

**Thursday 27th of November 2014 program**

9:15	-	10:35	<b>National and European Infrastructure</b>		
9:15		9:25	Welcome	Charlotte Björk Ingul	UNIKARD
9:25		9.45	European Strategy Forum on Research Infrastructures (ESFRI)	Hanne Monclair	Ministry of Education and Research
9.45		10.05	Norwegian (NORCRIN) and European Clinical Research Infrastructures Network (ECRIN)	Sigrun Kristine Sæther	St Olavs Hospital
10.05		10.35	European Advanced Translational Research Infrastructure (EATRIS)	Kjetil Taskén	Centre for molecular medicine (NCMM)
			EU-Openscreen and Chemical Biology	Kjetil Taskén	NCMM
10:35	-	11:05	Coffee break		
11:05	-	12:00	<b>Registries</b>		
11.05		11.25	How to use National Cardiovascular Registry for randomized studies	Ole Fröbert	SCAAR, Swedeheart
11.25		11.45	National Cardiovascular Registry	Marta Ebbing	Norwegian Institute of Public Health (FHI)
11.45		12.00	Epidemiological register case	Grethe Tell	FHI
12:00	-	12:20	Fruit break		
12:20		13.00	<b>Imaging and Structural Biology</b>		
13:20	-	12:40	Nor-Biolmaging and Euro-Biolmaging	Ole M Sejersted	NTNU/UiO
12.40	-	13.00	Norwegian Structural Biology Centre (Norstruct)	Arne Smalås	UIT
13.00	-	14.00	Lunch		
14.00	-	15:20	<b>Sequencing, Bioinformatics and Biobanks</b>		
14.00		14.20	Deep Sequencing	L. A. Meza-Zepeda	OUS
14.20		14.40	Bioinformatics	Eivind Hovig	OUS
14.40		15.00	Systems Biology	Molly Maleckar	SIMULA
15.00		15.20	Biobanks	Gun Peggy Knudsen	FHI
15:20	-	15.40	Coffee break		
15.40	-	17:00	<b>Regional Core Facilities</b>		
15.40		16.00	Trondheim	Janne Østvang	NTNU
16.00		16.20	Bergen	Frode Berven	UIB
16.20		16.40	Oslo	Ivar Sjaastad	UIO
16.40		17.00	Tromsø	Merete Molton Worren	UIT

**Dear researcher,**

The UNIKARD infrastructure seminar is primarily aimed at postdocs and scientists who are in the process of establishing their own research and research group. The seminar will be held in English and provide the researcher with essential information on advanced scientific equipment, large-scale research facilities, scientific databases and collections, translational medicine and electronic infrastructure.

You will also learn about simulation of the behavior of a biological system, biomedical innovations, innovative biological and medical imaging technologies, methods for sequencing DNA molecules, how to use national registries for clinical research, the use of national core facilities, prediction and modelling of protein or RNA structure.

### **ESFRI** European Strategy Forum on Research Infrastructures

ESFRI's objective is to identify and to address the scientific needs of research infrastructures in Europe. Its mission is to support a coherent and strategy-led approach to policy-making on new and existing pan-European and global research infrastructures. ESFRI facilitates multilateral initiatives leading to the better use and development of research infrastructures, acting as an incubator for decision-making processes

(<http://eu-openscreen.eu/index.php?id=esfri>)

### **ECRIN** European Clinical Research Infrastructures Network

ECRIN is a European network dedicated to improving the health of patients and citizens across the world through clinical research. ECRIN supports, services, coordinates, and manages high-quality, independent, and fully transparent multinational clinical research. ECRIN synergizes the capacities and capabilities of national clinical research. ECRIN strives for harmonization of European clinical research. By facilitating clinical research across Europe, ECRIN contributes to the achievement of the 'European Research Area' and the 'society of knowledge' and adds to European competitiveness. ([www.ecrin.org](http://www.ecrin.org))

### **NorCRIN** Norwegian Clinical Research Infrastructures Network

NorCRIN wishes to develop and strengthen the national network of research infrastructure. NorCRIN's aim is to facilitate clinical research by supporting the many complex elements of this type of research, such as study design, the application process, conduction and GCP reporting (Good Clinical Practice). The main objective is to strengthen and simplify the collaboration within all categories of clinical research in Norway. NorCRIN is the Norwegian part of ECRIN. The Ministry of Health and Care Services in Norway initiated the founding of NorCRIN, and Trondheim University Hospital (St. Olavs Hospital) is responsible for coordinating and operating the network. ([www.norcrin.no](http://www.norcrin.no))

### **EATRIS** European Advanced Translational Research Infrastructure

EATRIS Centre Norway is a Norwegian node for the European Advanced Translational Research Infrastructure in Medicine. Translational medicine is the transformation of laboratory research outcomes into new ways to diagnose and treat patients to improve the health of millions of people worldwide. It takes promising biomedical innovations 'from bench to bedside' and bridges clinical needs from bedside to bench.

