

How can regions learn to benefit from knowledge dynamics within life science?

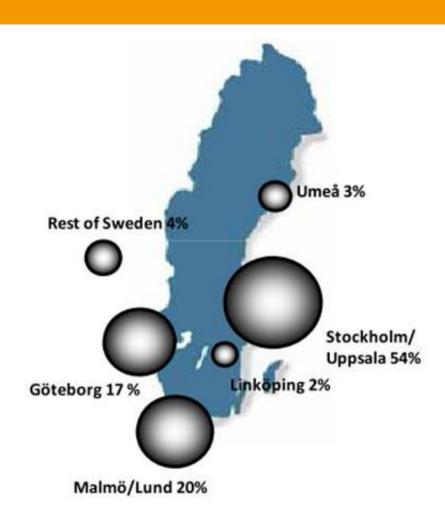


#### Life Science in Sweden

- > 20 per cent of Sweden's net export = life science
- **➤ More than 800 life science companies**
- ➤ Over 40 000 employees



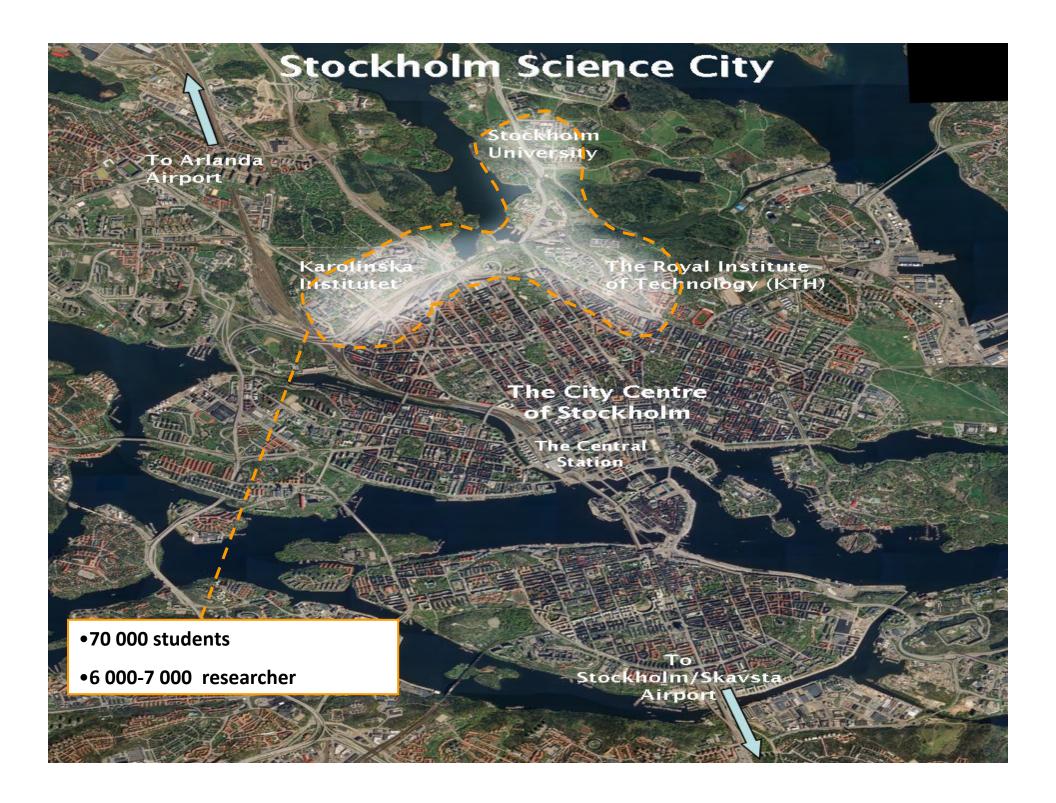
## Life Science regions in Sweden

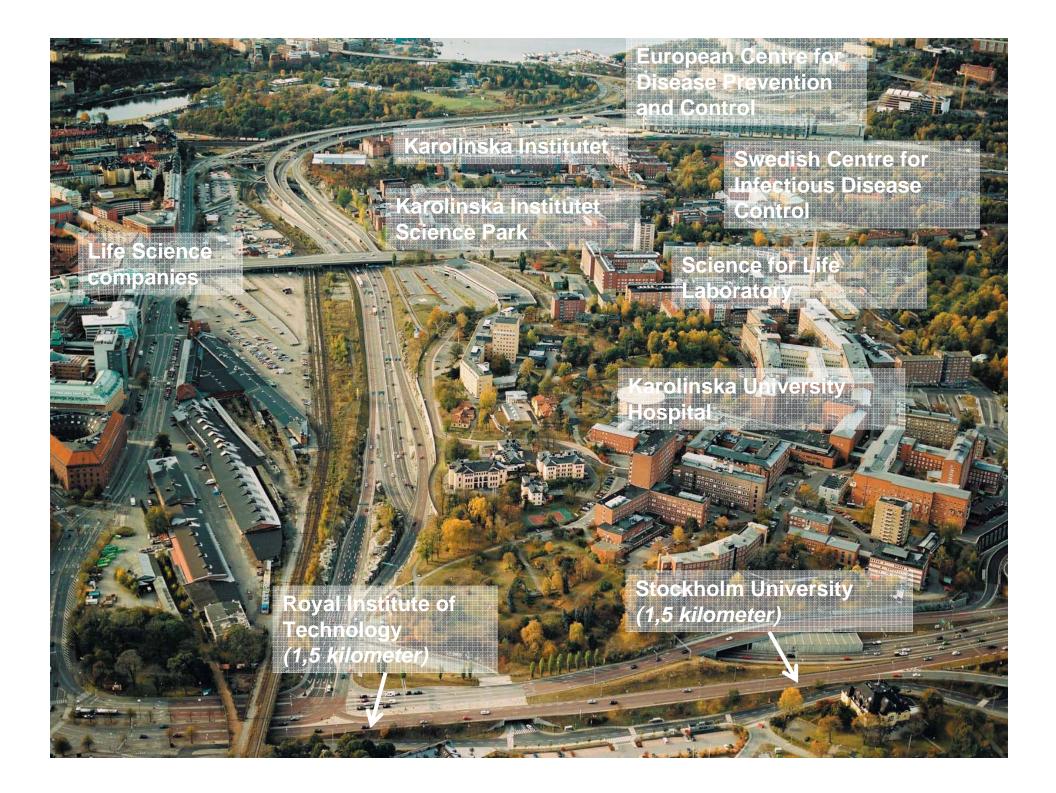




#### The Life Science Cluster

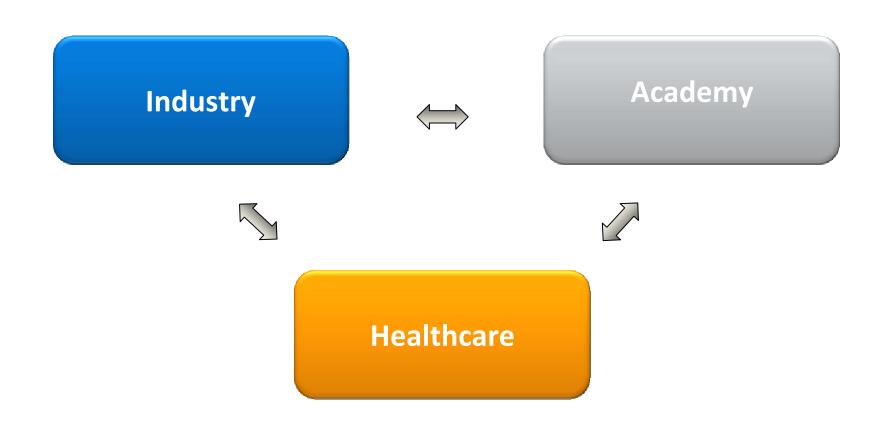






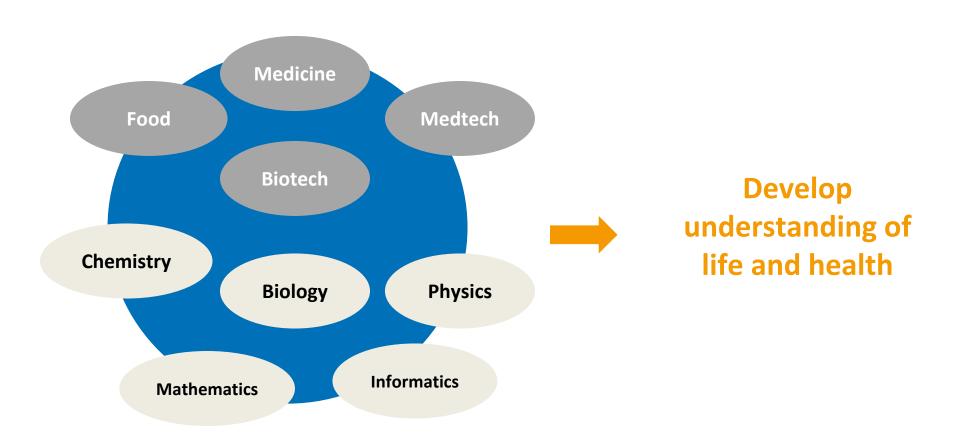


## The triple helix





#### Life Science – an overview

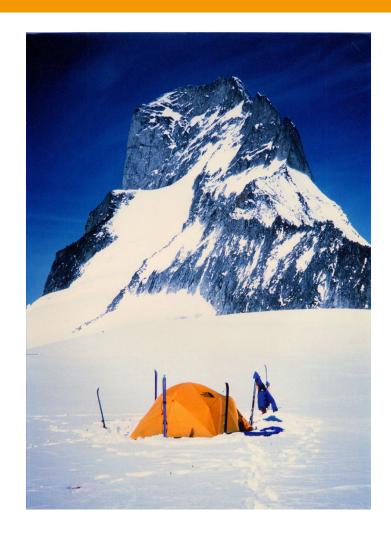




### Stockholm Science City function

Stockholm Science City foundation function as a base camp for the mountaineers.

