

# ANA Futura breakfast mingle



Karolinska  
Institutet



9 December 2025

# Agenda

- **Welcome!**
- **Latest ANA Futura news** – *Lars Frelin, facility manager*
- **Introduction to FENO Histology Core Facility** – *Shea Nee Chew / Tarja Schröder*
- **LCI Core Facility Node at ANA Futura** – *Sylvie Le Guyader, Live Cell Imaging core facility director*
- **Questions**

# Latest ANA Futura news

- New term of office in the steering- and drafting committee's
- Strategic work during 2025 – What have we done?
- Updated fire safety rules at KI
- The ANA Futura website
- Freezer facility
- Update from the service team
- Next ANA Futura breakfast mingle

Facility  
manager



Lars Frelin  
LabMed

# New term of office in the steering- and drafting committee's 2026

- Welcome – chair of the ANA Futura steering committee 2026
- Anna Norrby-Teglund – Head of Unit at the Center for Infectious Medicine (CIM) at the Department of Medicine Huddinge
- Members of the steering- and drafting committee's was decided on 20 October 2025.
  - See website for details



# Strategic work during 2025 – What have we done?

- **We have done a lot together!**
- We have worked on strategic focus areas, suggested by all of you!
- The service team have focused on preventive maintenance
- The service team have carried out >1,500 service tasks (reported in our case management system)



# Follow up on strategic work 2025

- **Vision work for ANA Futura:** define the vision of ANA Futura, organizational structure etc. – *ongoing/partly done*
- **Plan for additional premises in ANA Futura:** today's full occupancy is a problem in regard to recruitment, research groups that expands – *ongoing*
- **Principles for shared laboratories in ANA Futura:** how to handle cost for instruments, service contracts etc. – *done*
- **Collaboration with Neo:** in-depth collaboration (service team, labs, routines, infrastructure, common booking system for equipment that also functions as an inventory system, joint scientific activities) – *ongoing*
- **Common areas:** continue to optimize the use of all our common areas – *ongoing*
- **Scientific activities:** for example, seminars, journal clubs etc, preferably student-initiated – *not started*
- **Follow-up the principles for the ANA Futura distribution key** – *ongoing*
- **Common rules on densification in offices** – *not started*
- **Cost comparison between research environments at KI** – *ongoing*
- **Maintenance and contingency plan** – *ongoing*
- **Supply center KI South** – *not started*
- **Satisfaction survey (ANA Futura & Neo)** – *done*

# Updated fire safety rules at KI

- Updated fire safety rules with the aim of minimizing the risk of a fire breaking out within Karolinska Institute's (KI's) operations due to a lack of knowledge or incorrect action, and to ensure a safe evacuation from buildings.
- Dnr: 1-1250/2025
- <https://staff.ki.se/tools-and-support/safety-and-security/if-something-happens/fire-safety>



# Store your battery in cupboard in the bicycle garage

- From 1 January 2026, anyone who brings an electric bicycle or electric scooter to KI must lock their battery in a special locker. This is due to the increased risk of fire.
- <https://news.ki.se/store-your-battery-in-cupboard-in-the-bicycle-garage>



## No lithium-ion batteries in KI's premises

**No storage of lithium-ion batteries** (or electric bicycles with batteries) is therefore permitted anywhere on KI's premises (except in lockers).

**This also applies to visitors**, for example to conferences or to the University Dental Clinic.

It is not permitted to charge lithium-ion batteries on KI's premises.

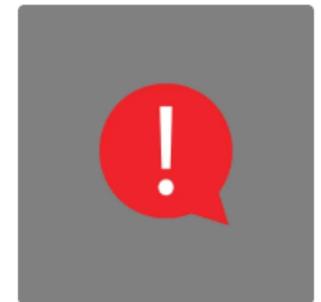


Illustration: Getty Images.

# The ANA Futura website

Karolinska Institutet Staff Portal

Log in Listen Svenska Search Menu

## ANA Futura – for staff

ANA Futura is creating a leading translational integrated research environment equipped for cutting-edge research, where the boundaries between departments and clinics are torn down and researchers collaborate on the basis of common research profiles.

Liquid Nitrogen Safety Course ANA Futura house- and fire safety introduction

### Menu for this area

- Support & Tools
- Building and localities ANA Futura
- Communication ANA Futura
- Work environment and safety
- Research groups in ANA Futura
- Addresses
- About ANA Futura
- If something happens

ANA Futura breakfast meeting, Karolinska Institutet.

<https://staff.ki.se/ana-futura-for-staff>

# Contact information ANA Futura freezer facility

*In case of a freezer alarm or a problem in the ANA Futura freezer facility*

## **Office hours:**

1. Contact the alarm recipients for the freezer that is alarming.
2. If no one answers, contact the service team: (08-524 836 41).
3. If multiple freezers are alarming, or if there is an audible alarm or lightning alarm from the room/corridor, contact the service team immediately (08-524 836 41).
4. For general problems in the freezer facility, contact the service team (08-524 836 41).

**Note: If urgent problems in the freezer facility – do not send a ticket/email to the ANA Futura Service Team.**

## **Outside office hours:**

1. Contact the alarm recipients for the freezer that is alarming.
2. If no one answers, contact the facility manager or coordinator.
3. If multiple freezers are alarming, or if there is an audible alarm or lightning alarm from the room/corridor, contact the facility manager or coordinator immediately.
  1. Facility manager Lars Frelin: 070-4243001
  2. Coordinator Tommy Eklund: 076-0500405
4. For general problems in the freezer facility, contact the facility manager or coordinator immediately.

