



**Center for Innovative Phage
Applications and Therapeutics**

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PRESS RELEASE

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Microbiotix Co., Ltd. and the Center for Innovative Phage Applications and Therapeutics (IPATH) sign collaborative agreement to improve access to phages for IPATH's phage therapy patients.

Microbiotix and UC San Diego's IPATH have announced a new collaboration to ensure that phage therapy applicants are provided access to a wider range of phages that have the potential to treat their infections caused by multidrug-resistant pathogens. This collaboration will ensure that patients have a higher chance of being matched with a suitable and effective treatment for their personalized therapy of an otherwise incurable disease.

Requests for bacteriophage therapy have been growing and IPATH is at the center of this explosion of interest due to a high-profile case that received extensive coverage in the media. The number of requests continues to grow as patients wish to receive phages through the FDA's compassionate use, a regulatory pathway that allows for the administration of novel drugs or biologics that have not yet been approved for human use.

The aim of this collaboration is to improve the accessibility of phages. Between June of 2018 and November of 2022, IPATH initiated a phage hunt for 265 patients. Of those 265 patients, around 25% of these requests could not proceed due to the lack of potential phages.

"What we need next is a phage library," Strathdee, IPATH Co-Director emphasizes. "We don't want to have to go from bog to bedside every time we need phages, right? We want to be able to go to a walk-in cooler and source phages that are characterized and cataloged and personalize them for patients." Microbiotix hopes to address this need and provide its library of phages to patients at IPATH.

Under the terms of the agreement, UC San Diego's IPATH will conduct screening on potential phage therapy recipients at its partnered hospitals and clinics. These patients will then have sample isolates sent to Microbiotix to screen for virulent phages from their phage library using in-vitro phage susceptibility tests. Chosen phages are to then be delivered to UC San Diego's IPATH. These phages will be administered to patients after

approval is obtained from the FDA for an expanded access investigational new drug through compassionate use. The collected data regarding the treatment and outcome of each case will be shared and used to further progress phage therapy research and formulation.

ABOUT PHAGE THERAPY

Bacteriophages are viruses that use bacteria as their hosts, targeting and eliminating specific bacterial species or strains while not infecting multicellular organisms. Phages are the most abundant life forms on Earth and inhabit everywhere bacteria can be found. Discovered in the early 20th century, Felix d'Herelle was the first to investigate their therapeutic potential. Due to the rise and spread of antibiotic-resistant bacteria, their potential to fight these infections has led to renewed interest.

One such case that gained national attention and helped spark this interest was that of Tom Patterson, Strathdee's husband. While vacationing in Egypt, Tom Patterson, PhD, contracted a life-threatening strain of multidrug-resistant *A. baumannii*. With the help of his colleagues at the UC San Diego School of Medicine and UC San Diego Health, he was able to be successfully treated using phage therapy. This was the first documented case in U.S. history that used phages intravenously to eliminate a systematic bacterial infection. Following the successful treatment of similar cases, the establishment of the Center for Innovative Phage Applications and Therapeutics (IPATH) was overseen by UC San Diego. This center is the first of its kind in North America.

ABOUT MICROBIOTIX

Microbiotix is a pre-clinical stage biotech company developing therapeutics to treat multidrug-resistant pathogens through the implementation of phage therapy.

- Established 2016 out of Yonsei University College of Medicine
- 15+ years of phage experience
- Phage library of 300
- Target WHO's critical priority pathogens
- GMP facility to produce drug quality phages
- Microbiota bank to conduct synergetic research between phages and the microbiome

For more information, please visit microbiotix.net.