We facilitate cooperation, gather information and create the best preconditions for researchers, the industry as well as society to reach the top.





## Stockholm Science City organization

#### **Owners:**

- Karolinska Institutet
- KTH Royal Institute of Technology
- Stockholm University
- City of Stockholm
- City of Solna
- Stockholm County Council

- Chairman of the Board is Per Unckel, County Governor
- Scientific Council
- Business Council

# Stockholm Life Solna Stockholm





#### Vision 2025



- A society with a mix of academia, industry, hospitals, residential areas, culture, service and recreation
- World-class knowledge center for life science



# Knowledge dynamics– examples from the region



# Stockholm School of Entrepreneurship (SSES)

- Joint school devoted to offering their students education, training and inspiration in applied entrepreneurship
  - The Royal Institute of Technology
  - Stockholm School of Economics
  - Karolinska Institutet
  - Stockholm University
  - University College of Arts, Craft and Design







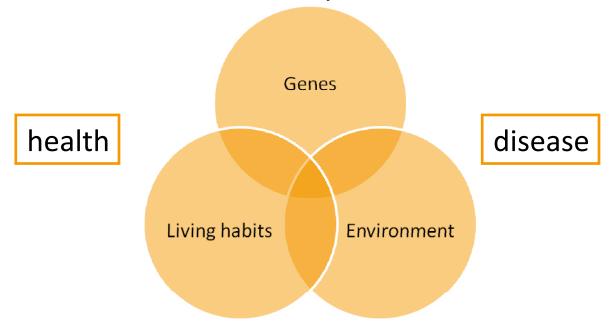






#### LifeGene

- National health study to investigate public health conditions
- ½ a million Swedes age 0-45
- Unique Swedish research collaboration between all medical faculties in Sweden hosted by Karolinska Institutet







