Introducing CARB-X
A non-profit partnership accelerating the best science from around the world to fight drug resistant infections

FUNDERS

ASPR
ASSISTANT SECRETARY FOR PREPAREDNESS AND RESPONSE

BARDA
BIOMEDICAL ADVANCED RESEARCH AND DEVELOPMENT AUTHORITY

NIH
National Institute of Allergy and Infectious Diseases

wellcome

PARTNERS

BOSTON UNIVERSITY

RTI INTERNATIONAL

CLSI
California Life Sciences Institute

MassBio
Massachusetts Biotechnology Council

BROAD INSTITUTE
CARB-X funds R&D to combat the rising threat of serious drug-resistant bacteria

Urgent public health need
Antibiotic resistance kills an estimated 700,000 people each year world-wide. No new antibiotic classes for drug-resistant Gram-negative bacteria have been approved in decades.

Investing globally
CARB-X is a non-profit public-private partnership investing $455M in 2016-2021 to accelerate the early development of life-saving antibiotics, vaccines and rapid diagnostics.

Turning science into products
CARB-X provides non-dilutive funding and accelerator support for projects that target Gram-negative resistant bacteria on the WHO and CDC priority lists.

Partnering for results
CARB-X is funded by BARDA and the Wellcome Trust. NIAID provides pre-clinical services. Partners include the Broad Institute of MIT and Harvard, Massachusetts Biotechnology Council (MassBio), California Life Sciences Institute (CLSI) and RTI International. CARB-X is led by Boston University.
Global Reach: CARB-X Funds 26 Projects in 6 Countries*

North America

Forge Therapeutics
San Diego, CA

Cidara Therapeutics San Diego, CA

Inhibrx
La Jolla CA

Amicrobe Inc.
Calsbad, CA

MicuRx
Hayward, CA

Curza
Salt Lake City, UT

VenatoRx
Pharmaceuticals
Malvern, PA

Integrated
Biotherapeutics
Rockville, MD

Contrafect Corporation
Yonkers, NY

Seres Therapeutics
Cambridge, MA

Vedanta Biosciences
Cambridge, MA

Spero Therapeutics
Cambridge, MA

Visterra Inc.
Cambridge, MA

Macrolide Pharmaceuticals
Watertown, MA

Tetraphase Pharmaceuticals
Watertown, MA

Entasis Therapeutics (2)
Waltham, MA

T2 Biosystems
Lexington, MA

Europe and Asia

Iterum Therapeutics Ltd.
Dublin, Ireland

Proteus IRC
Edinburgh, Scotland

Oppilotech Ltd.
London, UK

Eligochem Ltd.
Sandwich, UK

Antabio
Labège, France

Debiopharm International S.A.
Lausanne, Switzerland

Bugworks Research India Pvt Ltd.
Bangalore, India

* As of March 9, 2018

Great science knows no boundaries
- 26 early development projects targeting serious drug resistant bacteria
- 8 new classes of antibiotics
- 10 non-traditional antibiotics
- 11 new molecular targets and a rapid diagnostic
- 2 diagnostics

As of March 9, 2018
CARB-X has announced more than $68.2 million in awards, plus an additional $85.1 million if project milestones are met.

Many more awards to come in 2018, including a significant number of additional diagnostics.
What CARB-X Funds

• Early development projects that address serious bacterial threats
  – antibiotics and therapeutics of all types
  – rapid diagnostics
  – prevention such as vaccines, microbiome, devices

• Projects must target specific bacteria on the Antibiotic Resistance Threats List issued by the Centers for Disease Control and Prevention (CDC) in 2013 or on the Priority Bacterial Pathogens list published by the World Health Organization (WHO) in 2017
CARB-X Funds Projects in Early Development

**Therapeutics & Preventatives**
- **Hit to lead**
- **Lead optimization**
- **Pre-clinical**
- **Phase 1**

**Diagnostics & Devices**
- **Feasibility demonstration**
- **Optimization & prep for development**
- **Product development**
- **System integration & testing**

CARB-X Graduate
How CARB-X works

CARB-X welcomes applications from around the world. Projects are selected through a competitive process by panels of experts. Funded projects are supported by a network of world-class accelerators.
Combating antibiotic resistant bacteria

Better stewardship for existing antibiotics

Eliminate inappropriate use of these lifesaving drugs in both humans and animals.

Reduce the need for antibiotics by using alternative and nontraditional approaches to disease treatment and prevention.

Ensure that antibiotics are accessible and available to the people who need them.

Innovation to find new types of antibiotics

Support targeted research initiatives to overcome scientific challenges impeding the discovery of new antibiotics.

Address the complex barriers hindering the development of new treatment options for patients.

Drug-resistant bacteria
Centers for Disease Control and Prevention