

Workshop on Management of Large CryoEM Facilities

# User Management at SEMC

Edward T Eng | Carl Negro  
February 6, 2017

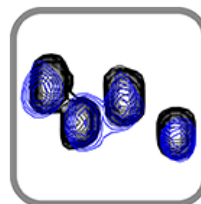
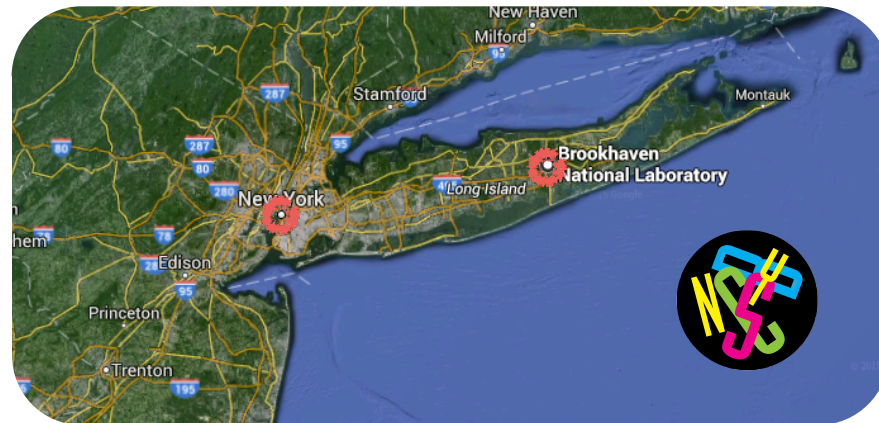
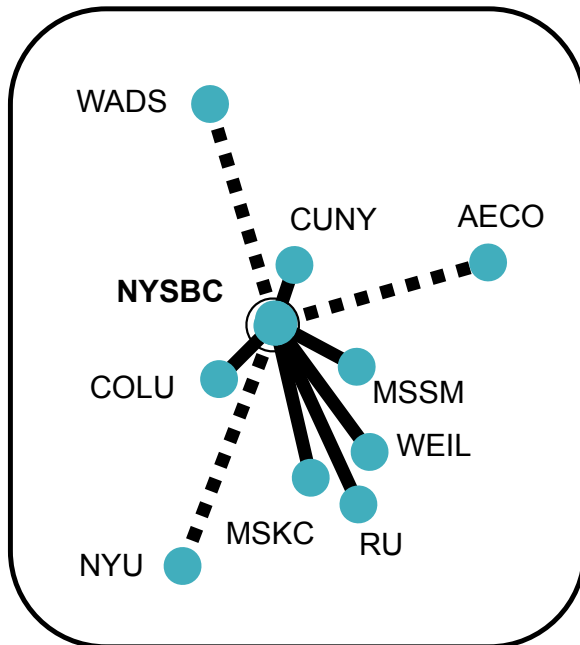
---



