

The Joys of Onboarding

April 24th, 2026



CNI Labs

[Overview](#)

- [Badger](#)
- [CNI Labs Team](#)
- [External Users Program](#)
- [CNI Labs Newsletter](#)
- [Equipment Status](#)

[Clean Room](#)

- [CR Access Protocol](#)
- [Equipment Training](#)
- [Process & Fabrication](#)
- [Equipment List](#)
- [Equipment Rates & Superusers](#)
- [Safety](#)
- [Group Research](#)
- [Related Links](#)

[Electron Microscopy](#)

- [EM Lab Access](#)

Clean Room Access Protocol

Become a CNI Clean Room User!

PLEASE NOTE: Absolutely no access to the clean room is allowed until all steps are completed and cleanroom orientation attended.

Afterhours Access Policy: Members must have a valid C-14 and be an active user of the cleanroom, in good standing, for 90 days.

For existing users, expired safety training or C-14 results in automatic access expiration. *Please make sure all safety trainings are current!*

For industrial, commercial and other academia, please visit our [External User Program page](#)



Cleanroom Access Application - Internal Users

Thank you for your interest in using Columbia Nano Initiative's [Cleanroom](#).

Clean Room Hours of Operation:

Regular hours: Monday through Friday 7:00 AM – 6:00 PM

After Hours: Monday through Friday 6:00 PM – 7:00 AM, Weekends and Holidays.

This form is for Columbia affiliates only and will walk you through the required steps necessary to gain access to CNI's cleanroom facility. If you have any questions or problems, please email - CNICr@columbia.edu

Before you begin, you will need:

- [NEMO Form](#) - (ONLY if you do not already have access to NEMO.CNI) completed and signed by your project's Principal Investigator
- [RASCAL](#) Training Certificates TC1650 & TC4951
- [Process flow](#) for proposed work in the cleanroom
- C-14 Certificate - **only necessary for after-hours access**

UNDERGRADUATE STUDENTS: You are required to complete 25 hours of shadowing before you are allowed swipe and independent access to the Cleanroom.

Onboarding @ Columbia

Internal Users

NEMO Account Setup Form (Word Document)

 COLUMBIA | NANO INITIATIVE

Shared Labs NEMO Account Setup Form



Please complete all of the following fields:

DATE:	
DESIRED CNI FACILITIES (check all that apply)	<input type="checkbox"/> Nanofabrication Cleanroom <input type="checkbox"/> Shared Material Characterization Lab <input type="checkbox"/> Electron Microscopy Lab
USER NAME	
PI NAME	
PI UNI	
PI ADDRESS	
PI PHONE	
DEPARTMENT NAME	
DEPARTMENT NUMBER	
PROJECT NUMBER	
ACTIVITY NUMBER	
INITIATIVE	
SEGMENT	
PROJECT TITLE	
PROJECT START DATE	
PROJECT END DATE	
SIGNATURE of PI or GROUP ADMIN	
PRINT NAME	

Onboarding @ Columbia

Internal Users

NEMO Account Setup Form (Word Document)

- External users (industry and external academic), must sign a terms and conditions document.
- Document covers
 - Payment terms
 - Insurance terms
 - Liability
 - Intellectual property

External Users

External User Agreement (signed PDF)



TERMS AND CONDITIONS OF USE

Terms and Conditions of services given in the Schapiro Center for Engineering and Physical Science Research Clean Room, the Electron Microscopy Lab in the Havemeyer Basement, the Nanobeam e-beam writing in the Northwest corner building, and the Shared Materials Characterization Lab in the Havemeyer Building (together hereinafter referred to as the "Shared Lab") at Columbia University ("Columbia") by a Columbia Affiliate(s) to _____, an employee of _____ ("User").

