

The Congressionally Directed Medical Research Programs

Peer Reviewed Medical Research Program (PRMRP)

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Hydrocephalus Research Workshop

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Transforming Healthcare through Innovative and Impactful Research



CDMRP
DEPARTMENT OF DEFENSE
**CONGRESSIONALLY DIRECTED
MEDICAL RESEARCH PROGRAMS**

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Vision

Transforming healthcare through innovative and impactful research

Mission

Responsibly manage collaborative research that discovers, develops, and delivers health care solutions for Service Members, their Families, Veterans and the American public



STEWARDSHIP



- **Manages targeted research funds** added by Congress to the DOD budget
- **Obligates funds up-front**; limited out-year budget commitments
- **Maximizes funding available for research** through low management costs and efficient processes
- **Maintains transparency and accountability**

COLLABORATION



- **Integrates consumers as full participants** throughout program processes and as the “True North” of CDMRP
- **Collaborates with other funding organizations** – complimentary, not duplicative

STRATEGY



- **Annually adapts each program's vision and investment strategy**, allowing rapid response to changing needs, opportunities, and congressional intent
- **Publicly announces and competes funding opportunities**
- Ensures scientific excellence and programmatic relevance through the National Academy of Medicine-recommended **two-tiered review process**

IMPACT



- Targets research that **fills gaps and addresses high-priority needs**
- **Funds impactful, innovative research for specific programs added by Congress to the Defense Appropriations Bill**
- **Focused on improving health, well-being, and health care quality for those affected**

CDMRP FY24 Appropriations



Research Program	FY24 \$M	Research Program	FY24 \$M
Alcohol and Substance Use Disorders	\$4.0	Neurofibromatosis	\$25.0
Amiotrophic Lateral Sclerosis	\$40.0	Ovarian Cancer	\$45.0
Arthritis <i>(New for FY24)</i>	\$10.0	Pancreatic Cancer	\$15.0
Autism	\$15.0	Parkinson's	\$16.0
Bone Marrow Failure	\$7.5	Peer Reviewed Alzheimer's	\$15.0
Breast Cancer	\$150.0	Peer Reviewed Cancer (18 Topics)	\$130.0
Combat Readiness Medical	\$5.0	Peer Reviewed Medical (42 Topics)	\$370.0
Duchenne Muscular Dystrophy	\$10.0	Peer Reviewed Orthopaedic	\$30.0
Epilepsy	\$12.0	Prostate Cancer	\$110.0
Hearing Restoration	\$5.0	Rare Cancers	\$17.5
Glioblastoma <i>(New for FY24)</i>	\$10.0	Reconstructive Transplant	\$12.0
Joint Warfighter Medical	\$20.0	Spinal Cord Injury	\$40.0
Kidney Cancer	\$50.0	Tick-Borne Disease	\$7.0
Lung Cancer	\$25.0	Toxic Exposures	\$30.0
Lupus	\$10.0	Traumatic Brain Injury and Psychological Health	\$175.0
Melanoma	\$40.0	Tuberous Sclerosis Complex	\$8.0
Military Burn	\$10.0	Vision	\$20.0
Multiple Sclerosis	\$20.0		
		TOTAL = \$1.51B	

- Every program aligns with CDMRP's overarching vision of transforming healthcare for Service Members (SMs), Veterans and the American public

Select examples of incidence in the military:

- Post-traumatic epilepsy affects >2,000 Iraq/Afghanistan War Veterans, with 5x higher mortality rate
- Female active duty SMs have a higher incidence rate of breast cancer
- SMs are at a 50% greater risk for ALS
- Substance abuse responsible for ~30% of Army's suicide deaths
- Deployment associated with 1.8-fold increased risk of Parkinson's
- Risk of dementia is 2-4x higher in SMs; increases by 70% following a TBI



