



Using

# Confluence

as a platform for research documentation  
and collaboration at Aarhus University

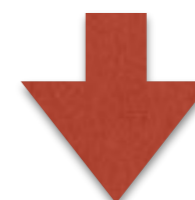
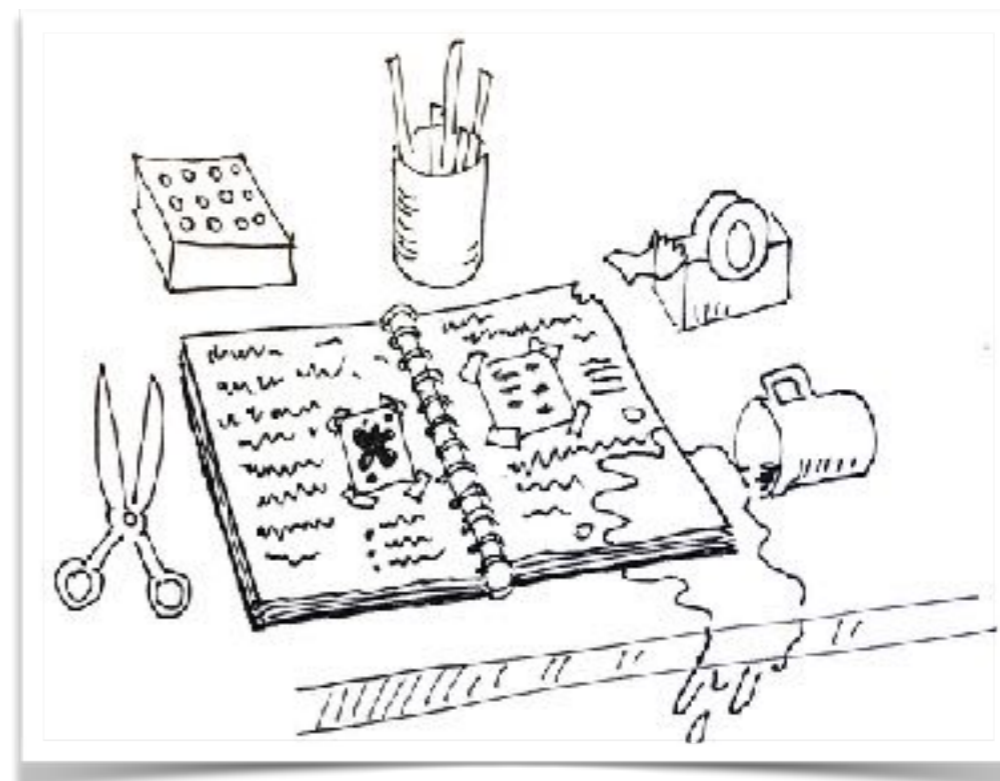
[labbook.au.dk](http://labbook.au.dk)

ELABBOOK WORKSHOP 13/4-2018

Ebbe Sloth Andersen, iNANO, Aarhus University

# Outline

- History of our use of ELNs
- The Confluence wiki
- Labbook.au.dk
- Lab space: Our way of using the system (demo)
- Tablets in the lab
- Information about ELNs to researchers
- Future plans and projects





