

# Expanding world-class technologies

Beginning over just 20 years ago, bioscience is no longer an emerging industry in Colorado. The sector spans more than 460 companies across the state and attracted USD 300 million in VC investment in the last five quarters.

**CLUSTER** More than 18,000 Coloradans find themselves walking into work each day discovering life saving therapies, creating instruments that will revolutionise healthcare and advancing current medical practices and techniques. For these Coloradans, life is good because their jobs directly improve the quality of life. These are the people of Colorado's expanding bioscience industry.

Bioscience is no longer an emerging industry in the state. Colorado's bioscience industry began just over 20 years ago and today has become one of the state's crown jewels, an economic driver that is vital as the state and nation work to recover from the current economic crisis. The sector spans more than 460 established and emerging bioscience companies across the state, with strong clusters of activity found throughout the state's metropolitan areas. Attracting more than USD 300 million in venture capital investment in the last five quarters, and in 2008 Colorado was ranked fourth in the nation for bioscience venture capital funding.

Key to the industry's growth in Colorado is proven success in nurturing and supporting its academic research institutions to advance bioenergy, electronic medical devices and pharmaceutical biotechnology platforms. Refining the technology transfer process from the laboratory to the business world has been critical in making Colorado's bioscience industry a world-class player.

The University of Colorado, Colorado State University, University of Northern Colorado, National Jewish Health, Bonfils Blood Center, University of Denver and the School of Mines each showcase the various talent and innovation being conducted in Colorado. The academic medical research and development grew more than 72% from 2002 to 2006, which is nearly twice the national average. These research institutions spin out new companies and entrepreneurs on an unprecedented level, keeping Colorado on the leading edge.

The University of Colorado system, CU, has four campuses spread across the state, and each specialises in varied areas of bioscience re-

search. The Technology Transfer Office at CU has certainly been busy over the last couple of years, producing about 10 new bioscience companies each year. Colorado State University, CSU, has also made significant investments in their technology transfer and commercialisation functions. CSU has produced 13 new companies since 2002, with more companies in the pipeline. In January of 2006, CSU began a new endeavour in their technology transfer efforts, the Supercluster, which will try to align CSU's strengths with local industry to foster regional economic development.

**"Colorado has also seen many companies move their operations to the state"**

#### Significant increase of M&As

As Colorado bioscience companies have demonstrated success, the level of merger and acquisition activity has increased significantly. Larger national and global companies are seeking to capture the technology developed by the smaller Colorado firms, and these firms have continued or expanded their operations in the state.

In 2006, Myogen was acquired by Gilead for USD 2.6 billion. Gilead, a biopharmaceutical company that discovers, develops, manufactures and commercialises therapies for viral disease, infectious disease and cancer chose to locate their cardiopulmonary research and clinical development in Colorado. Dharmacon RNAi Technologies was created as a subsidiary of Thermo Fisher Scientific when Dharmacon Inc., a company that started in Colorado in 1995, was acquired by Fisher Scientific Inter-



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national. Fisher Scientific International continued the Thermo Fisher Scientific operations in the state. Merck has acquired two Colorado companies since 2006, Sirna Therapeutics and Insmed, and have since remained in Colorado.

Colorado has also seen many companies move their operations to the state. Colorado-based Valleylab became a division of Tyco Healthcare Group in 1998, and Tyco Healthcare Group subsequently relocated its Respiratory and Monitoring Solutions unit from California to Colorado. Tyco Healthcare Group spun off as Covidien in 2007, with a USD 20 billion market capitalisation and have since added employees to their Colorado operation. GambroAB, a Swedish company, spun off Colorado-based GambroBCT Inc., today known as CaridianBCT Inc., making it the largest medical device manufacturer headquartered in Colorado. CaridianBCT has worldwide revenues approaching USD 500 million with 2,300 employees, 1,800 of which are based in Colorado.

As the future unfolds for Colorado's bioscience industry, it is undeniable that Colorado's future is bright. With more companies moving operations to Colorado and new companies forming within the state, Colorado is becoming known as an international name in the biosciences.

**COLORADO BIOSCIENCE**