

## **Denmark's Biomedical and Pharmaceutical Ecosystem**

The biomedical industry and, in particular, the pharmaceutical industry in Denmark demonstrated accelerated growth in recent years. This is represented, for example, in substantial increase in pharmaceutical export as well as in job creation and employment rates. Planning and implementation of governmental programs aimed at accelerating the industry's development and ensuring its future growth have taken place in recent years as well.

The pharmaceutical industry in Denmark relies, to a large extent, on established foundations that are the basis for the action of big pharmaceutical companies. These local big-pharma companies contribute greatly to the ecosystem in multiple ways such as employment of tens of thousands of local workers, facilitation of joint R&D initiatives with the universities, investments in academic infrastructure and supporting small biotech companies with promising technologies for the creation of growth engines.

As in other developed countries worldwide, Denmark understood the importance in creating clusters that bring together the different stakeholders in the ecosystem. Many of the biotech companies reside in a distance not greater than 5 km from the university centers. This allows close collaboration that is necessary for maintaining innovation. Consequently, it was found that approximately 80% of the companies in the life science sector have collaborated with Denmark's universities in the last years. Medicon Valley is the leading biomedical cluster in Denmark. Operating together with the neighboring country Sweden, the cluster has hundreds of companies. The medical centers and the Universities located in Medicon Valley are an integral part of the cluster and provide clinical know-how together with basic academic science that can further be developed to real-life medical solutions for unmet medical needs.

The aim of this case study is to describe the success factors and growth engines of the biomedical and, in particular, the pharmaceutical ecosystem in Denmark. The report describes many aspects of the ecosystem, including development of the local talent pool, contribution of the big-pharmaceutical companies to the ecosystem and the creation of local clusters. In addition, principles of the governmental programs aimed at maintaining and accelerating the sector's growth are presented.