# From paper to digital research documentation

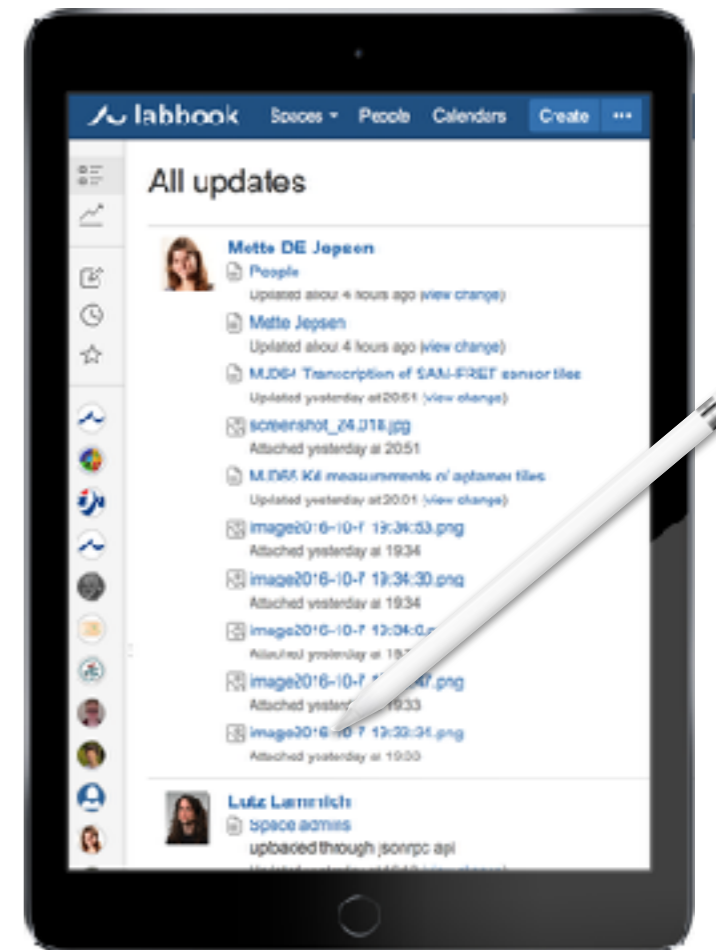
Analog lab notebook (ALN)

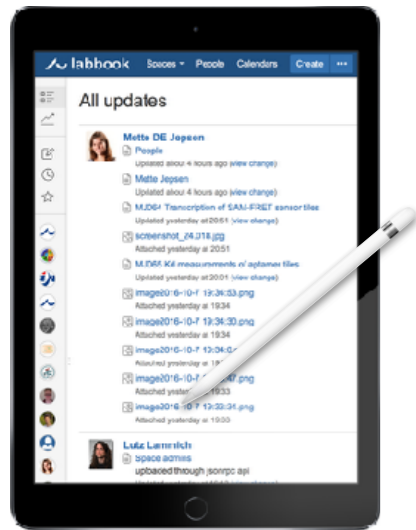


- ◆ Searchability
- ◆ Security
- ◆ Backup
- ◆ Availability
- ◆ Collaboration
- ◆ Common platform



Electronic lab notebook (ELN)





# History of using Confluence

- ◆ System was initiated at Aarhus University in 2007
- ◆ The Confluence system was chosen because of ease of use and collaboration features
- ◆ The Confluence system is developed by the company Atlassian
- ◆ Confluence is used by many big companies and universities around the world
- ◆ AU labbook is located on AU servers and uses AU login



[vimeo.com/28057616](https://vimeo.com/28057616)



