



# Sharing facilities in Sweden

*Filippa Kull, PhD, Stockholm Science City*



*Stockholm Science City*

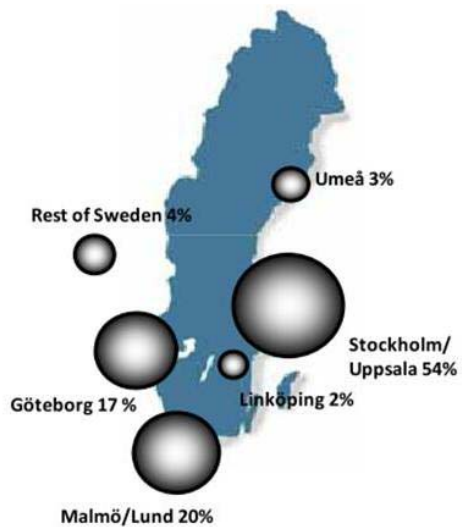
*Wallenberg Consortium North*

*Tools of Science*

## Stockholm Science City

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## Life Science regions in Sweden



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## Stockholm Science City



## The Vision 2025



## Stockholm Science City – our mission

- Increase collaboration between the three universities and between academia, industry and society within life science
- Attract business and academia
- Fill the development area Karolinska/Norra Station with life science activities

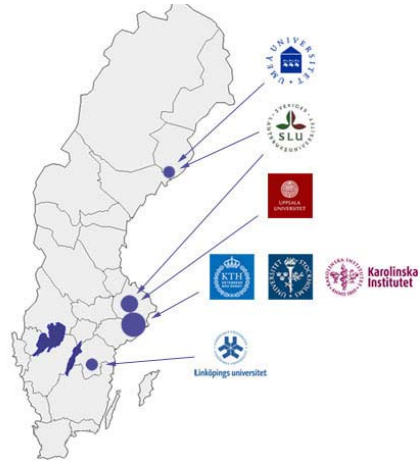
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## Wallenberg Consortium North (WCN)

## Wallenberg Consortium North (WCN)

**Aim: *To set up an infrastructure of national technology platforms within functional genomics***

- 7 universities
- 5 year project
- Budget of 50 million €
- Funded by Knut and Alice Wallenberg Foundation



## Technology Platforms

- SNP genotyping
- Expression profiling
- Protein production and structure
- Model organisms

***Each platform consists of a network of national core facilities***



## The result

- A network of core facilities was set up in Sweden
- Core facilities could be utilized to a low cost
- Availability of new techniques and HTP methods
- Increased collaboration between the universities
- Focus resource to national facilities
- Large projects where made possible



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***A web platform with information about services and resources within life science***

- Covers both business and academia
- Covers the entire value chain



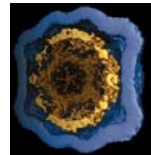
## The needs from academia

- Similar equipment at several departments
- Equipment and core facilities not utilised to full capacity
- Difficulties to keep good quality and competence
- Difficulties to find partners for multidisciplinary research
- Low level of awareness about available resources
- Increasing need for core facilities

***A pronounced need for an information platform***

## Academic Tools of Science

- Launched in October 2006
- Karolinska Institute, Royal Institute of Technology KTH, Stockholm University, and Karolinska University Hospital
- Life science
- Free
- Categories:
  - Core facilities
  - Equipment
  - Specific techniques



*Today there are approximately 60 academic Tools of Science*

## Trends in Pharma/biotech

- Increasing number of small biotech companies
- Outsourcing more frequent today
- Increasing interest for collaboration academia-industry

*The industry came knocking at the door!*





## Industrial Tools of Science

- Launched in January 2008
- Service companies with specialist competences within life science.
- National
- Paying and nonpaying members

 Syntagon

 a+ SCIENCE

 Vironova

 WORLD COURIER

 QUINTILES  
TRANSNATIONAL

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## What is in it for the paying members?

- Marketing platform
- Special offers
- Present the company at seminars
- Participate in events as an exhibiter
- News and information
- Statistics about visits on their site on Tools of Science

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Tuesday, 20 October 2009 MAIL HELP

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**Tools of Science - a tool for drug developers and life science researchers**

Get access to information about research excellence and advanced technologies along the entire value chain in life science in Sweden!

