December 21, 2010

PRO-PHARMACEUTICALS & MOUNT SINAI SCHOOL OF MEDICINE ANNOUNCE NEW LIVER FIBROSIS RESEARCH COLLABORATION

Newton, Mass. (December 21, 2010) -- Pro-Pharmaceuticals, Inc. (OTC: PRWP), the leading developer of Galectin therapeutics to treat cancer and fibrosis, today announced it has entered into a new research collaboration with Mount Sinai School of Medicine to evaluate in pre-clinical models, the anti-fibrotic effects of several of the Company's novel, Galectin-targeting compounds.

Mount Sinai has one of the world's largest, most productive and well-respected liver disease investigation programs. In previous experiments, Pro-Pharmaceuticals' polysaccharide compounds that target Galectin receptors have been shown to reverse the formation of fibrotic tissue in diseased rat livers. The Company's GR-Series of anti-fibrotic, cirrhosis compounds have reversed liver fibrosis/cirrhosis in pre-clinical studies. The only current treatment for late stage fibrosis or cirrhosis is a liver transplant.

According to the American Liver Foundation, more than 25 million Americans are or have been afflicted with liver and biliary diseases. The disease is even more of a problem outside the U.S. because of the prevalence of chronic hepatitis B and C that often results in fibrosis, and ultimately cirrhosis, of the liver.

"Collaborating with Mount Sinai represents an exciting opportunity to partner with a premier liver research program to develop a novel method for treating liver disease," said Peter Traber, MD, Chief Medical Officer, Pro-Pharmaceuticals, Inc. "We continue to develop and expand our product candidate pipeline. "We believe our expertise in developing compounds that target Galectin receptors offers opportunities to develop new paradigms for the treatment of cancer, fibrosis and inflammatory diseases."

"The area of anti-fibrotics is generating great interest based on their potential to impact chronic liver disease and we look forward to working with Pro-Pharmaceuticals," said Dr. Scott L. Friedman, Division Director of Liver Diseases, Mount Sinai School of Medicine. "The need for an effective therapeutic solution for liver fibrosis is acute, and this innovative project would certainly be vital and could significantly advance treatment in this critical area. The efficacy and safety of Pro-Pharmaceuticals' approach appears to be unique and thus, these studies should be of the highest priorities."

Dr. Friedman's team will be testing several of the Company's galactomannans and rhamnogalacturonans as Galectin blockers in liver anti-fibrotic therapies. Specifically Dr. Friedman will complete the in vitro and in vivo analysis of several of the Company's compounds for anti-fibrotic efficacy and mechanism of action using state of-the-art molecular methods to assess fibrosis, fibrogenic gene expression and liver function.

About Mount Sinai Liver Diseases

A unique program, under the direction of Dr. Scott Friedman, the Division Director of Liver Diseases and world authority on liver fibrosis, has been established to facilitate the development of novel diagnostic methods and treatments of liver fibrosis. This program is supported through the generosity of the estate of Eva and Morris Feld. In partnership with key pharmaceutical companies, Dr. Friedman and his group monitor the development and testing of potential anti-fibrotic compounds in cultured cells, in animal models of hepatic fibrosis, and ultimately in clinical trials of patients with chronic liver disease. Continued growth of this center will maintain Mount Sinai at the forefront of clinical testing for new anti-fibrotic compounds. In addition, Dr. Friedman and his colleagues are developing new methods for diagnosing fibrosis without the need to perform a liver biopsy, a relatively invasive procedure. Dr. Friedman has recently patented one such method, which is currently undergoing testing in animal models.

Mount Sinai and Hepatic Fibrosis

All chronic liver diseases can cause fibrosis, or scarring. Fibrosis is the reason patients with liver disease develop liver failure and may need transplantation. Thus, efforts to stop fibrosis may prevent complications of all chronic liver diseases including HCV, thereby avoiding the need for transplantation. Currently, more than four million people in the US have HCV, and many will develop severe fibrosis and liver failure over the next two decades.

There are currently no approved anti-fibrotic treatments for patients with liver disease. Interest in such therapies is increasing in the pharmaceutical community, but there is an urgent need for an academic center that integrates basic science discoveries with anti-fibrotic drug development and testing.

Mount Sinai is the ideal home for an anti-fibrotic research center. Mount Sinai is at the forefront of Liver Fibrosis research. Dr. Scott Friedman has assembled a world-class team of 18 individuals including students, postdoctoral fellows, technicians and

physicians who are together exploring the fundamental mechanisms underlying liver fibrosis or scarring. From these basic investigations have begun to emerge major new insights into how this fibrosis can be stopped.

Mount Sinai is synonymous with excellence in liver disease. In particular, the Division of Liver Diseases and the Recanati-Miller Transplant Institute are among the largest, most productive, and widely respected liver programs in the world.

