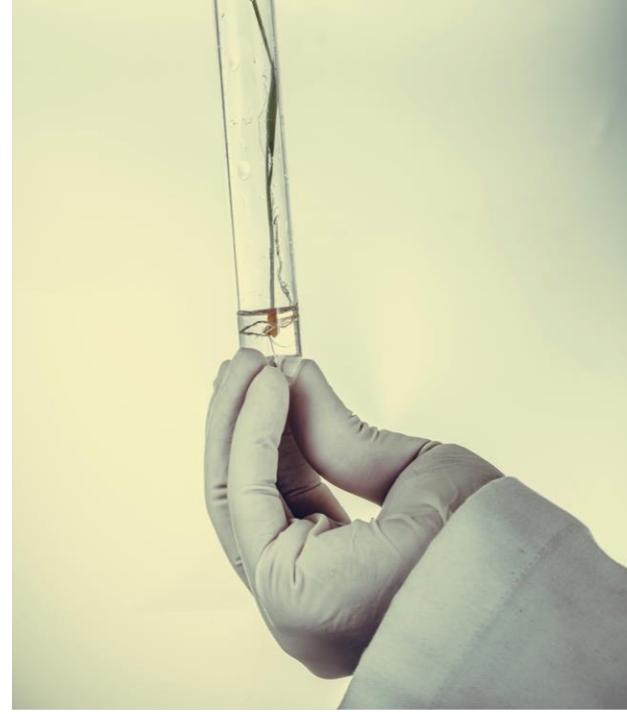# ACCELERATING INNOVATION!

