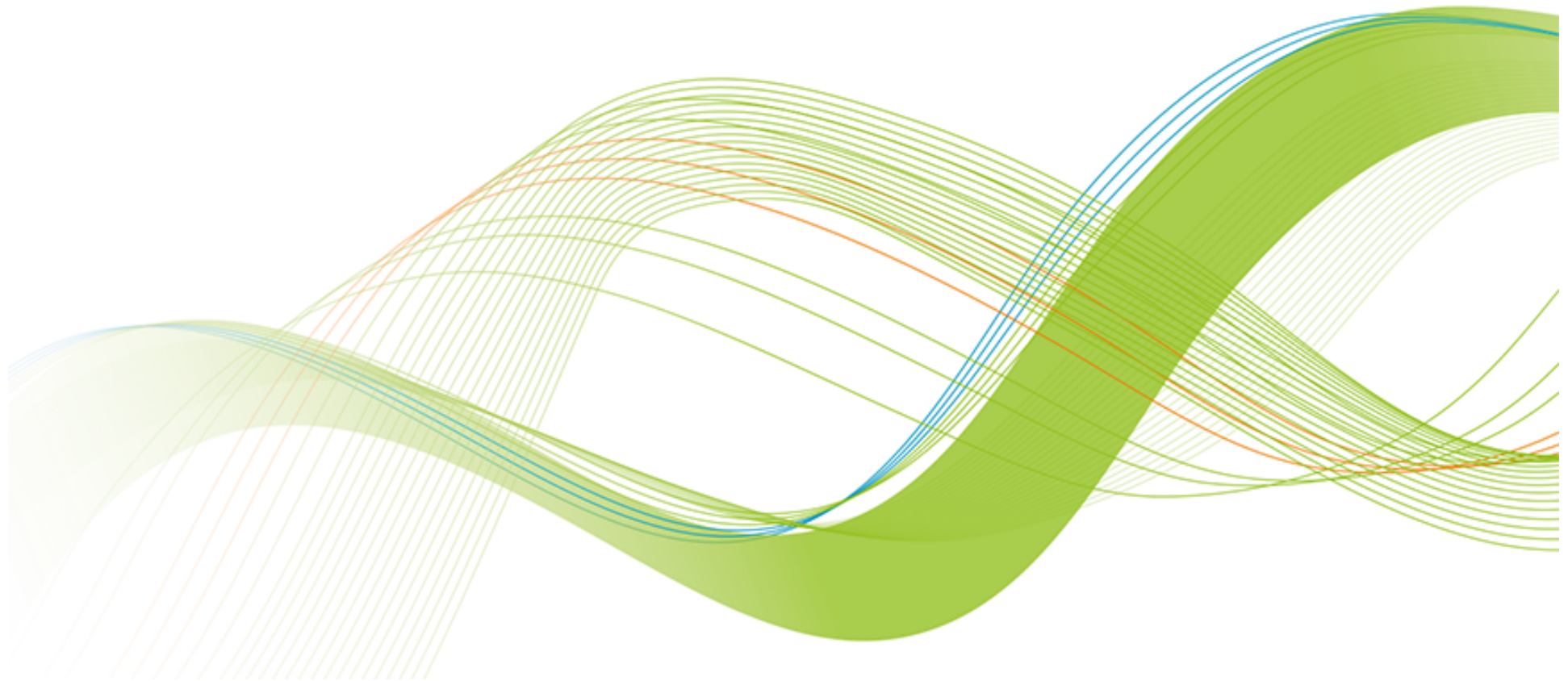

Thomas Källman, NBIS





- **4** host universities
- Established in **2010**
- National resource since **2013**
- More than **1000** researchers