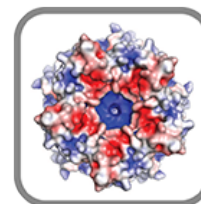
New York Structural  
Biology Center



# About the center



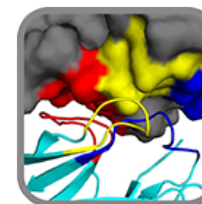
**NMR**



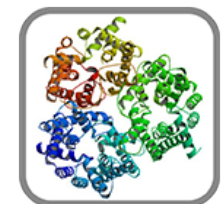
**X-Ray**



**EM**



**Special Projects  
Group**



**COMPAA  
(Membrane Proteins)**

# Our user base



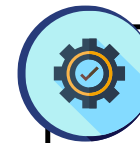
Hundreds of thousands  
Hundreds



**NRAMM**

National Resource for  
Automated Molecular  
Microscopy

Millions  
Several dozen



SIMONS ELECTRON  
MICROSCOPY CENTER

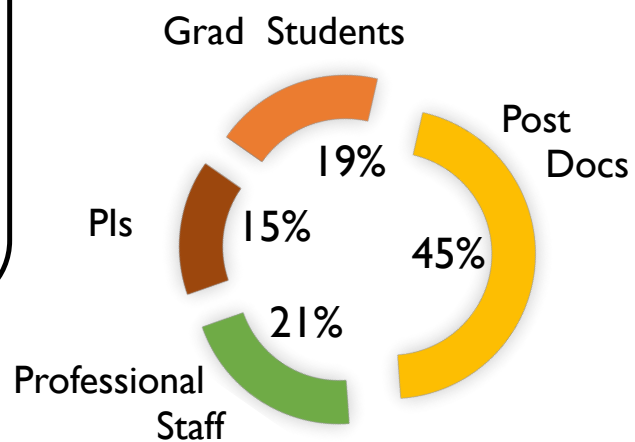


Hundreds  
dozens

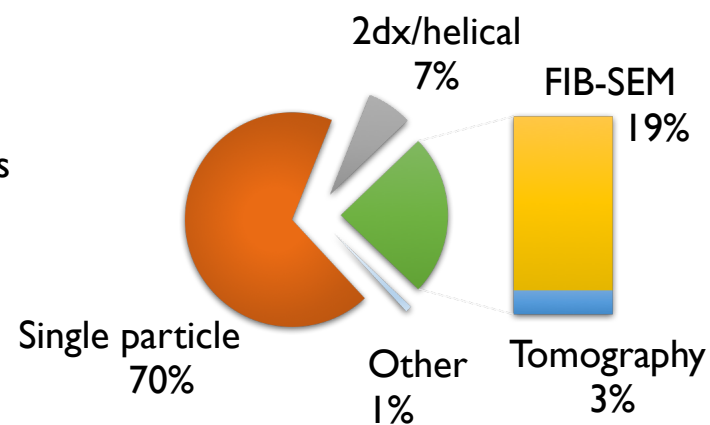
