



## Charles River Announces Strategic Partnership with Bit Bio, Increasing Portfolio of Translational Drug Discovery Technologies

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*Partnership will leverage Bit Bio's unique ability to generate authentic human cells at scale*

WILMINGTON, Mass.--(BUSINESS WIRE)--Dec. 10, 2019-- Charles River Laboratories International, Inc. (NYSE: CRL) today announced that it has entered into an exclusive Discovery and Safety Services partnership with [Bit Bio](#), a company that offers consistent and efficient reprogramming of human cells for use in research, drug discovery, and cell therapies.

By applying an engineering approach to synthetic and stem cell biology, Bit Bio has developed proprietary technologies for the efficient, consistent, and scalable reprogramming of induced pluripotent stem cells.

### Cellular Reprogramming

Cellular reprogramming is the process by which human stem cells, given a precise set of genetic instructions, differentiate into a desired cell type. Current cellular reprogramming approaches are inefficient, with low cell yields, creating a gap for applications requiring high quality, consistent, and pure human cells.

To overcome this hurdle, Bit Bio has developed a gene engineering approach, opti-ox (**opt**imised inducible **over-expression**). This platform, validated on both muscle and brain cells, enables precise, controllable stem cell reprogramming. According to Bit Bio, the process is more efficient and scalable than available technologies in transforming stem cells into desired cell types.

By combining the purity, scale, and speed of the opti-ox platform with deep learning algorithms, Bit Bio has the potential to accelerate the discovery and application of every single human cell type.

### Partnering for Translational Drug Development

By partnering with Bit Bio, Charles River plans to offer clients access to an expanding suite of authentic human cells through their use in target discovery, validation and screening services. In [drug discovery](#) and safety, the use of high quality, authentic human cells at scale will enable the development of therapies with a higher chance of success in patients. Additionally, through the partnership, Charles River will contribute to the development and validation of novel cell lines.

### Approved Quotes

- "Bit Bio's unique method of reprogramming human stem cells will have a significant impact on our ability to ensure we are discovering and developing therapies that are effective and safe in patients. We are excited to offer this next-generation technology as part of our comprehensive portfolio of drug discovery and development tools." – Birgit Girshick, Corporate Executive Vice President, Discovery and Safety Assessment, Biologics Testing Solutions, and Avian Vaccine Services at Charles River.
- "We believe that the next generation of medicine hinges on widespread access to human cells," said Bit Bio's Chief Business Officer, Paul Morrill, PhD. "We are excited to be partnering with Charles River Laboratories, a leader in drug development, to put our cells within a context to drive human translational experiments at the earliest stages of drug discovery and safety assessment."

### About Charles River

Charles River provides essential products and services to help pharmaceutical and biotechnology companies, government agencies and leading academic institutions around the globe accelerate their research and drug development efforts. Our dedicated employees are focused on providing clients with exactly what they need to improve and expedite the discovery, early-stage development and safe manufacture of new therapies for the patients who need them. To learn more about our unique portfolio and breadth of services, visit [www.criver.com](http://www.criver.com).

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