# Tick-Borne Disease Working Group



#### Patient Centered Lyme Disease Research & Big Data

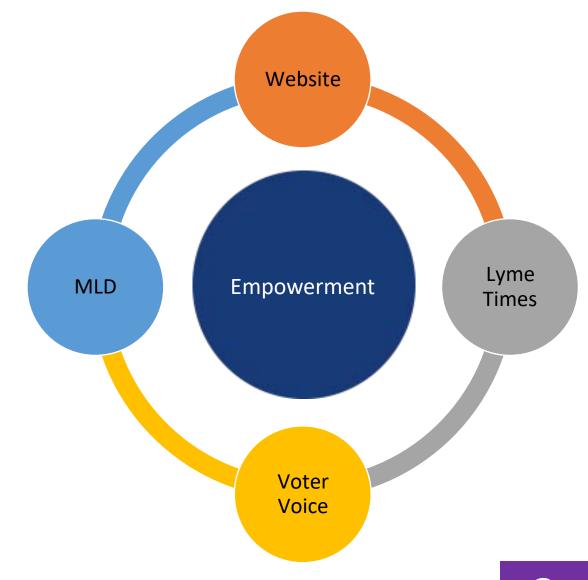


Tick-Borne Disease Working Group (Dec.11<sup>th</sup>, 2017 Wash. DC) Lorraine Johnson, JD, MBA CEO LymeDisease.org <sup>2</sup>

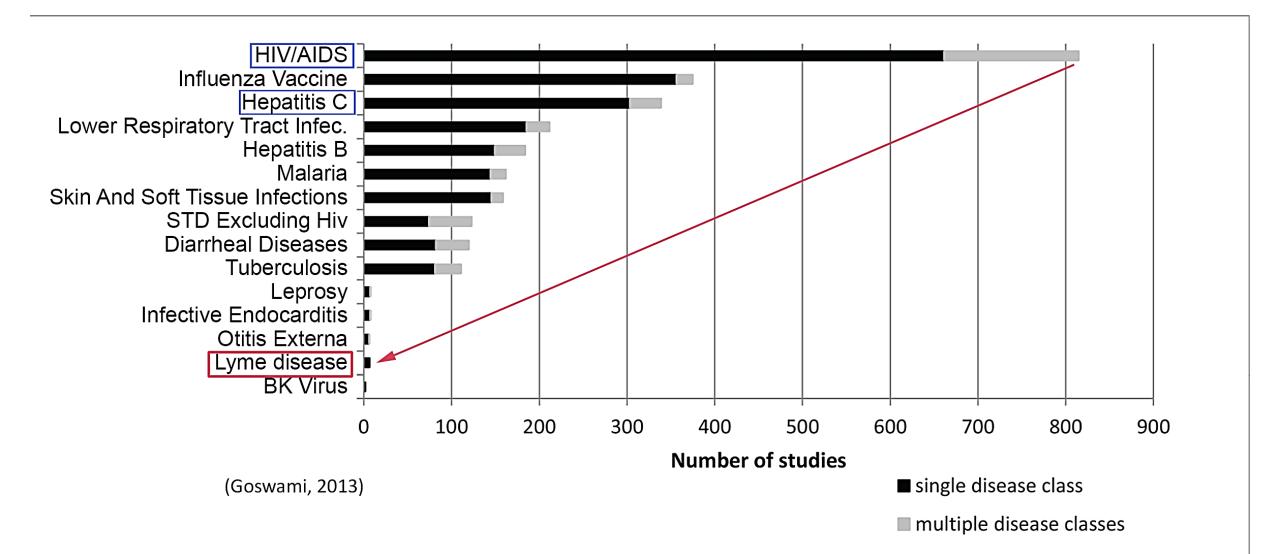
#### Founded in 1989, LDo's focus is on empowering individual patients

Empowerment is "a group-based participatory . . . process through which marginalized or oppressed individuals . . . gain greater control over their lives. . ., acquire valued resources and basic rights, and achieve important life goals and reduced societal marginalization ".

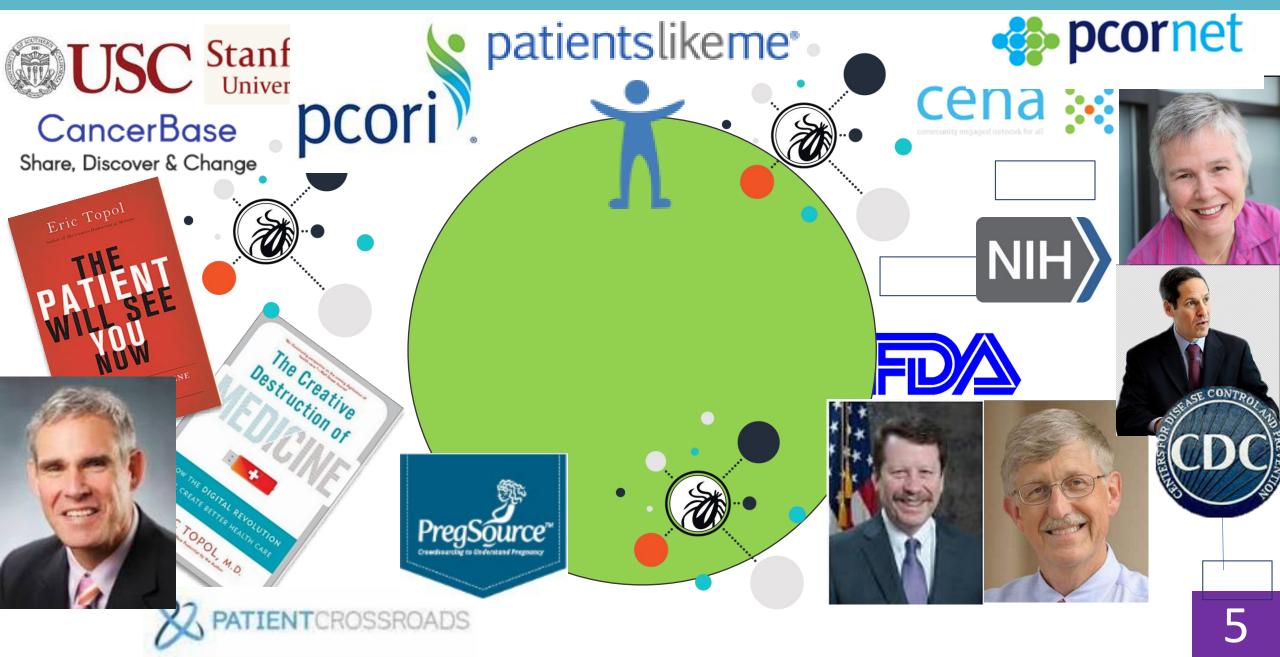
4 million unique visitors to website annually



