X. Myeloproliferative Disorders Research Program
Mission: To support biomedical research with direct relevance to military health in the specific chronic myeloproliferative disorders of polycythemia vera, idiopathic myelofibrosis, and essential thrombocytosis.

Congressional Appropriation for PeerReviewed Research:
$4.25M in FY04

Funding Summary:
~6 awards anticipated from the FY04 appropriation

The Disease
Myeloproliferative disorders are relatively rare forms of cancer that cause an overproduction of blood cells or alteration of bone marrow. There are six types of myeloproliferative disorders:

- **Polycythemia vera**: an overproduction of blood cells (particularly red blood cells) by the bone marrow
- **Essential thrombocytosis**: an overproduction of the platelets that promote blood clotting
- **Primary or idiopathic myelofibrosis**: an overproduction of collagen or fibrous tissue in the bone marrow that impairs the ability of bone marrow to produce blood cells
- **Chronic myelogenous leukemia**: an overgrowth of white blood cells called granulocytes
- **Chronic neutrophilic leukemia**: an overproduction of the principal phagocyte cells that combat infection
- **Chronic eosinophilic leukemia**: an overproduction of white blood cells that assist in allergic reactions and help fight various parasitic infections

Although these disorders of the bone marrow vary in severity by disorder and patient status, study of these malignant diseases offers promise toward understanding the pathogenesis, diagnosis, and treatment of human blood cell disorders.

Program Background
The DOD Myeloproliferative Disorders Research Program (MPDRP) was established in fiscal year 2004 (FY04) by Joint Appropriations Conference Committee Report No. 108-283, which provided $4.25 million (M) for myeloproliferative disorders research. In accordance with directives received from Congress, the MPDRP will support research focused on the specific chronic myeloproliferative disorders of polycythemia vera, idiopathic myelofibrosis, and essential thrombocytosis with direct relevance to military health.

The Business Strategy for the Fiscal Year 2004 Program
The goal of the FY04 MPDRP is to fund scientifically meritorious research focused on the specific chronic myeloproliferative disorders of polycythemia vera, idiopathic myelofibrosis, and essential thrombocytosis. Proposals were requested in response to a supplement to the USAMRMC 02-1 Broad Agency Announcement posted on the U.S. Army Medical Research Acquisition Activity (USAMRAA) website and FedBizOps on February 23, 2004. Twelve proposals were received, and scientific merit review was conducted in August 2004. Programmatic review is scheduled for October 2004. To evaluate their military relevance, the proposals will be programmatically
reviewed by members of the Joint Programmatic Review Panel of the Peer Reviewed Medical Research Program supplemented with ad hoc subject matter experts from the U.S. Army, U.S. Navy, and U.S. Air Force. (See Chapter VII for additional details about the Joint Programmatic Review Panel.) Approximately 6 awards are anticipated.

**Bottom Line**

The MPDRP was established in FY04 with a $4.25M congressional appropriation for research on three myeloproliferative disorders. Projects funded by this program are anticipated to offer promise toward understanding the pathogenesis, diagnosis, and treatment of human blood cell disorders.

**Fiscal Year 2004 Programmatic Reviewers**

**U.S. Navy Representatives**

**Rear Admiral Dennis D. Woofter, D.D.S.** (MPDRP Chair), Chief of Staff, Program Executive Officer, Dental Corps, Bureau of Medicine and Surgery

**Captain Doug Forcino, Ph.D.**, Program Director, Office of Naval Research

**Captain Michael McCarthy, M.D., M.P.H.**, Director, Medical Research and Development, Bureau of Medicine and Surgery

**Captain David Neri, Ph.D.**, Deputy Director, Research and Development, Bureau of Medicine and Surgery

**U.S. Air Force Representative**

**Major Donnamaria Robinson, R.Ph., Pharm.D.**, Chief, Biomedical Research and Compliance, Office of the Surgeon General

**U.S. Army Representative**

**Colonel Bruno Petruccelli, M.D., M.P.H.**, Director, Epidemiology and Disease Surveillance, U.S. Army Center for Health Promotion and Preventive Medicine

**Department of Veterans Affairs Representative**

**Brenda Cucherini, Ph.D.**, Program Specialist, Office of Research and Development

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**Signs and Symptoms**

Myeloproliferative disorders are fairly rare blood disorders characterized by the overproduction of a particular blood cell type. There are six types of myeloproliferative disorders, and signs and symptoms vary by disease type and from person to person. Often myeloproliferative disorders progress slowly over time, and symptoms can be controlled.

**Office of the Assistant Secretary of Defense (Health Affairs) Representative**

**Salvatore Cirone, D.V.M., M.P.V.M.**, Program Director, Health Science Policy, Office of the Assistant Secretary of Defense for Health Affairs, Office of the Secretary of Defense, Washington DC

**Ad Hoc Reviewers**

**Barry Meisenberg, M.D.** (University of Maryland School of Medicine), Head, Hematology/Oncology; Professor of Medicine

**Colonel Thomas Reid, M.D.** (U.S. Army), Chief, Hematology/Oncology, Walter Reed Army Medical Center

**Lieutenant Colonel David Ririe, M.D.** (U.S. Air Force), Medical Director, Fischer Bone Marrow Transplant Unit, Wilford Hall Medical Center