Niclas Fock

2019-02-05

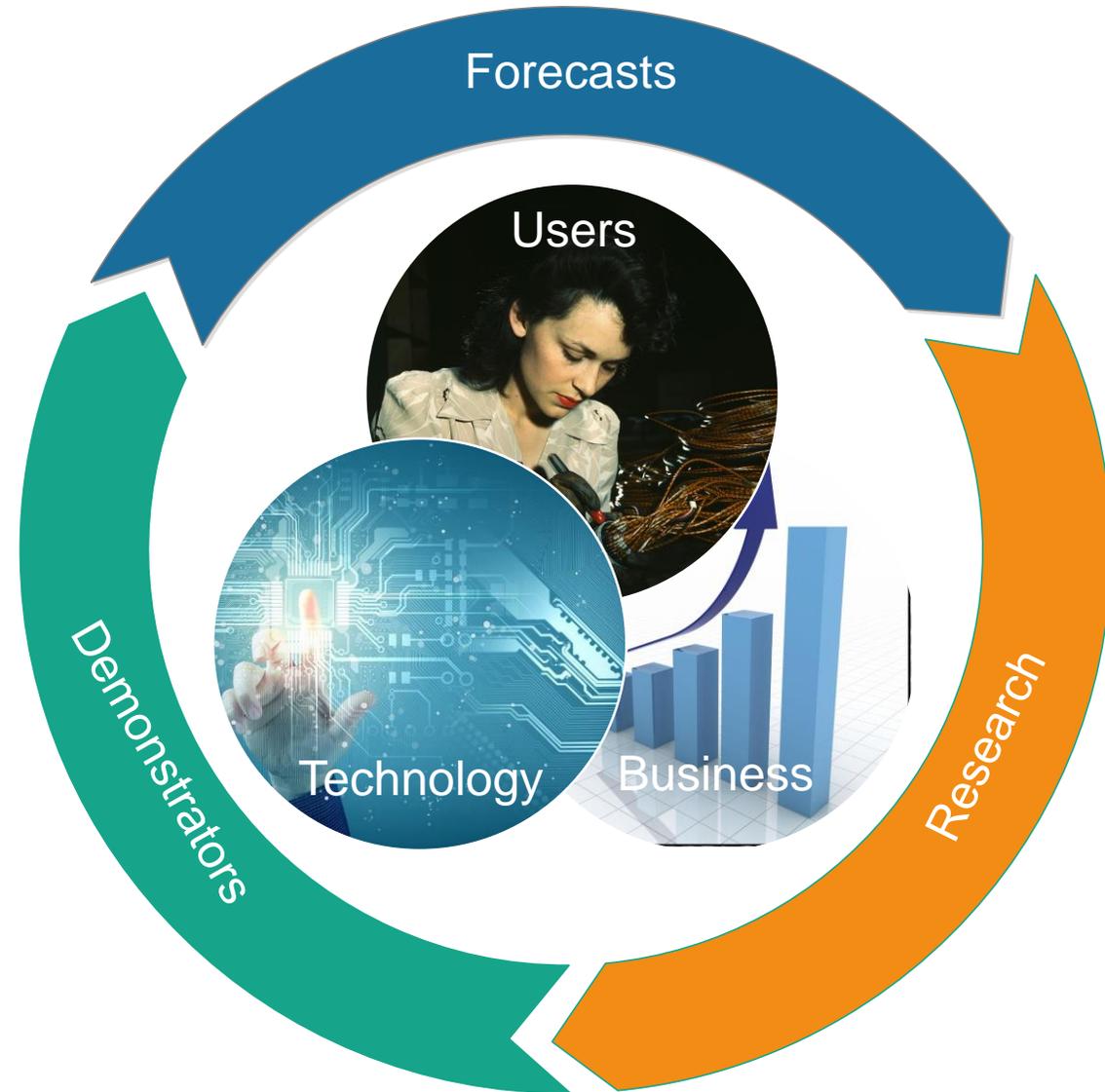Research Institutes of Sweden

RISE SICS East

Welcome to RISE SICS East, Linköping

- 100% part of RISE Research Institutes of Sweden AB (since sept 2018)
- 40+ researchers located in our facilities at Linköping University
- Own "Research faculty" – a dynamic network with LiU researchers
- Annual turn-around about 30 MSEK
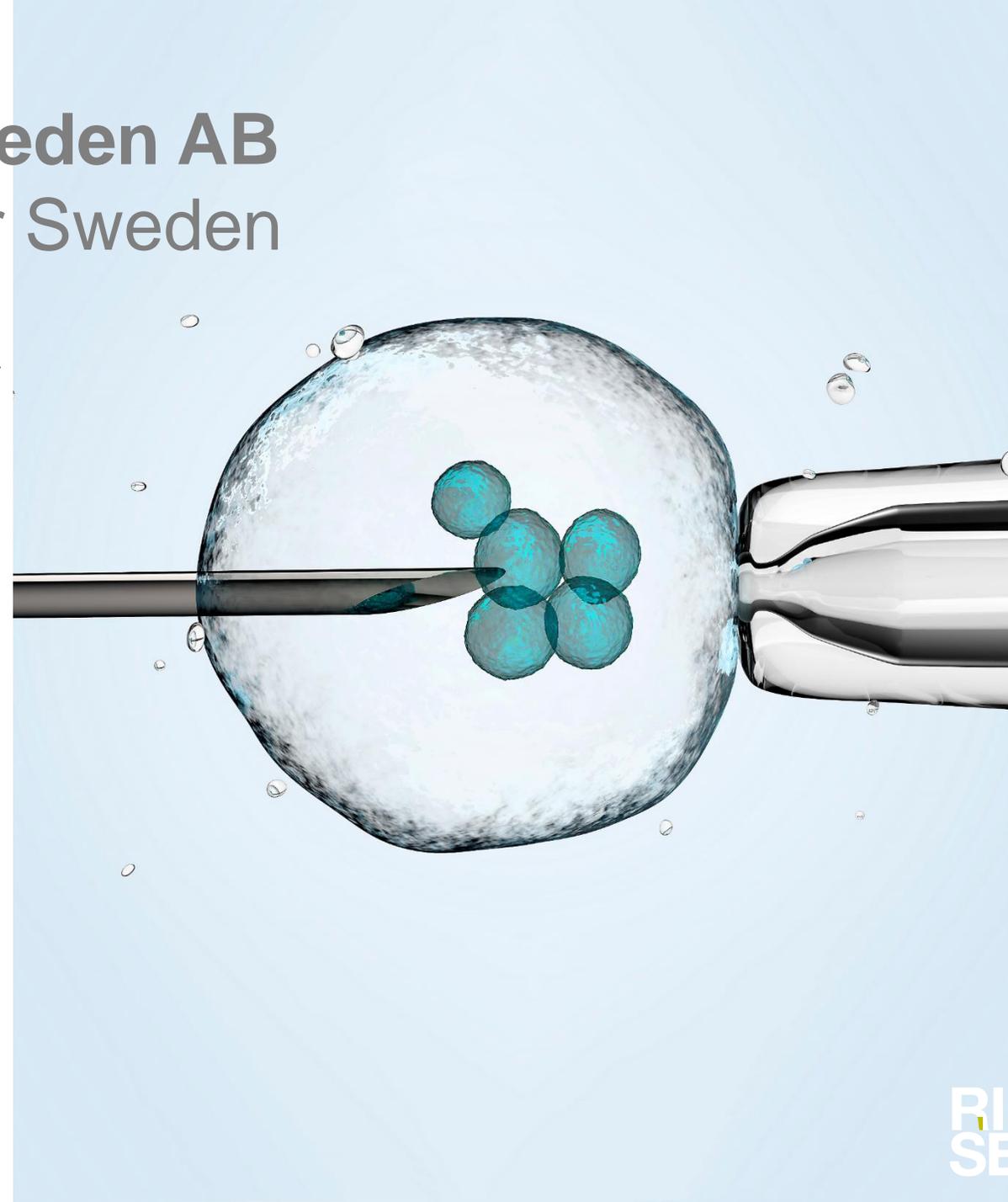
Integrated Innovation