# Confluence wiki basics



Spaces & pages



Groups & users



Permissions &  
restrictions

- Personal spaces
- Project spaces

# labbook.au.dk











Spaces & pages



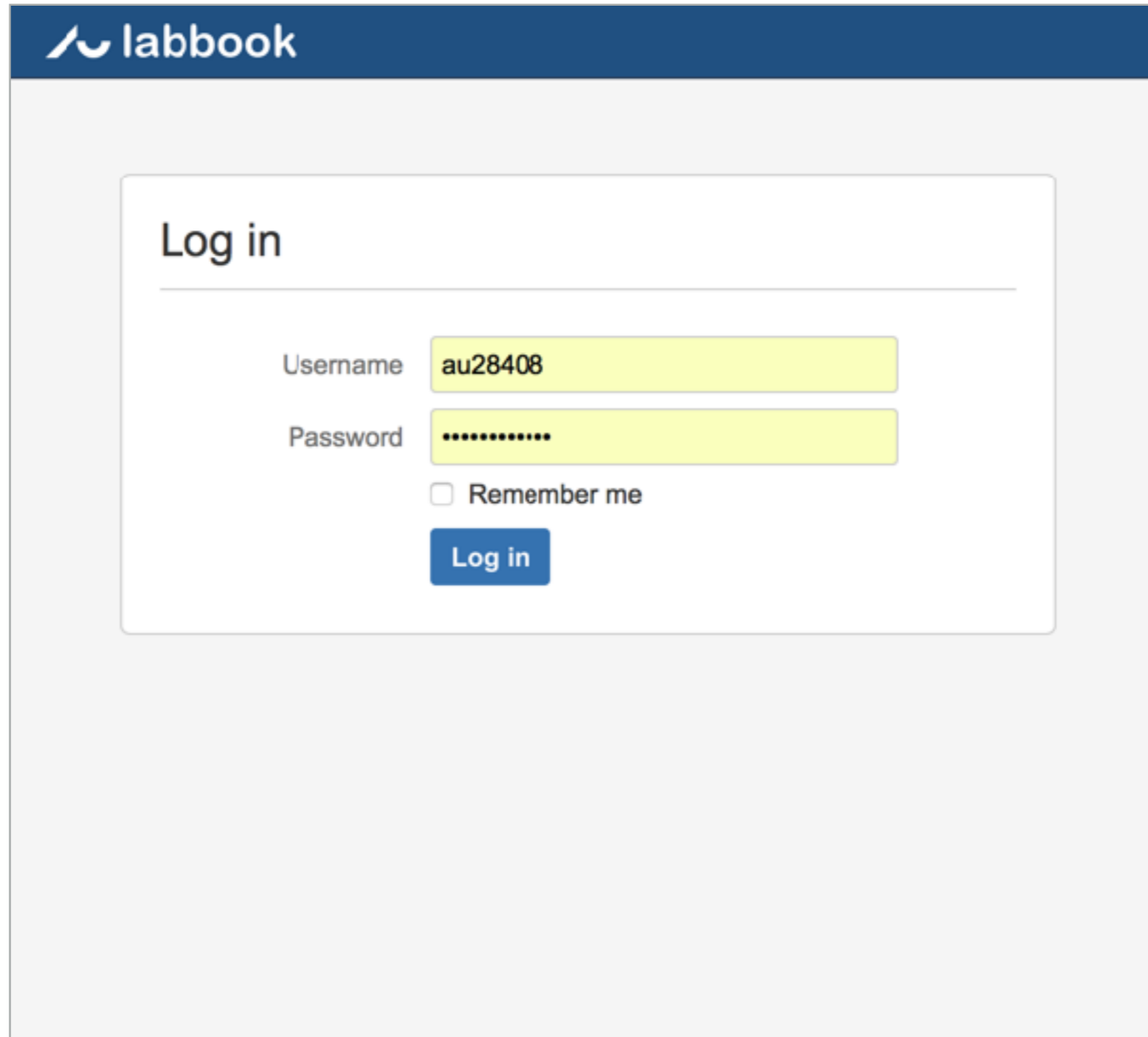
Groups & users



Permissions &  
restrictions

-  Personal
  -  Project
    - Date exp.
    - Notes
-  Group
  - Materials
  -  Meetings
  - Protocols
  -  Projects
    - Project
    - Date exp.
-  Center
-  Department
-  Faculty

# Labbook login



The image shows a web browser window with a dark blue header containing the 'labbook' logo and name. Below the header is a light gray background with a white rounded rectangle containing the login form. The form is titled 'Log in' and has a horizontal line below the title. It contains two input fields: 'Username' with the value 'au28408' and 'Password' with masked characters. Below the password field is a checkbox labeled 'Remember me' which is unchecked. At the bottom of the form is a blue 'Log in' button.

labbook

Log in

Username au28408

Password .....