# Update from the Service team

- **Details about the ANA Futura service team availability over Christmas**
  - The ANA Futura service team will be available on all working days throughout the Christmas period, although with a smaller team on site
  - A single service team member will be present on “bridge days”
  - There will be no staff on-site during days off and public holidays
  - Security personnel will inspect the freezer facility rooms four times daily

# Update from the Service team

**All you need is three phone numbers...**

- ANA Futura service team: 08-524 836 41
- KI security guards: 08-524 860 60
- SOS Alarm: 112
- **Please record the phone numbers in both your work and private phone! (if you have two separate)**



# Thank you for your service during 2025



Tommy Eklund



Tomas Hager



Marjan Amiri



Åsa Hedberg



Oscar Sillén



Jonathan Kullman



Michael Davoren

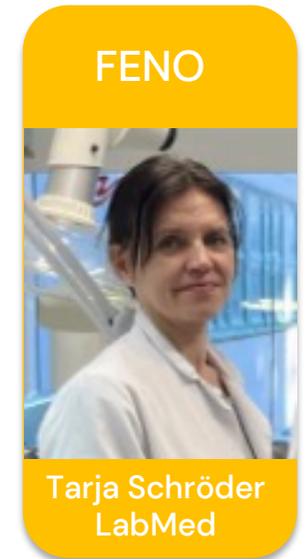
# Next ANA Futura breakfast mingle!



- **Drop-in breakfast 8.30 am**
- **Meeting starts 8.45 am – 9.30 am**

# Follow-up on fire safety

- **Shea Nee Chew**, Research Assistant
- **Tarja Schröder**, Biomedical Scientist





**Karolinska  
Institutet**

# FENO

## HISTOLOGICAL CORE FACILITY

2025-12-09

# ABOUT FENO

- **Since 2002**
- **Histological services and research support**
- **Located in ANA Futura, Room 7130, Floor 7**





**Tarja**  
Biomedical  
Scientist

**Makbule**  
Biomedical  
Scientist

**Shea Nee**  
Research  
Assistant

**Poomy**  
Laboratory  
Engineer

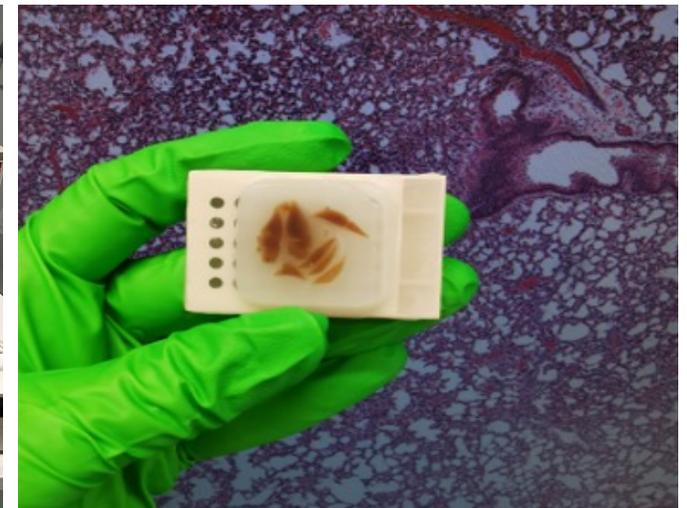
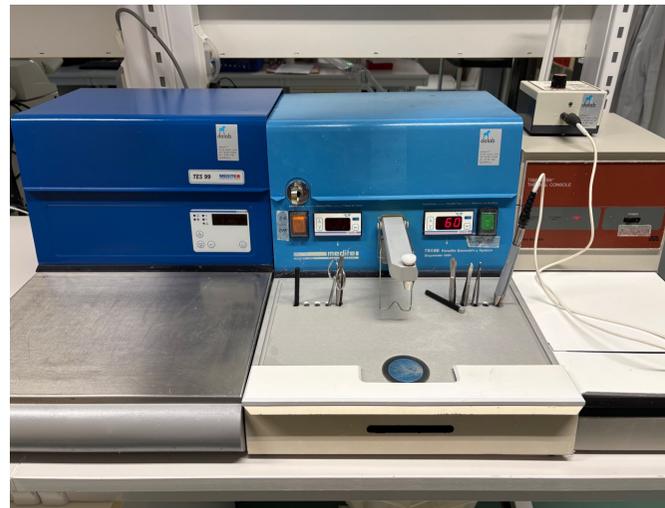
**Moustapha Hassan**  
Head of FENO Core  
Facility



# SERVICES

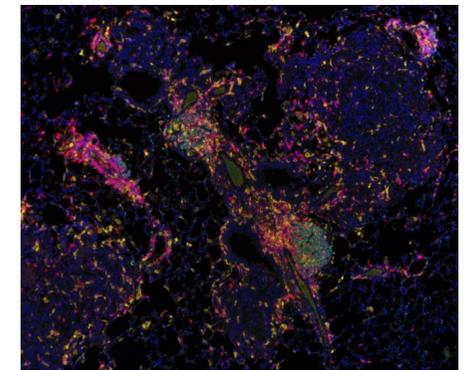
## Animal and human tissue:

- Consultation (FOC)
- Sample preparation
- Dehydration & Embedding
- Paraffin & Cryo Sectioning
- Histological Staining
- Special techniques: IHC, IF, RNAScope
- Scanning