# Our user profile



## Breakdown of users



## Breakdown of projects

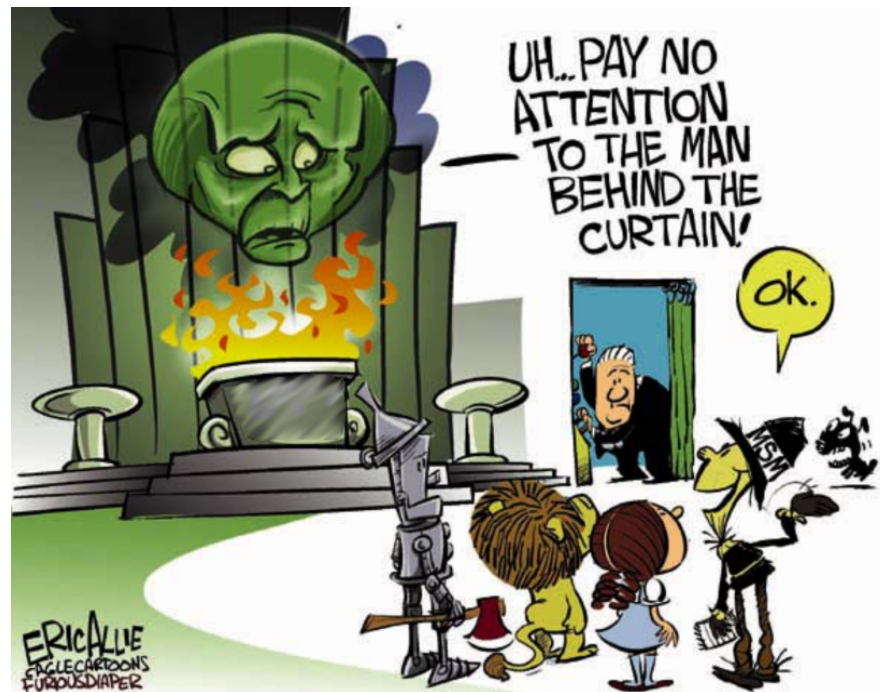


## Experience

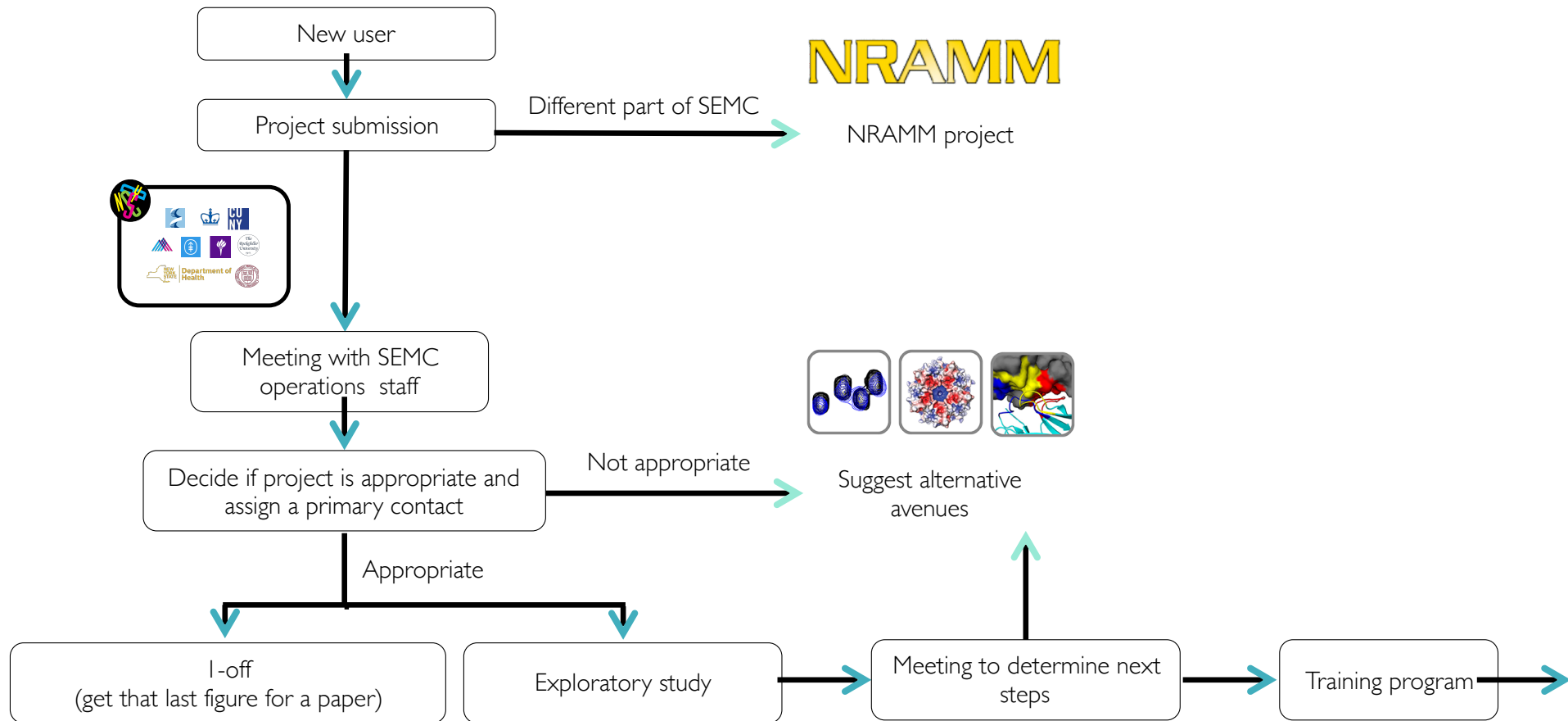
83%  
Beginner/Novice

14% 3%  
Intermediate Expert

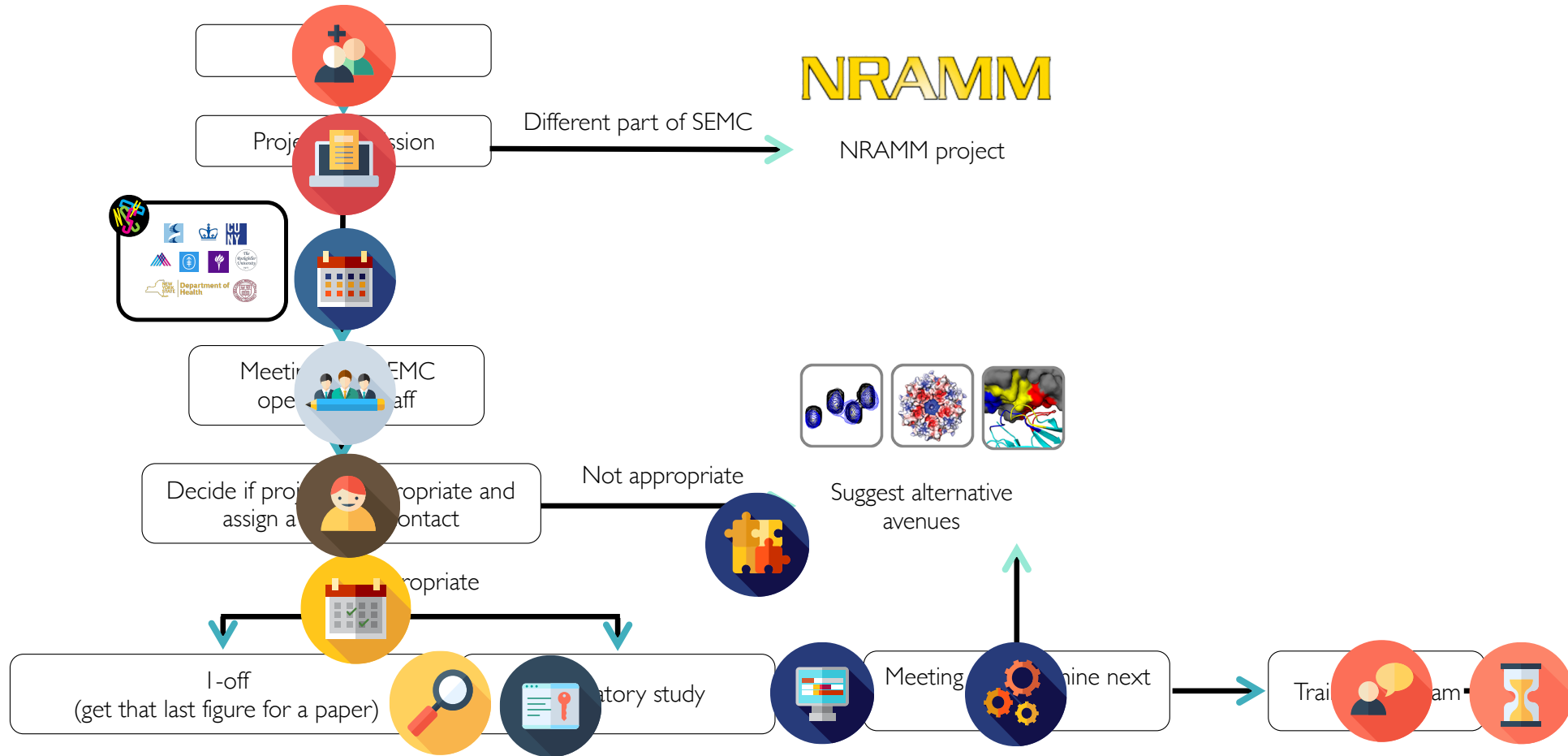
# User management



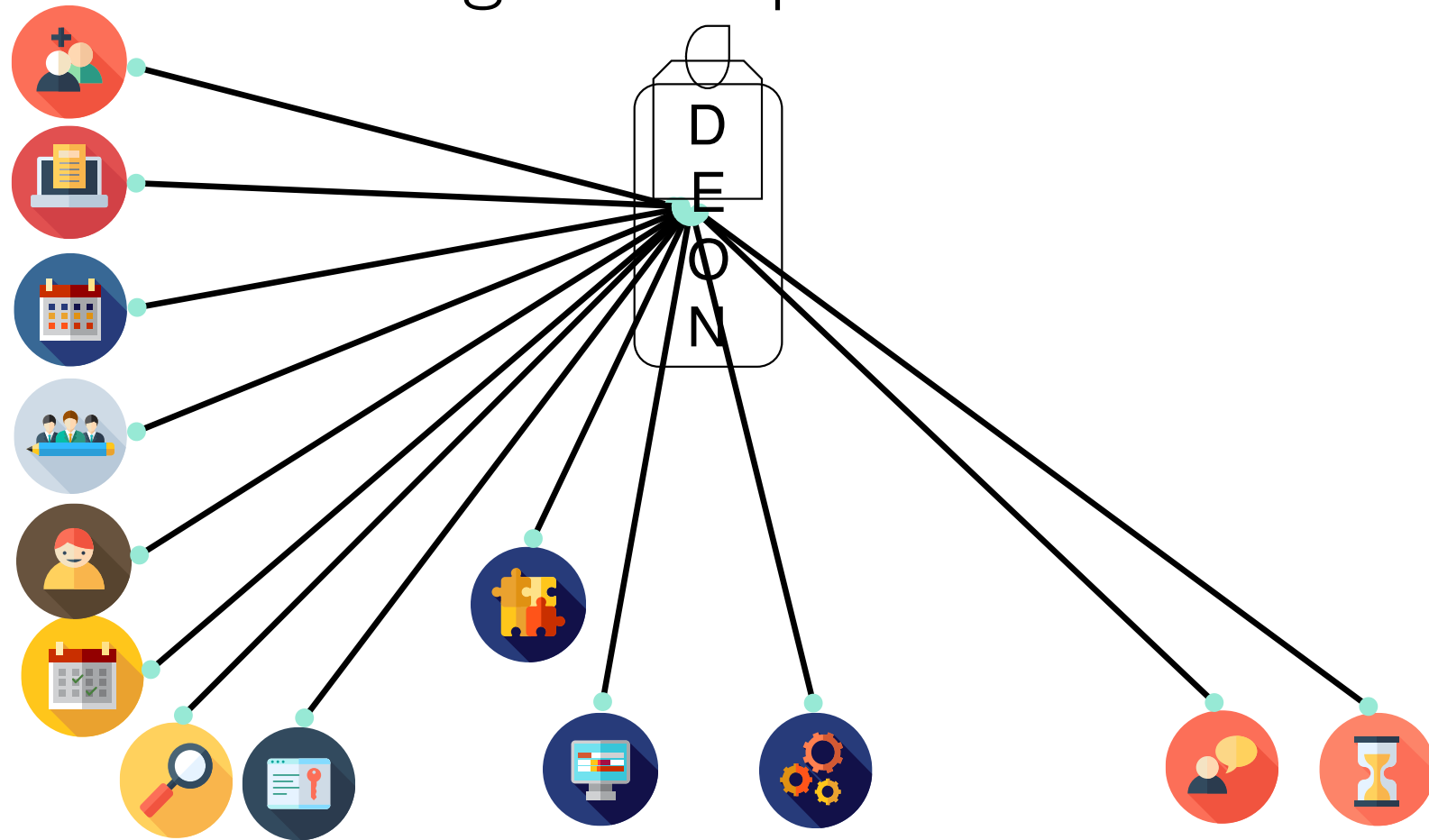
# What users see



# What staff see



# A scalable user management platform





# DEON backend




<https://www.djangoproject.com/>

Django is a free and open-source web framework, written in Python, which follows the model-view-controller (MVC) architecture. It is maintained by the Django Software Foundation.

