

FROM CANCER RESEARCH TO CURE

STRATEGY 2017 – 2019



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“ Our vision is to help patients by accelerating the development of innovative cancer treatment”



A DEDICATED ONCOLOGY CLUSTER

Oslo Cancer Cluster is an oncology research and industry cluster dedicated to improving the lives of cancer patients by accelerating the development of new cancer diagnostics and medicines through wide dissemination of knowledge and innovations.

The cluster is a non-profit member organization with about 90 members in 2017. Our member base consists mostly of biotechs, contract research organizations, investors and academic institutions, both universities and university hospitals – all working in the cancer field. They represent the entire oncology value chain, doing everything from exploratory research to selling therapeutics and diagnostics to global markets.

In 2007, we received the status as a Norwegian Centre of Expertise. Since then, we have developed into a strong biotech cluster well positioned in the global oncology industry. The world class research environment in immunotherapy and the presence of unique IT-infrastructure and competence, strengthen the cluster's position as a global knowledge and innovation centre. We use global connections and national advantages to help get the right treatment to the right patient at the right time.

Digitization is driving advances in cancer precision medicine. New technology, including tumour sequencing, is generating vast amounts of data that needs to be sorted and analysed. This has opened for IT companies to take part in developing personalized medicine, tailoring drugs to the biology of each patient. It also opens for large research projects, such as the projects of the National Cancer Genomic Consortium, initiated in 2012. It aims to establish new clinical practices for cancer treatment. Oslo Cancer Cluster also supports digitization of biopharma companies through the cross-sector EU-consortium PERMIDES.

A growing number of our members develop novel cancer immunotherapies. Therefore, we established the Norwegian Immuno-Oncology Consortium in 2013. The goal of this consortium is to strengthen the knowledge base and expertise, and to facilitate more national and international collaboration within immuno-oncology.

“Our mission is to be one of the top oncology innovation hubs and incubator centres in Europe”

THE BOARD

The board of Oslo Cancer Cluster is responsible for Oslo Cancer Cluster's strategy. The board consists of 11 highly skilled and experienced member representatives covering the whole oncology value chain – from basic research to globally marketed products, including patient organizations. This is the board as of June 2017.



Henrik Lund
Chairman of the board

Henrik Lund has more than 15 years' international management experience from AstraZeneca and Norwegian biotech companies. Lund is also CEO of Regenics, an Oslo Cancer Cluster member company.



Kirsten Haugland
Board member

Kirsten Haugland is Head of the Research and Prevention Department at the Norwegian Cancer Society. She has 25 years' experience from hospitals, and more than 15 years in leadership positions.



Bjørn Tore Gjertsen
Board member

Bjørn Tore Gjertsen Jr. is a professor at the Department of Clinical Science at the University of Bergen, and Clinical Chief at the early-phase Clinical Trials Unit at Haukeland University Hospital – Helse Bergen health trust.



Inger Sandlie
Board member

Inger Sandlie is professor at the Department of Biosciences, University of Oslo and research group leader at the Department of Immunology, Oslo University Hospital, as well as deputy director of the Centre for Immune Regulation. She co-founded Nextera and Vaccibody.



Øyvind Bruland
Board member

Øyvind Bruland is professor of clinical oncology at the University of Oslo and consultant oncologist at Radiumhospitalet Oslo University Hospital. He is one of the founders of the successful Norwegian biotech companies Algeta and Nordic Nanovector.



Benedikte Thunes Akre
Board member

Benedikte Thunes Akre is Medical Director for the Nordics & Baltics in Astra Zeneca. She has a long line of experience working within the pharmaceutical industry, including preclinical pharmacology, regulatory, safety, marketing and medical affairs.



Ludvik Sandnes
Board member

Ludvik Sandnes has more than 40 years' experience from international corporate finance, banking and asset management. He is also Chairman of the Board of Nordic Nanovector ASA.



Unni Hjelmaas
Board member

Unni Hjelmaas is CEO of Bionor Pharma. Hjelmaas has extensive senior management experience from Roche, and is the former CEO of Lytix Biopharma.