Tools of Science provides researchers from academia and industry with information about service companies, core facilities, technologies, competence and collaboration partners along the entire value chain within life science and drug development.

HiGene has invested in a new TaqMan® OpenArray® genotyping system. HiGene has acquired a new system for SNP analysis. The TaqMan® OpenArray® genotyping system provides PCR-based SNP analysis in a medium- to high-throughput format. OpenArray technology uses proven TaqMan® Genotyping Assay chemistry and nanoliter fluids. Read more here.

Get inspired at "The virtual pharmaceutical company".

Join next year's "Research and Health" event in Kungsträdgården! A successful event, read more here.

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**CMB Microscope Facility, CMB Microscope Facilit...**  
The CMB Microscope Facility has five fluorescence microscopes for fixed tissues and live cell imaging. The microscope can be used by internal (CMB)...  
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**Experimental models**

9 Academic Tools related to Experimental models  
sorted alphabetically << 1 / 1 >>

**Caenorhabditis elegans competence centres**  
Department of Biocences and Nutrition, Karolinska Institutet  
Specific technique  
Caenorhabditis elegans is an excellent model organism for the study of the genetics of development and neurobiology. Its genome is entirely sequenced and the fate of every cell is known throughout development. Also, the complete nervous system connectivity has been determined.  
» more

**Centre for Behavioural Phenotyping**  
Department of Physiology and Pharmacology, Karolinska Institutet  
Core facility, Equipment  
Our facility for behavioural phenotyping is open for the study of mice and rats. We have access to several models to analyse behaviours in mice and rats, as well as the necessary stereotaxic equipment to perform central injections. » more

**Centre for Genetic Physiology**  
Department of Physiology and Pharmacology, Karolinska Institutet  
Core facility, Specific technique  
The core facility/platform provides resources and service for physiological characterization of normal and genetically modified mice. A focus is on cardiovascular studies of living conscious animals and on in vitro examination of isolated cardiac and vascular tissue. » more

**Experimental MR Research Center**  
Department of Physiology and Pharmacology, Karolinska University Hospital  
Core facility  
We offer a flexible core facility for high quality and efficient research, aiming at providing the right solution and study set-up for the individual project and to provide modern education to researchers both within and outside Karolinska Institutet. » more

**Gamma radiation exposure facilities, Stockholm University Centre for Radiation Protection Research**  
Department of Genetics, Microbiology and Toxicology (GMIT), Stockholm University  
Specific technique, Equipment  
Gamma (137 Cs) exposure facilities for high or low dose rate exposures are available for the radiation of e.g cells, cell cultures, DNA and proteins. » more

**Karolinska Center for Transgene Technologies (KCTT)**  
Department of Cell and Molecular Biology (CMB), Department of Biocences and Nutrition, Karolinska Institutet  
Core facility  
The aim of Karolinska Center for Transgene Technologies (KCTT) is to produce transgenic mice by pronuclear injection and ES cell techniques. KCTT is one of the largest transgenic core facilities in Scandinavia.  
» more

**Karolinska Institute Zebrafish Core Facility (Campus)**  
Department of Medical Biochemistry and Biophysics, Karolinska Institute  
Core facility  
Our state-of-the-art facility, which is the largest in Sweden, houses fish in a continuously monitored environment and all staff are qualified animal technicians. There are already zebrafish models for a number of human diseases, for example cardiomyopathy, diabetes, muscular dystrophy and Parkinson's disease. » more

**Stockholm University Drosophila Development Site and Facility**  
Department of Developmental Biology, Wenner-Gren Institute, Stockholm University  
Core facility, Specific technique  
We can assist studies of gene function in high throughput gene inactivation experiments in cell lines and through the generation transgenic Drosophila melanogaster strains. » more

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### Stockholm University Drosophila Development Site and Facility, Stockholm University, Department of Developmental Biology, Wenner-Gren Institute (Add to My Favourites)

**Contact Person:** Christos Samakovlis, Professor. **Contact Person:** Monika Björk

**Department of Developmental Biology**



We can assist studies of gene function in high throughput gene inactivation experiments in cell lines and through the generation transgenic Drosophila melanogaster strains.

