



Newsletter

CREATE Health - a Strategic Centre for Translational Cancer Research at Lund University October - 2014

CREATE Health on Medicin Village - establishing and networking

A couple of hundred cancer researchers from the Faculties of Engineering, Medicine and Science have during 2013 moved to Medicin Village. These researchers include the majority of researchers within CREATE Health Translational Cancer Center. CREATE Health and also BioCARE are established in the northernmost buildings, and make up a significant part of Lund University Cancer Center - LUCC at Medicin Vil-



lage. The facilities are planned to encourage cooperation across faculty borders, and different groups have consequently been placed strategically to facilitate interactions.

The first year has revolved around establishing and networking both for CREATE Health and other cancer researchers, as well as to produce publications that can translate across borders and into the clinic. The idea to create a place for cancer researchers to come together, is bearing fruit, shown by planned and un-planned meetings and discussions that has led to new project collaborations. In addition, various in-house seminars as well as seminars with invited external, high-ranked scientists have been organized.

CREATE Health is featured in Näringsliv Medicin Valley 2020



The "Medicon Valley 2020" is a unique collaboration between Affärstidningen Näringsliv and Medicin Valley Alliance. The "Medicon Valley 2020" paper includes major actors within life science in the Öresund region. In the latest issue of Medicin Valley 2020, CREATE Health is featured in an article.

This paper is distributed at Swedish airports, trains and to company clusters like Medicin Village.

Link to the paper: <http://www.naringsliv.se/tidningar/2014-4/medicon-valley-2020/>

SCAN-B article in Läkartidningen

One of nine Swedish women is suffering from breast cancer. In 2012, almost 8500 new cases and approximately 1,460 deaths from the disease were reported. The survival rate after five years is approaching 90 percent, but 20-25 percent of women still relapse having a much more dismal prognosis. It is difficult at the individual level to predict which patients are cured with just surgery and which ones that need additional therapy. The consequence is that we are "over treating" a significant proportion of women who are exposed to side effects without getting any survival advantage.

SCAN-B (South Sweden Cancerome Analysis Network Breast) is a program for individualized cancer treatment, and is a long-term multidisciplinary collaborative project that started in 2009. Niklas Loman, MD, PhD, recently published an article highlighting SCAN-B in *Läkartidningen* (2014;111:CTEY). SCAN-B includes hospitals from six health-care districts in Skåne.



Uppsala University hospital joined SCAN-B in October 2013, and hospitals in Jönköping county, eastern health care region are in the process to join in 2014.

More than 5000 tumor samples have so far been collected. This project aims to identify markers for classification of breast cancer in refined biological subgroups for assessment of prognosis and treatment prediction.

Image: Läkartidningen/ AB Typoform

Cutting Edge Projects

In 2012/13 CREATE Health launched a new initiative called the Cutting Edge Projects (CE-projects). The aim of the CE-project is to increase cooperation within the center and to bring forward new and innovative projects that are not implemented in the framework of regular research grants. All researchers within CREATE Health could propose projects and representatives from the Board were the evaluators. The Cutting Edge-projects have after the first year been evaluated, and funding is extended for an additional year for three of the original four projects.

The 2013/14 Cutting Edge Projects are:

- **Detection of Cancer Cells in Sentinel Nodes**

P. James/S. Waldemarsson and C. Rose/E. Niméus

- **Comprehensive platform and software development for protein arrays**

C. Peterson/P. Edén and C. Borebaeck/C. Wingren

- **Multiplexed immunoassays in solution - novel opportunities for high-throughput disease proteomics**

C. Borebaeck/Wingren/A. Isinger-Ekstrand and Å. Borg/A. Kvist and C. Peterson

Scientific Advisory Board

Scientific Advisory Board (SAB)

Next SAB meeting will take place January 14th 2015. During this meeting CREATE Health will be evaluated.

SAB members are:

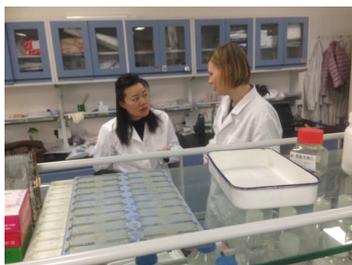
Prof. John Foekens, University of Rotterdam, The Netherlands
Prof. Nadia Harbeck, University of Munich, Germany
Prof. Torben Falck Örnthoft, Århus University, Denmark
Prof. Sören Brunak, Technical University of Denmark,
Prof. Bengt Glimelius, Uppsala University, Sweden
Prof. Mitch Dowsett, Royal Marsden Hospital, United Kingdom

MAD for cancer

Make a Difference (MAD) for Cancer is a program with a unique concept in that it brings together several different approaches of cancer biology from four different faculties at Lund University, in a multifocal approach to fight cancer. The project is based on the insight that a tumor is not only a bag of cancer cells, but rather an organ that needs to be approached from several angles to be eradicated. A tumor is interacting with the surrounding microenvironment, and is composed of stem cells, stromal cells, fibroblasts, immune cells etc.

