FATE THERAPEUTICS' IPSC TECHNOLOGY AWARDED TOP INDUSTRY HONORS FOR SMALL MOLECULE AND PROTEIN REPROGRAMMING BREAKTHROUGHS

San Diego, CA –December 21, 2009 – Fate Therapeutics, Inc. announced today that the Company's iPSC technology platform, developed with Sheng Ding, Ph.D., has been honored as the Top Innovation of 2009 by The Scientist and has received the 2009 North American Technology Innovation Award from Frost & Sullivan. These notable awards recognize Fate Therapeutics for advancing minimally invasive techniques for the reprogramming and differentiation of induced pluripotent stem cells (iPSCs), including the protein-induced reprogramming technologies pioneered by Dr. Ding, associate professor at The Scripps Research Institute and a scientific founder of Fate Therapeutics. Earlier this year, under a research collaboration with Fate Therapeutics and The Scripps Research Institute, Dr. Ding and his team of scientists became the first group to accomplish the extraordinary feat of iPSC generation without genetic manipulation.

"We are honored to receive these recognitions of achievement and thankful for the contributions of our Scientific Founders," said Paul Grayson, president and CEO of Fate Therapeutics. "By building on their pioneering research, we are striving to create an industry admired stem cell biology drug discovery engine for the identification and development of small molecules and biologics to modulate cell fate for therapeutic benefit."

Fate Therapeutics utilizes the most advanced reprogramming and differentiation technologies for generating cell types of interest to elucidate disease biology and identify targets for therapeutic intervention. The Company's protein-based reprogramming platform in combination with its novel small molecule conditions offers a highly efficient, non-viral, non-DNA based method to recapitulate human physiology for commercial scale drug discovery and therapeutic use. The Company has exclusively in-licensed from The Scripps Research Institute and the Whitehead Institute for Biomedical Research an intellectual property portfolio related to iPSC technology, including filings that date back to November 2003. This portfolio includes the latest techniques published by Dr. Sheng Ding in October 2009, which use three small molecules to generate iPSCs in a manner that is 200 times more efficient than and twice as fast as conventional methods for reprogramming adult human cells.

"Without using dangerous genetic manipulations associated with other methods of reprogramming, Fate Therapeutics has created a powerful platform for safer, more efficient reprogramming of human somatic cells," said Sandhya Kamath, senior research analyst at Frost & Sullivan. "Its protein-only approach to iPSC generation represents a true paradigm shift in reprogramming technology. By maintaining genetic fidelity, biologically-relevant model systems may be created to better understand diseases and to elucidate molecular targets for drug discovery."

In addition to establishing the leading industrialized platform for iPSC technology, Fate Therapeutics is advancing its pipeline of stem cell modulators, which includes FT1050 for the enhancement of hematopoietic stem cell (HSC) proliferation and homing. The small molecule is currently undergoing clinical testing at the Dana Farber Cancer Institute and Massachusetts General Hospital in adult patients with hematologic malignancies, such as leukemia and lymphoma, who have undergone nonmyeloablative conditioning therapy and are in need of HSC support. The Phase 1b study is intended to determine the safety and tolerability of introducing FT1050 during the standard course of dual umbilical cord blood transplant.

About The Scientist's "Top 10 Innovations" List

The Scientist, an award-winning magazine of the life sciences, gathered a panel of expert judges to evaluate a broad range of life science technologies and determine the best innovations to hit the life sciences market in 2009. The 2009 winners represent exceptional combinations of invention, vision and utility. This is the second annual ranking of life science innovations performed by The Scientist. For more information, please visit http://www.the-scientist.com.

About Frost & Sullivan's Technology Innovation Award

Frost & Sullivan's Technology Innovation Award is bestowed upon a company or individual that has carried out new research, which has resulted in innovations that have or are expected to bring significant contributions to the industry in terms of adoption, change, and competitive posture. This award recognizes the quality and depth of a company's research and development program as well as the vision and risk-taking that enabled it to undertake such an endeavor. Recipients of the award have excelled in establishing significant industry innovations and products with the potential to become industry standards and the support of a breadth of intellectual property. For more information, please visit http://www.frost.com.

About Fate Therapeutics, Inc.

Fate Therapeutics is interrogating adult stem cell biology and applying induced pluripotent stem cell (iPSC) technology to develop Stem Cell Modulators (SCMs), small molecule or biologic compounds that guide cell fate for therapeutic purposes. Fate's approach has broad therapeutic potential in areas such as regenerative medicine, hematological diseases, metastatic cancer, traumatic injury and degenerative diseases. The Company is currently conducting a Phase 1b clinical trial of FT1050, a small molecule SCM designed to increase hematopoietic stem cell number and function in dual umbilical cord blood transplant recipients with hematologic malignancies. Fate Therapeutics is headquartered in San Diego, CA. For more information, please visit http://www.fatetherapeutics.com.

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