RISE SICS East provides applied research and builds demonstrators that shows how new technology can create new and better products and services.

RISE Research Institutes of Sweden AB
- One strong, unified institute for Sweden

- Sweden needs a strong, national innovation capacity to compete on the international stage and to meet major global challenges.

- The new RISE aims to build a stronger Swedish institute sector that will actively support Swedish industry, providing increased benefits for trade and industry, and society in general.

RISE´s Mission
from the Swedish Government

"The industrial research institutes shall be internationally competitive and facilitate sustainable growth in Sweden by strengthening competitiveness and renewal in the business community."

Excerpt from the Research Bill 2016/17: 50 (Kunskap i samverkan).

As the united **RISE, we are:**

- Increasing both our own and our partners international presence and competitiveness.

- Strengthening regional industry clusters.

- Creating powerful innovation infrastructure for industry and society.

- Supporting the creation of innovative, sustainable solutions to major global challenges.

- Supporting SMEs across the whole of Sweden.

RISE in brief

- Present across the whole of Sweden. And beyond.

- 2,700 employees, 30 % with a PhD.

- Turnover approx. SEK 2.7 billion (2017).

- A large proportion of customers are SME clients, accounting for approx. 30 % industry turnover.

- Runs 100s of test and demonstration facilities, open for industry, SMEs, universities and institutes (RISE is owner and partner in 60 % of all Sweden's T&D facilities).

With our broad range of **competencies** and **unique expertise,** we create added value

Bioeconomy

Fire and safety

Cement and concrete

Certification

Circular economy

Design

Electronics

Energy and fuels

Packaging

Glass

Health and Care

ICT and telecoms

Agriculture and food

Chemistry, materials and surfaces

Life Science

Maritime

Mechanical engineering

Mechanics

Metrology and measurement technology

Paper and Pulp

Process development

Built environment

Safety

Mobility

Wood

Water

RI.
SE

Current Labs & Research areas within RISE SICS East

- E-Society, Digital Information Services (Prof Sture Hägglund)
  - Digitalisation of Public Sector och e-Care
  - Information Data Bases for AI Applications

- Software and Cyber-Physical Systems Engineering "CPS" (Prof Peter Fritzson)
  - Design, Modeling and Simulation of Cyber-Physical Products (incl Hardware & Software)
  - Tools for Efficient Software and Systems Development and Maintenance

- Coding & Communication (Prof Robert Forchheimer)
  - Organic Electronics, Video/Audio compression
  - Digital rights & IT Security
  - Medtech (biomarkers, regulatory issues)

- Autonomous Systems (Prof Martin Holmberg)
  - Mission Driven Autonomous Navigation
  - Robustness (navigating, collision avoidance etc)
  - Swarms/Groups of Drones (Simulation, Flight tests, User Interaction)

- IoT & AI (Dr Emil Hjalmarson)
  - Data-to-information-to-predictive future
  - Computer vision systems
  - Logistics digitalization

Current Labs & Research areas within RISE SICS East

- ## E-Society, Digital Information Services (Prof Sture Hägglund)
  - ### Digitalisation of Public Sector och e-Care
  - ### Information Data Bases for AI Applications
- Software and Cyber-Physical Systems Engineering "CPS" (Prof Peter Fritzson)
  - Design, Modeling and Simulation of Cyber-Physical Products (incl Hardware & Software)
  - Tools for Efficient Software and Systems Development and Maintenance
- Coding & Communication (Prof Robert Forchheimer)
  - Organic Electronics, Video/Audio compression
  - Digital rights & IT Security
  - Medtech (biomarkers, regulatory issues)
- Autonomous Systems (Prof Martin Holmberg)
  - Mission Driven Autonomous Navigation
  - Robustness (navigating, collision avoidance etc)
  - Swarms/Groups of Drones (Simulation, Flight tests, User Interaction)
- IoT & AI (Dr Emil Hjalmarson)
  - Data-to-information-to-predictive future
  - Computer vision systems
  - Logistics digitalization

