VHA-ORD Research

- The VA research program is *intramural*
- 116 VAMCs have capacity for research; More than 90 are funded by VA at any time
- Research is related to the clinical practice at VAMCs
- Broad, extensive research portfolio that balances the needs of all Veterans
Gulf War Research – Requests for Applications (RFAs)

**Biomedical Laboratory Research & Development (BLR&D):**

- BX-13-011
  Award for Research on Gulf War Veterans’ Illnesses (GWVI)
- BX-13-012
  Pilot Projects for Research on Gulf War Veterans’ Illnesses (GWVI)

**Clinical Science Research & Development (CSR&D):**

- CX-13-011
  Award for Research on Gulf War Veterans’ Illnesses (GWVI)
- CX-13-012
  Pilot Projects for Research on Gulf War Veterans’ Illnesses (GWVI)
- CX-13-013
  Award for Research on Treatments for Gulf War Veterans’ Illnesses (GWVI) – (clinical trial)

• 5.1 Symptomatic and Specific Treatments
• 5.2 Databases and Continued Surveillance
• 5.3 Establish an Evidence-Based Case Definition of Chronic Multisymptom Illness in Gulf War Veterans
• 5.4 Genetic, Genomic, and Systems Biology
• 5.5 Biomarkers
• 5.6 Animal Models
• 5.7 Improve Coordination and Communication
• 5.8 Translate Research Findings into Practice

Case Definition of Chronic Multisymptom Illness in 1990-1991 Gulf War Veterans

• Case Definition of Chronic Multisymptom Illness in Gulf War Veterans
  – Contract with the Institute of Medicine
  – May 1, 2013 – April 30, 2014
  – Open Meeting – June 26, 2013 (1:00-5:45pm)
  – Expect the IOM report in early Spring
## VA-ORD Gulf War Research Funding

<table>
<thead>
<tr>
<th>Fiscal Year (FY)</th>
<th>VA Merit Review</th>
<th>UTSW Contract</th>
<th>FY Total</th>
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<td>$85.52 M</td>
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## VA-ORD Gulf War Research Requests for Applications (RFAs)

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<th>Year</th>
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Gulf War Research Projects

Active (FY2014):

• Bacterial Overgrowth Associated with Chronic Multi-Symptom Illness Complex
• Bacterial Host Defense Mechanisms in Polyaromatic Hydrocarbon Carcinogenesis
• Somatic hypersensitivity in Veterans with IBS
• Multiple Antigenic Peptides to Alter the Course of Autoimmune Disease
• Immunoregulation of Myelin Specific T Lymphocytes
• Central Mechanisms Modulating Visceral Sensitivity
• Neuroprotection and Myelin Repair Mechanisms in Multiple Sclerosis
• Sleep Neurobiology and Circuitry
• Prevention of Hippocampal Neurodegeneration Due to Age and Apnea
• Epigenetic Mechanisms Relevant to the Pathogenesis of ALS
• Nanoparticle Coupled Antioxidants for Respiratory Illness in Veterans

VETERANS HEALTH ADMINISTRATION

Gulf War Research Projects

Active (FY2014):

• Impact of exercise training on pain and brain function in Gulf War Veterans
• Understanding Pain of Gastrointestinal Origin in Women that Serve in OEF/OIF
• Memory and Mood Enhancing Therapies for Gulf War Illness
• MEG Synchronous Neural Interactions (SNI) in Gulf War Veterans
• rTMS for the Treatment of Chronic Pain in GW1 Veterans
• Vascular and Skeletal Muscle Function in Gulf War Veterans Illness
• Diagnostic Utility of mtDNA Content and Exercise Challenge in Veterans with GWI
• Transcranial, Light-Emitting Diode (LED) Therapy to Improve Cognition in GWVI
• Examination of Cognitive Fatigue in Gulf War Illness Using fMRI
• RCT of Duloxetine & Pregabalin for the treatment of Gulf War Illness in Veterans
• Longitudinal assessment of Gulf War veterans with suspected Sarin exposure

VETERANS HEALTH ADMINISTRATION
Gulf War Research Projects

- **Gulf War Research Topics Selected for Funding**
  - Identification of Plasma Biomarkers in Ill Gulf War Veterans
  - Steroid Treatment for Gulf War Veterans’ Illnesses
  - Therapies for Improving Brain Function in a Mouse Model of Gulf War Veterans’ Illnesses
  - Gulf War Exposures and Reproductive Risk
  - Cognitive Rehabilitation Therapy for Gulf War Veterans
  - Neuroimaging and Biomarkers in Gulf War Veterans
  - Complementary and Alternative Medicine for Gulf War Veterans
  - Neuroinflammation and Hippocampal Effects in Gulf War Veterans
  - Gender Differences in Patient Symptoms

- **Recently Completed Gulf War Research Projects**
  - Autonomic Functions of Gulf War Veterans with Unexplained Illnesses
  - Motor Neuron Function of Gulf War Veterans with Excessive Fatigue
  - Diarrhea-Predominant Irritable Bowel Syndrome in Persian Gulf Veterans
  - Inspiratory Flow Dynamics During Sleep in GWS and the Effect of CPAP
  - Behavior of Neural Stem Cells in a Rat Model of GWS
  - Multiple Sclerosis in Gulf War Veterans
  - A Randomized Controlled Trial of a Mindfulness-Based Intervention for Gulf War Syndrome
Gulf War Research Biorepositories

• CSP #585 Gulf War Era Cohort and Biorepository
  – Kick-Off meeting – August 29-30, 2013
  – Enrolling participants very soon

• Gulf War Veterans’ Illnesses Biorepository
  – Began operations - July, 2012

http://www.research.va.gov/programs/tissue_banking/default.cfm

Gulf War Activities

• Gulf War Veterans’ Illnesses Task Force
  – Draft report posted on-line for comments

• Coordination with DoD-CDMRP
  – Joint VA/DoD Gulf War Program Review, Sep 2013
  – Regular briefings/updates
  – Special RFAs
  – Annual Report to Congress

• Researchers Meeting (September 18, 2012)
  – Planning for 2014
Gulf War Research Portfolio Criteria

  - Studies of chronic multisymptom illnesses (CMI) affecting GW Veterans, including case definitions for CMI in GW Veterans and the general population.
  - Conditions and/or symptoms occurring with higher prevalence in GW Veterans.
  - Long-term health effects of potentially hazardous substances, alone and in combination, to which GW Veterans may have been exposed to during deployment.
  - Other topics from the 19 Topics forming the framework for the Annual Report to Congress on Federally Sponsored Research on GW Veterans' Illnesses.