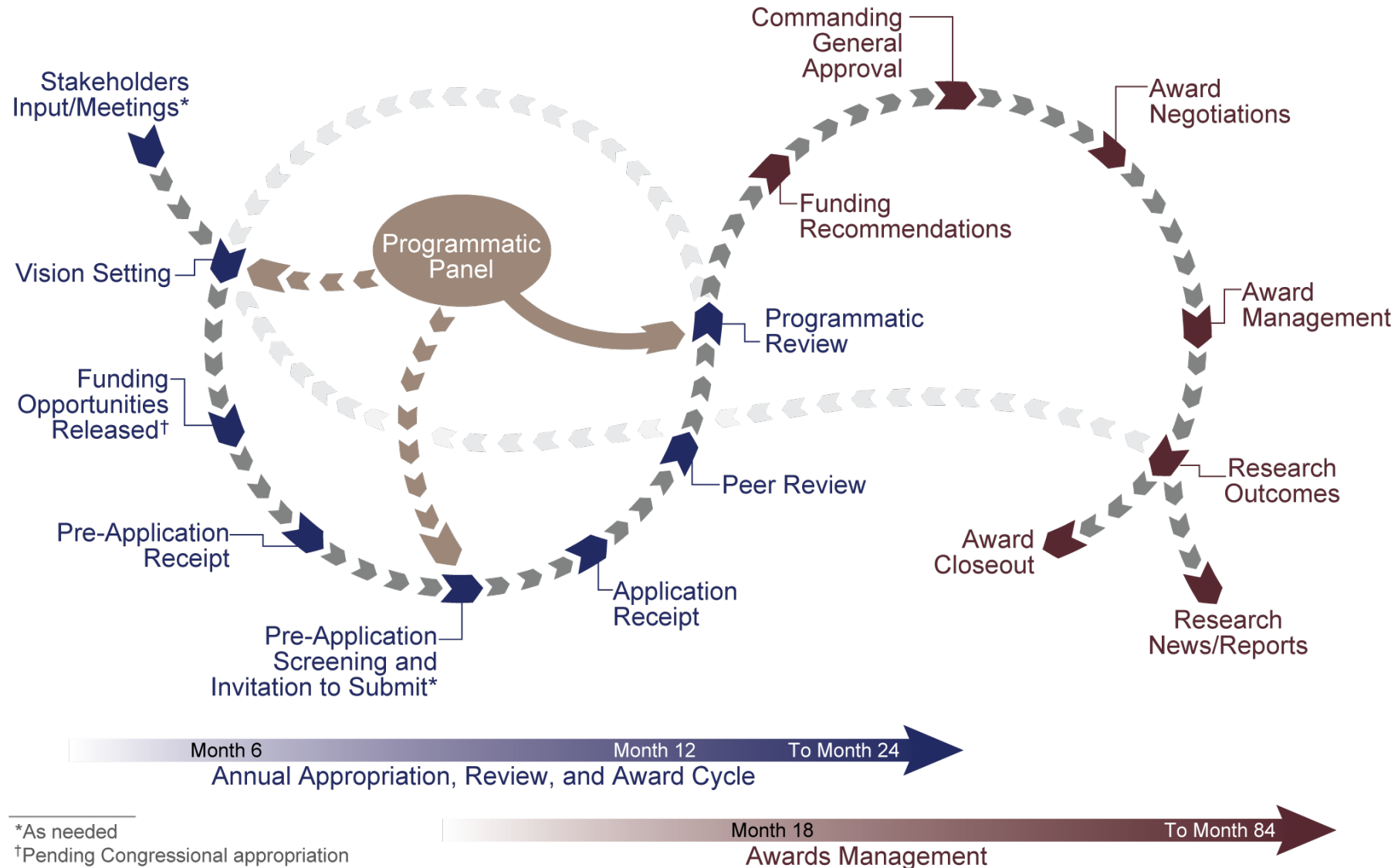
- Commitment to the health and wellbeing of DOD families also directly contributes to the readiness of Service Members by allowing them to focus on their military mission
 - Over 15,000 military dependents have a diagnosis of autism spectrum disorder
- CDMRP-funded research generates products that provide better preventions, novel diagnostics and prognostics, improved treatments and therapies, and more effective rehabilitation and restorative strategies – **to improve lives**