1. **Definitions: Affiliates** shall mean any corporation, firm, partnership or other entity which directly or indirectly controls, is controlled by, or is under common control with Columbia, including its staff members or employees.
2. **Scope of work:** The User is requesting to receive research services by Columbia's affiliates. The fees charged by Columbia will depend on the actual time of equipment use and staff time invested in the User's project. Updated User fee rates can be found on the Columbia Nano Initiative website at: <http://cni.columbia.edu/external-user-program-1/>
3. **Term:** The initial term of this agreement is one year from the effective date and will automatically renew for additional one (1) year terms for as long as the User is utilizing the Shared Lab in accordance with the terms of this Agreement or until either party notifies the other party of its intent to terminate this Agreement.
4. **Priority of service:** User understands and acknowledges that as a non-Columbia researcher, student or employee, the following individuals shall have priority over User's services by affiliates on equipment or instrument in the Shared Lab in the following order: (i) Columbia researchers conducting research funded by a current government grant shall have first priority at all times on any equipment or instrument purchased by that grant in the Shared Lab; (ii) Columbia researchers conducting research funded by a federal grant to Columbia shall have priority on any equipment or instrument purchased by a federal grant; and (iii) Columbia researchers conducting research within the scope of their service to Columbia.
5. **User Obligations:**
 - a. The User representatives may be present during the time of service as observers and will not be allowed to touch equipment or to remain in any of the labs by themselves without proper training as described in the external users access agreement. The User warrants that s/he has read, understood and agreed to the terms and conditions set forth herein and has been provided with information by Columbia regarding the use of the Shared Lab, including safety training, equipment training and the rules and safety manual for the specific Shared Lab. A different agreement needs to be signed in case the User wishes to use the CNI staff to perform

Onboarding @ Columbia

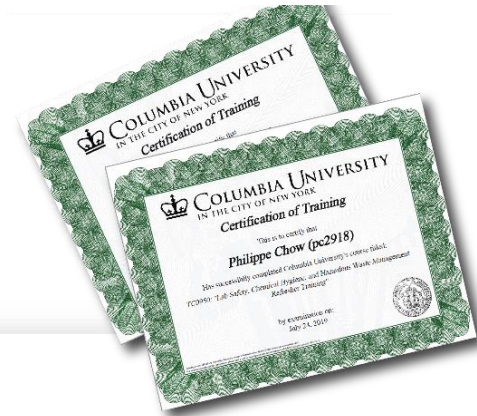
Internal Users

NEMO Account Setup Form (Word Document)

TC4951- Laboratory Safety, Chemical Hygiene, Hazardous Waste Management, and Fire Safety Training

TC1650 - Hydrofluoric Acid training (if using HF)

- Safety trainings required by EH&S and managed through a homebuilt platform called Rascal.
- Users watch interactive presentations and must pass a quiz with 80% correct.
- PDF certificates are provided upon completion
- Users must enter their expiration dates via a Google form. (renewed annually)



Training Center

Number	Name	Contact Name	Contact Email	Assign
TC0066	Compensation, Sponsored Projects and Effort Reporting for International Hires	Smith	aps2180@columbia.edu	Assign to Myself
TC0068	Compensation, Sponsored Projects and Effort Reporting	Schrag	effort-reporting@columbia.edu	Assign to Myself
TC0097	Foundations Test for Administrators (CUMC)	Smith	Rctraining@columbia.edu	Assign to Myself
TC0504	Sponsored Projects Training Review	Schrag	research-compliance@columbia.edu	Assign to Myself
TC0505	Foundations Test for Administrators (Morningside/LDEO)	Smith	Rctraining@columbia.edu	Assign to Myself
TC1400	Understanding Scientific, Budgetary and Commitment Overlap	Scott	sfs2110@columbia.edu	Assign to Myself
TC4008	Foundations: Export Controls and International Research	Schrag	research-compliance@columbia.edu	Assign to Myself
TC4016	Essentials Test for Administrators (Morningside/LDEO)	Smith	Rctraining@columbia.edu	Assign to Myself
TC4017	Essentials Test for Administrators (CUMC)	Smith	Rctraining@columbia.edu	Assign to Myself
TC7912	PI Responsibilities in Subrecipient Monitoring	Scott	sfs2110@columbia.edu	Assign to Myself

Animal Care and Use

Number	Name	Contact Name	Contact Email	Assign
TC0506	Macacine Herpes Virus-1 (aka Herpes B Virus) Training	Shoulson	rs2752@columbia.edu	Assign to Myself
TC0550	Rodent Barrier Training	Shoulson	rs2752@columbia.edu	Assign to Myself
TC0650	The Dog: Computer Based Training Program	Romanov	ar2772@columbia.edu	Assign to Myself
TC0700	Rabbit Wet Lab (Hands-on Course)	Shoulson	rs2752@columbia.edu	Assign to Myself
TC0750	The Pig: Computer Based Training Program	Romanov	ar2772@columbia.edu	Assign to Myself
TC0800	The Mouse and Rat: Computer Based Training	Shoulson	rs2752@columbia.edu	Assign to Myself
TC0850	The Rabbit: Computer Based Training Program	Romanov	ar2772@columbia.edu	Assign to Myself
TC0900	Introduction to the Institute of Comparative Medicine	Shoulson	rs2752@columbia.edu	Assign to Myself
TC1000	The Ruminant: Computer Based Training	Romanov	ar2772@columbia.edu	Assign to Myself
TC1050	The Gerbil: Computer Based Training Program	Shoulson	rs2752@columbia.edu	Assign to Myself
TC1051	The Guinea Pig: Computer Based Training Program	Shoulson	rs2752@columbia.edu	Assign to Myself