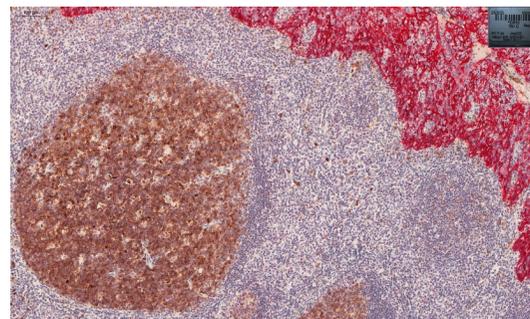


# Leica BOND RX<sup>m</sup> – Fully automated research stainer

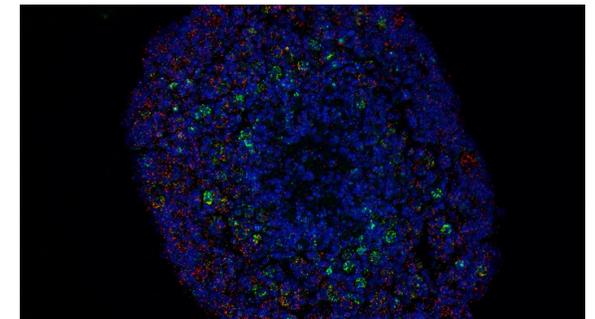
- IHC
- IF
- Opal 4-7- Color IF
- RNAScope
  
- Up to 30 slides per run
- Streamline antibody validation process



Opal 4-Color IF 1) PAX5 (B-cells) – 520 2) Iba1 (Macrophages) – 540 3) CD3 (T-cells) – 570 4) DAPI – Nuclear



IHC Double Stain 1) CD10 (B & T-cells)+ DAB 2) CK19 (cytoskeleton)+ Fast Red



RNAScope Duplex IF 1) Puma 2) Pten 3) DAPI

# Leica BOND RX<sup>m</sup> – Pricing Information

## ➤ 2 types of services:

### ▪ Self-service

- New users must book an introduction
- 1800 kr/run for up to 30 slides
- Own antibodies, kits, reagents

### ▪ FENO performs

- Quote pricing
- Customers provides antibodies & kits

**Leica**  
BIOSYSTEMS

**TRIOLAB**

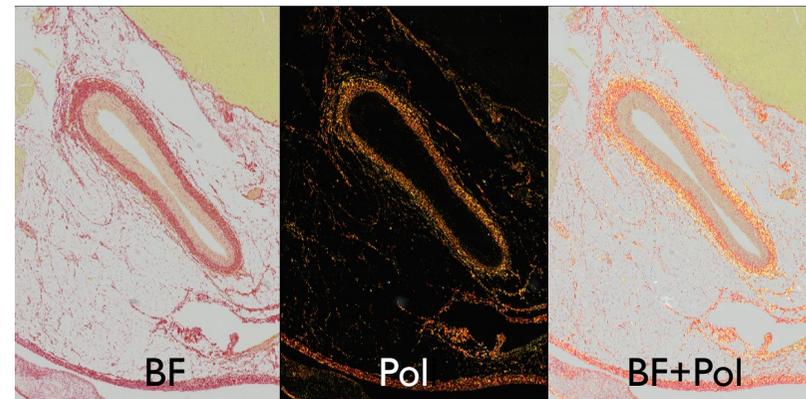


Email [phenotype@ki.se](mailto:phenotype@ki.se) for which reagents to purchase

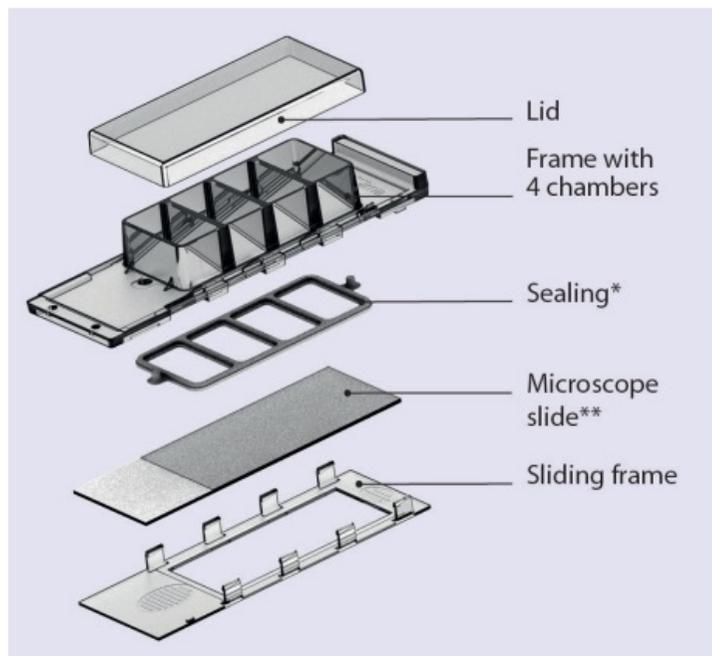
# ZEISS AXIOSCAN 7

## ZEISS Axioscan 7

- **Brightfield**
- **Polarization**
- **Fluorescence**
  - Up to 4 channels (blue, green, red, orange)
- **Z-stack with EDF**



# Sectioning for MACSima ✓



# SPATIAL TRANSCRIPTOMICS



**FENO**

- ✓ Sectioning
- ✓ Staining

Live Cell Imaging  
Core Facility

**LCI**

- ✓ Imaging

Single Cell  
Core Facility

**SICOF**

- ✓ RNA QC
- ✓ Transfer to 10x  
Genomics
- ✓ Builds library

Bioinformatics and  
Expression Analysis  
Core Facility

**BEA**

- ✓ Sequencing
- ✓ Analysis

# BOOKING SERVICES



Research

Svenska Search Menu

## Navigate on the page

FENO - user guidelines

Access

How to deliver samples

How to acknowledge our facility

## FENO - user guidelines

FENO is part of the animal research workflow that includes Preclinical Laboratory (PKL), Portal and Preclinical Imaging Facility (PIF), to help researchers smoothly plan and perform their animal studies and phenotype their animal models by combing multidiscipline technologies.