CDMRP Program Cycle and Review Process

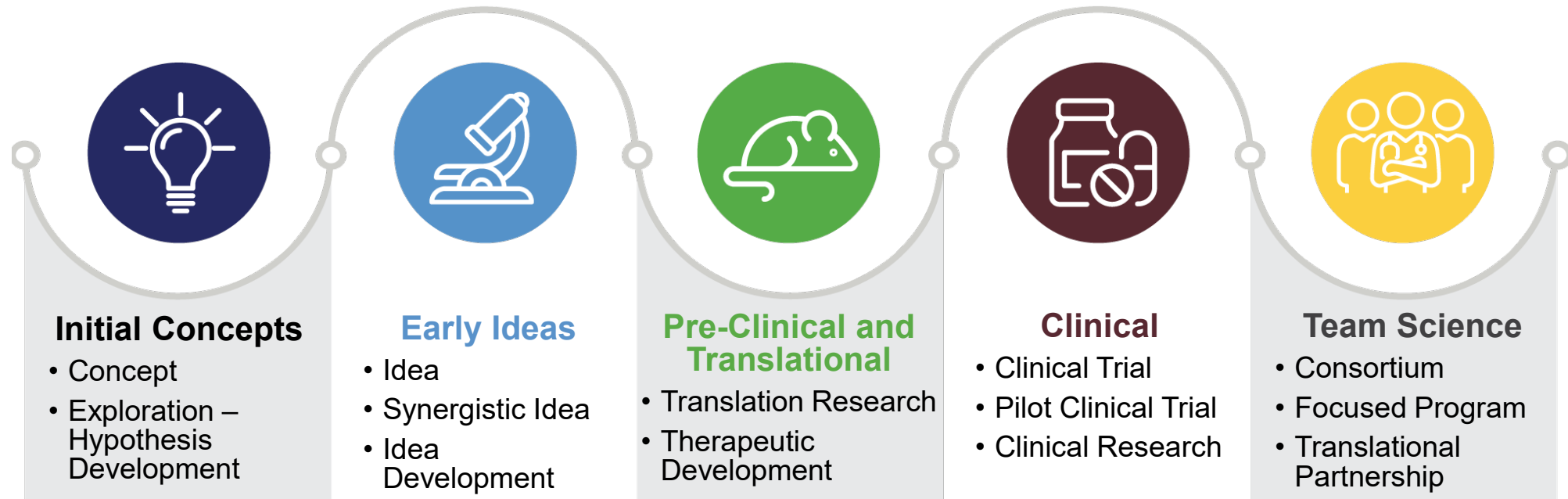
A decorative banner spans the width of the slide, positioned below the title. It has a dark blue background. On the left side, there is a faint, glowing molecular structure or network of nodes and lines. On the right side, there is a silhouette of a family consisting of two adults and a child, standing on a dark surface. The banner is partially overlaid by a large, light blue arrow pointing to the right, which is positioned behind the text.

Transforming Healthcare through Innovative and Impactful Research

Program Cycle



- Funding Opportunities are Program Announcements (PAs) or program-specific broad agency announcements (BAAs)
 - Grants/Cooperative Agreements (few contracts/other transactions)
- Numerous types of award mechanisms
 - Tailored to the goals of each program
 - Programs, topics, and focus areas may vary from year to year
 - Fund the full continuum of research



Goal of the Two-Tier Review Process

To develop funding recommendations that balance *the most meritorious science* across many disciplines and offer the highest promise to *fulfill the programmatic goals* set forth in the funding opportunity

Peer Review

- Criterion-based evaluation of full proposal
- Determination of “absolute” scientific merit
- **Outcome: Summary Statements**
 - No standing panels; reviewers are recruited based on expertise needed
 - No contact between applicants, reviewers, and program staff

Partnership



Programmatic Review

- Comparison among proposals of high scientific merit
- Determination of adherence to intent, program relevance, and potential for impact
- **Outcome: Funding Recommendations**
 - No “pay line” (portfolio balance)
 - Funds obligated up-front; limited out-year budget commitments (but milestones imposed)
 - No continuation funding



Video and additional information available at: <https://cdmrp.health.mil/about/2tierRevProcess>

