Annual Report

Research Advisory Committee on Gulf War Veterans' Illnesses December 1, 2009

1. Origin and Membership

The Research Advisory Committee on Gulf War Veterans' Illnesses was first appointed by former Secretary of Veterans Affairs Anthony J. Principi on January 23, 2002, pursuant to Public Law 105-368. Further appointments were made by former Secretary of Veterans Affairs R. James Nicholson in 2005-2007, and by former Secretary of Veterans Affairs James Peake in 2008. Committee members who served during 2009 are listed in Appendix A.

2. Committee Activities

The Committee held three meetings during 2009: February 23-24 in Dallas, TX, June 29-30 in Boston, MA, and November 2-3 in Washington, D.C. All meetings were open to the public. The February meeting featured presentations by researchers involved in the VA-funded Gulf War illness (GWI) research program at the University of Texas Southwestern Medical Center, and included preliminary results of neuroimaging studies in a small subset of veterans and from a large telephone survey of veterans. The June meeting focused on treatment avenues for Gulf War illness, ranging from the lack of existing treatment options in academic and private medical practices, to presentations by VA and outside researchers on mechanisms that could provide promising targets for treatments (including blood hypercoagulation and neuroinflammation), to presentations regarding novel therapies being used in other neurological and multisymptom illnesses (including transcranial magnetic stimulation and cold laser acupuncture). The November meeting included several presentations on the chronic health effects of organophosphate pesticide exposures, which described new mechanisms by which organophosphates can affect the body beyond the classic means of inhibiting nerve transmission through the neurotransmitter acetylcholine. In these new studies, organophosphates have been shown to permanently bind to proteins found in the microtubules of neurons thus potentially causing cognitive slowing and neurological dysfunction. Other presentations addressed

treatments, including encouraging results of a VA pilot study of the use of continuous positive airway pressure (CPAP) to improve sleep and other symptoms of Gulf War illness. The second day featured a presentation by Chief of Staff John Gingrich on the VA's task force to review GWI practices, and a discussion with Chief Research and Development Officer Dr. Joel Kupersmith, Deputy CRADO Dr. Timothy O'Leary, and other VA researchers regarding the structure and content of the new Gulf War illness research program under development at VA.

Topics discussed in Committee meetings were addressed by multiple investigators in most content areas. Representatives from VA, DoD, and other federal agencies were invited to attend the meetings and participate in discussions with presenting scientists along with Committee members. This structure has allowed Committee meetings to serve not only as forums for presenting the latest GWI research, but also as a vehicle for advancing that research and disseminating current information to government agencies and government-funded scientists. Time was also reserved to allow members of the public to provide comments on the Committee's work and on matters related to GWI.

Committee members have been active participants in all aspects of the Committee's work. Meetings have been well-attended. In addition, members have devoted substantial time to Committee business outside of meetings, particularly reviewing proposed Research Funding Announcements (RFA's) and offering comments.

The Committee has kept VA leadership and the Office of Research and Development (ORD) informed of its work and its findings on an ongoing basis. This task has been accomplished through attendance and participation of ORD officials at Committee meetings, and ongoing communications between the Committee chairman, scientific director and scientific coordinator, and the Secretary's Office and ORD.

3. Support Activities

Responsibility for providing scientific and administrative support to the Committee was provided by the Boston University School of Public Health, Department of Environmental Health, through a contract with the Bedford, Massachusetts VAMC. Committee member Dr. Roberta White currently serves as Scientific Director, and Dr. Kimberly Sullivan serves as Scientific Coordinator. In addition to ongoing activities relating to monitoring research relating to GWI, preparation of Committee reports, development of Committee meetings, and preparation of meeting minutes, the staff has primary responsibility for Committee administrative activities and management of the Committee's website.

4. <u>Designated Federal Officer</u>

The Designated Federal Officer for the Committee is Dr. William Goldberg, PhD, who also serves as manager for the GWI portfolio within the VA Office of Research and Development. Dr. Goldberg's joint role has facilitated regular communications between the Committee and ORD.

