
LATCH

EH&S LION Tutorial Series: The LATCH

Columbia University's Department of Environmental Health and Safety (EH&S) is happy to present the LATCH in our LION program.

The [LION](#) is the Laboratory Information Online Network, a web-based software platform, designed to simplify laboratory safety management between the research community, and supporting departments, including EH&S.

The [LATCH](#) is the Laboratory Assessment Tool and Chemical Hygiene Plan, specific to each Principal Investigator based on their research.

During this tutorial, you will learn how to login to the LION and update your laboratory's LATCH.

The LATCH documents the personnel, training records, and hazards present in a given laboratory. The LION program populates training records for your personnel, as well as the recommended engineering controls and PPE necessary for your research. The document is available for your whole group to view online, and can be edited and updated in one place. It's kind of like a Google doc!

Log into the LION by following the instructions outlined on the log in page.

The URL is <https://research.columbia.edu/lion>. Click the Columbia University bar to log in through Columbia's authentication portal. (Note: if "Remember Selection" is ticked On, you will remain logged in on your computer. Leave it ticked Off if you would like to be logged off for security reasons).

The image shows a login interface with the following elements:

- Remember Selection**: A toggle switch currently set to **Off**.
- Single Sign On:** A label above a horizontal bar containing the **COLUMBIA UNIVERSITY** logo and text "IN THE CITY OF NEW YORK". This bar is highlighted with a green border.
- Other:** A label above a horizontal bar containing the text **SafetyStratus**.

Continued on the next page ->

Below is the LION homepage with the menu bar on the left. Click on the [LATCH](#) icon in the side bar to get started.

Inspections ▾

- New Inspection
- Continue an Inspection
- Pending Inspections
- Follow Up Items

Inspection Findings ▾

- Corrective Actions
- Summary Reports
- Completed Inspections


LATCH

Incidents ▾



- Task View
- New Incident
- Open Incidents
- Closed Incidents

Welcome to Columbia University's LION Database

The LION is your laboratory's home for management of people, places, protocols, protective equipment, and training.

Begin by verifying or updating your personal information by clicking the  icon in the top right corner of the screen. This includes your name, email address, and other basic information.

Explore LION:

- 
- 

The LATCH has several sections listed at the top of the screen. Begin by going through and updating the [Personnel](#) information.

Inspections ▾

- New Inspection
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- Follow Up Items

Inspection Findings ▾

- Corrective Actions
- Summary Reports
- Completed Inspections

LATCH

Incidents ▾

- Task View
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[Home](#) **[Personnel](#)** [Training](#) [Inventory](#) [Permits](#) [Permit Requests](#) [Waste](#) [Assessment](#) [Files](#)

Welcome to the Columbia University Laboratory Assessment Tool and Chemical Hygiene Plan (LATCH)

The LATCH is your laboratory-specific complement to the Columbia University Chemical Hygiene Plan; it is a living document that should be reviewed at least annually and revised as-needed, and should serve as the primary resource for laboratory-specific safety information in your research space(s).

A Chemical Hygiene Plan (CHP) is required in accordance with OSHA's Occupational Exposure to Hazardous Chemicals in Laboratories standard

Continued on the next page ->

Personnel

Keeping an up to date roster of the personnel working in your lab will let you assign and review safety training later on. If someone is no longer part of the lab, click the red "X" next to their name to remove them. You can add personnel by beginning to type in their last name or UNI, and then click the green plus sign. At the bottom is a section for emergency contacts. It's important to add in at least one emergency contact number at the bottom of your roster, but two is recommended. These phone numbers should be 24-hour accessible such as a cell phone and not a daytime office line. The contacts should also be knowledgeable about the research occurring inside the space.

Select Principal Investigator:

Test, New PI ▼

Use this section of the LATCH to update and maintain your lab roster.

- Begin by selecting the Principal Investigator for the LATCH you wish to create or modify.

[Read more](#)

Add User To Roster:

+

Name	Email	Allowed	Role
✖ Lab Member A Test	test1@test.com	<input checked="" type="checkbox"/>	Lab Safety Manager
✖ Lab Member B Test	test2@test.com	<input type="checkbox"/>	Radiation User Laboratory Staff Action
New PI Test [PI]	test@test.com	<input checked="" type="checkbox"/>	Principal Investigator

24-Hour Emergency Contact Numbers

✖ (212) 305-0303 - Test, Lab Member A - [Room Assignment:(Test Room 2)] (Jul 16, 2020)

Training

Training records are updated overnight every night by RASCAL whenever someone completes a course. The Training tab also allows you assign classes to your group.