Current Labs & Research areas within RISE SICS East

- E-Society, Digital Information Services (Prof Sture Hägglund)
  - Digitalisation of Public Sector och e-Care
  - Information Data Bases for AI Applications

- **Software and Cyber-Physical Systems Engineering "CPS" (Prof Peter Fritzson)**
  - **Design, Modeling and Simulation of Cyber-Physical Products (incl Hardware & Software)**
  - **Tools for Efficient Software and Systems Development and Maintenance**

- Coding & Communication (Prof Robert Forchheimer)
  - Organic Electronics, Video/Audio compression
  - Digital rights & IT Security
  - Medtech (biomarkers, regulatory issues)

- Autonomous Systems (Prof Martin Holmberg)
  - Mission Driven Autonomous Navigation
  - Robustness (navigating, collision avoidance etc)
  - Swarms/Groups of Drones (Simulation, Flight tests, User Interaction)

- IoT & AI (Dr Emil Hjalmarson)
  - Data-to-information-to-predictive future
  - Computer vision systems
  - Logistics digitalization

Current Labs & Research areas within RISE SICS East

- E-Society, Digital Information Services (Prof Sture Hägglund)
  - Digitalisation of Public Sector och e-Care
  - Information Data Bases for AI Applications
- Software and Cyber-Physical Systems Engineering "CPS" (Prof Peter Fritzson)
  - Design, Modeling and Simulation of Cyber-Physical Products (incl Hardware & Software)
  - Tools for Efficient Software and Systems Development and Maintenance

Coding & Communication (Prof Robert Forchheimer)

- ### Organic Electronics, Video/Audio compression
- ### Digital rights & IT Security
- ### Medtech (biomarkers, regulatory issues)

- Autonomous Systems (Prof Martin Holmberg)
  - Mission Driven Autonomous Navigation
  - Robustness (navigating, collision avoidance etc)
  - Swarms/Groups of Drones (Simulation, Flight tests, User Interaction)
- IoT & AI (Dr Emil Hjalmarson)
  - Data-to-information-to-predictive future
  - Computer vision systems
  - Logistics digitalization

Current Labs & Research areas within RISE SICS East

- E-Society, Digital Information Services (Prof Sture Hägglund)
  - Digitalisation of Public Sector och e-Care
  - Information Data Bases for AI Applications

- Software and Cyber-Physical Systems Engineering "CPS" (Prof Peter Fritzson)
  - Design, Modeling and Simulation of Cyber-Physical Products (incl Hardware & Software)
  - Tools for Efficient Software and Systems Development and Maintenance

- Coding & Communication (Prof Robert Forchheimer)
  - Organic Electronics, Video/Audio compression
  - Digital rights & IT Security
  - Medtech (biomarkers, regulatory issues)

- Autonomous Systems (Prof Martin Holmberg)
  - Mission Driven Autonomous Navigation
  - Robustness (navigating, collision avoidance etc)
  - Swarms/Groups of Drones (Simulation, Flight tests, User Interaction)

- IoT & AI (Dr Emil Hjalmarson)
  - Data-to-information-to-predictive future
  - Computer vision systems
  - Logistics digitalization

Current Labs & Research areas within RISE SICS East

- E-Society, Digital Information Services (Prof Sture Hägglund)
  - Digitalisation of Public Sector och e-Care
  - Information Data Bases for AI Applications

- Software and Cyber-Physical Systems Engineering "CPS" (Prof Peter Fritzson)
  - Design, Modeling and Simulation of Cyber-Physical Products (incl Hardware & Software)
  - Tools for Efficient Software and Systems Development and Maintenance

- Coding & Communication (Prof Robert Forchheimer)
  - Organic Electronics, Video/Audio compression
  - Digital rights & IT Security
  - Medtech (biomarkers, regulatory issues)

- Autonomous Systems (Prof Martin Holmberg)
  - Mission Driven Autonomous Navigation
  - Robustness (navigating, collision avoidance etc)
  - Swarms/Groups of Drones (Simulation, Flight tests, User Interaction)

IoT & AI (Dr Emil Hjalmarson)

- Data-to-information-to-predictive future
- Computer vision systems
- Logistics digitalization

TACK!

Niclas Fock

niclas.fock@ri.se

+46-722 24 22 84

Research Institutes of Sweden

DIVISION ICT
RISE SICS East