Onboarding @ Columbia

Internal Users

NEMO Account Setup Form (Word Document)

TC4951- Laboratory Safety, Chemical Hygiene, Hazardous Waste Management, and Fire Safety Training

TC1650 - Hydrofluoric Acid training (if using HF)

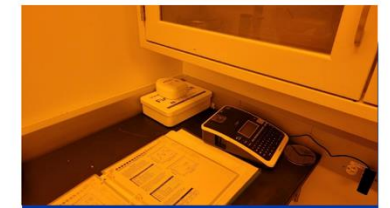
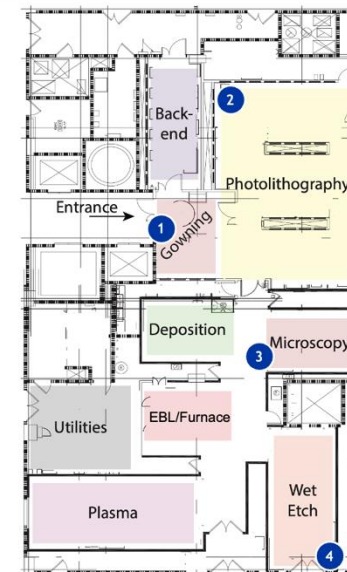
Download and view – Cleanroom User's Presentation (PDF)

- 50-page document, equivalent to a user handbook in power point form.
- Users must click a checkbox on a Google form acknowledging they have reviewed the document.

First Aid, HF, and CPR Kit Locations



1. Gowning room drawer



2. Litho bay corner



3. Microscopy/deposition table



4. Wet etch bay corner

Onboarding @ Columbia

Internal Users

NEMO Account Setup Form (Word Document)

TC4951- Laboratory Safety, Chemical Hygiene, Hazardous Waste Management, and Fire Safety Training

TC1650 - Hydrofluoric Acid training (if using HF)

Download and view – Cleanroom User’s Presentation (PDF)

Sign-up for the newsletter (MailChimp)

- Users must sign up for our weekly newsletter managed through MailChimp.

