

New national Lyme Disease biobank to accelerate research by making samples available

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Bay Area Lyme Foundation, a national organization funding research to make Lyme disease easy to diagnose and simple to cure, announces the launch of the Lyme Disease Biobank, which is the first program to provide researchers with blood and urine samples from people with acute Lyme disease from multiple regions across the country, including the East Coast, West Coast and Upper Midwest.

"One of the biggest barriers to research is a lack of samples from people confirmed to have Lyme disease - our program aims to alleviate this," said Liz Horn, PhD, MBI, principal investigator, Lyme Disease Biobank. "Our efforts will unlock a huge bottleneck and make it possible for more scientists to conduct desperately needed research in Lyme disease."

The Lyme Disease Biobank will dramatically increase the volume of well-characterized samples to enable research efforts to accelerate medical breakthroughs in the understanding, diagnosis and treatment of Lyme disease as well as co-infections. More than 95% of Lyme disease researchers (n=50) reported that they do not have access to the samples they need for their research, according to a 2016 survey conducted by Lyme Disease Biobank.

Because the bacterial strains which cause many tick-borne infections have been shown to vary from region to region, the Lyme Disease Biobank offers researchers the unique opportunity to explore potential



new diagnostics against a range of <u>bacterial strains</u>. Samples from patients and healthy controls are currently available from East Hampton, New York, Martha's Vineyard, Mass., and Marshfield, Wisc., and collections will soon become available from centers in the San Francisco Bay Area, Calif. Each <u>sample</u> undergoes several tests, including Serology (ELISA, Western Immunoblot IgM/IgG; C6 Peptide) and qPCR, in order to confirm the diagnosis of Lyme disease and any co-infections (or for the controls, to rule out a diagnosis). Currently there are samples available from more than 250 individual participants.

Each application for samples from researchers undergoes a <u>peer-review process</u> by three members of the Lyme Disease Biobank reviewer pool, which consists of 39 scientists and clinicians each with specific expertise related to tick-borne illness. The Lyme Disease Biobank Board will use the recommendations of these experts and the Principal Investigator to determine allocation of samples. Approvals will be based on technical merit, potential to advance diagnostics, the likelihood of increasing understanding of Lyme disease and other tick-borne infections, and alignment with the Lyme Disease Biobank scientific goals and objectives. Nine investigators have thus far been approved to receive samples.

Lyme Disease Biobank is fully supported by Bay Area Lyme Foundation, which has received several substantial grants that help fund this effort. Bay Area Lyme Foundation's financial commitment has included: investigations and research to develop criteria for collections and distribution of samples; identification of appropriate initial locations and initiation of collections at pilot sites; enrollment of clinical participants at multiple sites; collection and storage of samples; sample testing; maintenance of the proper environment for samples; and appropriate follow-up on research to ensure completion and scientific collaboration as appropriate. Researchers approved to receive samples are required to pay a nominal fee for samples to cover the cost to



retrieve and ship the requested samples.

Provided by Bay Area Lyme Foundation

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