5. Accomplishments

Through the first half of the year, the Committee continued to provide review and feedback regarding the VA-funded GWI research program at the University of Texas Southwestern Medical Center. Following VA's decision not to renew that contract, the Committee has provided advice on VA's plans to establish a new GWI research program. This advice included detailed review and recommendations related to three new Research Funding Announcements and general recommendations related to the full program, adopted at the Committee's November 2-3 meeting. In addition, the Committee participated informally in a discussion with VA research leaders at its November meeting regarding the possible design of the new research program.

At the request of the Secretary, three Committee members participated in a meeting of a newly-formed committee of the Institute of Medicine on April 14, to present the findings of the Committee's 2008 Report.

At the request of the House Veterans Affairs Committee, Subcommittee on Oversight and Investigations, several members of the Committee testified at hearings on Gulf War illness research held by the Subcommittee on May 19 and July 30.

Four Committee members participated in an extended meeting with senior VA managers chaired by Chief of Staff John Gingrich on July 30, including a presentation of the major findings of the Committee's 2008 Report.

The Committee has structured its meetings in accordance with the priorities recommended in its 2008 Report, giving highest priority to research developments with potential application to the identification of treatments to improve the health of ill Gulf War veterans.

Appendix A

Research Advisory Committee on Gulf War Veterans' Illnesses 2008 Committee Members

Chairman

James H. Binns, former Chairman, Parallel Design, Inc.; former Principal Deputy Assistant Secretary of Defense; Phoenix, Arizona.

Committee Members

Carrolee Barlow, MD, PhD, Vice President Biology Research, Brain Cells, Inc., San Diego, California.

Floyd E. Bloom, MD, Professor Emeritus, Molecular and Integrative Neuroscience Department, The Scripps Research Institute, La Jolla, California.

Dedra S. Buchwald, MD, Professor of Medicine, University of Washington, Seattle, Washington.

Daniel J. Clauw, MD, Assistant Dean for Clinical and Translation Research and Professor of Medicine, University of Michigan, Ann Arbor, Michigan.

Beatrice A. Golomb, MD, PhD, Associate Professor of Medicine and of Family Preventative Medicine, University of California at San Diego, La Jolla, California.

Joel C. Graves, hospice chaplain and Captain, U.S. Army (Retired); 1990-1991 Gulf War veteran, Lacey, Washington.

Anthony Hardie, Executive Assistant, Wisconsin Department of Veterans Affairs; 1990-1991 Gulf War veteran, Madison, Wisconsin.

Marguerite L. Knox, MN, NP, Senior Sales Representative, Teva Neuroscience; 1990-1991 Gulf War veteran, Hopkins, South Carolina.

William J. Meggs, MD, PhD, Professor and Chief, Division of Toxicology, The Brody School of Medicine at East Carolina University, Greenville, North Carolina.

Mary D. Nettleman, MD, MS, Chair, Department of Medicine, Michigan State University, East Lansing, Michigan.

James P. O'Callaghan, PhD, Head of Molecular Neurotoxicology, Toxicology and Molecular Biology Branch, Health Effects Laboratory Division, Centers for Disease Control and Prevention-NIOSH, Morgantown, West Virginia.

Steve Smithson, Deputy Director for Claims Services, The American Legion; 1990-1991 Gulf War veteran, Washington, D.C.

Lea Steele, PhD, Associate Professor, College of Human Ecology, Kansas State University, Topeka, Kansas.

Adam Such, Lieutenant Colonel, United States Army, Executive Officer, 5th Special Forces Group, Fort Campbell, Kentucky.

Roberta White, PhD, Chair and Professor, Department of Environmental Health, Boston University School of Public Health; Scientific Director, Research Advisory Committee on Gulf War Veterans' Illnesses, Boston, Massachusetts.

Consultant to the Committee

Jack Melling, PhD, Consultant to the United States Government Accountability Office, Salisbury, United Kingdom.