

# Using the eLabNext Platform for Digital Lab Record Keeping

Information Technology Research Computing  
Harvard Medical School  
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# Agenda

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- What is the eLabNext platform?
- HMS ELN Pilot Highlights
- eLabJournal Features
- eLabJournal Usage at HMS
- Who Supports It
- How to Signup
- Questions

# What is the eLabNext platform?

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- A web-based digital lab platform to elevate your research! It contains:
  - an electronic lab notebook (ELN)
  - inventory management
  - protocols management
  - an add-on marketplace
  - a mobile app
- Currently in Pilot phase at HMS

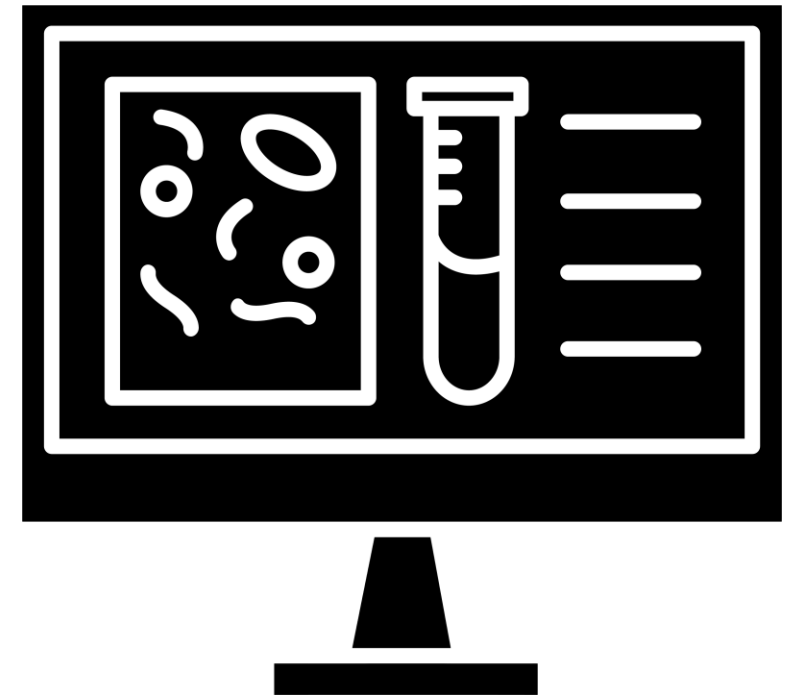


Image credit: redesign at the  
Noun Project



# ELN Options at Harvard

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Notebook, protocols and inventory	Notebook, protocols and inventory
HUIT Harvard-wide service	HMS IT Pilot Project
Available to PIs with a Harvard appointments and their lab members	Available to HMS On-Quad Labs, Departments, and Cores
\$120/user/year	N/A for HMS on-quad users during pilot
Login with Harvard Key at <a href="https://harvard.researchspace.com">harvard.researchspace.com</a>	Login with HMS ID at <a href="https://elab.hms.harvard.edu">elab.hms.harvard.edu</a>
<a href="#">More information available here</a>	<a href="#">More information available here</a>



Now let's look at the features of:

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Your active group



Menu  
used to  
toggle  
between  
different  
eLabNext  
modules

Click  
to sign  
out

The screenshot shows the eLabJournal interface. At the top, a teal header bar contains the eLabJournal logo, 'Organisation Admin', and the active group 'Harvard IT System Admin Grou...'. To the right of the group name is a user profile for 'Kathleen Chappell' and several utility icons. A red arrow points to the group name with the label 'Your active group'. Below the header is a dark blue navigation bar with tabs: Journal, Inventory, Search Lists, Protocols, Supplies, Configuration, File Storage, and Marketplace. A red arrow points to the 'Journal' tab with the label 'Menu used to toggle between different eLabNext modules'. Below this is a light grey sub-navigation bar with links: Dashboard, Experiment Browser, Timeline, Projects, Studies, and Experiment list. The main content area starts with a 'Dashboard' section, which is highlighted by a red rectangle. It contains six tiles: Projects, Studies, Experiments, Protocols, Samples, and Equipment. Below the dashboard is an 'Uploaded Files' section with a table. The table has columns for File Name, Upload Date, and Action. One file is listed: IMG\_20210224\_192102\_ABC889AF-917D-4670-89AE-4EC869E24D16.jpg, uploaded on 2021-02-24 19:21. Below that is a 'Requested Witness Signatures' section with a table that has columns for Experiment, Signed By, and Signed. It shows 'No data found'. Finally, there is a 'Pending Experiments' section with a table that has columns for Experiment, Study, Status, Signature, and Due Date. Two experiments are listed: 'Test 1' and 'test', both with a status of 'Configuring'.

