



MEDIPHAGE

BIOCEUTICALS

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PRESS RELEASE

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Mediphage Bioceuticals, Inc. Establishes Large-Scale msDNA Production In-House

Toronto, Ontario – Mediphage Bioceuticals, Inc., a genetic medicine company developing **safe, effective, and accessible** therapeutics to unlock the power of *personalized and redosable* genetic medicine, established large-scale production capabilities in-house.

Mediphage Bioceuticals has expanded its in-house manufacturing capabilities to rapidly and efficiently generate large quantities of pure ministring DNA (msDNA) materials for use in internal and external therapeutic programs. The scale-up and optimization of upstream fermentation in *E. coli* cells and downstream purification processes will allow for seamless transition to a GMP manufacturer to support clinical stages of therapeutic and vaccine development programs.

To perform large-scale fermentation and purification in-house, Mediphage acquired a LEX bioreactor, chromatographic columns, and other required equipment for msDNA manufacturing. Furthermore, Mediphage hired two skilled Laboratory Technicians and an Associate Scientist with extensive industry experience to develop and optimize fermentation and chromatographic purification. Mediphage continues to optimize production and will initiate production of msDNA constructs for various applications of the technology.

About Mediphage

Mediphage Bioceuticals is a precision genetic medicine company with a mission to eradicate suffering from a wide range of chronic diseases through revolutionary therapeutics. The Toronto-based company, founded in January 2016 as a spin-off from the University of Waterloo, uses proprietary *E. Coli*-based manufacturing platforms to generate safe, effective and redosable gene delivery vectors called ministring DNA or msDNA. Mediphage's proprietary msDNA platform is an efficient, customizable, durable, and highly scalable, non-viral gene delivery vector which confers application to *in vivo* and *ex vivo* gene or cell therapies. Mediphage is focusing its internal efforts on developing a therapeutic for Stargardt Disease, an ocular inherited condition caused by a mutation of the large *ABCA4* gene. As a platform technology, msDNA has the potential for broad applicability to various gene or cell therapy and gene editing categories including T-cell and B-cell applications, DNA vaccines, iPSC, CRISPR and rAAV production.