Remember me

Log in



# Terms & conditions

## STANDARD LABBOOK USER CONFIDENTIALITY AGREEMENT

By clicking the “Accept” button you as the User accept to be bound by the terms of this “Labbook User Confidentiality Agreement” with Aarhus University, Nordre Ringgade 1, DK-8000 Aarhus C, Denmark (“AU”).

### 1 Confidential Information

1.1 This Confidentiality Agreement is made for the purpose of allowing the User, to perform collaborative research at AU (the Purpose). In connection with the Purpose, AU and eventual external partners (the Discloser(s)) will provide the User with different kinds of proprietary information and data via Labbook. Any and all information provided to the User by AU and eventual external partners, whether orally or in writing, shall be considered Confidential Information and shall

1.2 Confidential Information used for the Purpose should be processed in a manner consistent with Aarhus University’s code of practice to ensure scientific integrity and responsible conduct of research at Aarhus University.

### 2 Confidentiality and Non-use

2.1 The User shall keep the Confidential Information strictly confidential and may not use it or disclose it to any third party. The User has no right to use any part of the Confidential Information to develop its own technology or seek patent protection for it (whether or not in combination with other technology).

I Agree



# Labbook dashboard

The screenshot displays the Labbook dashboard interface. At the top, there is a navigation bar with the Labbook logo and menu items: Spaces, People, Calendars, Create, and a search icon. Below the navigation bar, the main content area is divided into three sections:

- DISCOVER:** A sidebar menu with options: All updates (selected), Popular, MY WORK (Recently worked on, Recently visited, Saved for later), and MY SPACES (All, Labbook Help, Department of Molecular Biolo..., INANO, Science & Technology, AU Cryo-EM CIG, Biosensor projekt, Andersen lab, Mads Jeppesen, Peter Møller, Daniel Miotto Dupont, Mette Jepsen, Simon Pedersen).
- All updates:** A central feed of updates. The first update is by Mette DE Jepsen, categorized under 'People', with a list of recent changes including 'Mette Jepsen' and 'MJ064 Transcription of SAM-FRET sensor files'. The second update is by Lutz Lammich, categorized under 'Space admins' and 'Spaces', with a note 'uploaded through jsonrpc api'.
- Welcome to AU labbook:** A right-hand sidebar containing a 'Create Space' button, a welcome message, and an 'Upcoming Events' section with a calendar view showing events for October 9th, 10th, and 11th.

**Navigation Bar:** labbook Spaces People Calendars Create ...

**DISCOVER**

- All updates
- Popular

**MY WORK**

- Recently worked on
- Recently visited
- Saved for later

**MY SPACES** All

- Labbook Help
- Department of Molecular Biolo...
- INANO
- Science & Technology
- AU Cryo-EM CIG
- Biosensor projekt
- Andersen lab
- Mads Jeppesen
- Peter Møller
- Daniel Miotto Dupont
- Mette Jepsen
- Simon Pedersen

**All updates**

**Mette DE Jepsen** (People)

- Updated yesterday at 14:01 (view change)
- Mette Jepsen (Updated yesterday at 14:00 (view change))
- MJ064 Transcription of SAM-FRET sensor files (Updated Oct 07, 2016 (view change))
- screenshot\_24.018.jpg (Attached Oct 07, 2016)
- MJ065 Kd measurements of aptamer files (Updated Oct 07, 2016 (view change))
- image2016-10-7 19:34:53.png (Attached Oct 07, 2016)
- image2016-10-7 19:34:30.png (Attached Oct 07, 2016)
- image2016-10-7 19:34:0.png (Attached Oct 07, 2016)
- image2016-10-7 19:33:47.png (Attached Oct 07, 2016)
- image2016-10-7 19:33:34.png (Attached Oct 07, 2016)

**Lutz Lammich** (Space admins)

- uploaded through jsonrpc api (Updated Oct 07, 2016 (view change))
- Spaces (uploaded through jsonrpc api (Updated Oct 07, 2016 (view change)))

**Welcome to AU labbook**

AU labbook is a wiki-based platform to document research and share information within and between research groups at Aarhus University. If you are new to this wiki, please check out the Tutorials. To get access to relevant spaces please contact your local user administrator.