FENO aims to provide standardized and comprehensive analysis of genetically modified mice phenotypes and different disease models, and hence contribute to increase the understanding of human diseases/disorders and the development of new treatments strategies.

## Access

FENO services is managed by the [iLab booking system](#). The system is used for all bookings, service requests as well as introduction/training.

Log in to the iLab booking system (FENO histology/pathology@ilab)

## Related

[FENO - our offer](#)

[FENO - about us](#)

Agilent CrossLab | iLab Operations Software | Search... | Go | Shea Nee Chew

## FENO Histology Core Facility

Request Services | View All Requests | People | Reporting | Billing | Administration

### Service Projects & Quote Requests

Sort manually | Add a Service Project Template

General instructions for histological sampling and fixation:

- General fixation of tissues in 4% neutral buffered formaldehyde for maximum time of 24 h.

To ensure optimal fixation the volume of the fixative should be at least 15-20 times the volume of the tissue, and tissue parts should not be thicker than 5 mm. Use flat bottom vials/jars. For thicker tissues >5 mm, fix 48 h in 4% neutral buffered formaldehyde.

- After 24-48 hours transfer tissues to 70 % ethanol unless working with brain.

For brain tissues fix in 4% neutral buffered formaldehyde for 24-48 hours and transfer tissues in 30% sucrose with 0.05% sodium azide. Store in +4°C.

Sample Submission/Consultation Request | initiate request

### Service & price list

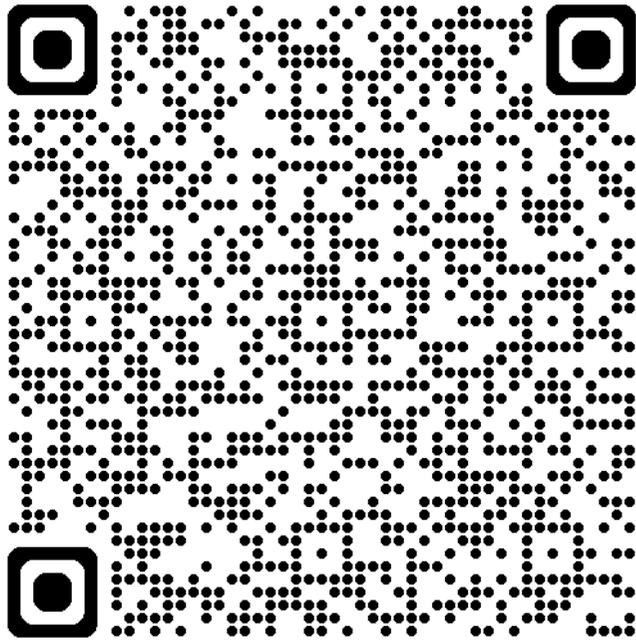
Sort manually | Add a Service Template

Search available services: | View: by category alphabetically

- ▶ Dehydration of paraffin (1)
- ▶ Tissue preparation & embedding (1)
- ▶ Paraffin sectioning (1)
- ▶ Cryo sectioning (1)
- ▶ Histological stainings (2)



# THANK YOU FOR LISTENING



**FENO's Home Page**



[phenotype@ki.se](mailto:phenotype@ki.se)



**Tel. 073-6994370**



**Karolinska  
Institutet**

# Questions



- <https://ki.se/en/research/research-infrastructure-and-environments/core-facilities-for-research/feno-histological-core-facility>