File Name	Upload Date	Action
 IMG_20210224_192102_ABC889AF-917D-4670-89AE-4EC869E24D16.jpg	2021-02-24 19:21	  

Experiment	Signed By	Signed
No data found		

Experiment	Study	Status	Signature	Due Date
 Test 1	Debugging Excel File Section "File Not Found" Error	Configuring		
 test	Introduction to eLABJournal	Configuring		



# Editing an Experiment

Export your  
experiment

Full audit  
trail

Good practice to perform  
these steps once done

Folks you are  
working with on  
this experiment

Study

The screenshot displays the 'New experiment' page in the eLABJournal system. On the left, a sidebar contains a 'Study' section (highlighted with a red box) and an 'Experiments' section (also highlighted with a red box). The 'Experiments' section lists several items, including 'Introduction to eLABJournal', 'New experiment', 'test', 'New test experiment', and 'Baguettes with warm water'. The main content area features a top navigation bar with buttons for 'Back', 'PDF', 'Restore', 'Log', 'Link', 'Sign', and 'Complete'. Below this, the 'New experiment' section displays details for a project named 'Training (Kathleen)', with the study 'Introduction to eLABJournal', created by 'Kathleen Chappell', and linked to 'N/A'. The status is 'Configuring' with an edit icon. The 'ExperimentID' is '00100000000398423', the 'Created' date is '2022-09-13 21:12', and the 'Due date' is 'Not set' with an edit icon. A 'Collaborators' section on the right lists 'Kathleen Chappell' and includes an 'Add collaborator' button. A red box at the bottom of the main content area contains an 'Add Section' button. Red arrows point from external text labels to specific UI elements: 'Export your experiment' points to the 'PDF' button; 'Full audit trail' points to the 'Log' button; 'Good practice to perform these steps once done' points to the 'Sign' and 'Complete' buttons; 'Folks you are working with on this experiment' points to the 'Collaborators' section; 'Study' points to the 'Study' section in the sidebar; and 'Experiments' points to the 'Experiments' section in the sidebar.



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# Editing an Experiment: Adding sections

**Add Section** ✕


☒ Add a new section  
☐ Copy an existing section

Header:

Type:  

Text paragraph

Date:  

2022-09-13 21:26:49 

Cancel

Add Section

**Text**  
✓ Text paragraph  
Procedure template  
Comment

**Inventory**  
Used samples  
**Generated samples**

**Data**  
Table/Spreadsheet  
Drawing  
Chemical (Marvin JS)  
CloneAssist

**Files**  
Image  
File

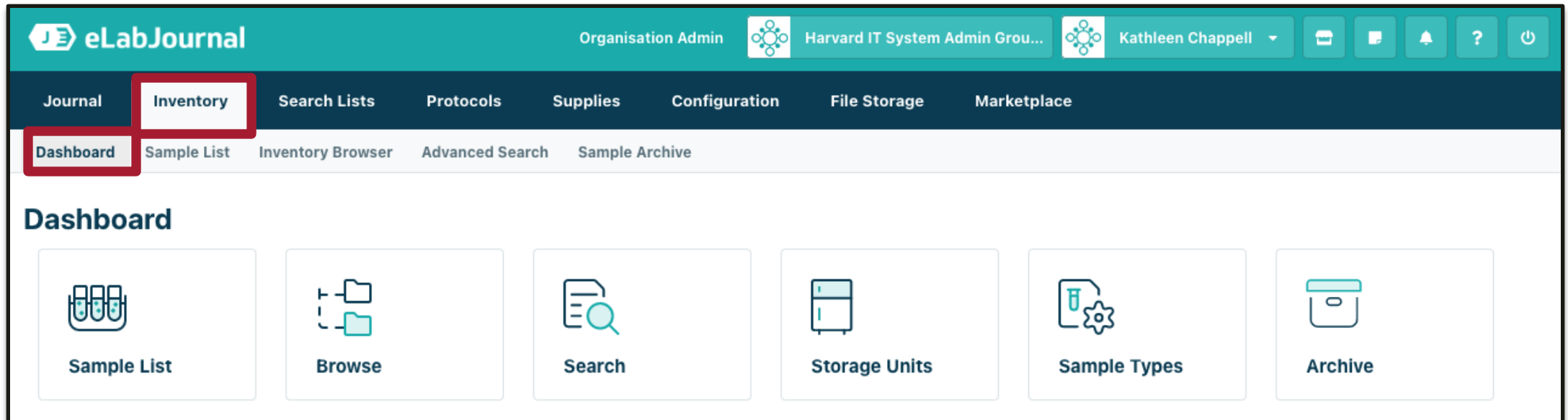
**MS Office**  
MS Excel  
MS Word  
MS PowerPoint