**Category:** Core facility, Specific technique  
**Key words:** drosophila, RNAi, interference, GFP, transgenic, industryinterest  
**Facility website:**  
<http://www.wgi.su.se/pub/jsp/polepoty.jsp?w=61915a-26331>  
**Interest in collaboration with industry:** Yes

**Description:**  
 The Stockholm University Drosophila Site establishes inducible cellular GFP assays for high throughput gene inactivation via RNAi transfections. It also generates transgenic fly strains for tissue specific expression of tagged forms of any protein, as well as fly strains for conditional gene inactivation via RNAi.

Functional genomics is a dynamic field that is currently shifting from a descriptive period focused on gene identification and expression to a phase addressing the most fundamental question in biology: gene function. Biomedical research is critically dependent on the ability to test gene function in suitable model organisms by examining the phenotypes of mutations. During the last century the fly has been the favourite organism for genetic studies in higher eukaryotes. A large collection of available mutants affecting approximately 25% of the predicted genes is available from public stock centres.

R-element transposon based methods allow the creation of genetically defined, stable lines with regulated transgenes and efficient production of genetic mosaics, techniques not available in other animals including C. elegans. Recent comparative genome sequence studies reveal that 2/3 of the human genes that have been implicated in disease have clear orthologs in flies. In addition, the similarities in the molecular control of several developmental and physiological responses have recently enabled the use of Drosophila as a model system for the identification and validation of therapeutic agents for human disorders. Wallenberg Consortium North (WCN) has financed the setup of Drosophila technology platforms at Stockholm and Umeå Universities.

The SU facility was initiated in October 2001 and is currently providing two sorts of services:  
 1) Establishment of inducible cellular GFP assays for high throughput gene inactivation via RNAi transfections.  
 2) Generation of transgenic fly strains for tissue specific expression of GFP or epitope tagged forms of any protein. Generation of fly strains for conditional gene inactivation of Drosophila genes via RNAi.

Researchers with relevant competence can use our resources, while full service can be provided to those who desire.

**Infrastructure/methods:**  
 The facility houses both Drosophila cell line cultures and Drosophila mutant strains. The facility mainly performs two sorts of services:  
 1) High throughput RNAi gene inactivations in cell lines  
 This arm of the facility is dedicated in establishing inducible assays in Drosophila and potentially other insect cell-lines to carry out large scale gene inactivation experiments using standard double stranded




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CONTACT PERSONS (28)

27 Industrial Tools related to Services  
sorted alphabetically

**Actar AB**  
(Björn Kull)

An idea-to-innovation tool for researchers –Actar AB identifies drug targets generated from research conducted at Swedish universities and performs drug development. Through high-throughput screening of low molecular weight molecule libraries in innovative and relevant model systems, lead compounds are identified. The lead compounds are thereafter transferred to the medical industry for further development into candidate drugs. Actars Scientific Advisory Board ensures the optimal evaluation of an **» more**

**AIESSEC Sweden**  
(Thomas Krane)

AIESSEC connects organizations with the students and graduates from the best universities in over 100 countries through our Global Exchange Program. AIESSEC is the best option for short term project needs as well as long term leadership pipeline. AIESSEC was founded in 1948 and since then we have worked with different organizations world wide. AIESSEC has partnership with companies such as Electrolux, ABN AMRO Bank, DHL, Microsoft, Alcatel, UPS, among others. **» more**

**Alexander Hughes Nordic & Baltic**  
(Björn Åkerblom)

Alexander Hughes is a leading European Executive Search Company dedicated to helping you acquire and retain the vital human capital you need to achieve your strategic business goals. We display a comprehensive European network of 40 subsidiaries located in 30 countries, offering local life science expertise combined with international capabilities. The Nordic & Baltic offices are located in Stockholm, Copenhagen, Helsinki and Oslo. In conjunction with our strategic alliance partners Nosal Partner **» more**