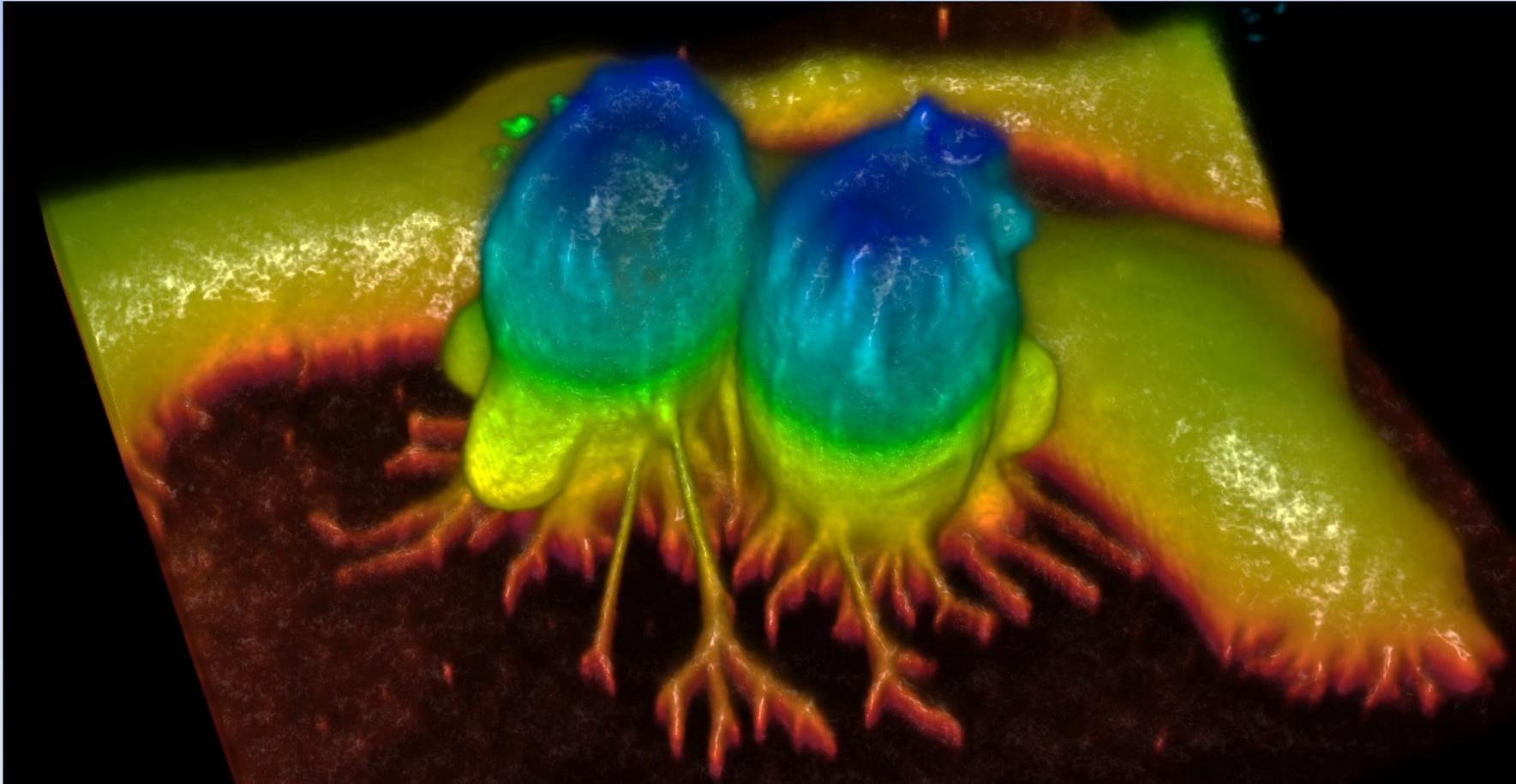
# LCI Core Facility Node at ANA Futura

- **Sylvie Le Guyader**, Live Cell Imaging core facility director



# LCI spinning disk confocal at Ana Futura

Sylvie Le Guyader, LCI Director



# Point scanning versus spinning disk confocals

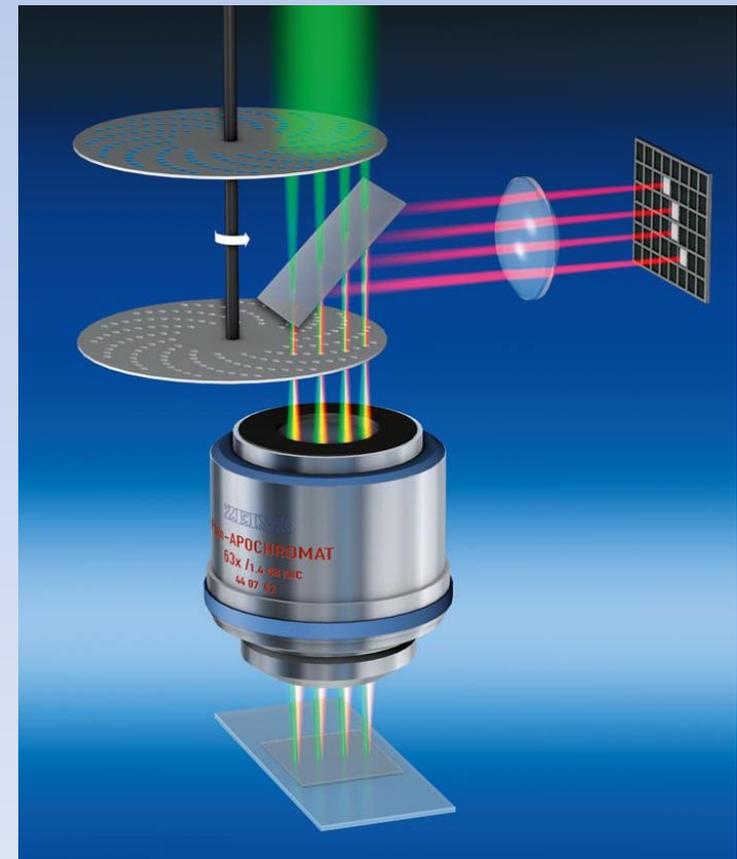
There are 2 types of confocal microscopes:

- Point scanning confocals: Detectors record 1 spot at a time.
- Spinning disk confocals: Camera-based systems: millions of spots at once.

Both fully confocal (pinholes).