# eLabInventory



**Sample:** basic unit within eLabInventory.

**Storage Unit:** Contains *Samples* within eLabInventory.

# Inventory Browser

Add a new sample

The screenshot displays the 'Inventory Browser' interface. The top navigation bar includes 'Journal', 'Inventory' (highlighted with a red box), 'Search Lists', 'Protocols', 'Supplies', 'Configuration', 'File Storage', and 'Marketplace'. Below this, a sub-navigation bar shows 'Dashboard', 'Sample List', 'Inventory Browser' (highlighted with a red box), 'Advanced Search', and 'Sample Archive'. The main content area is titled 'Inventory Browser' and features a search bar with the placeholder 'Search samples...'. To the right of the search bar is a dropdown menu labeled 'in Group'. Below the search bar are three buttons: 'Equipment Info', 'Free Location' (highlighted with a red box), and 'Print Compartment'. To the right of these buttons is a dropdown menu labeled 'Sample Actions'. On the left side, there is a 'Navigation' panel with a tree view of equipment and storage units. A red bracket on the far left points to this panel with the text 'Tree view of equipment and storage units'. The tree view includes 'Storage Units' (Kathleen's Freezer with Drawer 1 and Drawer 2, Loveluck's Refrigerator, Safety Cabinet in room 100, Shelf in Lab) and 'Equipment' (PCR thermocycler 1, PCR thermocycler 2, Sequencer). Below the navigation panel is a 'Legend' section with a red circle for 'Antibody' and a green circle for 'Bacterial strain'. The main content area also displays a 'Box View' of sample locations, showing a grid of compartments labeled A through L and 1 through 4. The grid is titled 'Harvard IT System Admin Group - Kathleen's Freezer - Drawer 1 - samplebox 1'. The grid shows various sample locations, with some highlighted in green (Bacterial strain) and others in red (Antibody). A red arrow points to an 'Add' button in the top right corner with the text 'Add a new sample'.

Tree view of equipment and storage units

Inventory Browser

Search samples... in Group

Equipment Info Free Location Print Compartment Sample Actions

Harvard IT System Admin Group - Kathleen's Freezer - Drawer 1 - samplebox 1

List View Box View

	A	B	C	D	E	F	G	H	I	J	K	L
1	A.1	B.1	C.1	D.1	E.1	F.1	G.1	H.1	I.1	J.1	K.1	L.1
2	A.2	B.2	C.2	D.2	E.2	F.2	G.2	H.2	I.2	J.2	K.2	L.2
3	A.3	B.3	C.3	D.3	E.3	F.3	G.3	H.3	I.3	J.3	K.3	L.3
4	A.4	B.4	C.4	D.4	E.4	F.4	G.4	H.4	I.4	J.4	K.4	L.4

Representation of compartment in "box view"

Legend

- Antibody
- Bacterial strain



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Back

PDF

Comment

Copy

Remove

Finalize

Average rating:☆☆☆☆☆

Rate protocol:☆☆☆☆☆

Protocol Draft

Make your procedure available as a template for experiments by finalizing this draft to a protocol version.

Screening

CategoryExperimenta

Author:Kathleen Ch

Versiondraft

Labels: +

Attachments

Finalize this version

Finalize a draft procedure as a new version to use it as a template for an experiment.

Are you sure you want to finalize this draft procedure?