You can assign safety training to your whole group, or to only certain personnel as needed. To assign safety training, select the training tab from the drop down menu, then you can either click to "Add Training to All Lab Personnel" or click the "Add Training" button next to their name to assign it individually.

Home Personnel **Training** Inventory Permits Permit Requests Waste Assessment
Files

Select Principal Investigator:

Filter by Name or Email
Test, New PI

Use this tab to assign safety training to your personnel and to review their training status.

- First, search for and select the name of the PI for the personnel you would like to review.


[Read more](#)

Select Training

Lab Safety, Chemical Hygiene, and Hazardous Waste Management - TC0950
Add Training to All Lab Personnel

Lab Member A Test

Add Selected Training

Training	Last Completed	Status
✘ Lab Safety, Chemical Hygiene, and Hazardous Waste Management - TC0950	Never Completed 	Needed

New Assessment

The next step is to click on the Assessment tab and then click the New Assessment button. If your lab has previously completed the LATCH, the existing data will be available by clicking the "Open" button.

The screenshot shows a web application interface for 'Assessments'. At the top, a navigation bar includes 'Home', 'Personnel', 'Training', 'Inventory', 'Permits', 'Permit Requests', 'Waste', 'Assessment' (highlighted with a green box), and 'Files'. Below the navigation bar, the main heading is 'Assessments' with a clipboard icon. To the right of the heading is a blue button labeled 'NEW ASSESSMENT' (highlighted with a blue box). Below the heading are three status filters: 'OPEN 165' (highlighted with a yellow box), 'DUE 692', and 'COMPLETED 1279'. There are also 'FILTERS' and 'HELP' buttons. The main content area contains search filters for 'TYPE', 'ASSESSED', 'PRINCIPAL INVESTIGATOR', 'DEPARTMENT', 'ASSESSOR', 'STATUS', and 'SCOPE'. Each filter has a search input field and a dropdown menu.

After clicking New Assessment, you should review and update your lab locations shown on this page before entering the assessment. During the assessment you will then document lab hazards, and designate requirements for personal protective equipment by room. To update a lab location, click the "Add Room" button. You can add a lab room by typing in the search or browsing the dropdown list. To remove a room you no longer use, unselect its box. Next, click "Start" to evaluate the hazards in your lab. If you do not see your lab room listed in the database, please contact labsafety@columbia.edu and EH&S will add your location.

Select Scope to Begin Assessment

Step 1
of 6

Please begin by selecting the name of the Principal Investigator whose LATCH is being completed, and then review your room assignments.

- If you need to add or remove a location, click the "Update Room Assignments" button.

by Principal Investigator

SELECT PRINCIPAL INVESTIGATOR

Test, New PI

PI Room List

ADD ROOM

BUILDING

ROOM

SELECT ALL

Test Building

Test Room

Test Building

Test Room 2

BACK

CANCEL ASSESSMENT

START

Continued on the next page ->

You can start an assessment from scratch by clicking "[Start New Assessment](#)", or [copy from a previous assessment](#).

Start without Copying Previous Assessment



Start New Assessment

Previous Assessments

DATE	PRINCIPAL INVESTIGATOR	ASSESSOR	
03/20/2019	New PI Test	Pandit, Ritu	 

The activity assessment in the image **below** is broken down into several different categories, and you can go through them in any order. An important page every group should review is the [Physical Hazards page](#). Select the page you want to update. And Review your previous selections.

Activity Assessment

Step 2 of 6

High Hazards ✓

Chemical Hazards ✓

Biological Hazards ✓

LASER Hazards ✓

Nanomaterial Hazards ✓

Physical Hazards

Radiological Hazards

Laboratory Equipment and Machine Shop Tool Hazards

For each category of hazards within the drop-down menu below these instructions, please select the specific processes and tasks that apply to your lab; a check mark will appear to indicate your lab's activities.