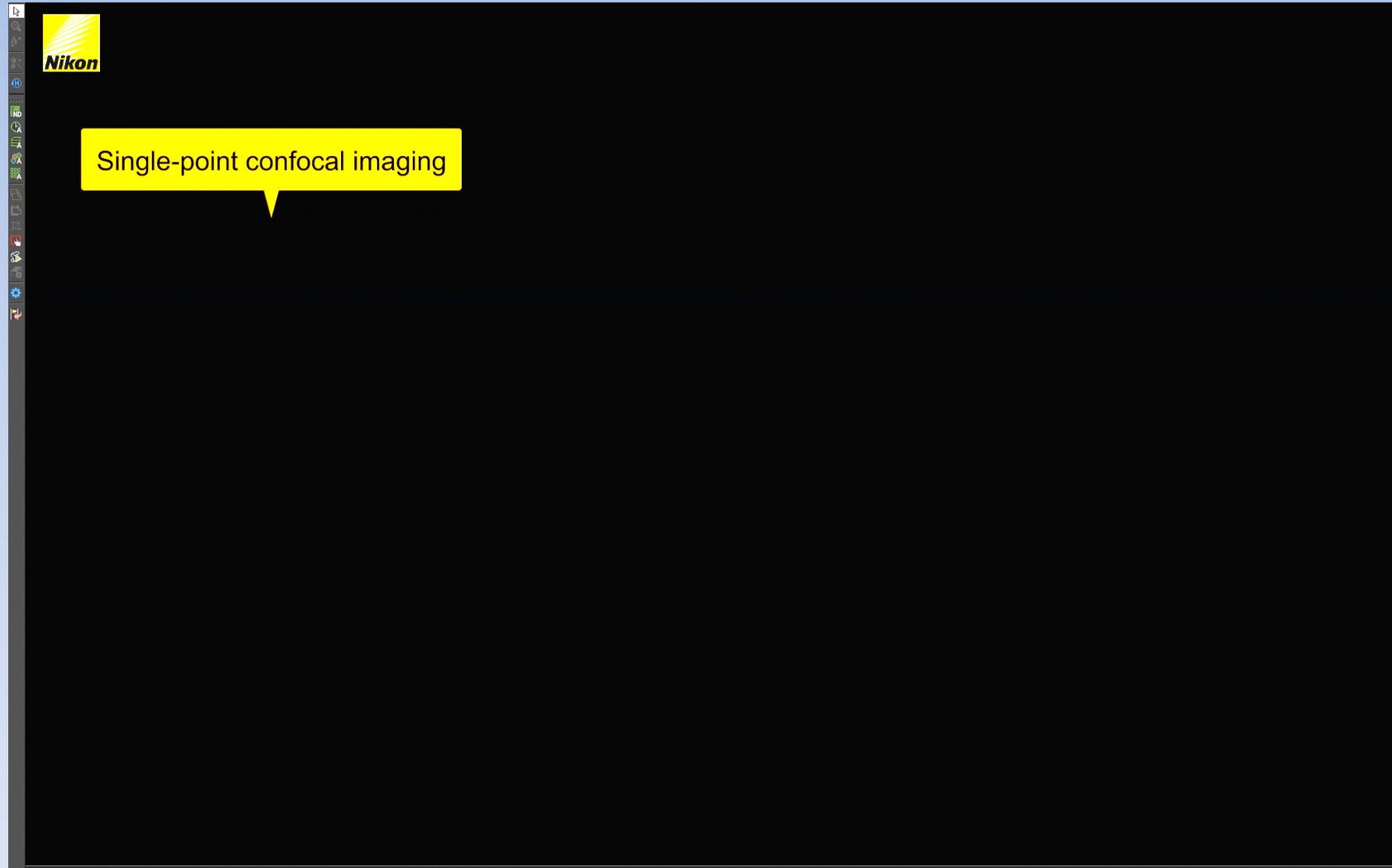
Both types can image:

- Transmitted light and fluorescence
- Live and fixed samples
- Optical sections (3D samples)
- Multidimensions:  $xy$ ,  $z$ , tiles, time, multiple channels, multiwell plates
- Smart imaging
- Ai