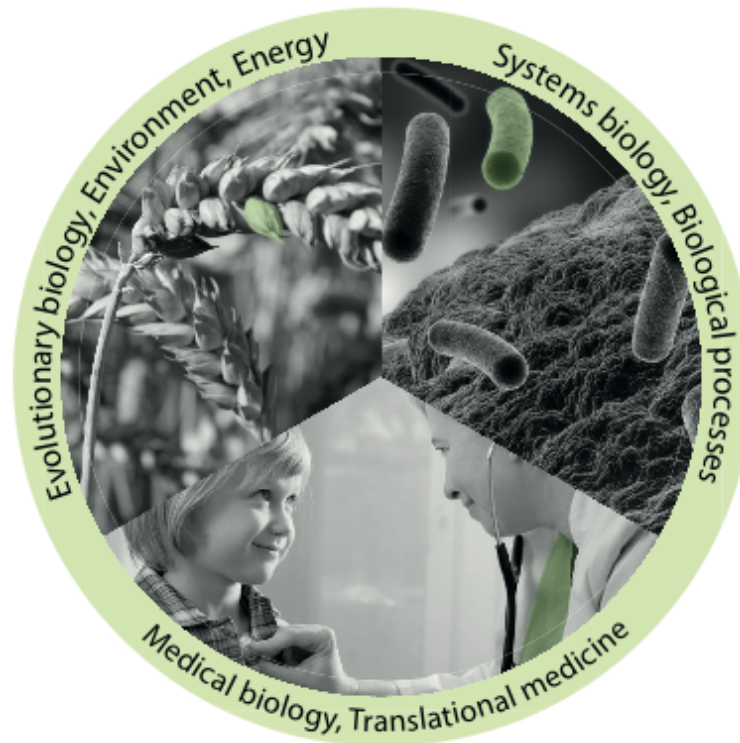
UPPSALA
UNIVERSITET



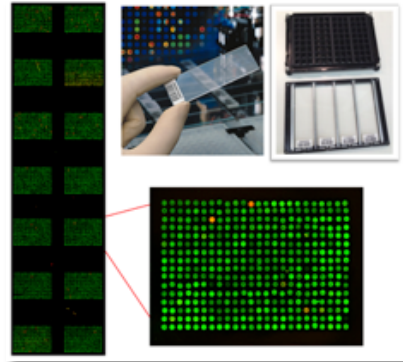
Stockholms
universitet

Vision

To be an internationally leading center that develops, uses and provides access to advanced technologies for **molecular biosciences** with focus on health and environment

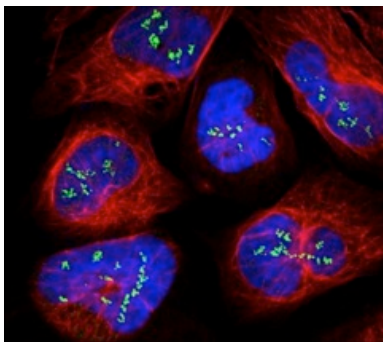


Mission



Technology platforms for national use

- Service to research community
- Technology development
- Education



Strong research community

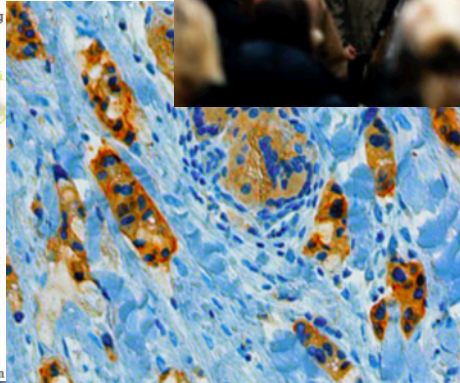
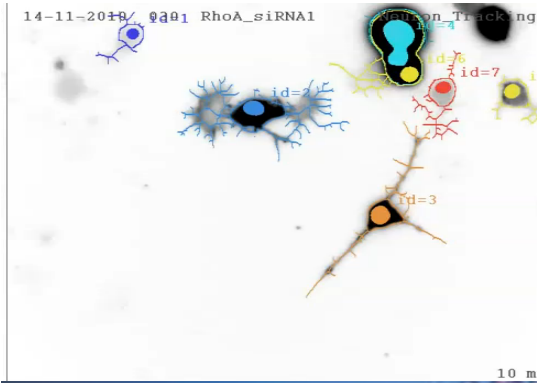
- Strong interdisciplinary community
- SciLifeLab Fellows Program
- National projects