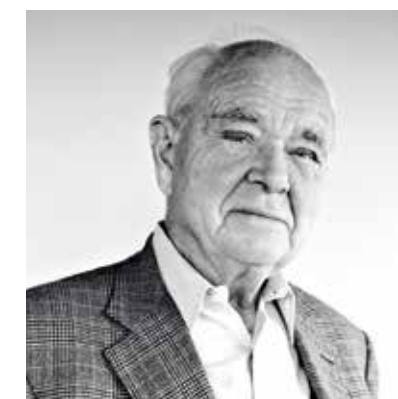
Ole Dahlberg
Board member

Ole Dahlberg has more than 15 years' international Life Science management experience. Dahlberg is Managing Director for Thermo Fisher Norway and in the leadership group of License- and Commercial Supply in Thermo Fisher Scientific.



Jónas Einarsson
Honorary member of the board

Jónas Einarsson, M.D., is CEO of the Radium Hospital Research Foundation. He is one of the founders and former CEO and Chairman of the Board of Oslo Cancer Cluster and Oslo Cancer Cluster Innovation Park.



Kaare R. Norum
Honorary member of the board

Kaare R. Norum is Professor Emeritus at the University of Oslo. Norum started both the Oslo Cancer Cluster and the Oslo Cancer Cluster Innovation Park together with Jónas Einarsson, CEO of the Radium Hospital Research Foundation.

STRATEGY AND GOALS IN BRIEF

This strategy document is the result of a thorough strategy process, including both a quantitative and a qualitative member survey, previous external evaluations of Oslo Cancer Cluster as a Norwegian Centre of Expertise, and workshops with the board and team at Oslo Cancer Cluster.

CANCER INNOVATION EXCELLENCE

Create a leading innovation ecosystem for cancer treatment and diagnosis for the benefit of cancer patients.

A PREFERRED GLOBAL PARTNER

Connect to global value chains through research, development and distribution partnerships.

LIFE SCIENCE TALENTS OF TOMORROW

Attract and develop life science talents to increase competitiveness and drive growth.

CANCER INNOVATION EXCELLENCE

Strategic goal: Create a leading innovation ecosystem for cancer treatment and diagnosis for the benefit of cancer patients.

Oslo Cancer Cluster has been dedicated to strengthening Norway's innovative capacity in the field of oncology since its establishment in 2006. During the past decade, the cluster has matured into an integrated innovation ecosystem, with additional resources provided by Oslo Cancer Cluster Incubator, located in the Oslo Cancer Cluster Innovation Park.

As an innovation cluster, we are particularly strong in academic research. Our academic members are the main driving force for research, development and innovation. Norwegian research in the fields of immunology and oncology is world-class. A flourishing undergrowth of biotech companies have been spun off from this academic research, and most of these companies continue to collaborate with the institutions that fostered them.

These companies' ground breaking products address unmet medical needs in the cancer field, but also in the field of infectious diseases and other disorders. The global biopharmaceutical companies in the cluster are members through their Norwegian branches. They are important drivers for larger projects, innovative research and educational initiatives.

Around 30 of the members are gathered in Oslo Cancer Cluster Incubator, a successful biotech cluster, situated in the Oslo Cancer Cluster Innovation Park. We share the innovation park with Ullern Upper Secondary School, the Cancer Registry of Norway and Oslo University Hospital.

Objectives:

- > Continue to develop Oslo Cancer Cluster Incubator to increase the commercialization of cancer research and support the successful development of start-ups and biotechs
- > Develop a programme for translational life science research in collaboration with other life science players to accelerate the commercialization process
- > Establish projects within digital oncology to advance digitalization of the biopharma players
- > Continue to build on the momentum and high standing of the immuno-oncology research and development community
- > Develop and acquire innovative technologies and infrastructure to provide state-of-the-art facilities for both academia and the industry



Examples of initiatives:

- > Nordic network of incubators in the cancer field
- > Expansion of the Immuno-Oncology Consortium
- > Network for digital oncology in Norway
- > Financing of innovative cancer projects and start-ups
- > PERMIDES EU Project to make small and medium sized biopharma companies more competitive by joint projects with IT partners

Norway's Prime Minister Erna Solberg visited Oslo Cancer Cluster Incubator and Innovation Park when the innovation park opened in August 2015.