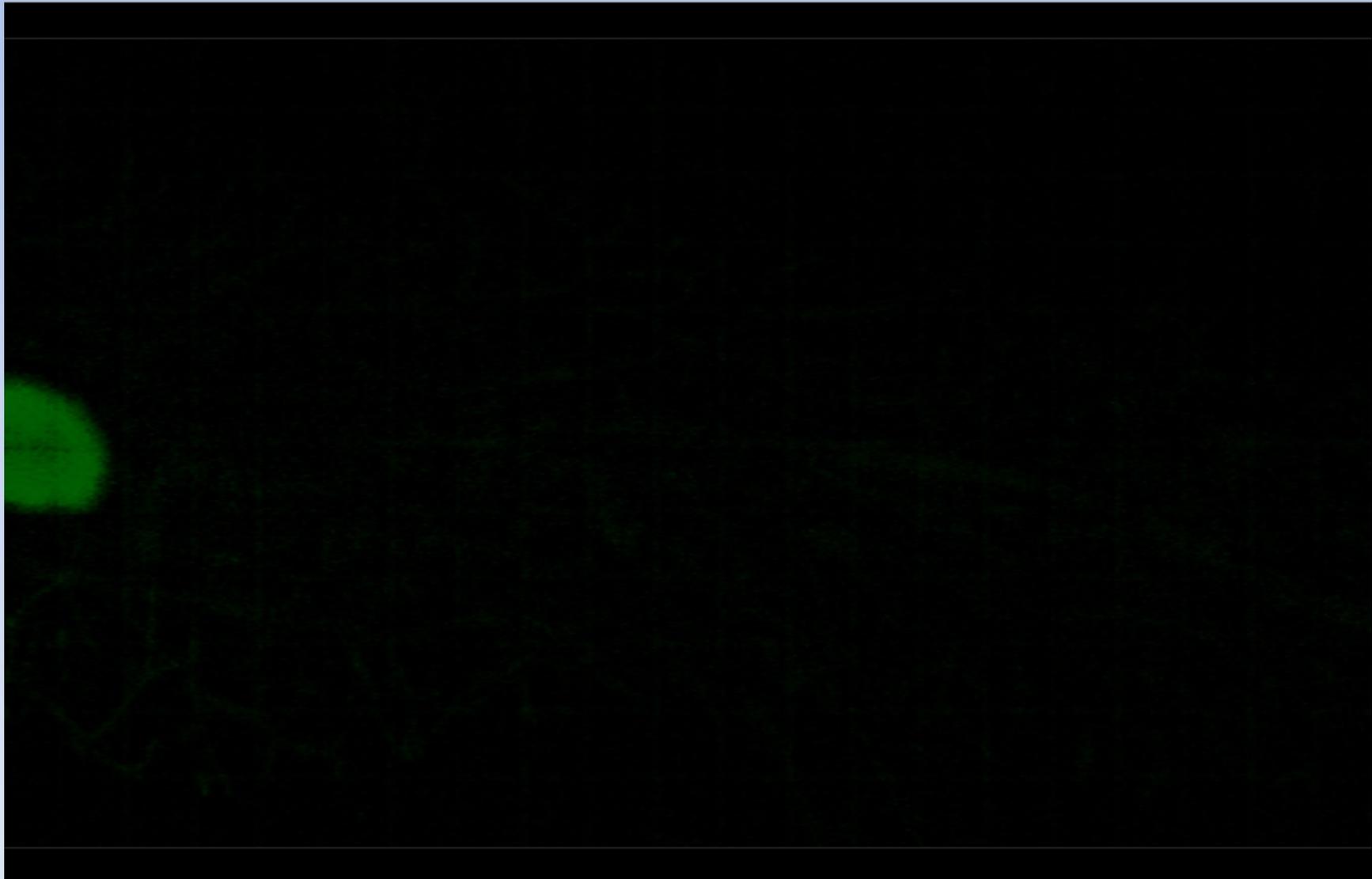
# Point scanning versus spinning disk confocals

Imaging at full field of view and highest resolution (4096 px)



# Spinning disk confocal

- High speed of a camera-based system
- Optical sectioning



# Single-point versus spinning disk confocals

## **Advantages of a Single-point confocal: Flexibility for specialised applications**

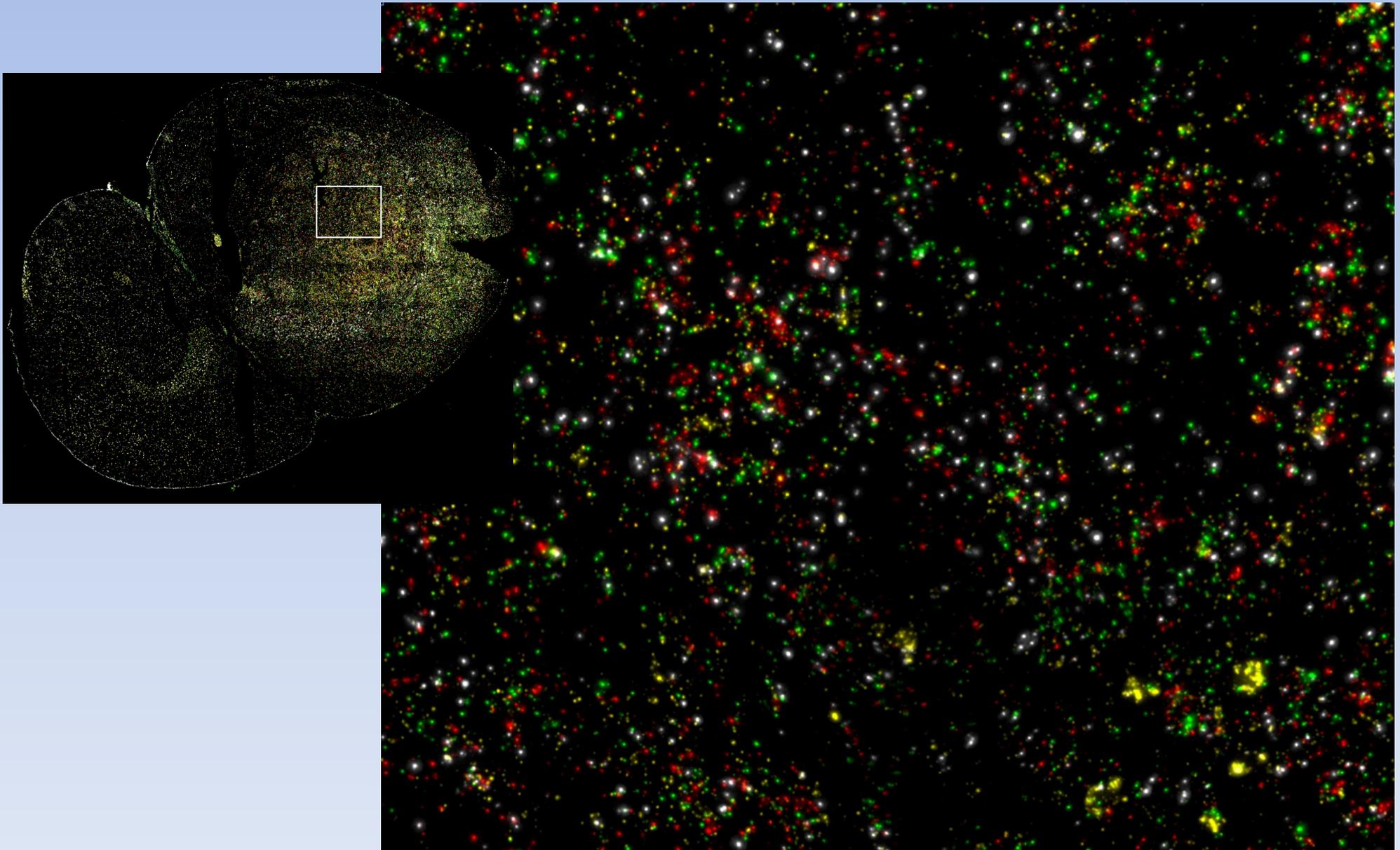
- Higher light concentration for specialised techniques (FRAP or STED)
- Pinhole size for any channel or objective
- Flexible emission filters