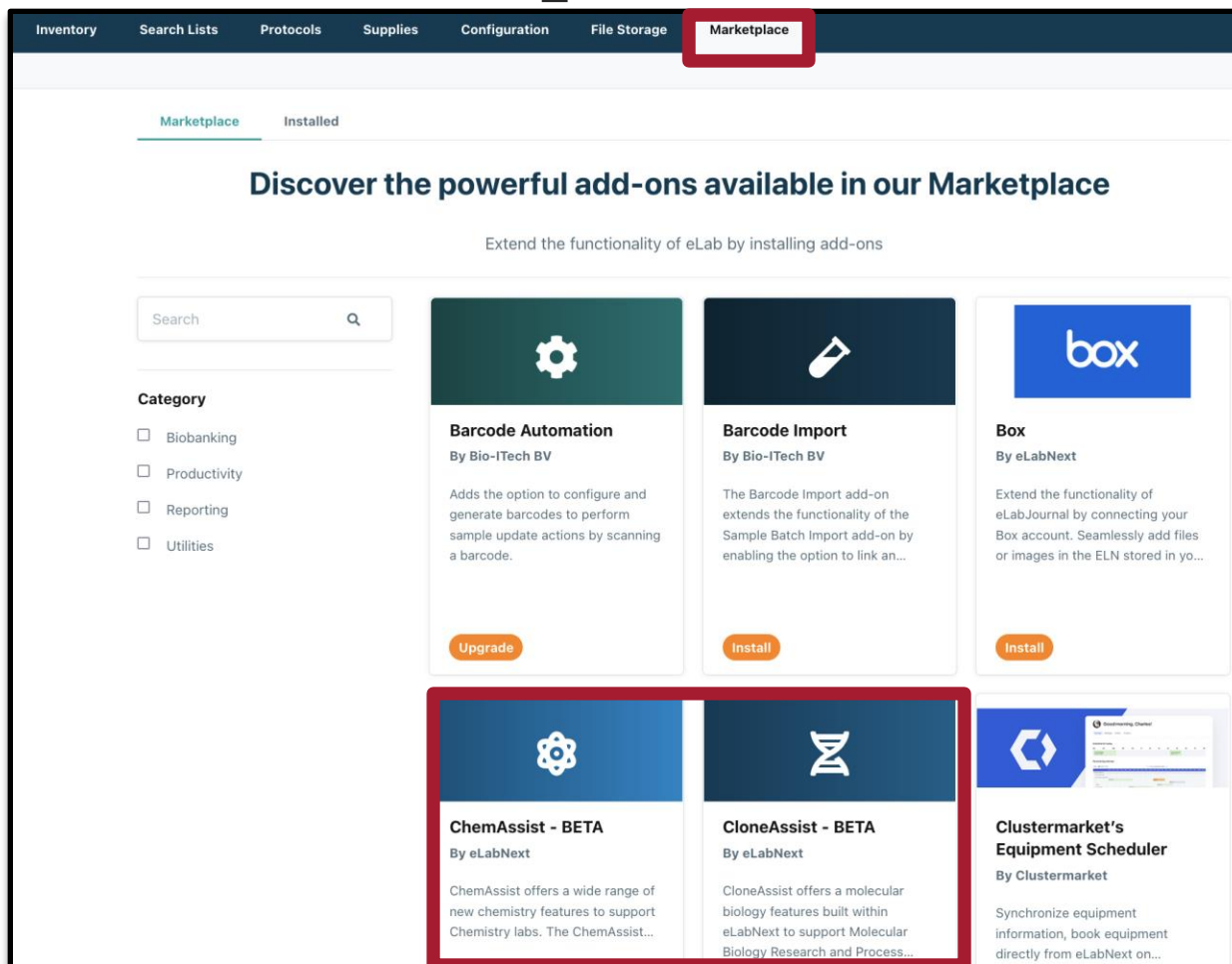
Cancel

OK

+ Add File



# eLab Marketplace



- Installing apps extend the functionality of the platform
- Many apps that enhance inventory
- Can integrate with cloud storage
- ChemAssist and CloneAssist
- Some apps are not free



# Who is using eLabNext?

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## Labs

5 labs, 36 total users

*Departments:* Cell Biology, Genetics, Immunology, Neurobiology  
eLabJournal is primarily used.



## Cores

4 Cores, 11 total users

eLabInventory is primarily used.



# Who Supports It

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The **Research Computing Operations** team supports the eLabNext platform ensuring the system is up and running.



The **Research Computing Consultants** provide training, onboarding assistance, email-based support and consultations.



# How to Signup for the eLabNext platform

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- Contact [rchelp@hms.harvard.edu](mailto:rchelp@hms.harvard.edu)
- *Test accounts are possible if you'd like to get a feel for the system without any commitment.*
- **Eligibility Requirements:**
  - Be part of an HMS On-Quad Lab, Core, or Department
  - Have PI's approval
  - Have an HMS ID



Thank you for your attention!

**Questions?**

