Achieving Cures Together (ACT)



Mission

Our mission is to save lives by advancing microbiome research.

Vision

Our vision is to be the leading microbiome research organization and resource center in the world.

About Us

Achieving Cures Together was founded to fill a void in microbiota research. Recently, the microbiota frontier has taken off and investors and companies have begun to recognize its healing powers. However, the intellectual property for microbiota therapeutics is weak. So, instead of using what God provided us, synthetic mixtures of microbes with stronger intellectual property are being developed. This highlights a problem throughout our medical system that many patients face consistently - our medical system appears to be more concerned about itself than the patients it is supposed to take care of. As a non-profit, we believe that microbiota therapeutics go far beyond a synthetic mixture, or even a single application. Therefore, we exist to drive academic research focused on microbial restoration to find safe, affordable, and accessible cures.

The Human Microbiome

Given its potential, ACT's focus is on therapies targeting the intestinal microbiome. Humans have trillions of bacteria, fungi, and viruses that live on and within us. Most of our microbial communities reside in our gastrointestinal tract ('the gut microbiota') where they graze on foods and assist in digestion.

Our microbes also collaborate with us and train our immune system, they participate in all aspects of energy metabolism where they affect our appetite and energy storage, and they even send messages to our nervous system and affect our mood. Given our microbes importance, the gut microbiota is frequently referred to as our "second brain".

Over the past couple decades our microbial diversity has declined markedly. This can be attributed to our "western" diet, heavy antibiotic usage, and our clean, "sanitized" lifestyle. This decreased diversity can have serious implications on our health and is likely connected to the surge in many diseases prevalent today including diabetes, superbugs, inflammatory bowel disease, autism, allergies and more.

Our Approach

Our approach is to provide safe, high-quality microbiota material to patients and research organizations around the country. To do this, we partnered with the University of Minnesota Microbiota Therapeutics Program, which has been the world leader in developing ways to repair damaged gut microbiota. Specifically, this group has developed methods to harvest intact, healthy microbiota from thoroughly screened stool donors and administer it to patients via colonoscopy or freeze-dried encapsulation. Their protocols have been adapted worldwide and have cured tens of thousands of patients suffering from intractable *Clostridium difficile* infections, a superbug formed from a complication of antibiotic treatments.



Encapsulated microbiota

This restorative approach has opened an entirely new frontier of therapeutics, bringing hope to patients with serious medical conditions that are not well addressed by available medicines. Some of the applications that are being studied include:

Ulcerative Colitis

Diabetes

Depression

Crohn's Disease

Autism

Parkinson's

Obesity

Cancer

Allergies

Accomplishments

Since 2016, ACT has made significant progress towards our mission and has accomplished the following:

- Supported microbial treatment for over 590 patients suffering from antibiotic resistant superbug, Clostridium difficile
- Supported the development of an encapsulated microbial restoration product
- Cited in 6 research publications targeting our human microbiota

2019 Goals

- Treat and cure 500 patients suffering with intractable *C. difficile* infections working in collaboration with several centers around the US, and <u>capture the outcome data</u>
- Provide the active treatment and placebo to a multi-center Veterans Affairs (VA) trial on C. difficile infections (the MATCH trial)
- Provide the active treatment and placebo to an autism trial at the Arizona State University
- Provide the active treatment and placebo to an Ulcerative Colitis trial at the University of Minnesota
- Provide the active treatment and placebo for a trial in patients undergoing intensive chemotherapy for acute leukemia at the University of Minnesota
- Provide the active treatment and placebo for a trial in patients undergoing hematopoietic stem cell transplants for acute leukemia at the University of Minnesota

2020 Goals

- Treat and cure 1,000 patients suffering with intractable *C. difficile* infections working in collaboration with several centers around the US, and <u>capture the outcome data</u>
- Continue to support trials initiated in 2019
- Initiate trials currently at various stages of regulatory review, including those on optimization of cancer immunotherapy, childhood obesity, and chronic fatigue syndrome