EATRIS provides a new development pathway, open to researchers and companies in need of support for advancing biomedical innovations. EATRIS comprises over 70 leading academic institutions across Europe, each renowned for its individual skills and high-end research facilities. ([www.eatris.eu](http://www.eatris.eu)).

### **EU-OPENSREEN**

A European Infrastructure of Open Screening Platforms for Chemical Biology. Building a sustainable European infrastructure for Chemical Biology, supporting life science research and its translation to medicine, agriculture, bioindustries and society. The aim of EU-OPENSREEN is the discovery of biologically active substances in all areas of the Life Sciences by providing transnational open access to the most advanced technologies, chemical and biological resources, and expertise and harnessing the rich chemistry knowledge of Europe in a common compound collection to advance the elucidation of the molecular mechanisms of complex biological phenomena. ([www.eu-openscreen.eu](http://www.eu-openscreen.eu))

**Euro-BioImaging** is a large-scale pan-European research infrastructure project on the European Strategy Forum on Research Infrastructures (ESFRI) Roadmap. The mission is to build a distributed imaging infrastructure across Europe that will provide open access to innovative biological and medical imaging technologies for European researchers. The project is funded by the EU and currently the consortium is finalizing the basic principles for the operation of future EBI organization. ([www.eurobioimaging.eu](http://www.eurobioimaging.eu)).

**Nor-BioImaging** was established in 2011 as the Norwegian national participant organization towards Euro-BioImaging, and replaced the former NorMIC consortium for advanced light microscopy and molecular imaging.

### **Norstruct**

The Norwegian Structural Biology Centre (NorStruct) was established in 2003 as a national laboratory for 3D structural analysis within the functional genomics initiative in Norway (FUGE). The Centre offers consulting, service, courses and collaboration to the Norwegian research community in structural biology techniques. The lab is equipped with state-of-the-art instrumentation for the full pipeline from protein production through high throughput crystallization and structure determination to drug discovery related tasks.

The NorStruct facilities and competence are divided into three platforms, "Protein production" (SP1), "Structure determination" (SP2), and "Drug discovery and design" (SP3), which are available to the Norwegian research community through services and collaborative projects. (<http://norstruct.uit.no>).

## Deep Sequencing

The Norwegian Sequencing Centre is a national technology core facility offering sequencing services. Method for sequencing DNA molecules of which is up to several million times more efficient than current dominant method for DNA sequencing. This makes it possible making far more extensive examination of the genome of human, cancer cells and medically relevant microorganisms ([www.sequencing.uio.no](http://www.sequencing.uio.no)).

## Bioinformatics

The Norwegian Bioinformatics Platform is a joint project between five partner organisations: the [University of Bergen](#), the [University of Oslo](#), the [Norwegian University of Science and Technology](#) in Trondheim, the [University of Tromsø](#) and the [Norwegian University of Life Sciences](#) at Ås. The platform is coordinated from the [Computational Biology Unit](#) at the University of Bergen.

Bioinformatics deals with the analysis of nucleotide and amino acid sequences, and prediction and modelling of protein or RNA structure. Modern bioinformatics includes subjects like analysis of microarray data or simulation of complex interactions between the molecules in a cell. ([www.bioinfo.no](http://www.bioinfo.no))

## Systems Biology

*Systems Biology* refers to a type of biological research that is firmly based on a model of a biological system. It aims to use that model to explain and simulate the behaviour of a biological system, and to use simulations to help design experiments to challenge, expand and refine that model.

Simula Research Laboratory's main objective is to create knowledge about fundamental scientific challenges that are of genuine value for society. Important research with long-term impact in the fields of communication systems, scientific computing and software engineering constitutes the basis of Simula. The strong focus on basic research is combined with both teaching of postgraduate students and development of commercial applications ([www.simula.no](http://www.simula.no)).