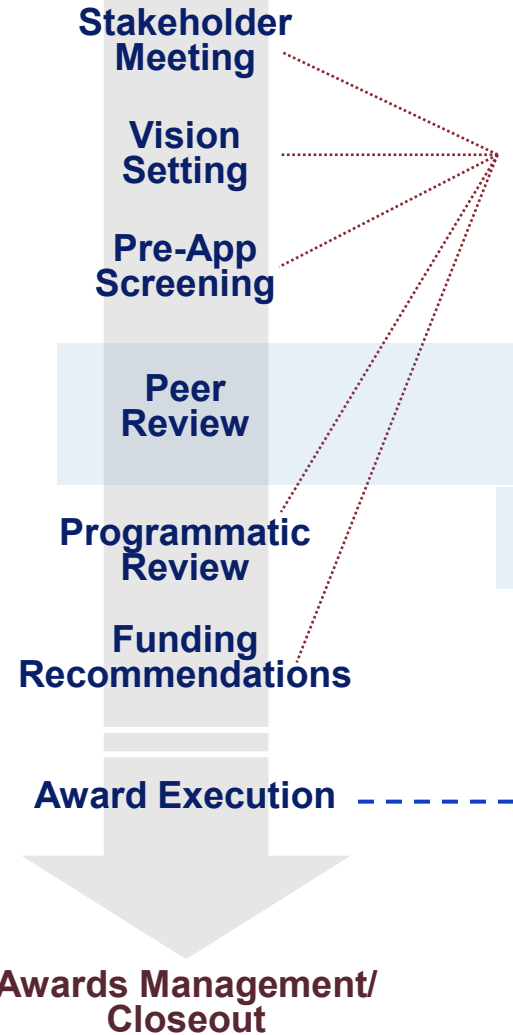
Consumers are the “True North” and Foundation of the CDMRP

CDMRP includes consumers – patients, survivors, family members, and/or caregivers – in every aspect of the program lifecycle.

Consumers serve as full voting members on peer review and programmatic panels. Through their lived experiences with the target disease, disorder, or injury, consumers represent their respective communities and add valuable perspectives and a sense of urgency to the program mission, investment strategy, and research focus.



PROGRAM LIFECYCLE



FY22 Consumer Involvement

80 consumers* were assigned to Programmatic Panels as members and ad hoc reviewers representing **65** consumer advocacy organizations, active-duty Service Members, or Veterans

855 consumer reviewers** were assigned to Peer Review Panels representing **415** consumer advocacy (nominating) organizations

Consumer advocates also participate on research teams for funded projects

* All unique individuals
** 737 unique individuals



Peer Reviewed Medical Research Program (PRMRP)