A PREFERRED GLOBAL PARTNER

Strategic goal: Connect to global value chains through research, development and distribution partnerships.

The oncology industry is global. We want to attract foreign investments, oncology clinical trials and collaborations with targeted centres and companies, and take innovations from Norway to the global market. Therefore, it is crucial to promote Oslo Cancer Cluster internationally.

Since 2008, Oslo Cancer Cluster has collaborated closely with selected European and international clusters to gain critical mass and raise our profile in international arenas, e.g. the International Cancer Cluster Showcase at the BIO International Convention in the USA, BIO-Europe and Nordic Life Science Days. The goal is two-fold: to support the international partnering activities of our members, and to benefit from complementary contact networks. These include scouting, licensing and business development representatives, international investors and strong academic and clinical communities.

In a globally competitive environment, we need to work continuously to increase the role of Norwegian research and development in oncology innovation. It will be crucial to attract more oncology clinical trials to Norwegian centres, and to market the Nordic countries as an environment in which to carry out oncology trials, especially for precision medicine.

Norwegian health registries and biobanks have unique assets. Several international players such as Lawrence Livermore National Laboratory in the USA and international software companies like SAS Institute and IBM, have joined Oslo Cancer Cluster to participate in the growing community working to utilize this resource for the benefit of cancer patients.

Objectives:

- > Design a global membership programme to extend the membership base of Oslo Cancer Cluster beyond the Nordic countries and the UK
- > Identify and initiate new international cluster-to-cluster collaborations
- > Raise the cluster's international profile and promote the Norwegian cancer research and development community to selected target groups
- > Make it even more attractive to set up projects and Norwegian subsidiaries in Oslo Cancer Cluster Incubator and Innovation Park

Examples of initiatives:

- > Tailored meetings with international academic experts, business development and licensing executives from global pharma companies and international investors
- > Establish a global advisory board
- > Discounts for international conferences
- > Collaboration with pharma, investors, and EU Horizon 2020 partners
- > International Cancer Cluster Showcase as a satellite of BIO in the USA – to showcase small and medium sized enterprises to the global oncology business community



LIFE SCIENCE TALENTS OF TOMORROW

Strategic goal: Attract and develop life science talents to increase competitiveness and drive growth.

Oslo Cancer Cluster is engaged in building competence that is crucial to the growth of the Norwegian biopharma industry. We need to secure access to top research talent and future entrepreneurs. The pool of biopharmaceutical industry experts and entrepreneurs in Norway secures the growth and success of existing and emerging companies, even though our member biotechs have ambitions to reach global markets.

Oslo Cancer Cluster Innovation Park is unique in the world with its physical integration with Ullern Upper Secondary School. Since 2009, the school and the cluster have collaborated on educating pupils in the natural sciences, media and entrepreneurship. As a result, more students from Ullern have decided to study medicine or

natural sciences at university level. This is the main goal of the ongoing collaboration which serves as a model on how to work with life science talents.

The transformation of excellent academic science into innovative products is a major challenge. As a cluster, we therefore wish to intensify our efforts to encourage young researchers to build and expand their competence in innovation, intellectual property rights and product and business development. The newly established School of Health Innovation is an example of how we work with this aspect, in collaboration with the University of Oslo, Karolinska Institute, Oslo Medtech and Nansen Neuro Science.

Objectives:

- > Continue to develop the ongoing collaboration with Ullern Upper Secondary School
- > Contribute to innovation competence among academic researchers and clinicians in close collaboration with universities and university hospitals
- > Increase competency in developing pharmaceutical products and diagnostics in Norway



Selected projects:

- > Develop talent programmes together with Ullern Upper Secondary School
- > Collaborate with the University of Oslo, Karolinska Institute, Oslo Medtech and Nansen Neuro Science on the School of Health Innovation
- > Initiate an EU project in diagnostics