[Read more](#)

SAVE ALL CATEGORIES

SAVE & CONTINUE

Select Applicable Activities



Working with very cold equipment or dry ice

Associated Hazard: Frostbite, hypothermia
Engineering Controls: Work with material or equipment in a laboratory or laboratory support areas with adequate air exchanges. Allow Dry Ice to sublimate in certified fume hood or glove box.
Administrative Controls: Develop & follow test

Continued on the next page ->

Check or un-check the activities relevant to your lab. When you select an activity a PPE recommendation will appear. If you'd like to require additional PPE, select it from the dropdown list and click "Add to Required PPE". Or, if you'd like to modify the recommendations, explain your changes in the comment box below

<input checked="" type="checkbox"/> Working with very cold equipment or dry ice	Associated Hazard: Frostbite, hypothermia Engineering Controls: Work with material or equipment in a laboratory or laboratory support areas with adequate air exchanges. Allow Dry Ice to sublimate in certified fume hood or glove box. Administrative Controls: Develop & follow task specific SOP; Do not store dry ice in cold rooms
Activity Locations Select All Clear	Required PPE Add to PPE Additional PPE to be det ▼
<input checked="" type="checkbox"/> [Test Building] Test Room	Gloves, insulated gloves, e.g. for cryogenics
<input checked="" type="checkbox"/> [Test Building] Test Room 2	Safety glasses
	<input type="text" value="Explain Modifications to Recommended PPE (if any)"/>

Review the rest of your lab attributes in this section, and when you're finished with a page, make sure to click "Save All Categories" before proceeding to the next one.

When you're finished with the assessment, click "Save & Continue", and you are ready to move on to the "Safety and Emergency Equipment Inventory".

<input type="checkbox"/> Laboratory has powered hand tools, such as drills or powered hand saws.	Associated Hazard: Laceration hazard electrical hazard potential eye damage due to flying debris or tool parts. Engineering Controls: Use safety shields. Administrative Controls: Inspect power cord prior to use Unplug when not in use and when changing bits and blades. Must comply with Academic Machine Shop Policy and training requirements.
BACK CANCEL ASSESSMENT	SAVE ALL CATEGORIES SAVE & CONTINUE

Continued on the next page ->

Safety and Emergency Equipment Inventory

This page documents the PPE and safety equipment available in each of your labs. You can start by clicking "[Select All](#)" and un-checking items to work backwards or "[Clear All](#)" and check the box if your lab has the item. It's important to notice which rooms have what supplies. Some lab floors have a general spill kit in the corridor, but perhaps you have a specialty one for your group. When you're done, remember to click "[Save](#)" at the bottom.

Safety Equipment Audit

Step 3 of 6

Safety and Emergency Equipment Inventory

- The following items have been identified as required equipment in accordance with the selections in your Activity Assessment.

Please review the selections for each room and select all equipment from the following lists that is present in your laboratories.

[Read more](#)

[SAVE & CONTINUE](#)

[Select All](#)

[Clear All](#)

Test Campus: Test Building - Test Room

^ PPE

Additional PPE to be determined after Risk Assessment and in consultation with EH&S

Chemical resistant apron

Gloves, chemically resistant and disposable, e.g. nitrile gloves

Lab coat, standard, e.g. polyester-cotton blend

Lead apron and thyroid shield must be worn when operating a mini C-arm.

Safety glasses

Standard laboratory attire (long pants or equivalent, closed shoes, hair pulled back)

^ Safety & Emergency Equipment

Bio-Safety Cabinet

Emergency Shower in Corridor

Eye Wash Station

Continued on the next page ->

Attachments

The attachment tab gives you the opportunity to upload a safety-related file, such as a standard operating procedure, or a chemical inventory.

Attachments

Step 4 of 6

You may attach files to your assessment on this tab.

Please be advised: We recommend using 'Files' available from the main LATCH menu over this section as it allows for file transferability outside of your LATCH assessment. Using 'Files' allows you to upload and delete files at any time without beginning a new LATCH and will be easily accessible and downloadable for all members of your laboratory. Note that attachments you upload will not be part of the current LATCH and will be inaccessible to future LATCH assessments.

[Read more](#)



Drag and drop to store your files, or browse

No Attached Files

BACK

CANCEL ASSESSMENT

SAVE & CONTINUE

Notes

Use the notes tab for any additional information you would like to include. After this step, the LATCH can now be completed.