Society impact

- Health care outcome
- Environment
- Tech transfer, spin-offs, industry collaborations

The range of life sciences studied



- Ecosystems
- Communities
- Populations
- Organisms
- Organs
- Tissues
- Cells
- Organelles
- Molecules

Platforms and facilities

National facilities		
<p>Affinity Proteomics Biobank Profiling Cell Profiling Fluorescence Tissue Profiling Mass Cytometry PLA Proteomics Protein and Peptide Arrays Tissue Profiling</p>	<p>Functional Genomics Eukaryotic Single Cell Genomics Karolinska High Throughput Center (KHTC) Microbial Single Cell Genomics Single Cell Proteomics</p>	<p>National Genomics Infrastructure NGI Stockholm (Genomics Applications) NGI Stockholm (Genomics Production) NGI Uppsala (SNP&SEQ Technology Platform) NGI Uppsala (Uppsala Genome Center)</p>
<p>Bioimaging Advanced Light Microscopy Fluorescence Correlation Spectroscopy</p>	<p>Metabolomics Swedish Metabolomics Centre (SMC)</p>	<p>Next-Generation Diagnostics (NGD) Clinical Biomarkers Clinical Genomics Clinical Sequencing Integrative Clinical Genomics Translational and Clinical Genomics</p>
<p>Chemical Biology Consortium Sweden Laboratories for Chemical Biology Umeå (LCBU) The Laboratories for Chemical Biology at Karolinska Institutet (LCBKI) Uppsala Drug Optimization and Pharmaceutical Profiling (UDOPP)</p>	<p>National Bioinformatics Infrastructure Sweden (NBIS) Bioinformatics Compute and Storage (UPPNEC) Bioinformatics Long-term Support (WABI) Bioinformatics Short-term Support and Infrastructure (BILS) Systems Biology</p>	<p>Structural Biology Cryo-EM Protein Science Facility Swedish NMR Centre (SNC)</p>
<p>Drug Discovery and Development ADME (Absorption Distribution, Metabolism Excretion) of Therapeutics (UDOPP) Biochemical and Cellular Screening Biophysical Screening and Characterization Human Antibody Therapeutics In Vitro and Systems Pharmacology Medicinal Chemistry – Hit2Lead Medicinal Chemistry – Lead Identification Protein Expression and Characterization</p>		

Nodes and sites



Uppsala node



Stockholm node (Solna)



Platforms and facilities

National facilities		
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www.nbis.se

SciLifeLab

Support ▾

Infrastructure ▾

Training ▾

NBIS

NATIONAL BIOINFORMATICS
INFRASTRUCTURE SWEDEN

NBIS is a distributed national bioinformatics infrastructure, supporting life sciences in Sweden



A continuous technical scale-up will provide an unprecedented amount of heterogeneous omics data

- Support, Tools, Training

System-level analyses in biomedical research will transform life science

- Strategic positioning in systems biology

Large-scale omics is will make a major leap into translational research and diagnostics

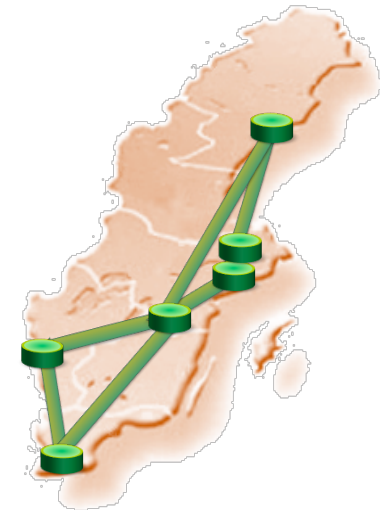
- Method adaptation and expert advice

User access to NBIS

- Study design consultation (free)
- Short & medium-term support
- 8 hours for free, then 800 SEK/hour
- <http://www.nbis.se/support/supportform/index.php>
- Apply anytime

- Long-term support (500h; free: scientific evaluation)
- <http://www.scilifelab.se/facilities/wabi/>
- Next deadline: **March 2017**