#### **COMBINE**

Controlling chronic inflammatory diseases with combined efforts

Network of scientists, clinicians, patients and industrial partners

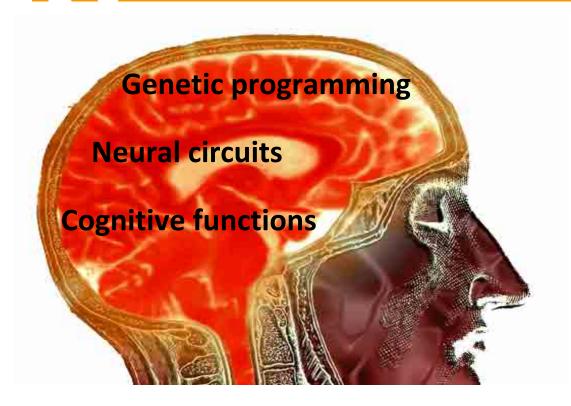
Patient Research







#### Stockholm Brain Institute



**Neurobiology** 

**Imaging** 

**Psychology** 



#### Hearing link

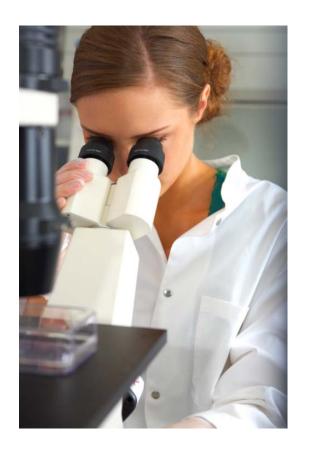
- Joint effort beween
  - The Swedish Association of Hard of Hearing People
  - The Royal Institute of Technology
  - Karolinska Institutet
  - Stockholm Science City
- Hearing Link aims to become the leading platform within technical assistance to communication for both the hearing impaired and the hearing
- Web based hearing test: http://www.horselbron.se/hearingtest/



#### www.toolsofscience.se

# A web platform with information about services an resources within life science

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







#### **Tool of Science**



- > Browse Academic Tools of Science
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Owned and maintained by



#### 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.

KIGene has invested in a new TaqMan® OpenArray® genotyping system KiGene has aquired 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 fluidics. 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.



#### Kemwell AB



Kemwell is a leading provider of contract manufacturing and development services for pharmaceutical products globally. Kemwell meets current (cGMP)... » more

In situ hybridisation laboratory, In situ

The facility enables researchers to perform mRNA In Situ hybridization in a controlled environment.

» more

#### World Courier (Sweden) AB



World Courier pioneered the offering of specialty logistics services for the medical and biopharmaceutical communities. Today, as the leading speci... » more

#### 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)...

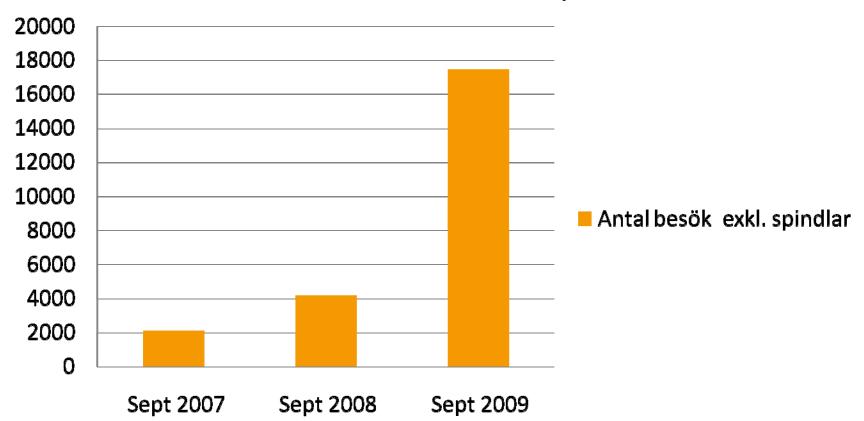
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22



#### Tools of Science – a success story

#### Number of visits excl. web spiders





#### Science for Life Laboratory

- National resource center dedicated to large-scale research in molecular biosciences and medicine
- Analysis of genomes, proteomes, cells, bioinformatics, statistics and systems biology
- Collaboration between
  - The Royal Institute of Technology
  - Karolinska University
  - Stockholm University
- Node in Uppsala which is hosted and organized by Uppsala University
- Role for research, healthcare and industry



#### 5 keys to success

- Critical mass
- Shared resources
- Specialists to collaborate cross-disciplinary
- People bridging the gap between academia and industry
- Mobility of people

# Thanks for your attention! ylva.williams@ssci.se www.ssci.se