**Upcoming Events** My Calendars

- 09 Today
- Oct 09 INANO Autumn School ESA-lab
- 10 Monday
- Oct 10 Lab management meeting ESA-lab
- 11 Tuesday
- Oct 11 Group meeting ESA-lab

# Labbook help

The screenshot shows the Labbook interface. The top navigation bar includes 'labbook', 'Spaces', 'People', 'Calendars', 'Create', and a search bar. The left sidebar shows a 'PAGE TREE' with 'Local user administrators' selected. The main content area is titled 'Local user administrators' and includes a table of departmental user administrators.

Pages / Labbook Help [Edit](#) [Save for later](#) [Watch](#) [Share](#)

## Local user administrators

Created by Ebbe Sloth Andersen, last modified by Lutz Lammich on Sep 28, 2016

Here is a list of the local user administrators at each department. Please contact them for changes of access rights, creation of new spaces, or general assistance with using the AU Labbook system.

Department	User admin
AGRO	<a href="#">@Rene Larsen</a>
Bios-AAR	<a href="#">@Per Gulhammer Henriksen</a>
Bios-RKS	<a href="#">@Berit Langkilde Møller</a>
Center for Bioinformatik (BIRC)	<a href="#">@Ellen Bernadette Noer</a>
ENVS	<a href="#">@Pia Lasseen</a>
INANO	<a href="#">@Rebeca Thostrup</a>
Ingeniørhøjskolen	<a href="#">@Christina Kirkegaard Dose</a>
Institut for Datalogi	Jan Frederiksen ( <a href="mailto:janfre@cs.au.dk">janfre@cs.au.dk</a> )
Institut for Fysik og Astronomi	<a href="#">@Lutz Lammich</a>
Institut for Fødevarer	<a href="#">@Tina Lillelund Magaard</a>
Institut for Geoscience	<a href="#">@Lone Davidsen</a>
Institut for Husdyrvidenskab	<a href="#">@Jens Bech Andersen</a>
Institut for Ingeniørvidenskab	<a href="#">@Morten Lund Jensen</a>
Institut for Kemi	<a href="#">@Lene Conley</a>

# Labbook tutorials

The screenshot shows the Labbook Help page. The top navigation bar includes 'labbook', 'Spaces', 'People', 'Calendars', 'Create', and a search bar. The left sidebar shows a 'PAGE TREE' with a 'Tutorials' section containing a list of links: 'How to login and the dashboard', 'How to create a personal space and...', 'How to create and edit a page', 'How to document your research', 'How to setup a lab notebook?', 'Automatic generation of pages from...', 'Local user administrators', 'Trouble shooting', 'Server maintenance information', 'Other documentation', and 'Labbook Administration'. The main content area is titled 'Tutorials' and includes a breadcrumb 'Pages / Labbook Help', a 'Created by Ebbe Sloth Andersen, last modified by Lutz Lammich on Sep 29, 2016' note, and a paragraph explaining that the section provides custom-made tutorials for the AU labbook system. Below the text is an embedded video player showing a video titled 'AU LABBOOK - PLATFORM FOR RESEARCH DOCUMENTATION AND COLLABORATION' by Ebbe Sloth Andersen.

labbook Spaces People Calendars Create ...

Labbook Help

PAGE TREE

- ▼ Tutorials
  - [How to login and the dashboard](#)
  - [How to create a personal space and...](#)
  - [How to create and edit a page](#)
  - [How to document your research](#)
  - [How to setup a lab notebook?](#)
  - [Automatic generation of pages from...](#)
  - [Local user administrators](#)
  - [Trouble shooting](#)
  - [Server maintenance information](#)
  - [Other documentation](#)
  - [Labbook Administration](#)

Pages / Labbook Help

## Tutorials

Created by Ebbe Sloth Andersen, last modified by Lutz Lammich on Sep 29, 2016

This section provides custom-made tutorials for the users of the AU labbook system. Using the menu on the left, you can find both basic tutorials on how to use the Confluence wiki system and more advanced tutorials introducing how we use this system for research documentation and collaboration. The tutorials can be text or videos. You are welcome to contribute tutorials that you find will be useful to others.