Notes

Step 5 of 6

Please use this tab to include any notes or comments you would like to make regarding your lab's assessment.

The notes will be reviewed by EH&S.

Add your notes

BACK

CANCEL ASSESSMENT

SAVE & CONTINUE

Continued on the next page ->

Review Assessment

A summary page of your selections is displayed. Verify that your information is all correct, and then click [Complete Assessment](#).

Review Assessment

Step 6 of 6

REVIEW ADDITIONAL INFO

VIEW/PRINT DRAFT

COMPLETE ASSESSMENT

- Please verify that all information is correct, and then click "Complete Assessment."

Assessed Labs

BUILDING	ROOM
Test Building	Test Room
Test Building	Test Room 2

Identified Activities

Chemical Hazards Working with small volumes (< 1L) of organic solvents, oxidizers or non-acutely toxic liquids

Chemical Hazards Working with corrosive liquids with a ph < 2 or > 12.5

Chemical Hazards Lab works with chemical(s) that have OSHA specific standards.

Biological Hazards Working with toxins of biological origin

Radiological Hazards Working with X-ray equipment, such as particle accelerator, electron microscope, X-ray fluorescence, photoelectron

Continued on the next page ->

After you click "Complete Assessment", you will be taken through a few brief screens with safety reminders about our programs. Take a moment to review and acknowledge these, and then you can finalize your LATCH.

Chemical Inventory

An inventory of the chemicals in the laboratory is a requirement of the LATCH. This list should be updated regularly as new chemicals are introduced and removed from the laboratory. Please follow the instructions for your campus below.

Medical Center: Please submit a chemical inventory by using the spreadsheet provided here. It is the laboratory's responsibility to update the inventory regularly.

Lamont: Your laboratory's chemical inventory is managed and maintained through the Safety Office and can be accessed here. No further action is required.

Morningside: Your laboratory's chemical inventory is managed and maintained through ChemTracker and can be accessed here. No further action is required.

Nevis: Please submit a chemical inventory by using the spreadsheet provided here. It is the laboratory's responsibility to update the inventory regularly.

Barnard: Please contact Dan Davis at ddavis@barnard.edu or 212-854-6939 for further information and instructions.

NYSPI: Please submit a chemical inventory by using the spreadsheet provided here. It is the laboratory's responsibility to update the inventory regularly.

I have read and acknowledge the information on this page

Safety Data Sheets

The Occupational Safety and Health Administration's (OSHA) Hazard Communication Standard (29 CFR 1910.1200) requires employers, including Columbia University, to make safety and health information for hazardous chemicals available to their employees. Columbia University subscribes to a web-based service for providing this information. The service, ChemWatch, makes finding Safety Data Sheets (SDS) quick and easy, and can be accessed here.

I have read and acknowledge the information on this page

Waste Management

Columbia University is committed to protecting human health and the environment through a proactive Waste Management and Recycling Program. This commitment is realized through EH&S's collaborations with the University's schools, departments, research laboratory community and Facilities Management. Through these partnerships EH&S is able to help the University maintain compliance with all applicable regulations, promote best management practices and contribute to the goal of environmental protection. EH&S training programs coupled with the 5Ls of Hazardous Waste Management and the University's No Drain Disposal Policy provide the essential foundation to properly manage hazardous waste.

I have read and acknowledge the information on this page

Select Scope Activity Assessment Safety and Emergency Equipment Inventory Attachments Notes **Review Assessment**

You are about to finalize this assessment. This operation cannot be undone.

- Click "Continue" to complete Assessment.
- Click "Cancel" to return.

