

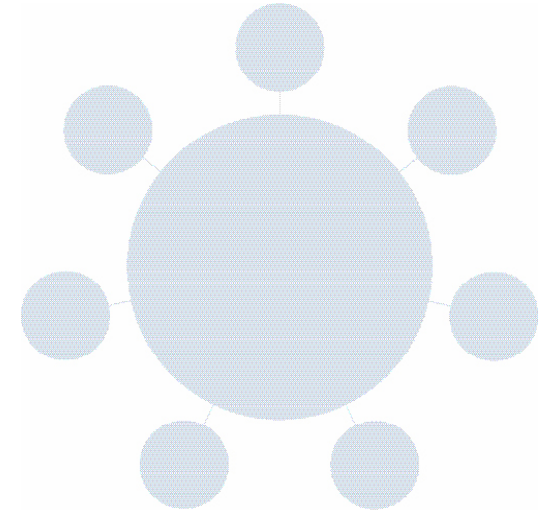
## Translational research

Modern biomedical research increases our knowledge about the molecular background of diseases. The Core Facilities provide the technological platforms for multi-disciplinary key competences and advanced equipment. At the same time, the basic research get access to clinical data and relevant problem – translational research.

Foto: Richard Landor / Parasoll



# CORE FACILITIES



[www.cf.gu.se](http://www.cf.gu.se)

GENOMICS  
MAMMALIAN PROTEIN EXPRESSION  
PROTEOMICS  
CENTRE FOR CELLULAR IMAGING  
THE ELECTRON MICROSCOPY UNIT  
SWEDISH NMR CENTRE  
CENTER FOR MOUSE PHYSIOLOGY AND BIO-IMAGING  
EXPERIMENTAL BIOMEDICINE

Ill: Anders Lyon, Agadtem 0909



UNIVERSITY OF GOTHENBURG

A number of advanced technology platforms within the Academy campus complement the many strong research centres. This puts further emphasis on the translational and interdisciplinary research at the Sahlgrenska Academy.

Presently there are more than a dozen such core facilities and more are planned. Substantial investments have been made – much of it through generous donations from foundations like the Wallenberg, Lundberg and Hasselblad foundations.

### Genomics Core Facility

Technology, service and support for complete analysis of genetic material. The centre provides large-scale DNA extraction, genotyping, expression analysis, and DNA sequencing analysis.

+46 31-786 31 27 Camilla Stiller  
+46 31-786 36 15 Catrine Forssén  
genomics@gu.se

### Mammalian Protein Expression

Large scale production of recombinant proteins for research purposes. The technology allows the production of proteins with defined posttranslational modifications, such as glycosylation. Consulting regarding vector constructions. Also culture of different cell lines.

+46 31-786 34 96 Malin Bäckström  
+46 31-786 34 96 Elisabeth Thomsson  
mpe@gu.se

### Proteomics Core Facility

Identification, characterisation and quantification of proteins. The Centre provides a wide range of services: advanced mass spectrometric analyses as well as image analyses of 2D-gels for identification of biomarkers.

+46 31-786 34 82 Elisabeth Carlsohn  
+46 31-786 38 22 Jörgen Bergström  
proteomics@gu.se

### Centre for Cellular Imaging

Study of processes and molecules in their natural environment – the cell. Confocal microscopes for living and fixed specimens. Spinning disc microscope for studies of fast processes. Multiphoton technology for deep tissue penetration. FCS, FRAP and FRET for mobility and interactions. LM-EM correlative microscopy for ultrahigh resolution.

+46 31-786 37 04 Maria Smedh / Susanna Myhre  
+46 31-786 37 03 Julia Fernandez-Rodriguez  
cci@gu.se

### Electron Microscopy Unit

High resolution imaging of biological material, in detail or overview. Full scale EM lab for preparation and analysis e.g. immunolocalisation, cytochemistry, image analysis, elemental analysis, negative staining and methods for optimal preservation for SEM and TEM.

+46 31-786 33 38 Bengt R Johansson  
+46 31-786 33 37 Ulf Nannmark  
+46 31-786 33 05 Yvonne Josefsson  
emu@gu.se

### Swedish NMR Centre

Structural analyses and biophysical characterization of biological macro molecules. Metabonomics. A national resource centre, the NMR Centre has world class equipment, such as a 900 MHz spectrometer.

+46 31-786 38 81 Göran Karlsson  
nmr@gu.se

### Center for Mouse Physiology and Bio-Imaging (CPI)

Characterisation of genetically modified mice and other animal disease models using physiological and bio-imaging techniques. State-of-the-art methods, such as MRI, DEXA, ultrasound and cardiac catheterization, as well as a number of cardiovascular, metabolic, behavioural and pharmacokinetic tests are available to all users, irrespective of previous experience. These techniques and methods are also available as commissioned work performed by the CPI staff.

Web-site: <http://www.cf.gu.se/english/cpi>.  
contact.cpi@gu.se

### Experimental Biomedicine, EBM

Medical research and development – in vivo. Surgery unit for research and workshops.

+46 31-786 56 50 Ewa Crusner Gustafsson  
+46 31-786 56 17 Sara Persson  
ebm@gu.se