Below you can find a video that introduces the concept of AU labbook.

intro2  
from Ebbe Sloth Andersen

# AU LABBOOK

- PLATFORM FOR RESEARCH DOCUMENTATION  
AND COLLABORATION

# Lab space

labbook Spaces People Calendars Create ...

Andersen lab

Calendars

PAGE TREE

- Administration
- Design
- Equipment
- Funding
- Laboratory
- Materials
- Meetings
- New lab members look here
- People
- Projects
- Protocols
- Suppliers
- Trash



Pages

Edit Save for later Watching Share ...

## Andersen lab: Biomolecular design for synthetic biology

Created by Anonymous, last modified by Ebbe Sloth Andersen on Oct 04, 2016

Welcome to the wiki space of the Andersen lab situated in the iNANO building 1592-313. Below is a list of the labbook profiles of the current members:



Our official website is: <http://andersen-lab.dk/> and <https://www.facebook.com/andersenlab/> (formerly [biodesign.au.dk](http://biodesign.au.dk)). Mailing list: [esa-lab.inano@maillist.au.dk](mailto:esa-lab.inano@maillist.au.dk). The mailing list is administered here: <http://maillist.au.dk/mailman/admin/esa-lab.inano>. The front page gives an overview of our planned activities:

**Regular meetings:**

- Monday 9-10 MMM (Monday Morning Management Meeting) (for senior PhDs and postdocs) in room 1592-318
- Monday 11-12 AJEMCIG (Electron Microscopy Common Interest Group) in room 1590-213
- Tuesday 13.15-15 Andersen group meeting (AGM): Andersen lab every second Tuesday in room 1592-316,
- Tuesday 13.15-15 Joint Group Meeting (JGM), every second Tuesday in room 1590-231, See schedule here: [ESA JK Group Meeting](#)
- Friday 10.15-11.00 iNANO seminar
- Friday 15.15-16.00 FAM (Friday Afternoon Meetings) @Aud-D1 Math Department

**Group meeting schedule:**

- 2016/10/11 Group meeting, 1592-316 (Guido & Maria)
- 2016/10/18 Group meeting Cancelled

### Who can see these pages (esa-users):

**Group: esa-users**

- [Ane Andreassen](#) (au284108) [a.lengvad.andreassen@inano.au.dk](mailto:a.lengvad.andreassen@inano.au.dk)
- [Cody Geary](#) (au495556) [geary@inano.au.dk](mailto:geary@inano.au.dk)
- [Daniel Miotto Dupont](#) (au132158) [dmd@inano.au.dk](mailto:dmd@inano.au.dk)
- [Daniel Svane Søgaard Nielsen](#) (au256603) [danielsn@au.dk](mailto:danielsn@au.dk)
- [Ditte Høyer Engholm](#) (au216672) [dhe@mbg.au.dk](mailto:dhe@mbg.au.dk)
- [Ebbe Sloth Andersen](#) (au28408) [esa@inano.au.dk](mailto:esa@inano.au.dk)
- [Guido Grossi](#) (au481822) [ggrossi@inano.au.dk](mailto:ggrossi@inano.au.dk)
- [Mads Jeppesen](#) (au483959) [201304182@post.au.dk](mailto:201304182@post.au.dk)
- [Maria Jensen](#) (au338247) [20114896@post.au.dk](mailto:20114896@post.au.dk)
- [Mette DE Jepsen](#) (au281522) [mettebj@inano.au.dk](mailto:mettebj@inano.au.dk)
- [Peter Møller](#) (au457309)

