CDMRP
Department of Defense

"Serving as a consumer reviewer was a rewarding experience, especially knowing that I provided input for funding research proposals that were most likely to improve patients' chances of obtaining useful test results and better outcomes. Participating in the evaluation of research proposals alongside a team of brilliant people was great. Providing these experts with the patient's perspective helped them to better understand the human side of their work. I have been involved in tick-borne diseases for over twenty years, as a patient, caregiver, advocate, and educator. Educating the public has always been my top priority because I want to help people avoid the suffering I have seen. It was very gratifying to have the opportunity to take part in guiding research funding to help people affected by these diseases."

Doug Fearn, Lyme Disease Association of Southeastern PA

Congressionally Directed Medical Research Programs (CDMRP)

Tick-Borne Disease Research Program

Vision

To prevent the occurrence, better diagnose and resolve or minimize the impact of Lyme disease and other tick-borne illnesses, with emphasis on burden of disease

Mission

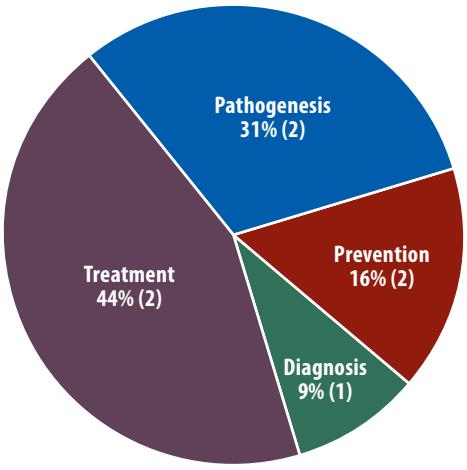
To understand the pathogenesis of Lyme disease and other tick-borne illnesses and to deliver innovative solutions to prevent, diagnose, and treat their manifestations for the benefit of US Service members and the American public

Program History

The Tick-Borne Disease Research Program (TBDRP) was established in FY16 when the efforts of Lyme disease advocates led to a Congressional appropriation of $5 million. The intent of the TBDRP is to support innovative and impactful research that addresses fundamental issues and gaps in tick-borne diseases.

There are currently at least 16 known tick-borne illnesses, with emerging diseases being discovered all of the time. In the United States, the yearly cases of Lyme disease and other tick-borne diseases, including spotted fever rickettsiosis, anaplasmosis, and ehrlichiosis, have been increasing steadily for years, currently totaling tens of thousands of people diagnosed annually, with more likely undiagnosed. Globally, the U.S. military prioritizes tick-borne Crimean-Congo hemorrhagic fever as an operational threat abroad.

Much remains to be determined regarding tick-borne disease pathogenesis, including host–pathogen interactions and the human immune response to these pathogens. There is a need for better disease prevention in terms of controlling the natural cycle of disease and protecting people from tick bites by various means. For people who are bitten, having methods of direct detection of tick-borne pathogens is critical in guiding treatment, and more must be learned about the causes of persistent symptoms in Lyme disease and other tick-borne illnesses in order to establish the best treatments.



FY16 TBDRP Portfolio by Research Area
Percentages of total spent and (number of awards)

For more information please visit the CDMRP website
cdmrp.army.mil

Program Goals and Strategy

The FY17 TBDRP is seeking research focused in the following areas in Lyme disease and other tick-borne diseases, with emphasis on reducing public health burden. Applications addressing persistence and direct detection of Lyme borreliae are highly encouraged.

Diagnosis:

- Direct detection of agents of Lyme disease and other tick-borne diseases or their products in humans
- Biomarkers for diagnosis, prognosis, and cure

Pathogenesis:

- Mechanisms of persistence of Lyme disease
- Host-pathogen interactions
- New research tools to support studies of pathogenesis

Treatment:

- Innovative approaches to treatment
- Studies aimed at safe and effective treatments for the cause(s) of persistent symptoms in Lyme disease

Prevention:

- Vaccines
- Interrupting the cycle of the disease agents in nature

The FY17 TBDRP Idea Award funds conceptually innovative, high-risk/potentially high-reward research in the early stages of development that could lead to critical discoveries or major advancements that will accelerate progress in improving outcomes for individuals affected by Lyme disease and/or other tick-borne illnesses. This award mechanism promotes new ideas that represent innovative approaches to Lyme disease and other tick-borne diseases research and have the potential to make an important contribution toward the TBDRP mission. A New Investigator Option encourages applications from investigators in the early stages of their careers, with their applications undergoing peer and programmatic review separately from the Established Investigator submissions.

The FY17 TBDRP Investigator-Initiated Research Award funds highly rigorous, high-impact studies that have the potential to make important contributions to Lyme disease and other tick-borne diseases research, patient care, and/or quality of life. This award mechanism promotes a wide range of research, from basic through translational, including preclinical studies in animal models or human subjects, as well as correlative studies associated with an existing clinical trial to establish proof-of-principle for further development in future studies.