



GULF WAR RESEARCH PORTFOLIO

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Gulf War Research Funding – DoD, HHS, VA

10-Year (FY 2001-2010) Funding Trends for GW Research in Millions of Dollars

Department	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	Total Costs FY '01-'10
DoD	\$ 31.6	\$ 18.8	\$ 16.4	\$ 11.1	\$ 10.1	\$ 10.1	\$ 3.4	\$ 11.7	\$ 10.4	\$ 3.1	\$ 126.70
HHS	\$ 1.0	\$ 0.8	\$ 1.0	\$ 0.5	\$ 0.5	\$ 0.4	\$ 0.4	\$ 0.4	\$ 0.0	\$ 0.0	\$ 5.00
VA	\$ 8.6	\$ 4.5	\$ 5.7	\$ 7.6	\$ 9.5	\$ 13.0	\$ 22.1	\$ 21.9	\$ 16.6	\$ 13.9	\$ 123.40
TOTAL	\$ 41.2	\$ 24.1	\$ 23.1	\$ 19.2	\$ 20.1	\$ 23.5	\$ 25.9	\$ 34.0	\$ 27.0	\$ 17.0	\$ 255.10

(DoD estimate for FY 2010 does not include CDMRP funds.)

Gulf War Research Funding – DoD, HHS, VA

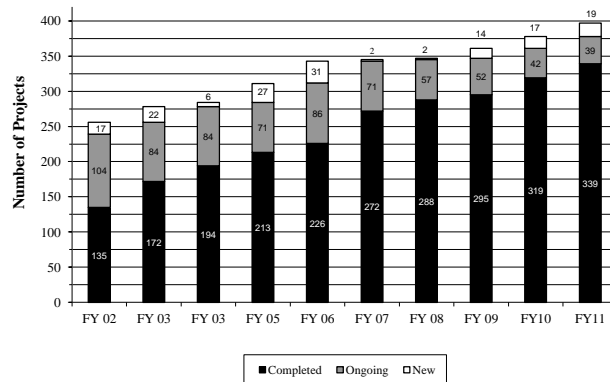
10-Year (FY 2002-2011) Funding Trends for GW Research in Millions of Dollars

Department	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	Total Costs FY '02-'11
DoD	\$ 18.8	\$ 16.4	\$ 11.1	\$ 10.1	\$ 10.1	\$ 3.4	\$ 11.7	\$ 10.4	\$ 10.2	\$ 3.2	\$ 105.40
HHS	\$ 0.8	\$ 1.0	\$ 0.5	\$ 0.5	\$ 0.4	\$ 0.4	\$ 0.4	\$ 0.0	\$ 0.0	\$ 0.0	\$ 4.00
VA	\$ 4.5	\$ 5.7	\$ 7.6	\$ 9.5	\$ 13.0	\$ 22.1	\$ 21.9	\$ 16.6	\$ 13.9	\$ 6.0	\$ 120.80
TOTAL	\$ 24.1	\$ 23.1	\$ 19.2	\$ 20.1	\$ 23.5	\$ 25.9	\$ 34.0	\$ 27.0	\$ 24.1	\$ 9.2	\$ 230.20

(DoD estimate for FY 2011 does not include CDMRP funds.)

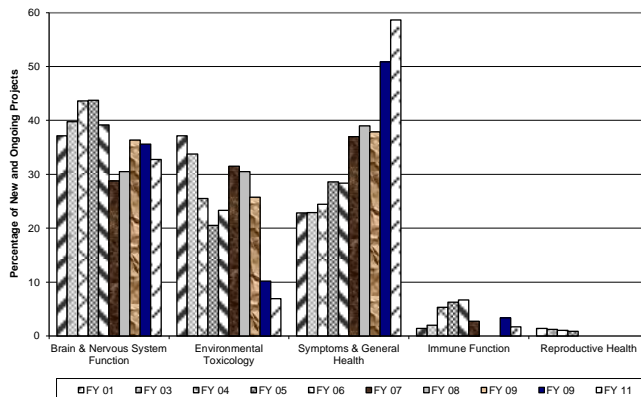
Funded Gulf War Research Projects – DoD, HHS, VA