# Demo:

# labbook.au.dk

1. Main page
2. Labbooks
3. Projects
4. Meetings

# How we use the lab space

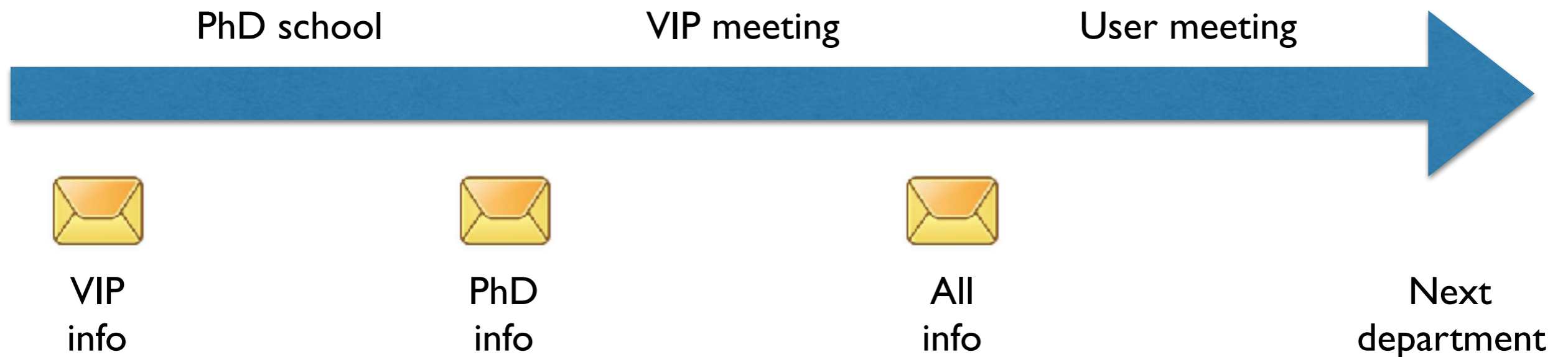
## **Experimental work**

- Design experiments in the office
- Execute and document experiments in the lab
- Analyze results and conclude on experiments
- Share protocols

## **Collaboration**

- Share useful information relevant to the lab
- Comment on each others experiments
- Review data and progress at group meetings
- Provide training and guidelines

