



Finland has some 200 biotech companies, more than half of which operate in the health sector.

Juha Rahkonen

Biotechnology

Over the past 20 years, Finland has invested heavily in research and development in the field of biotechnology. As a result, Finns are forerunners in several core fields of biotech.

Saara Hassinen

Finland's infrastructure and innovation environment strongly promote the pursuit of high-level scientific and technological achievements. The world-renowned educational system, state-of-the-art facilities, and close interactions between large corporations, SMEs, universities, and research institutes all provide a good environment for the development of the biotechnology industry.

Thanks to strong public investment in biotechnology and the entrepreneurial spirit of its industry, Finland saw fast growth in biotechnology in the 1990s. During this decade, private risk financing significantly boosted progress in the Finnish biotech industry.

In 2000, a lack of private capital started to slow the growth of the Finnish life science industries and also reduced the number of successful business cases. However, during the last few years, many companies have made a noticeable return to growth.

Cooperation is key

The foundation of the biotech industry in Finland was laid in the 1980s, with heavy public investment in R&D activities in the area. Of the public funding agencies, the Academy of Finland provided funding to basic research, while Tekes supported more applied research and development.

Tekes technology programmes and the Academy of Finland research programmes are central tools in the promotion of Finnish scientific and R&D work. Programmes offer a solid framework, not just for cooperation between academia and enterprises—and between enterprises—but also for joint R&D projects at an international level.

In 2006, the Finnish Science and Technology Policy Council, which coordinates the public funding for research and development in Finland, decided to launch Strategic Centres for Science, Technology, and Innovation, initially in five focus areas.

Biotechnology and its applications will have a central role in the planning of a Strategic Centre for Health and Wellbeing and in the already-established Forest Cluster.

Potential for partners

The combination of knowledge, research, know-how, and a solid infrastructure has been encouraging to entrepreneurs. Most new companies in the field have emerged from research and innovation that originated in universities or institutes of technology.

Biotechnology centres and science parks established with universities act as catalysts, merging companies and biotechnology-focused research units.

In 2007, there were about 200 biotech companies operating in Finland. Most of these—about 150—are companies exploiting biotechnology or closely related technologies. Besides these core companies there are a variety of support companies, mostly service companies, subcontractors or consulting firms.

More than half of Finland's biotech companies operate in the health sector, conducting research and developing or manufacturing drugs, diagnostics or biomaterials.

There are about 30 companies developing drugs. Some 40 companies are engaged in *in vitro* diagnostics and Finland has ten biomaterials companies. All of these intend to place products on the international market.

Finland also has a significant presence in industrial-scale enzyme production. Some companies concentrate on high-quality enzymes for research.

Making the most of the rich potential offered by Finnish biotech will rely on an ability to attract partners and funding.

“All Finnish biotech companies intend to place products on the international market.”

Finnish Bioindustries

Established in 1997, FIB is Finland's biotechnology industry association. It is a private, independent, non-profit organisation. FIB has about 60 member companies varying from big pharmaceutical enterprises to small start-ups. The companies represent all life science areas. FIB is a member of BIO, EuropaBio and AusBiotech.

Index of biotechnology companies in Finland: www.finbio.net.

The writer is Director General of Finnish Bioindustries FIB.
saara.hassinen@finbio.net