

Factor Bioscience Granted First U.S. Patent for RNA-Based Reprogramming Technology

Cambridge, Mass. – JULY 30, 2013 – The United States Patent and Trademark Office today granted Factor Bioscience the first patent covering methods for reprogramming cells using RNA, a technology with wide-ranging applications in biological research and personalized medicine. The patented methods can transform patient skin cells into stem cells more rapidly, efficiently, and safely than previous techniques.

“Reprogramming is an amazing process, when it works”, explains co-inventor Dr. Christopher Rohde, High-Throughput Technologies Engineer. “However, previous methods were burdened by cumbersome protocols, poor reliability, and woeful inefficiency. Our RNA-reprogramming technology overcomes all of these limitations while being faster and safer than the best available techniques.”

Excitement has been growing in the reprogramming field since Dr. Shinya Yamanaka’s Nobel Prize-winning discovery in 2006 that infecting skin cells with a specific combination of viruses could reprogram them to a pluripotent stem-cell state. However, efforts to achieve the same goal without using the potentially mutation-causing viruses had, until this point, yielded mixed results. “Many researchers have attempted to develop a reliable DNA-free reprogramming method, and more than one have claimed success”, says co-inventor Dr. Matt Angel, CEO. “In every case, the reported method turned out to be unreliable at best, and more often than not, completely irreproducible. The grant of the first patent covering reliable DNA-free reprogramming technology brings us one step closer to the development of therapeutics based on safely reprogrammed cells.”

The methods developed by Dr. Angel’s team can be used with a wide range of reprogramming factors and cell types, and the company is making chemically-defined, animal component-free versions of its products available for therapeutic applications. Dr. Angel’s goal is to deploy the technology as widely as possible through a combination of products, services, and partnerships. “Factor Bioscience is a unique company, owned and operated entirely by scientists. The development of the first reliable RNA-reprogramming technology is the perfect example of what is possible in this environment.”

About Factor Bioscience

Founded in 2011, Factor Bioscience develops nucleic-acid and cell-based research tools and therapeutics using its patented and patent-pending reprogramming and gene-editing technologies. For more information, visit www.factorbio.com, and follow us on Twitter at @factorbio.

The content of this press release is the sole responsibility of the authors and does not necessarily represent the official views of the USPTO.

Contact:

Matt Angel, CEO of Factor Bioscience

matt.angel@factorbio.com

781.640.1031