#### Chronic Lyme disease is a research orphaned disease



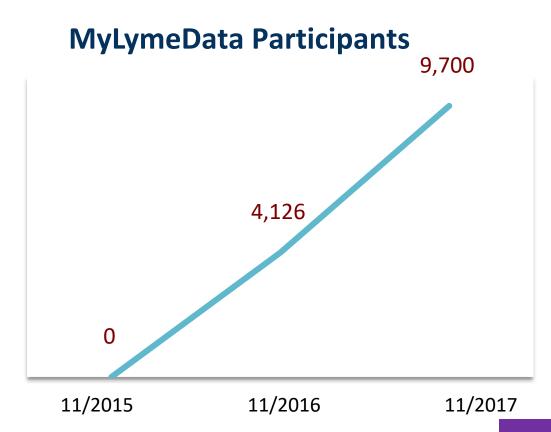
#### Patient generated data from e-registries: valued source of data





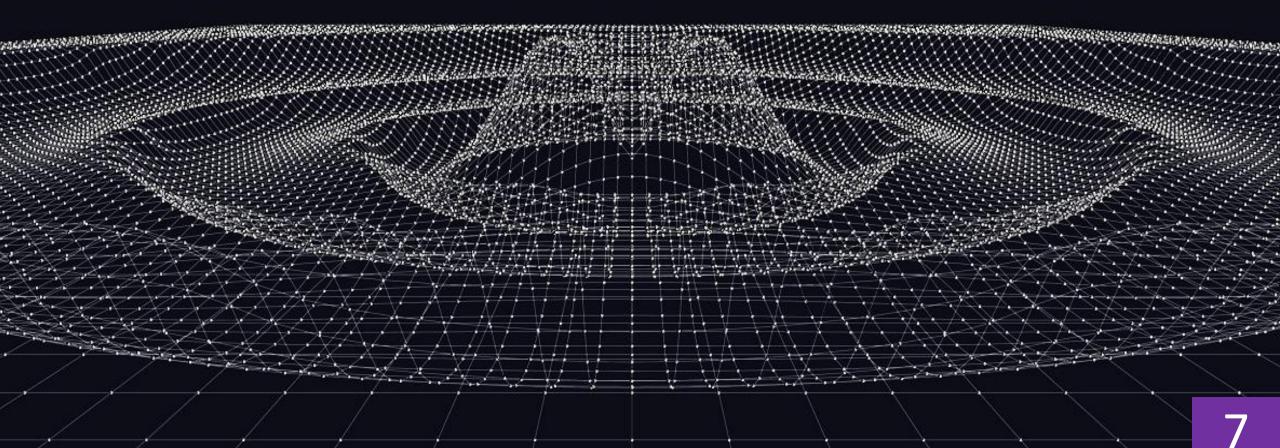
#### One of the largest and fastest growing patient-led registries in the US

- FasterCures reports that there are over 110 patient foundation-led registries
- 47% had ≤1,000 participants or fewer
- 44% had between 1,000 and 5,000 participants
- Only 2 registries had more than 10,000





The National Science Foundation (NSF) has granted an \$800,000 threeyear award supporting research using data collected by MyLymeData registry.



#### MyLymeData patients are diagnosed late and have coinfections







**70%** not diagnosed until **late stage** 

72% are initially misdiagnosed

**60%** diagnosed with a **co-infection** 



<sup>x</sup>Phase I- 3,903 enrolled. <sup>xx</sup>Sick for six months or longer, Phase I MyLymeData. Images: Freepik from www.flaticon.com

### **Top 10 Research Priorities**

Over 7,000 responses from:

Patients Physicians Researchers Advocacy groups





### Top Ten Lyme Disease Research Questions



What **direct diagnostic test** would be both highly sensitive and specific for Lyme disease and co-infections?



What is the **most effective treatment** protocol to restore health to patients with Lyme disease?



What is the impact of **delayed diagnosis** on the course of Lyme Disease?



What **natural therapies** and protocols are most effective?



What **other diseases (e.g. MS, Parkinson's)** may be caused by Lyme disease?



What are the most effective methods for **rehabilitating the brain** in neurologic Lyme disease?



Why do some people develop **chronic Lyme disease** after antibiotic treatment?



What **triggers reactive** chronic/late stage Lyme disease or co-infections after remission?



How do **co-infections** affect the immune response and course of illness in patients with Lyme disease?



Are treatment regimens **tailored for specific symptoms** more effective? (e.g. neurologic) **MAGINE A WORLD** where people with Lyme disease are diagnosed and treated correctly and go back to living their lives.

#### YOU CAN BE PART OF MAKING THIS HAPPEN

## MyLymeData

To learn more, visit lymedisease.org/mylymedata

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