The MAD for Cancer Program encompasses early diagnosis, patient stratification and targeted therapies, as well as the concept of resilience to disease. The MAD for Cancer Program is one of the 12 projects selected in the fundraising campaign in celebration of Lund University's 350-year jubilee "Lund University – For a better world". Already, a donation of 15 million SEK has been given to MAD, aiming to support Sven Pahlman's research on paraganglioma. Link to our campaign: <http://donationskampanj.lu.se/projekt/cancerforskning>. Link to the entire campaign: <http://donationskampanj.lu.se/for-skningsutmaningar>

CREATE Health in China



CREATE Health established 2012/13, in collaboration with Invest in Skåne, a link to several of the major cancer hospitals in Beijing, Tianjin and Shanghai. The CREATE Health protein biomarker signature for early diagnosis of pancreatic cancer, has now formed the basis of a partnership with the Tianjin Medical University Cancer Institute & Hospital – one of the two National Cancer Centers within China. One researcher from CREATE Health has been in Tianjin for several months, analysing around 100 pancreatic patient samples. The study aims to determine any differences between patient cohorts with different genetic backgrounds, and also to identify cancer-stage associated biomarker signatures. The data points to a very successful outcome and has opened up for discussions about further collaborations.

CREATE Health on

facebook

You can follow our activities on Facebook. We publish news, information regarding interesting seminars and calls for funding and a lot more.

KVSU prize 2014 to Carsten Peterson



Professor Carsten Peterson was awarded The Royal Academy of Arts and Sciences of Uppsala (Kungliga Vetenskapsamhället i Uppsala) prize for his interdisciplinary work. The prize was parted at its annual ceremony in

October 2014. He received the prize of 75.000 SEK for his "theoretical physics based research that provides new knowledge about complex systems in molecular biology and medicine". At the award ceremony Carsten held his laureate lecture "From stem cell to mature cell - a theoretical physicist's perspective".

Most recent publications 2014

- Nordström, M. et al.** Identification of plasma protein profiles associated with risk groups of prostate cancer patients. *Proteomics Clin Appl.* 2014.
- Török, S. et al.** Localization of Sunitinib, Its Metabolites and Its Target Receptors in Tumor Bearing Mice: a MALDI Mass Spectrometry Imaging Study. *British J. Pharmacol.*, 2014.
- Sugihara, Y. et al.** A New Look at Drugs Targeting Malignant Melanoma – An Application for Mass Spectrometry Imaging. *Proteomics*, 2014.
- Reinbothe S. et al.** EPO-independent, functional EPO receptor in breast cancer enhances estrogen receptor activity and promotes cell proliferation. *Biochem Biophys Res Commun* 445, 2014.
- Braekveldt N. et al.** Neuroblastoma patient-derived orthotopic xenografts retain metastatic patterns and geno- and phenotypes of patient tumours. *Int J Cancer*. In press 2014.
- Rankin EB. et al.** Direct regulation of GAS6/AXL signaling by HIF promotes renal metastasis through SRC and MET. *Proc Natl Acad Sci U S A*, 2014.
- Björner S. et al.** Epithelial and stromal microRNA signatures of columnar cell hyperplasia linking let-7c to precancerous breast cancer cell proliferation. *PLoS One*, 2014.
- Lehn S. et al.** Decreased expression of Yes-associated protein is associated with outcome in the luminal A breast cancer subgroup and with an impaired tamoxifen response. *BMC Cancer*, 2014.
- Fritz H. et al.** The miR21/10b Ratio As a Prognostic Marker in Clear Cell Renal Cell Carcinoma. *Eur J Cancer*, 2014.
- Newie I. et al.** The HER2-Encoded miR-4728-3p Regulates ESR1 through a Non-Canonical Internal Seed Interaction. *PLoS One*, 2014.
- Fehniger TE. et al.** Queries of MALDI-imaging global datasets identifying ion mass signatures associated with tissue compartments. *Proteomics*, 2014.
- Hansson, J. et al.** Evidence for a morphologically distinct and functionally robust cell type in the proximal tubules of human kidney. *Hum Path.* 2014.
- Borrebaeck, CAK. and Wingren, C.** Antibody array generation and use. *Meth. Mol. Biol.* 2014.
- Sherwood, V. et al.** WNT5A-mediated CTNBN1-independent signalling is a novel regulator of cancer cell metabolism. *Carcinogenesis*, 2014.

Pamphlet

Download the CREATE Health Pamphlet at http://www.createhealth.lth.se/fileadmin/create_health/pdf/CREATE_Health_2011.pdf or send a mail to Ulrika.Andreasson@immun.lth.se for a hard copy.

