

Course information

# Biobanking as a resource for biomedical research

---

One-week course, April 18-22, 2016

---

This course will give you new insights on the value of biobanks and how to use these rich sources of samples and related data. It will include lectures on health registers, large-scale omics analyses and some of the emerging and powerful IT tools to link such data sources.

## Purpose and goal

Biobanks constitute a powerful resource in medical research with access to millions of human samples and related data. Easier access to samples and new “omic-technologies” with high-throughput analytical platforms now permit cheaper large scale analyses. The European strategy for medical research is now taking big steps towards translational infrastructural networks based on open science and open access. The information derived from these large scale analyses in combination with powerful IT tools is now transforming medical research and we see more and more examples how applied “omics” is showing impact on health care.

However, successful research based on human biological samples and associated data requires applied knowledge on how different analytical methods can be applied to samples and tumor tissues, data processing, data sharing and the ethical and legal framework.

This one week course addresses fundamental concepts in biobank infrastructures and biobank research, ethical and legal frameworks, technologies, sample analysis and practical considerations when new samples are to be collected.

## Target group

Researchers and professionals from health care, universities and industry with an interest in biobanking.

## Course management

**Gunnel Tybring**, Course director, PhD, Associate Professor

**Mark Divers**, PhD, Director of KI-BBMRI.se Biobank

**Joakim Galli**, PhD, Uppsala University & ScieLifeLaboratory

**Ulla Rudsander**, PhD, BBMRI.se

The responsible department for this course is the Department of Medical Epidemiology and Biostatistics (MEB), Karolinska Institutet in collaboration with <http://BBMRI.se>



## Course information

### Biobanking as a resource for biomedical research

---

#### Course content

Participants will get insights and knowledge of:

- the value of biobanking in national and international collaboration projects.
- the need of standardization and the importance to ensure quality in all steps from needle to freezer.
- basic principles of common and advanced molecular technologies for sample analysis
- the need of a secure IT structure in order to ensure the integrity of the sample donors with full traceability of samples and data.
- open science and return of data
- the legal and ethical framework for biomedical research on human samples

#### Course structure

- Lectures & group discussions
- Field trips
- Presentation (= examination)

All students are required to take part in all scheduled activities: lectures, field trips and presentation/examination. The course is examined by giving a presentation of the course assignment, either a pre-defined biobank study or an example from own research.

#### Date and place

The course will be given at Karolinska Institutet, Stockholm during April 18-22, 2016.

More information regarding venue and schedule will be sent out prior to the course start.

#### Course fee and registration

The course fee is 12000 SEK, excluding VAT. Please note that the course is conducted under the condition that we receive a sufficient number of participants.

VAT may be added to all prices, contact us for more information.

If you are interested in the course, please visit <http://ki.se/epe> or contact Kristoffer Mörttsjö at Karolinska Institutet Executive and Professional Education.

**Application deadline: 2016-02-22**

#### For more information, please contact

##### Questions regarding the course:

Gunnel Tybring, Course manager  
Department of Medical Epidemiology and Biostatistics (MEB), Karolinska Institutet  
E-mail: [Gunnel.Tybring@ki.se](mailto:Gunnel.Tybring@ki.se)

##### Questions regarding course registration, etc.:

Kristoffer Mörttsjö, Project Coordinator  
Karolinska Institutet Executive and Professional Education  
E-mail: [kristoffer.mortsjo@ki.se](mailto:kristoffer.mortsjo@ki.se)  
Telephone: +46 8 524 860 32

Karolinska Institutet is one of the world's leading medical Universities. Its mission is to contribute to the improvement of human health through research and education. Karolinska Institutet accounts for over 40 per cent of the medical academic research conducted in Sweden and offer the country's broadest range of education in medicine and health sciences. Since 1901 the Nobel Assembly at Karolinska Institutet has selected the Nobel laureates in Physiology or Medicine.

Karolinska Institutet Executive and Professional Education delivers competence development for municipalities, governments and businesses and works for development in healthcare and a healthier society.

