Culminatum works to develop an attractive innovation environment for biotechnology in the BSR

By Pekka Ihalmo

Culminatum Innovation Ltd was established in 1995 to serve as a joint regional development instrument for its owners and to implement the national Centre of Expertise programme in the Helsinki region. Due to its triple-helix ownership structure, Culminatum represents a unique, independent platform able, on the one hand, to respond rapidly to the demands of local business clusters and cities and, on the other hand, to address future challenges facing society, e.g. in the healthcare sector. Since Culminatum's founding, biotechnology and life sciences have been one key focus area in developing the Helsinki area towards sustainable economy.

The Helsinki Region serves as an attractive environment for high-level academic research combined with a rapidly growing industry. In fact, the Helsinki region is Finland's largest hub of biotech companies, generating the majority of revenues (75 %) in the entire industry. The region's business ecosystems have a solid foundation in drug development and diagnostics, with bioinformatics and neurotechnology recognized as emerging new strong points.

In order to support economic growth and sustainable development in biotechnology and life sciences, Culminatum 1) builds internationalization programmes for groups of high tech services companies having value added from customers' perspective; 2) provides business acceleration support and builds bridges between innovative SMEs and healthcare organizations; and 3) encourages the utilization of the wideranging expertise of PhDs for reinforcing enterprises R&D&I activities. All of these initiatives are expected to support the funding, growth and entry into global markets of SMEs.

Strong and reliable networks are the basis for successful development work

The key to success in all development activities is well-developed networks on regional and inter-regional level. The networks introduced below have provided excellent platforms for developing, launching and disseminating projects that build the competitiveness of biotechnology in BSR.

HealthBIO Biotech Cluster is a well-established Competence Cluster for health-related biotechnology within the Centre of Expertise Programme OSKE. Helsinki and the other four participating regions represent the five major bio-clusters in Finland. HealthBIO lays the ground for diverse innovation activities which, among other things, support the internationalization of biotech companies and tackle their funding bottlenecks.

Culminatum is an active member of the ScanBalt BioRegion promoting the development of the ScanBalt BioRegion as a globally competitive macro-region and innovation market within Health and Life Sciences. ScanBalt is a bottom-up association driven by its members (e.g. cluster development agencies, science parks and universities) and their needs, based on a shared vision for the ScanBalt BioRegion.

As a primary contact point for biotech companies in the Helsinki region, Culminatum is a Full member of **the Council of European BioRegions - CEBR**. CEBR aims to build a competitive European biotechnology sector on the world stage through networking, collaboration, recommendations for policy and sharing best practice. The main tools of CEBR are Special Interest Groups, such as Clinical Innovation and Innovative Finance for Biotechnology.

From objectives and networks to concrete results

Boost Biosystems (2006–2008) was an FP6 project initiated by ScanBalt with the objective of boosting collaboration between SMEs and academia by initiating RTD consortia in the cross-disciplinary field of 'biosystems technologies', including diagnostics, *in vitro* tests, and pharmacogenomics applications. Improvements in these areas can, for instance, solve unanswered questions in diagnosing major diseases and can provide inexpensive diagnostics for poverty-related diseases. These objectives were approached, e.g. through informing on the potentials of biosystems technologies and partner matching for joint EU projects.

Baltic Sea Innovation Network Centres – BaSIC (2009-2012) aims to create a seamless working environment for fast-growing, innovative SMEs all over BSR, embedded in a reliable network of leading business innovation centres, science parks clusters. The BaSIC network has set up Market access services, organized cluster cooperation events and produced, e.g. cluster reports on the life sciences, which provide information for key players in research and industry.

BSHR HealthPort (2011–2013) addresses pivotal bottlenecks in healthcare innovation, such as insufficient commercial exploitation of solutions proposed by healthcare. Within this project, Culminatum organized a HealthPort Innovation Competition that boosted the commercial utilization of ideas arising from the clinical environment and healthcare research conducted in the BSR and in Northern Netherlands. The winners of the competition included *Ergofinger*, a unique disposable suction device attached to the dental worker's finger, and *Dr. Modz*, a user-friendly diabetes management system for juvenile diabetics.

Networking Power (2011–2013) aims at helping high-tech service companies in the biotechnology and pharmaceutical industries reach international markets. The project and the internationalization programmes are targeted at groups of companies having value added from customers' perspective. The internationalization measures can include, e.g. fact-finding trips to events and road shows to interesting markets and potential customer companies in Germany, Scandinavia and the rest of Europe.

PhDs to Business Life (2011–2013) is a project that creates and pilots study modules and models for doctoral programmes. The project strives in the way to improve the correspondence between doctoral studies and working life and to increase cooperation between doctoral programmes and enterprises. The project ensures the availability of expert personnel for life science enterprises and gives graduate students the readiness for a variety of working careers.

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