Dr. Scott Friedman, Professor, Medicine/ Liver Diseases

Dr. Scott L. Friedman is the Chief of Liver Diseases, Division of Medicine and has performed pioneering research into the underlying causes of scarring, or fibrosis associated with chronic liver disease, which affects millions worldwide. Dr. Friedman was among the first to isolate and characterize the hepatic stellate cell, which is the key cell type responsible for scar production in liver.

Dr. Friedman's work has been continuously funded by the NIH since 1985. Dr. Friedman is a 1979 graduate of Mount Sinai School of Medicine, where he served as the President of Alpha Omega Alpha Honor Society and was an awardee of the Arthur Aufses, Sr. Prize in Surgery. After graduation Dr. Friedman was a Medical Resident at the Beth Israel Hospital, Harvard Medical School, Boston, and then a Gastroenterology Fellow at UCSF before assuming a faculty position there which he held for ten years. During a 1995-96 sabbatical from UCSF he was a Senior Fulbright Scholar and Visiting Professor at the Weizmann Institute of Science in Israel, in the laboratory of Professor Moshe Oren. Dr. Friedman has given invited honorary lectures throughout the world and is also a respected author, with over 200 peer-reviewed publications. He has mentored over 50 postdoctoral fellows and students, almost all of whom remain in academic training programs or faculty. In addition to his laboratory research, Dr. Friedman is a respected clinician and teacher, and is listed among the "America's Top Doctors". He was awarded the Mount Sinai Department of Medicine's Solomon Berson Housestaff Teaching Award in 2006 and in 2009 was recognized as a Master Educator by the Mount Sinai Institute of Medical Education. In 2003 Dr. Friedman was honored with the International Hans Popper Award by the Falk Foundation in Freiburg, Germany, in recognition of his outstanding contributions to the understanding of liver diseases and its treatment. He is currently the number 10 most cited author in the field of hepatology, with an H-index of 67 (http://hepatop.biopredictive.com/top/dinosaur/)

Dr. Friedman is a senior Attending Physician in Liver Diseases at Mount Sinai. He is formerly an Associate Editor of Hepatology, and has served on multiple Editorial Boards. He is senior Editor of the textbook "Current Diagnosis and Treatment in Gastroenterology". He is on the Scientific Advisory Board of the US-Israel Binational Science Foundation and the Senior Advisory Council for the National Institute of Alcohol Abuse and Alcoholism. Dr. Friedman was a recipient in 1993 of the Saul Horowitz, Jr. Outstanding Alumnus Award from Mount Sinai and is a member of the American Society of Clinical Investigation since 1995 and the Association of American Physicians since 2004. He has served on numerous committees for the American Association for the Study of Liver Diseases and the American Gastroenterological Association (AGA) and is recognized as an AGA Fellow. He is immediate Past-President of the American Assn for the Study of Liver Diseases

About Pro-Pharmaceuticals GR Series of Fibrosis Compounds

The GM and GR series of compounds are first-in-class, novel carbohydrate compounds that significantly reduced collagen expression and reversed fibrosis in animal models. Uncontrolled collagen expression is a pathological process that occurs during the fibrotic process, affecting various organs leading to scar tissue. Chemical toxicity, microbial infection or physical injury cause hepatic, renal and other types of fibrosis. Carbohydrate polymers were synthesized and screened to inhibit collagen production in in-vivo and in-vitro fibrosis models.

About Pro-Pharmaceuticals, Inc.

Pro-Pharmaceuticals, OTC: PRWP, is the leader in the field of Galectin therapeutics and is engaged in the discovery, development and commercialization of therapeutics that target Galectin receptors for advanced treatment of cancer and fibrosis. The Company is headquartered in Newton, Mass. Additional information is available at www.pro-pharmaceuticals.com.

FORWARD LOOKING STATEMENTS: Any statements in this news release about future expectations, plans and prospects for the Company constitute forward-looking statements as defined in the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995. These forward-looking statements are based on management's current expectations and are subject to a number of factors and uncertainties, which could cause actual results to differ materially from those described in such statements. We caution investors that actual results or business conditions may differ materially from those projected or suggested in forward-looking statements as a result of various factors and not place undue reliance on forward-looking statements.

More information about those risks and uncertainties is contained and discussed in the Company's most recent quarterly or annual report and in the Company's other reports filed with the Securities and Exchange Commission. The forward-looking statements represent the Company's views as of the date of this news release and should not be relied upon to represent the Company's views as of a subsequent date. While the Company anticipates that subsequent events may cause the Company's

views to change, the Company disclaims any obligation to update such forward-looking statements.

DAVANAT is a registered trademark of Pro-Pharmaceuticals.

Investor Contact: Pro-Pharmaceuticals, Inc., Anthony D. Squeglia: 1.617.559.0033; squeglia@pro-pharmaceuticals.com.

Media Contact: Joanne Hogue, LVA Communications, 1.410.658.8246; Joanne@lva.com.