

FACT SHEET

**Texas A&M Health Science Center College of Medicine
Institute for Regenerative Medicine at Scott & White
Temple, Texas**

Founding of the Institute

The Texas A&M Health Science Center College of Medicine Institute for Regenerative Medicine (IRM) at Scott & White was founded in August 2008 with a commitment of \$40 million from the Texas A&M Health Science Center College of Medicine and Scott & White.

Background

The IRM is based on recent discoveries that stem-like cells from adult patients or normal volunteers have a remarkable power to speed the repair of almost any tissue in the body.

The director, Darwin J. Prockop, M.D., Ph.D., and other scientists of the IRM were leaders in many of these discoveries and were among the first to establish their practical application to patients. Their pioneering role is reflected in the fact that their first papers in the field published in the late 1990s have now been cited more than 5,000 times in publications by other scientists (<http://scholar.google.com>).

Their status in the field is also reflected in their success in obtaining NIH funding for their work, including the only NIH award to prepare standardized samples of the cells and distribute them to other scientists. They are currently supplying cells to over 250 investigators in this country and abroad.

The research by Dr. Prockop and his associates was the basis for using adult stem/progenitor to repair extremely brittle bones in children with the genetic disease called osteogenesis imperfecta. This successful trial prompted subsequent trials of the cells in a broad range of other diseases in hundreds of patients.

Goals of the IRM

The IRM has three major goals:

1. One goal of the IRM is to perform basic research to further understand the intriguing ways in which adult stem-like cells can repair injured tissues. The information generated by the basic research will advance our understanding of the principles that govern all living organisms, including man. The information is also essential to design the safest and most effective therapies for patients.

2. A second goal of the IRM is to initiate clinical trials in which adult stem cells will be used to treat patients at the Texas A&M Health Science Center College of Medicine/Scott & White. The first trial of the cells will most likely be in patients with diabetes. Subsequent trials are planned in patients with knee injuries and arthritis, heart disease, stroke, kidney diseases, and probably some forms of cancer.
3. The third goal of the IRM is develop new biotechnology industries in Temple, Texas. To support the clinical trials with adult stem cells, efforts have been initiated to launch a new biotechnology company that will be located in Temple. A second biotechnology company is under consideration to develop a therapeutic protein produced by the adult stem cells.

In the course of pursuing these three aims, the IRM's faculty and staff will be actively training technicians and students to prepare them for careers in the rapidly expanding field of biotechnology.

Facilities of the IRM

Research Laboratories: The research facilities include over 30,000 square feet of modern laboratories with the latest instruments for culture of adult stem/progenitor cells; microscopic imaging of cells and tissues; analysis of proteins, messenger RNAs and genes; and data processing.

The research facilities are supported by offices for faculty and administrative staff. They are also supported by two small conference rooms and a large conference room that seats 100 and that is fully equipped for teleconferencing.

GMP Facility for Production of Adult Stem Cells: Construction will shortly be completed on laboratory of about 6,000 square feet for preparing adult stem/progenitor cells for the treatment of patients. The cells will be prepared under conditions that meet the highest standards for Good Manufacturing Practices set forth by the US Food and Drug Administration.

Staff

Since it was launched on August 1, 2008, the IRM has recruited a staff of 35 that includes four faculty, five administrators, 11 Ph.D. postdoctoral fellows, four M.D. postdoctoral fellows, one DVM postdoctoral fellow, six Ph.D. graduate students, and four technicians.

The staff includes representatives of Texas, Connecticut, Louisiana, Indiana, Iowa, New York, Oregon, Pennsylvania and Washington. It also includes representatives of Brazil, Canada, China, Cyprus, England, Finland, Germany, Japan, Russia and South Korea.

The IRM is continuing to recruit with the goal of reaching a full staff about 75 in a year or two.