PEER REVIEWED MEDICAL RESEARCH PROGRAM



MISSION: Encourage, identify, select and manage medical research projects of clear scientific merit that lead to impactful advances in health care of Service Members, Veterans and their Families

Congressional Appropriations FY99-FY24:

\$4.191B total



"I feel very honored to be part of evaluating and reviewing the cutting edge of research. It is a very good feeling to see the

broad range of research being done and how it one day can make my life better."

Ron Lissak, Foundation for Peripheral Neuropathy, FY21 Consumer Peer Reviewer

SCOPE OF THE PROBLEM

- Since 1999, Congress identified >240 topic areas, including underserved healthcare needs
- Understanding of medical needs and treatment availability varies widely across an array of diseases and conditions
- Solutions needed for physical, mental and environmental threats

RELEVANCE TO MILITARY HEALTH

- >50% of medical encounters by Service Members in 2022 related to PRMRP topic areas¹
- All topic areas address medical needs of Service Members and their Families, including inherited illnesses, servicerelated injuries and environmentally triggered diseases and conditions

PROGRAM PRIORITIES

All applications for PRMRP funding must specifically address one of the PRMRP topic areas as directed by the U.S. Congress. The PRMRP groups related topics into portfolios, each with a set of portfolio-specific strategic goals, to address critical gaps in diverse research areas.



Autoimmune Disorders and Immunology

- · Celiac Disease
- Computational Biology for Precision Health
- · Food Allergies
- Guillain-Barré Syndrome
- Inflammatory Bowel Disease
- Proteomics
- Scleroderma



Cardiovascular Health

- Computational Biology for Precision Health
- Congenital Heart Disease
- Proteomics
- Vascular
 Malformations



Infectious Diseases

- Computational Biology for Precision Health
- Congenital Cytomegalovirus
- Far-UVC Germicidal Light
- Hepatitis B
- Malaria
- Proteomics



Internal Medicine

- Accelerated Aging Processes Associated with Military Service
- Computational Biology for Precision Health
- Focal Segmental Glomerulosclerosis
- Interstitial Cystitis
- Lymphedema
- Nephrotic Syndrome
- Pancreatitis
- Polycystic Kidney Disease
- Proteomics



Neuroscience

- Computational Biology for Precision Health
- · Eating Disorders
- Maternal Mental Health
- Myalgic Encephalomyelitis/Chronic Fatigue Syndrome
- · Neuroactive Steroids
- Peripheral Neuropathy
- · Proteomics
- Suicide Prevention



Orthopaedic Medicine

- Accelerated Aging Processes Associated with Military Service
- Computational Biology for Precision Health
- Musculoskeletal Disorders Related to Acute and Chronic Bone Conditions and Injuries
- Proteomics



Rare Diseases and Conditions

- Computational Biology for Precision Health
- Dvstonia
- Ehlers-Danlos Syndrome
- Epidermolysis Bullosa
- Fibrous Dysplasia/ McCune-Albright Syndrome
- Fragile X
- Frontotemporal Degeneration
- · Hereditary Ataxia
- Hydrocephalus
- Mitochondrial Disease
- Myotonic Dystrophy
- Proteomics
- Rett Syndrome
- Sickle-Cell Disease
- Von Hippel-Lindau Syndrome



Respiratory Health

- Computational Biology for Precision Health
- Proteomics
- Pulmonary Fibrosis
- Respiratory Health







¹ Armed Forces Health Surveillance Branch. MSMR, 30, no.6, 2023:7-10.

PROGRAM IMPACT AND OUTCOMES

To achive impacts across many topic areas with diverse needs, the PRMRP invests in the full spectrum of product development.







Basic Research

Translational Research

Clinical Trials/ Clinical Research

Discovery Award

Novel/breakthrough exploratory research, high-risk/high-reward

Investigator-Initiated Research Award

 Preclinical expansion, replication and/or comparative studies to validate preliminary or published data

Impact Award

• Mature research studies with potential for near-term clinical impact for patients

Technology/Therapeutic Development Award

 Final steps of clinical translation (IND-/IDE-enabling studies or studies required to transition a product of prototype utility)

Clinical Trial Award

• Early-phase or large-scale interventional clinical trials to measure safety, effectiveness and/or efficacy outcomes

Lifestyle and Behavioral Health Interventions Research Award

 Clinical trials/research focused on non-pharmacological therapies, non-invasive devices, patient outcomes or quality of life

RESEARCH BREAKTHROUGHS — MAKING A DIFFERENCE



I-STAT® Test for Traumatic Brain Injury: FDA-approved blood-based biomarkers to rapidly predict brain injury



Cobas® Liat® "Laboratory in a Tube" PCR System: A point-of-care device for fast and **reliable detection of pathogens,** including SARS-CoV-2, Influenza A/B, RSV, Group A Strep and *C. difficile*



Mirasol® Pathogen Reduction Technology System: Reduces pathogen load and inactivates residual white blood cells in donated fresh whole blood to reduce transfusion-transmitted infections



SPRINT® PNS System: A non-opioid therapy to **treat lower back pain** from overuse injuries



OsteoAdapt SP Advanced Bone Graft: A resorbable bone void-filling implant for **improved bone healing** in traumatic extremity injury and traumatic spine injury



Naxitamab (Danyelza®; HU3F8): An FDAapproved monoclonal antibody targeting the ganglioside GD2 for the **treatment of high-risk neuroblastoma** in the bone or bone marrow



Vazalore™: An FDA-approved aspirin-lipid formulation for pain relief while minimizing damage to the stomach



The American Trauma Society's Trauma Survivors Network NextSteps: An interactive self-management program for patients with traumatic injuries



Sotera Digital Health ViSi Mobile® System and ZOLL Propaq® MD and X Series:
Noninvasive sensor systems for patient monitoring and defibrillators



MeMed VB® and MeMed Key®: A rapid, FDA-approved diagnostic technology to distinguish between bacterial and viral infections in blood samples