

NORDIC LIFE SCIENCES

THE LEADING LIFE SCIENCE BUSINESS MAGAZINE

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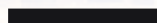
TAKING A SMALL COMPANY TO A BIG
MARKET AND TACKLING A BIG PROBLEM

ALL ELEMENTS ARE IN PLACE FOR

A STRONG LIFE SCIENCE PROFILE

Kuopio combines a great business environment, strong international networks and a wide range of education and research expertise.

TEXT by MALIN OTMANI





Arto Holopainen, Senior Digital Advisor, City of Kuopio

PHOTO JAKKO SUVALA

KUOPIO LIES IN THE BEAUTIFUL FINNISH LAKELAND, where there is more water than land, and from its very beginning in 1775 it has been a center of education.

“A “trivium” school offering secondary education was founded in 1778, a high school in 1844, and an industrial school, commercial school and nursing school in the 1890s. In 1966 a law was created establishing an institute of higher education (later a university) in Kuopio,” says Arto Holopainen, Senior Digital Advisor at the City of Kuopio.

The city obtained the status of University City in 1972 when the new university was founded, offering education in medicine, medical physics and biochemistry. In the same year the Kuopio Central Hospital became Kuopio University Hospital. The new university campus moved to Savilahti in 1978 when the new Canthia university building was completed. Since then the university has expanded in every direction and a true science park has emerged in the area, describes Holopainen.

Pioneering expertise in health and wellness, security and biotech solutions

Today around 118 000 people live in the city and Kuopio is a modern, developing center of economic life in Eastern Finland. For example, the city is one of the national centers of expertise, with the University of Eastern Finland, one of the largest research universities in Finland, as well as one of Finland’s five university hospitals.

“Kuopio combines a great business environment and a wide range of education and research expertise. Strong international networks provide possibilities for companies in healthcare technology and the biotech, medical and environmental sectors, as well as for cooperation in travel, education and culture,” states Holopainen.

10 X LIFE SCIENCE COMPANIES IN KUOPIO

TALO FINLAND

Produces virtual and augmented reality-based software and services. Virtual reality in life sciences can improve learning in life sciences, train the next generation of healers, improve patient outcomes and give patients new perspectives on their health.

AFEKTA TECHNOLOGIES

A spin-off company based on experience in metabolic profiling analytics at the University of Eastern Finland. The company offers mass spectrometry-based comprehensive metabolomics services tailored for any R&D question and any biological sample material.

BIOSAFE – BIOLOGICAL SAFETY SOLUTIONS

A CRO at the cutting edge of safety applications in biotechnology. Their core competence includes the use of cell and molecular biology, microbiology and diverse biotechnological approaches in product safety research.

BONE INDEX FINLAND

A medical device company with a point-of-care technology (Bindex) in osteoporosis diagnostics. The company specializes in the development of measuring devices for osteoporosis screening and diagnostics.

FINVECTOR VISION THERAPIES

A world leader in the R&D of Viral-Based Gene Therapy products. The company is authorized under EMA for the production of gene therapy products for clinical and commercial supply.



“Nowadays Kuopio is known internationally for our pioneering development and expertise in health and wellness, security and biotechnology solutions.”

He emphasizes Kuopio’s strength in the multidisciplinary approach towards human health and wellbeing, especially in serious public health problems. “These include prevention, diagnostics and treatment of very common diseases, e.g. cardiovascular, metabolic, and neurological diseases.”

These developments have also led to the creation of numerous startup and growth companies in the city. In the health and wellbeing sector Kuopio is home to over 1 100 companies and around 11 300 employees.

“The commercial health and wellbeing activities pursued in the Kuopio area are mainly in the service sector, contract manufacturing, health technology and pharmaceutical drug development. There is also groundbreaking work

being done in the commercialization of gene therapy, neurology and diagnostics,” says Holopainen. “All elements are in place in Kuopio. Kuopio is surrounded by lakes and surrounded by beautiful and clean nature. Residents have ranked Kuopio the number one place to live amongst 20 of the largest cities in Finland according to the municipality rating 2017 (Kuntarating 2017),” he adds. “This is very well aligned with the City of Kuopio’s strategic vision to be the Capital of Good Life.”

