in the field and across CNRM.
- Collaborative USU/DoD-NIH efforts.
- Why us? What can CNRM do that other programs or centers could not?

CNRM First Annual Retreat

April 19, 2010

- Over 200 investigators and CNRM personnel
- Introduction of leadership along with administrative and research core staff
- Updates of core resources and status
- Large group updates and research highlights
- Research group break out sessions for each project PI to present an update
- Across research groups session for future plans

Cores are functional now – except for magnet installations





CNRM Leased Space
12725 Twinbrook Parkway in Rockville, MD