

a report by
Karin Duncker

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Karin Duncker has served as Executive Director of the New York Biotechnology Association, Inc. (NYBA) since 1998, and has been on staff at the association for 12 years. Within her current leadership capacity, Ms Duncker is responsible for providing strategic, operational and financial leadership for this statewide association. Under her stewardship, NYBA has increased its membership rolls by 75% and today consists of 250 member companies that represent the nation's fifth largest biotechnology sector and the third leading biotechnology-based employment roster. Ms Duncker also serves as a liaison to regional industry organisations and economic development agencies throughout the state. This effort has helped unify New York's diverse biotechnology business sector while also developing a targeted legislative agenda that benefits biotech clusters across the state. Ms Duncker has submitted testimony at New York State Assembly and Senate hearings and NYC Council meetings, and has participated on the NYC Mayor's Taskforce on Economic Development. She is routinely sought out as a speaker at biotech industry events and her professional commitments include membership on several industry-related committees and boards. Prior to joining NYBA, Ms Duncker worked in corporate training and development at the Long Island Lighting Company and the Pall Corporation. She began her career in the field of education where she served as a Continuing Education Instructor and high school biology teacher. Ms Duncker received her BA and Graduate Fellowship in Marine Biology from Hofstra University.

On 11 January 1999, *Time* magazine's cover called the 21st century the "Biotech Century", fuelling an already escalating race to grow the biggest and brightest biotechnology industry in the world. In North America, California, Massachusetts and Canada have the majority of biotech companies, while in Europe the most successful regions seem to be located in the UK, Germany and France. What is it that makes these regions so successful?

In a region like California the answer seems somewhat obvious – the existence of Silicon Valley, and a 'silicon-valley mindset' made it easier to grow a high-risk, high-reward, high-technology industry like biotech. With an active venture capital community already in place in the bay area, a new community of high-worth investors, those who had made their money in high technology, already understood the game and were ready to play. There was also an entrepreneurial focus within the research institutions in the region. Creating industry out of science was a goal, not just a novel or even radical idea.

In order to build a sustainable biotech industry, several factors must be in place: a mature and informed business environment and governmental support network; and a critical mass of biotechnology organisations led by 'success stories'. The first nurtures small companies and creates an environment for them to grow. The second provides greater opportunities for collaboration and growth, attracting more companies to the region.

Another important factor for a successful bioregion is clustering. In New York (NY), there are four regions in where the ground is most fertile – the Westchester/New York City/Long Island region, or 'downstate cluster', the western NY region around Buffalo/Rochester, or 'western cluster', the 'capital cluster', centred around Albany and the 'southern cluster' centred in the region around Ithaca. If investments were focused into these clusters, New York would be able to take advantage of the escalating interest in biotech, and be better able to compete in the biotech race.

For any state to lead in the biotech industry race, strong commitment and support of programmes that drive cluster development must occur. NY State has already recognised the potential of the biotechnology industry, and has started to make investments in its future, yet the competition from other states has put NY at a critical juncture, and how the state invests its resources needs to be thought out with great care and focus. The New York Biotechnology Association (NYBA) wants to help focus that effort, and believes if those investments are made as suggested below, NY can realise the goal of a world-class biotech industry within its borders.

In order for any biotechnology industry to thrive, it needs the following:

- access to excellent technology to create companies;
- incubator programmes to provide affordable wet lab space;
- access to seed stage and venture capital for new companies to grow;
- technology parks to expand and grow companies once they have spun out of incubators;
- access to qualified personnel, both scientific research staff and experienced senior management; and
- an informed legislative community that realises the potential of its biotech industry and creates policy to support and not stifle its growth.

This inaugural edition of *Biotechnology Regional Development 2006* details regional initiatives that are developing to support the growth of biotechnology, pharmaceutical and life sciences industries, and I hope you enjoy reading it. ■