- Compute and storage (free; majority of hardware and system administration belongs to SNIC)
- Apply: <https://supr.snic.se>
- Read more: <http://www.uppmax.uu.se/>



-
- Are you planning a project and need someone to discuss the bioinformatics analysis with?
 - Do you need bioinformatics support, but do not know who to turn to?
 - Are you stuck in your own bioinformatics project and need help?
 - Meet the NBIS staff at bioinformatics drop-in

Uppsala

When: Weekly on Thursdays
at 10-11 am

Where: SciLifeLab, level 3

Stockholm

When: Weekly on Tuesdays
at 10.30-11.30 am

Where: SciLifeLab, gamma, level 6

- Similar activities in the other NBIS nodes/cities

Upcoming courses 2017

Date	Course
January 23-27	Introduction to Bioinformatics using NGS data
February 6-10	Python programming with applications to Bioinformatics
October 25-27	RNA-seq
March 27-31	R Programming Foundations for Life Scientists
May 9-11	Introduction to Genome Annotation
May 15-19	Introduction to Bioinformatics using NGS data, Göteborg
Application Nov/Dec	The Swedish Bioinformatics Advisory Program

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The Swedish Bioinformatics Advisory Program



A new teaching model, where PhD students get a senior bioinformatician as a personal advisor during 2 years of their PhD.

Monthly project meetings + two grand meetings per year to aid networking and knowledge transfer.

First call late 2014:

>50 applicants for 15 places

Last call in 2016

>110 applicants

www.scilifelab.se/education/mentorship/the-swedish-bioinformatics-advisory-program/

Next call Nov-December 2016

Why this program

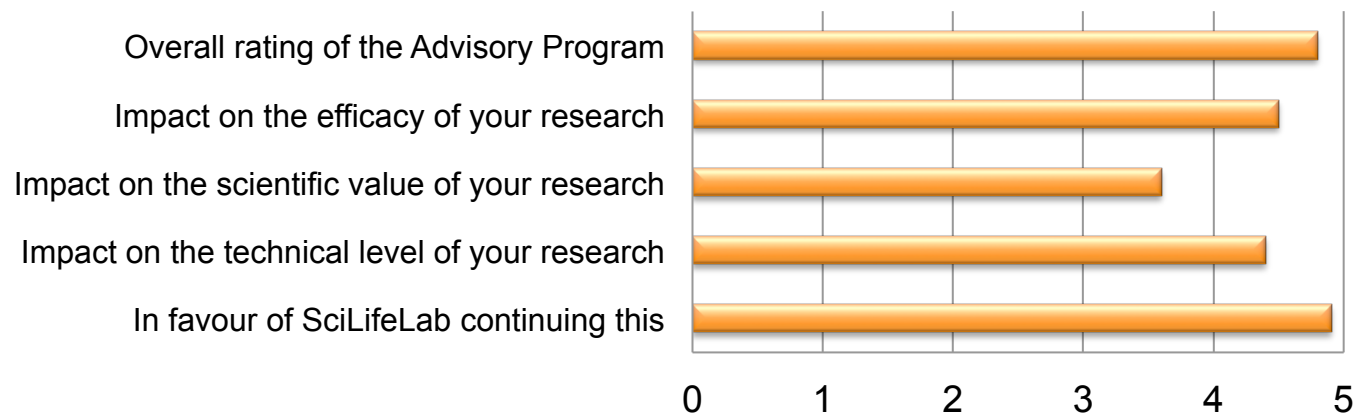
Overall aim: Great research in Sweden!

How? Strategic investment in PhD education
Complementing PhD supervisors with technical expertise
Catalyze transition to large-scale data analyses

The PhD student is responsible to prepare and drive the meetings!

The Swedish Bioinformatics Advisory Program

Student evaluation, June 2015



Science & SciLifeLab Prize



- A grand prize winner receives a prize of US \$30,000; and each of the three category winners will receive US \$10,000
- The grand prize winning essay will be published in *Science* and essays from the three category winners will be published online



“to incent our best and brightest to continue in their chosen fields of research”

SciLifeLab



www.scilifelab.se