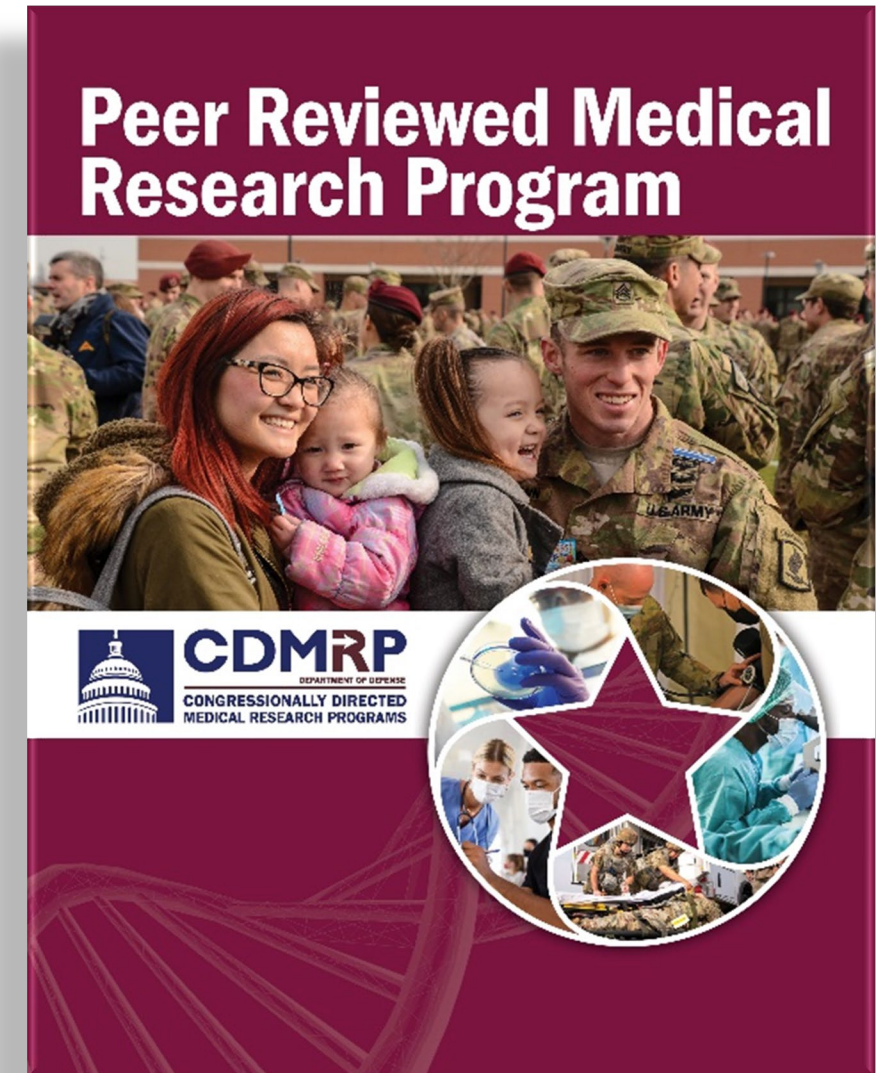


Transforming Healthcare through Innovative and Impactful Research

Vision: Improve the health, care, and well-being of all military Service Members, Veterans, and their Families

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

- Initiated in 1999 to address diseases and conditions with relevance to military health
- Direction from congress to support research of “clear scientific merit” and “direct relevance to military health” in specified topic areas

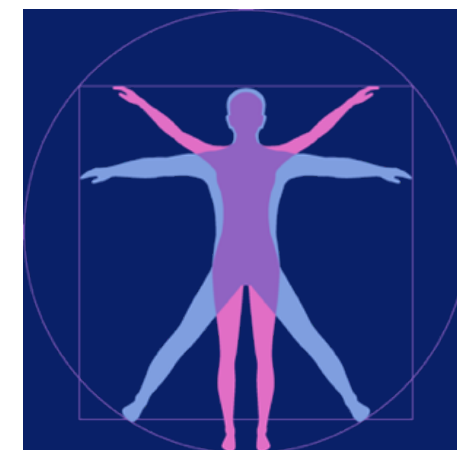


<https://cdmrp.health.mil/prmrp/default>

FY24 Topic Areas (42 total) for Peer Reviewed Medical Research Program

- Accelerated Aging Processes Associated with the Military*
- Celiac Disease
- Computational Biology for Precision Health*
- Congenital Cytomegalovirus*
- Congenital Heart Disease
- Dystonia
- Eating Disorders
- Ehlers-Danlos Syndrome
- Epidermolysis Bullosa
- Far-UVC Germicidal Light*
- Fibrous Dysplasia/McCune Albright Syndrome
- Focal Segmental Glomerulosclerosis
- Food Allergies
- Fragile X
- Frontotemporal Degeneration
- Guillain-Barre Syndrome
- Hepatitis B
- Hereditary Ataxia
- Hydrocephalus
- Inflammatory Bowel Disease
- Interstitial Cystitis
- Lymphedema
- Malaria
- Maternal Mental Health
- Mitochondrial Disease
- Musculoskeletal Disorders Related to Acute and Chronic Bone Conditions and Injuries
- Myalgic Encephalomyelitis/Chronic Fatigue Syndrome
- Myotonic Dystrophy
- Nephrotic Syndrome
- Neuroactive Steroids
- Pancreatitis
- Peripheral Neuropathy
- Polycystic Kidney Disease
- Proteomics
- Pulmonary Fibrosis
- Respiratory Health
- Rett Syndrome
- Scleroderma
- Sickle-Cell Disease
- Suicide Prevention
- Vascular Malformations
- Von Hippel-Lindau Syndrome

Applicants must address at least one of the Topic Areas, which are directed by Congress



**Assigned for the first time in FY24*

PRMRP's Portfolio-Driven Approach



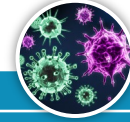
Autoimmune Disorders and Immunology

- Celiac Disease
- Computational Biology for Precision Health
- Food Allergies
- Guillain-Barre 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



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



Respiratory Health

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



Neuroscience

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



Rare Diseases and Conditions

- Computational Biology for Precision Health
- Dystonia
- 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

Program Priorities Set at the Portfolio Level



Portfolio-Specific Strategic Goals:

- Devised in coordination with key stakeholders
- Aligned to the Continuum of Care

Foundational

Prevention

Diagnosis

Treatment

Epidemiology

Applications must address ONE Topic Area and ONE Strategic Goal

Example: Rare Diseases and Conditions Portfolio Strategic Goals

Foundational Studies

- Identify biological mechanisms underlying disease onset, disease progression, or phenotype/symptomatic heterogeneity, including studies to address sex, gender, ethnic and/or racial differences.
- Elucidate how biomarkers (including genotype) are linked to disease phenotype or subtype.
- Develop novel preclinical models that recapitulate the phenotype of human disease.