KUOPIO-HEALTH OPEN INNOVATION Ecosystem is also an easy access

to the region’s expertise says Holopainen. KuopioHealth is a network of healthcare professionals committed to advancing health technology expertise, research, business life and awareness of the area.

It is an open innovation platform enabling co-creation and transfer of knowledge and technologies for the benefit of society. In addition, the Kuopio Living Lab, provided by the City of Kuopio, Kuopio University and Savonia University of Applied Sciences, enables co-creation in authentic healthcare environments. The aim is that companies will develop future healthcare solutions and test and improve their products and services together with end users here.

A unique campus for three different levels of education

Another interesting feature lies in the middle of the city, by the Kallavesi lake. The *Savilahti* project has grown to be an international center of excellence and provides a work and study environment for more than 19 000 people with a combination of expertise and know-how in the fields of health, environment and wellbeing. It is one of the country’s most extensive

KUOPIO CENTER FOR GENE AND CELL THERAPY

A newly formed research center in Finland performing basic and translational research, providing scientific know-how and modern technologies to develop advanced therapies.

MEDFILES

An established CRO serving the pharmaceutical, medical device, veterinary, biopharmaceutical and food & nutrition industries. Service offerings cover the entire range of outsourcing needs from early development to market approval and post-marketing activities.

MEDIKRO

Develops, manufactures and markets medical systems for pulmonary diagnostics and monitoring. As a technology leader in computer based spirometers, the company is actively introducing innovative solutions for efficient asthma and COPD treatment.

MYONTEC

Designs intelligent clothing and devices for monitoring and analyzing its customers exercise performance. The clothing directly measures your muscular system not just your heart rate.

NEWICON

The company has developed a product portfolio consisting of storage robots for retail pharmacies and hospital pharmacies, automated dispensing cabinets (ADCs), narcotic cabinets, and antibiotics compounding robots.

urban planning and development projects.

“The future aim is to turn the area into a 35 000 people business, education and residential smart city region where know-how, science, training and business ecosystems are brought together. Savilahti also provides a unique campus for three different levels of education; the University of Eastern Finland, Savonia University of Applied Sciences and the Savo Consortium for Education (vocational and upper secondary education),” says Holopainen.

PUBLIC AND PRIVATE SECTOR investment in the built environment of the Savilahti area amounts to two billion euros.

“It is a home for hundreds of high tech technology and service companies offering their businesses, innovations

and international contacts, and numerous testing and analysis laboratories, as well as piloting environments,” says Holopainen.

Research strengths

The University of Eastern Finland’s most renowned top-level international research areas are cardiovascular and metabolic diseases, as well as neurosciences.

Kuopio University Hospital’s strongest areas of research are chronic diseases, such as diabetes, arteriosclerotic vascular disease, Alzheimer’s disease, cerebrovascular diseases and obesity. Kuopio University Hospital is also a worldwide pioneer in brain tumor and blood vessel gene therapy.

At Savonia University of Applied Sciences, wellbeing technology has been selected as one of the RDI (research & development & innovation) priorities. This focus area aims to develop the quality

and effectiveness of social and health care services, especially by developing technological applications, digitalization, and the safe use of electronic services.

“The group studying applied wellbeing technology works closely with industry to promote these technologies, gamification, computational intelligence, ICT solutions and big data to develop new information services in social and health care,” says Holopainen.

IN ADDITION, NATIONAL INSTITUTE for Health and Welfare (THL), Finnish Institute of Occupational Health (FIOH), Neurocenter Finland (a one-stop shop for research in neurosciences and product development), and VTT Technical Research Centre of Finland all have departments in Kuopio and conduct research and administrative operations. 



ehealth2019, an international conference and the 24th Finnish National Conference on Telemedicine and eHealth (2-3 April 2019) will cover themes focusing on updating knowledge about international and Nordic eHealth trends and solutions. There is also a possibility to create new eHealth services in eHealth2019 Hackathon held as a pre-event organized by Savonia University of Applied Sciences.