Cumulative Number of Funded Projects (FY2002 – FY2011)



Topic Areas Gulf War Research Projects

Annual Distribution of Topic Areas for New and Ongoing Projects



Recent Gulf War Research Projects

Completed in FY2010:

- Effects of Gulf War Illness on Brain Structure, Function and Metabolism: MRI/MRS at 4 Tesla
- Immunologic Mechanisms and Biomarkers in Gulf War Illness
- Diarrhea-Predominant Irritable Bowel Syndrome in Persian Gulf Veterans
- Behavior of Neural Stem Cells in a Rat Model of GWS
- Multiple Sclerosis in Gulf War Veterans

Completed in FY2011:

- Tissue Factor and Gulf War-Associated Chronic Coagulopathies
- Autonomic Functions of Gulf War Veterans with Unexplained Illnesses
- Motor Neuron Function of Gulf War Veterans with Excessive Fatigue
- Genetic Epidemiology of ALS Veterans
- Testing the Feasibility of MC CBT for Veterans with IBS
- A Pilot study of CPAP Adherence Promotion by Peer Buddies with Sleep Apnea
- Transcription factors regulating sensory gene expression and pain pathways

Active Gulf War Research Projects

Active:

- Bacterial Overgrowth Associated with Chronic Multi-Symptom Illness Complex
- Differential Gene Expression in Pathologies Associated with Neuronal Hyperexcitability: Links to Gulf War Illness
- Imaging Pain Modulation in Gulf War Veterans with Chronic Muscle Pain
- Bacterial Host Defense Mechanisms in Polyaromatic Hydrocarbon Carcinogenesis
- Somatic hypersensitivity in Veterans with IBS
- Lipoic Acid Therapy for Experimental Autoimmune Encephalomyelitis
- Multiple Antigenic Peptides to Alter the Course of Autoimmune Disease
- Immunoregulation of Myelin Specific T Lymphocytes
- Central Mechanisms Modulating Visceral Sensitivity
- Evaluation of MEG Synchronous Neural Interaction Test in PTSD
- Neuroprotection and Myelin Repair Mechanisms in Multiple Sclerosis

Active Gulf War Research Projects

Active:

- Sleep Neurobiology and Circuitry
- Prevention of Hippocampal Neurodegeneration Due to Age and Apnea
- Epigenetic Mechanisms Relevant to the Pathogenesis of ALS
- A randomized controlled trial of a mindfulness based intervention for Gulf War Syndrome
- Impact of exercise training on pain and brain function in Gulf War Veterans
- Nanoparticle Coupled Antioxidants for Respiratory Illness in Veterans
- Understanding Pain of Gastrointestinal Origin in Women that Serve in OEF/OIF
- Randomized Trial of a Formal Group Program for Fatigue in Multiple Sclerosis
- 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

Gulf War Research – Requests for Applications (RFAs)

Biomedical Laboratory Research & Development (BLR&D):

BX-12-011

Award for Research on Gulf War Veterans' Illnesses (GWVI)

BX-12-012

Pilot Projects for Research on Gulf War Veterans' Illnesses (GWVI)

Clinical Science Research & Development (CSR&D):

CX-12-011

Award for Research on Gulf War Veterans' Illnesses (GWVI)

CX-12-012

Pilot Projects for Research on Gulf War Veterans' Illnesses (GWVI)

CX-12-013

Award for Research on Treatments for Gulf War Veterans' Illnesses (GWVI) –
(clinical trial)

Gulf War Research – Other Activities

- **Cooperative Studies Program (CSP)**
- **Institute of Medicine (IOM) – Treatments for Gulf War Veterans' Illnesses**
- **Gulf War Veterans' Illnesses Task Force (GWVI-TF)**
- **Annual Report to Congress**
- **Research Meeting (Fall, 2012)**
- **Gulf War Research Strategic Plan**