**Arandi Development AB**  
(CEO Anders Tamsen)

Arandi Development offers medical and scientific support to pharmaceutical and medical device products development in northern Europe. We provide around-the-clock medical support for all medical issues related to product safety and adverse events in clinical trials. Our IDea has many years of clinical experience PLUS additional 12 to 22 years experience from drug safety work inside pharma industry and the regulatory authority. We also investigate study feasibility through investigator and RA cont **» more**

**Avaris AB**  
(CEO Mats Lake)

Avaris is a biotechnology company that develops and commercializes cutting edge gene and cell therapy products in the fields of chronic infections, cancer and inherited diseases. We develop proprietary technology platforms within the founders groups at the Karolinska Institute, Huddinge. Bringing forward new methods of treatment can be based on our platforms, ensuring value for the future. The unique portfolio gives Avaris a mass of knowledge and resources to recruit further innovations. Avaris **» more**

**Battison & Partners**  
(Mary-Rose Hoja)

Battison & Partners is a communication consultancy that helps Swedish






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**World Courier (Sweden) AB** (+Add to My Favourites)

Contact Person: Johan Krohné

**World Courier (Sweden) AB**



World Courier pioneered the offering of specialty logistics services for the medical and biopharmaceutical communities. Today, as the leading specialty courier service for the pharmaceutical industry, World Courier is utilized in approximately 80% of the world's clinical trials requiring the use of a specialty courier service. Every World Courier office is ISO 9001-certified. World Courier is the only specialty courier service whose SOPs and systems meet the rigorous requirements of this independent certification-the world's gold standard in quality assurance.

**Keywords:** Transport, express, dry ice, gel packs, courier, samples, cold chain, Stockholm  
**Company website:** www.worldcourier.com

**Description:**  
World Courier is a family owned company with over 140 own offices around the world. We handle every shipment containing biological specimens, investigational drugs, vaccines, etc on an individual basis by our own trained and highly skilled employees.

World Courier pioneered the offering of specialty logistics services for the medical and biopharmaceutical communities. Today, as the leading specialty courier service for the pharmaceutical industry, World Courier is utilized in approximately 80% of the world's clinical trials requiring the use of a specialty courier service.

**Assurance of quality:**  
Every World Courier office is ISO 9001-certified. World Courier is the only specialty courier service whose SOPs and systems meet the rigorous requirements of this independent certification-the world's gold standard in quality assurance.


**Services:**

- Dry ice and gel pack replenishment during transportation
- Temperature monitoring
- Pre-customs clearance whenever possible to ensure the shortest transit times
- Assistance in obtaining required import and export permits
- DG trained staff in over 140 company owned offices world wide
- Real-time online tracking
- Recommendation and furnishing of all packing materials, including UN specification packaging
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**Practical information:**  
For more information please call + 46 8 594 414 80 or visit www.worldcourier.com

Last updated: 2009-01-20

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**Johan Krohné**  
Sales Executive  
World Courier (Sweden) AB 

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- Complete
- A dynamic platform
- Updated regularly
- Free access

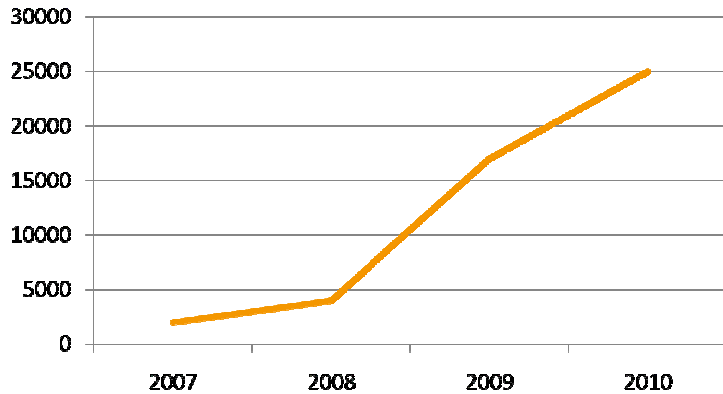




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## The success story

Visits per month



## Future

- Continue to develop with new applications and offers
- Continue to attract paying members
- Other regions in Sweden want to set up an academic Tools of Science
- Through ABC Europe a variant of Tools of Science will be adapted to the European community

Thank you for your attention



<sup>27</sup>  
*Stockholm, February 16, 2010*