CNI Labs Users Subscription

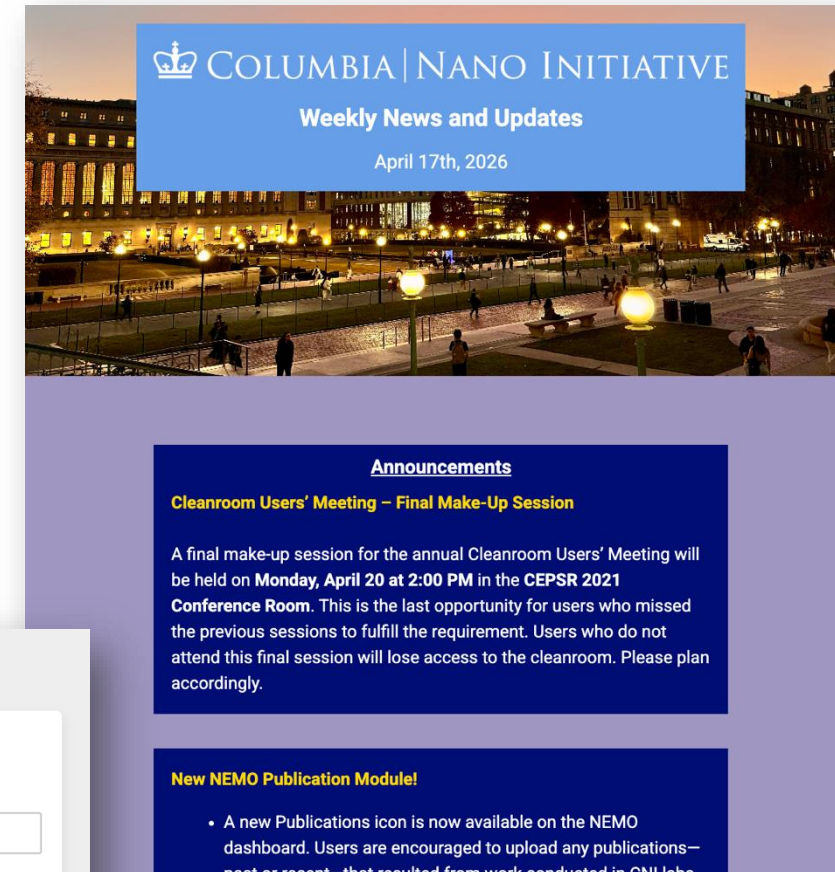
 COLUMBIA UNIVERSITY
IN THE CITY OF NEW YORK
COLUMBIA NANO INITIATIVE

Email Address

First Name

Last Name

Subscribe



Onboarding @ Columbia

Internal Users

NEMO Account Setup Form (Word Document)

TC4951- Laboratory Safety, Chemical Hygiene, Hazardous Waste Management, and Fire Safety Training

TC1650 - Hydrofluoric Acid training (if using HF)

Download and view – Cleanroom User’s Presentation (PDF)

Sign-up for the newsletter (MailChimp)

Submission of Process Flow (Word Document)

CNI Cleanroom Process Flow Review Form

Instructions:

- **Save** this document as: **uni_firstname_lastname.docx**
- Fill out **all** of the following fields.
- **Email** the document to cnicr@lists.columbia.edu.

Name	
Group/Affiliation	

Provide a very basic description of the fabrication work you plan to perform in the CNI cleanroom:

List the materials present in your device or process:

Will any of the following be present in your work?		Description, if 'Yes'
Biological materials	No	No
III-V elements	No	No
Nanoparticles	No	No

List all Cleanroom Equipment you will use:

Basic clean room equipment/materials to make these

List all wet processes you plan to perform in the Cleanroom:

Onboarding @ Columbia

Internal Users

NEMO Account Setup Form (Word Document)

TC4951- Laboratory Safety, Chemical Hygiene, Hazardous Waste Management, and Fire Safety Training

TC1650 - Hydrofluoric Acid training (if using HF)

Download and view – Cleanroom User's Presentation (PDF)

Sign-up for the newsletter (MailChimp)

Submission of Process Flow (Word Document)

Attend in-person Cleanroom orientation – held weekly



Issues with Current System

Email-Based Bottlenecks

- Requests and approvals rely on back-and-forth emails, creating delays and missed messages.

Limited Visibility into Status

- No centralized way to quickly see where each user is in the onboarding process.

Manual Tracking Burden

- Staff must maintain spreadsheets or personal notes to monitor approvals and next steps.

Poor Scalability

- As user volume grows, the manual process becomes increasingly time-consuming and unsustainable.

Fragmented Communication

- Information may be spread across inboxes, spreadsheets, and shared drives.

Airtable Integrations

Streamline Onboarding. Automate Workflows. Stay Connected.



Airtable-Based Onboarding System for CNI

Centralized Intake Process

- Internal users complete a single online onboarding form capturing user, PI, and project information.

Automated PI Approval Workflow

- Submitted requests automatically trigger an email to the PI with a linked approval form.

Real-Time Approval Tracking

- PI approvals automatically update the user record, allowing instant visibility into onboarding status.

Improved Administrative Efficiency

- Reduces manual email follow-up, duplicate data entry, and spreadsheet-based tracking.

Scalable for Multiple User Types

- Framework can be expanded to support external users, visiting researchers, students, and staff.

Onboarding Example

Onboarding checklist | Team members | Onboarding resources | Tools

Views | All onboarding tasks | Hide fields | Filter | Group | Sorted by 1 field

	Name	When?	Complete?	Notes
1	Fill out the technology equipment...	Before your first day	✓	You'll receive an email with instructions to fill
2	Sign & return your offer letter	Before your first day	✓	
3	Complete your I-9 form and bring...	Before your first day	✓	
4	Get a quick intro to the team	Before your first day	✓	Go into the "Team members" table to get a qu
5	Read through the new employee ...	First day		The new employee handbook covers everythi
6	Initial check-in with your manager	First day		This initial check-in with your manager will he
7	Send out a welcome message to ...	First day	✓	Send out an introduction to the team in the #c
8	Pick up your laptop & devices fro...	First day	✓	
9	Get set up with all of your benefit...	First day		
10	Get a tour of the office	First day	✓	Get a quick tour of the office from Jean! (P.S.
		Week 1		

18 records

Airtable | Copy base | View larger version