# Information about the system





# From the digital workbench to the tablet

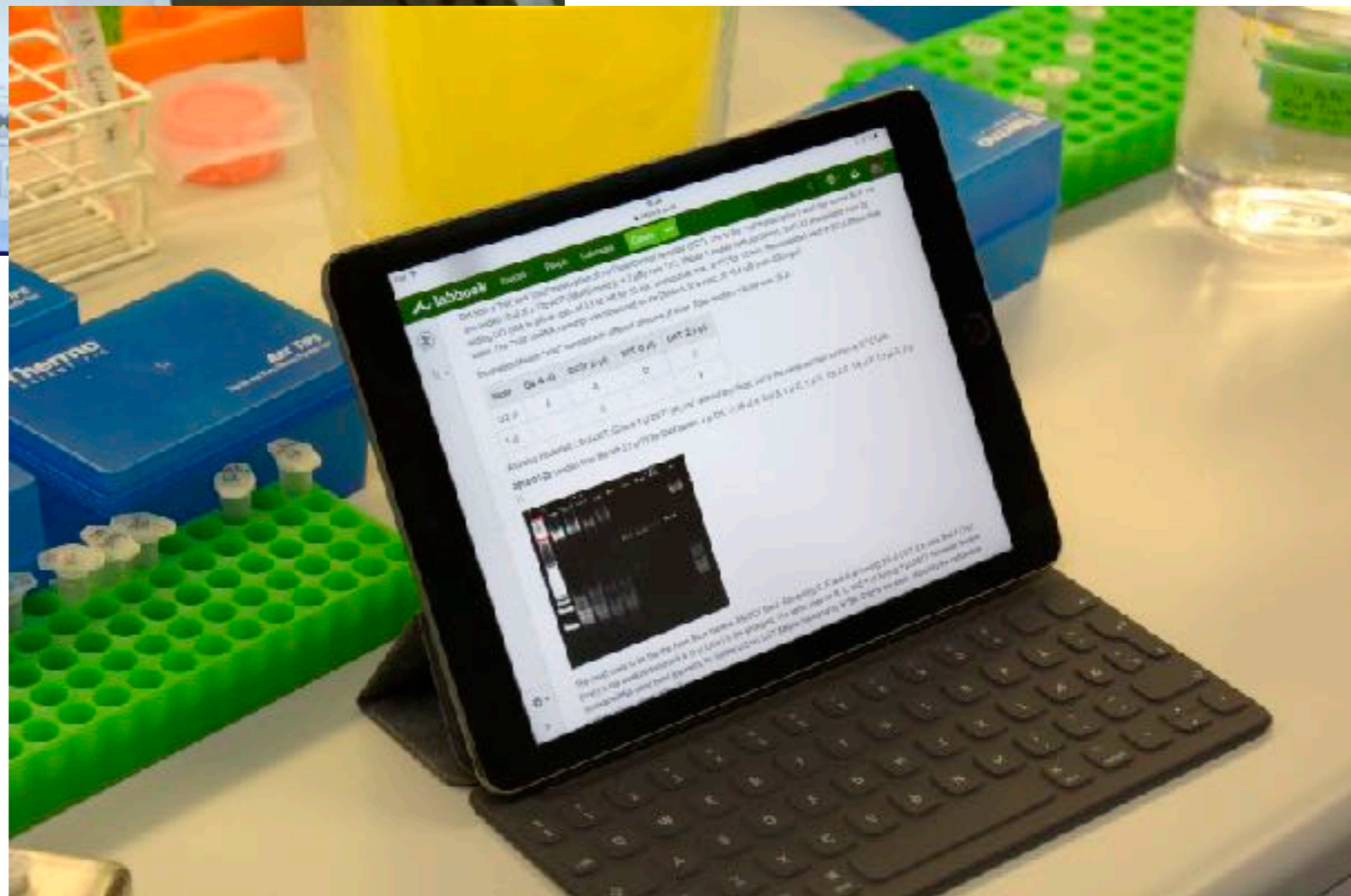


## Benefits of tablets:

- easy to move around to collect data
- easy to store in drawers

## Problems with the digital workbench:

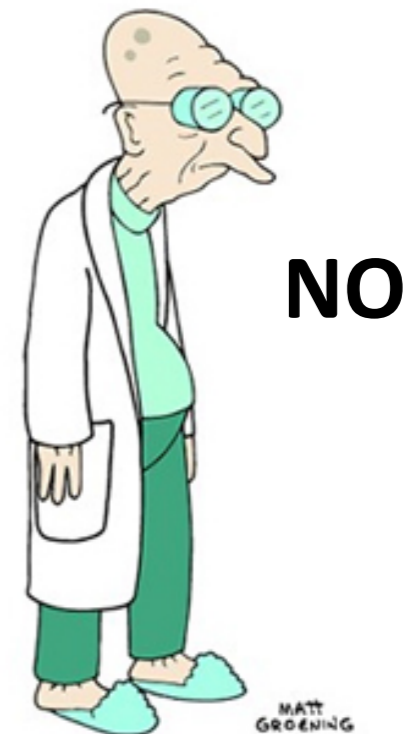
- taking up too much space
- material on top of important information





# Conclusions

1. Easier collection of data in one place
2. Increased transparency
3. Helpful comments on experiments
4. Sharing of best practice (protocols)
5. Careful documentation
6. Using same systems ease collaboration



# Future projects

- Linking labbook.au.dk to cloud data storage archives (NextCloud)
- Publishing research data and documentation to public repositories upon publication
- New cool project: Labstrates (interactive and automated ELNs)