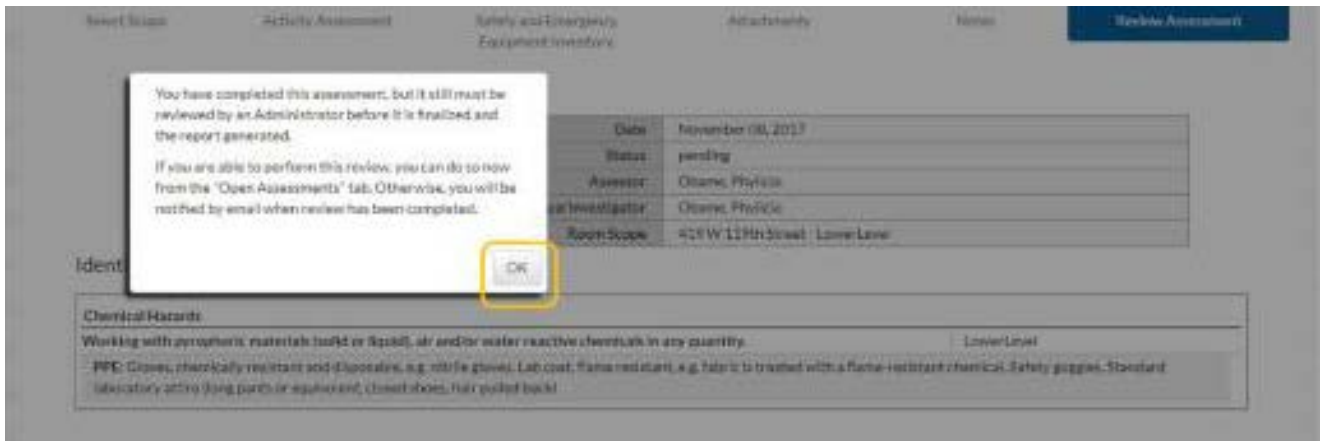
Continue Cancel

Assessed Labs

Building	Room	24-Hour Phone
419 W 119th Street	LowerLevel	

Select continue.

Continued on the next page ->



The image above shows that the LATCH has been submitted for review.

Open Assessments

The LATCH will appear in your Open tab while it is pending approval, and you will receive an email once it is approved.

Assessments

NEW ASSESSMENT

OPEN 166

DUE 692

COMPLETED 1279

FILTERS

HELP

TYPE	ASSESSED	PRINCIPAL INVESTIGATOR
Show All	Search	Search
DEPARTMENT	ASSESSOR	STATUS
Search	Search	Show All
SCOPE		
Search		

Apply Filters

Summary

To view your LATCH, click on Completed, and you can print or save the whole document, or just the section you updated.

Assessments

NEW ASSESSMENT

OPEN 166

DUE 692

COMPLETED 1279

FILTERS

HELP

NUMBER Search	ASSESSED Search	ASSESSOR Search
PRINCIPAL INVESTIGATOR test	APPROVER Search	DEPARTMENT Search
SCOPE Search		

Apply Filters

START DATE 03/01/2013

END DATE 11/13/2020

Show 25 rows

PDF

EXCEL


#	DATE	TYPE	ASSESSED	ASSESSOR	PRINCIPAL INVESTIGATOR	DEPARTMENT	APPROVER	ROSTER
2605	Mar 20, 2019	Principal Investigator	Test, New PI	Pandit, Ritu			Pandit, Ritu	

View Print

Continued on the next page ->

The screenshot below shows the newly updated LATCH. Share this with your group, and make sure everyone **reads and signs** next to their name on the cover page. Replace this with the old version posted in your lab.

12/07/2015 07:44:26

 **COLUMBIA UNIVERSITY**
IN THE CITY OF NEW YORK

Laboratory Assessment Tool

Principal Investigator: Pitoscia, Chris

Please post a signed copy of the LATCH in the lab where it can be easily accessed by all laboratory personnel and maintain the original on file.

A Chemical Hygiene Plan (CHP) is required per OSHA's Occupational Exposure to Hazardous Chemicals in Laboratories standard (29 CFR 1910.1450) and Columbia University policy. The CHP provides essential information for prevention of potential exposures to hazardous materials and physical hazards in the laboratory. Columbia University has developed a [Chemical Hygiene Plan](#) to provide an overview of information about the use of hazardous materials in research laboratories, their hazards, warning signs, control measures, safety training to minimize exposure and waste management. LATCH is your laboratory-specific complement to the Columbia University Chemical Hygiene Plan.

After review, please sign and date below.

Name	Email	Signature	Date
Kathy Heinemann	kmh2191@columbia.edu	_____	_____
Jean Lee	jl2402@columbia.edu	_____	_____
Jessica Phippard	jp3478@columbia.edu	_____	_____
Chris Pitoscia	cp2175@columbia.edu	_____	_____

If you have any questions, please email labsafety@columbia.edu or call our main offices at (212) 305-6780 for the Medical Center, and (212) 854-8749 for Morningside. Stay tuned for more information about the LION!