

# INFECTION RESEARCH INITIATIVE

The Cystic Fibrosis Foundation has committed at least \$100 million to the Infection Research Initiative as part of a comprehensive effort to address the chronic infections that are a hallmark of cystic fibrosis.

The goal is to identify and fill gaps in our existing infection research portfolio and expand it to meet our overall mission of improving detection, diagnosis, treatment, and outcomes of infections for people with cystic fibrosis.

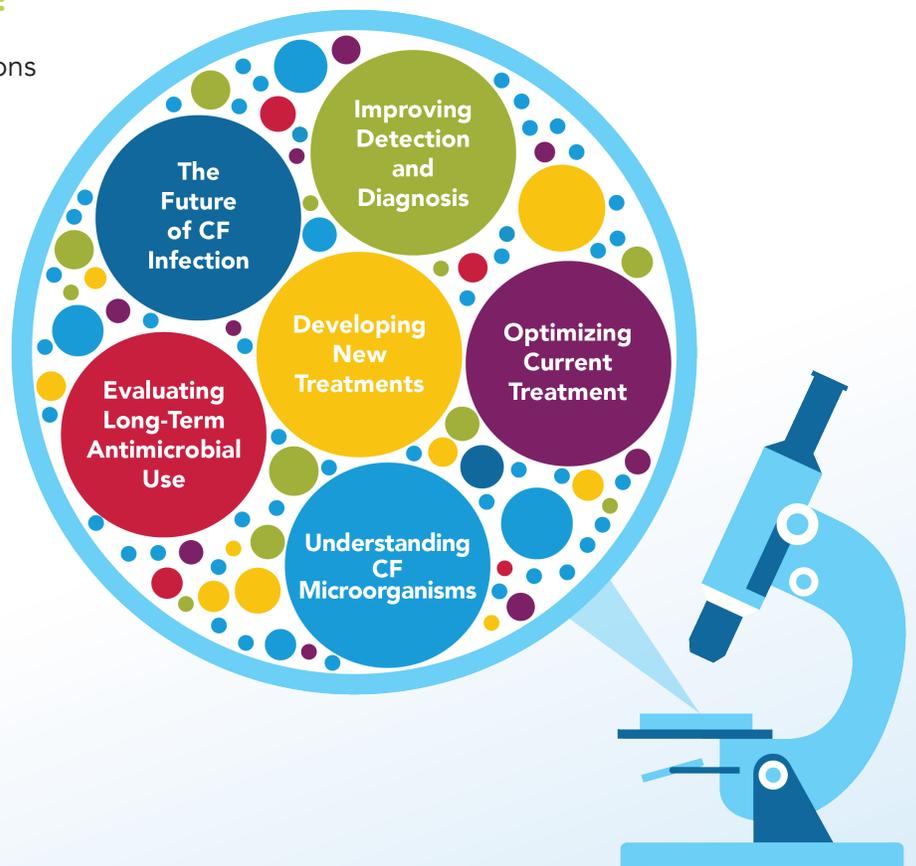
Learn more at [cff.org/IRI](https://cff.org/IRI)

COMMITTED  
**\$100M**  
OVER THE NEXT 5 YEARS TO THE  
INFECTION RESEARCH INITIATIVE

## RESEARCH PRIORITIES

The Infection Research Initiative takes a broad approach to advancing research into CF-related microorganisms (germs), focusing on six areas:

- **Improving Detection and Diagnosis:** Identifying new ways to detect microorganisms and diagnose infections
- **Understanding CF Microorganisms:** Enhancing our understanding of CF germs and how people get them
- **Developing New Treatments:** Supporting the development of safe and effective treatments, including antibiotics, antivirals, and antifungals
- **Optimizing Current Treatment:** Enhancing current treatments to improve outcomes and minimize treatment burden
- **Evaluating Long-Term Antimicrobial Use:** Assessing the impact of long-term or frequent, intermittent antimicrobial use
- **The Future of CF Infection:** Understanding how infections are influenced by disease-modifying treatments, such as modulators.



## INFECTION RESEARCH SNAPSHOT

The Foundation is aggressively pursuing innovative approaches to address difficult-to-treat infections. In 2018, we met with more than 70 companies and academic researchers to discuss research projects and potential treatments.

FUNDING

>12

TREATMENTS CURRENTLY  
IN DEVELOPMENT

CURRENTLY

130

ONGOING  
RESEARCH PROJECTS

FUNDED

55

NEW STUDIES  
IN 2018

MORE THAN

150

FUNDING APPLICATIONS  
RECEIVED IN 2019

### Nontuberculous mycobacteria (NTM)

NTM is one of our highest priority antimicrobial areas. Recognizing the need for better treatments, the Foundation developed the NTM consortium, a network of researchers focused on NTM. We are supporting two large studies through this consortium so that we can learn more about how to diagnose NTM and when to treat it: The PREDICT study aims to develop a systematic way to identify people with CF who require treatment for NTM infections; the PATIENCE study is focusing on standardizing treatment options.

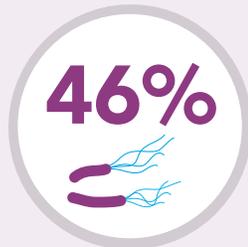
The Foundation also awarded up to \$5.1 million to the TB Alliance to develop potential treatments for two common NTM infections caused by *Mycobacterium abscessus* and *Mycobacterium avium complex* (MAC).



PEOPLE WITH CF  
WHO CULTURED  
POSITIVE IN 2018

### *Pseudomonas aeruginosa*

*Pseudomonas* research projects compose almost 40 percent of the infection research portfolio. Most of the projects are directed at improving our understanding of how *Pseudomonas* interacts with other germs and how the body responds to *Pseudomonas* infections.



PEOPLE WITH CF  
WHO CULTURED  
POSITIVE FOR  
*PSEUDOMONAS*  
IN 2018

### MRSA

Methicillin-resistant *Staphylococcus aureus* (MRSA) infections are becoming more prevalent, and we need to address them. The Foundation is working to improve current treatments to address MRSA infections.



PEOPLE WITH CF  
WHO CULTURED  
POSITIVE FOR  
MRSA IN 2018

### Bacteriophage (Phage) Therapy

Phage therapy is a potential treatment that uses viruses to target difficult-to-treat bacteria. We are searching for companies to conduct rigorous, controlled clinical trials, so we can understand the potential treatment's safety and efficacy and measure benefits.

### Fungal Infections

We need to learn more about when and how to treat those who culture fungi. We're funding research to standardize the detection of fungi and improve our understanding of when and how to treat fungal infections, especially *Aspergillus*.