## **Advantage of a Spinning disk confocal: Speed**

- Fully confocal but only gives perfect settings for high magnification objectives.
- Speed, especially for large samples, 3D samples, multiwell plates
- Much gentler for live samples, a lot less bleaching
- Many combinations of ex/em

# 6 channels whole brain section imaging

Maria Escriva Conde, Mats Nilsson's lab SU



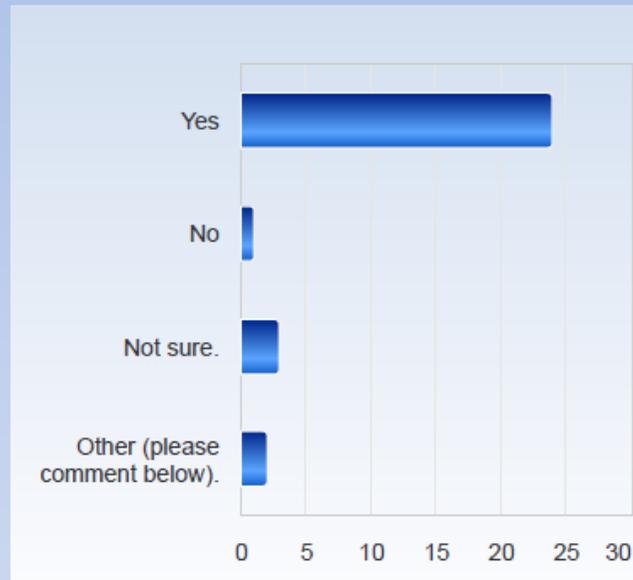
# The LCI aim:

## Covering the needs of all researchers on the South campus

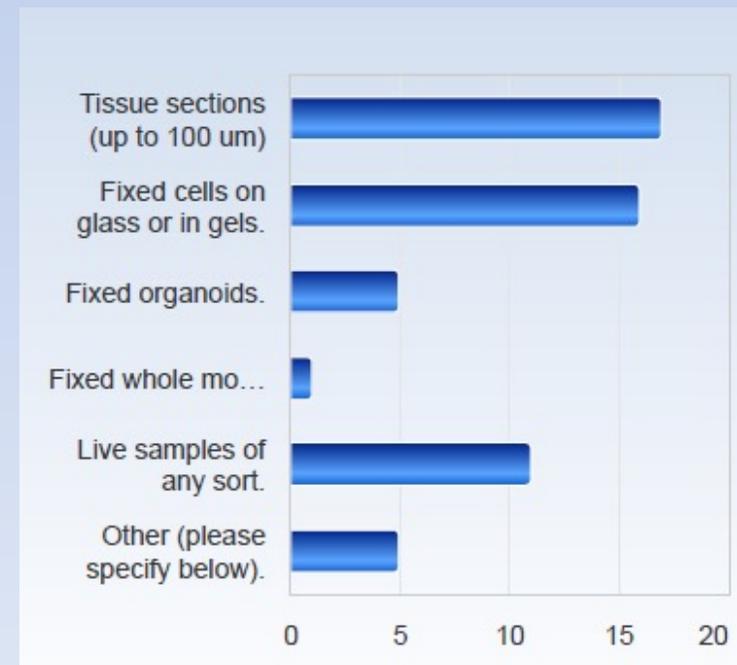
- Cost of a spinning disk confocal: 4-6 MSEK
- All costs (including rent), maintenance and training covered by LCI
- Similar pricing compared to BIC (but much closer 😊)
- Excellent training and post-training support
- Flexible usage fees
- High microscope availability
- BSL2 environment to accommodate BLS1/BLS2, live/fixed
- Time plan: second half of 2026
- No change of conditions for the existing point confocals

# Survey

- Do you support the idea that LCI would place a high-end light microscope at Ana Futura? 80% yes



- What type of samples do you image?



# Questions?

**Sylvie Le Guyader**, Live Cell Imaging core facility director

<https://ki.se/en/research/research-infrastructure-and-environments/core-facilities-for-research/live-cell-imaging-core-facility-lci>



ANA Futura breakfast mingle, Karolinska Institutet.

# Questions from the staff

## ANA Futura

ANA Futura breakfast meeting, Karolinska Institutet.

# Questions?

- **Sylvie Le Guyader**, Live Cell Imaging core facility director
- <https://ki.se/en/research/research-infrastructure-and-environments/core-facilities-for-research/live-cell-imaging-core-facility-lci>



## Questions from the staff

# ANA Futura



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