Diagnosis

- Identify and validate objective biomarkers to predict onset, response to therapy, disease complications and/or disease progression.
- Develop and validate improved diagnostic criteria and screening tools for early detection or to track disease progression.
- Determine the physiological impact related to diagnosis and/or timing of a diagnosis.

Topic Areas

- [Computational Biology for Precision Health](#)
- Dystonia
- 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

Applications must address one Strategic Goal and one Topic Area

Example: Rare Diseases and Conditions Portfolio Strategic Goals

Treatment

- Develop and test pharmacological or nonpharmacological treatments, or improve upon existing treatments, especially those that will minimize side effects.
- Develop and test curative strategies to include tissue engineering, genetic approaches, or protein replacement.
- Develop and test interventions to improve neuropsychological outcomes and cognitive symptoms and other comorbidities as defined by those with lived experience.
- Develop and test strategies to support ongoing treatments during life transitions (i.e., pediatric to adult care).

Epidemiology

- Conduct population-based studies to identify risk (i.e., carrier status), lifestyle determinates of health or protective factors that influence onset, progression and/or outcomes.
- Conduct natural history/longitudinal studies to understand incidence, prevalence, and progression of the disease/condition and carrier and modifier gene status.
- Develop and validate research tools to collect, mine, and integrate real-world data (patient-reported data, longitudinal data, etc.) with electronic medical records to guide precision medicine approaches.
- Develop clinically relevant endpoints for clinical trials.

Topic Areas

- [Computational Biology for Precision Health](#)
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Applications must address one Strategic Goal and one Topic Area

FY24 PRMRP Funding Opportunities Available

Basic Research		Translational Research		Clinical Trials/Clinical Research	
<p>Discovery Award</p> <p><u>Direct Cost Max:</u> \$275K</p> <p><u>LOI/Invite:</u> Letter of Intent</p> <p>Novel/ breakthrough exploratory research, high risk/high reward</p>	<p>Investigator- Initiated Research Award</p> <p><u>Direct Cost Max:</u> \$1M</p> <p><u>LOI/Invite:</u> Letter of Intent</p> <p>Preclinical expansion, replications and/or comparative studies to validate preliminary or published data</p>	<p>Impact Award</p> <p><u>Direct Cost Max:</u> \$2M/\$2.6M</p> <p><u>LOI/Invite:</u> Letter of Intent</p> <p>Mature research studies with potential near term clinical impact for patients</p>	<p>Technology/ Therapeutic Development Award</p> <p><u>Direct Cost Max:</u> \$4M</p> <p><u>LOI/Invite:</u> Letter of Intent</p> <p>Final steps of clinical translation (IND-/IDE- enabling or studies required to transition a product of prototype utility)</p>	<p>Lifestyle Behavioral Health Intervention Research Award</p> <p><u>Direct Cost Max:</u> \$3M</p> <p><u>LOI/Invite:</u> Letter of Intent</p> <p>Clinical trials/research focused on non- pharmacological therapies, non- invasive devices, patient outcomes or quality of life</p>	<p>Clinical Trial Award</p> <p><u>Direct Cost Max:</u> No direct cost limit</p> <p><u>LOI/Invite:</u> Preproposal</p> <p>Early-phase or large scale interventional clinical trials to measure safety, effectiveness and/or efficacy outcomes</p>

Application Submission Deadlines (PRMRP)

Award Mechanism	LOI	Pre-Proposal	Dates	Invitation to submit	Full Application Deadline
Discovery Award (DA)			06 May 2024		23 May 2024
Investigator-Initiated Research Award (IIRA)			06 May 2024		23 May 2024
Impact Award (IPA)			13 May 2024		06 June 2024
Technology/Therapeutic Development (TTDA)			13 May 2024		06 June 2024
Lifestyle and Behavioral Health Interventions (LBIRA)			13 May 2024		06 June 2024
Clinical Trial (CTA)			13 May 2024	17 June 2024	19 August 2024

Questions?
For more information, please visit:



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