# DEON interfaces with existing databases

New user registration



**User Registration**

If you already have an account with us, please submit your project [here](#)

\*User name:

\*Password:

\*Confirm:

\*Firstname:

\*Lastname:

\*Email:

\*Confirm Email:

Title:

PI Name:

PI Email:

\*Institution:

Dept:

Address:


City:

State/Country:

Zip:

Phone:

New project registration



**Enter your username and password**

If you don't have an account with us, please register [here](#)


\*Username:

\*Password:

**Brief description of the proposed project**

- Project name:
- Short description:
  - One-line summary of the project (~25 words)
- Funding Status for project:
  - a. PI, grant number, funding source,
  - b. Term of funding.
- Description of the project:
  - a. General description of the biological problem

Project & User tracking



**EMG@NYSBC » EMG User Pr**

Overview Activity Roadmap Issues **New issue** News Documents Wiki Files Sett

**EMG User Project Summary**

Filters Options

Apply Clear

#	Status	Subject	Assignee	Primary User Name	Institution	PI Name
<input type="checkbox"/> 4745	Pending				Misc	
<input type="checkbox"/> 3992	New		Ashleigh Raczkowski		MSKC	
<input type="checkbox"/> 3696	Active		Ashleigh Raczkowski		CUNY	
<input type="checkbox"/> 3694	Active		Ashleigh Raczkowski		CUNY	
<input type="checkbox"/> 3279	Dormant		Ashleigh Raczkowski		NYU	
<input type="checkbox"/> 3916	Dormant		Ashleigh Raczkowski		RU	
<input type="checkbox"/> 3420	Dormant		Ashleigh Raczkowski		COLU	
<input type="checkbox"/> 3695	Active		Ashleigh Raczkowski		CUNY	
<input type="checkbox"/> 3914	Dormant		Ashleigh Raczkowski		NYU	

# DEON backend web interface



Django administration

Site administration

## AUTHENTICATION AND AUTHORIZATION

**Groups** [+ Add](#) [Change](#)

**Users** [+ Add](#) [Change](#)

## DEONDB

**Booked Users** [+ Add](#) [Change](#)

**Leginon Projects** [+ Add](#) [Change](#)

**Leginon Users** [+ Add](#) [Change](#)

**Redmine Users** [+ Add](#) [Change](#)

## KRIOS MANAGER

**Cassettes** [+ Add](#) [Change](#)

**Grid Box Locations** [+ Add](#) [Change](#)

**Grid Drop-Off Events** [+ Add](#) [Change](#)

**Grids** [+ Add](#) [Change](#)

**Instruments** [+ Add](#) [Change](#)

**Organizational Affiliations** [+ Add](#) [Change](#)

**Payment Data** [+ Add](#) [Change](#)



Django administration

WELCOME, EDWARD. [VIEW SITE /](#)

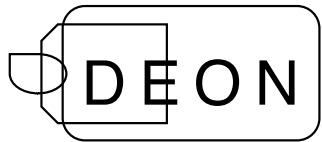
Home » Deondb » Leginon Users

Select userdata to change

Action:   0 of 100 selected

<input type="checkbox"/>	DEF ID	USERNAME	FIRSTNAME	LASTNAME	EMAIL
<input type="checkbox"/>	357	...	...	...	...
<input type="checkbox"/>	356	...	...	...	...
<input type="checkbox"/>	355	...	...	...	...
<input type="checkbox"/>	354	...	...	...	...
<input type="checkbox"/>	353	...	...	...	...
<input type="checkbox"/>	351	...	...	...	...
<input type="checkbox"/>	350	...	...	...	...
<input type="checkbox"/>	349	...	...	...	...
<input type="checkbox"/>	348	...	...	...	...
<input type="checkbox"/>	347	...	...	...	...
<input type="checkbox"/>	346	...	...	...	...
<input type="checkbox"/>	345	...	...	...	...
<input type="checkbox"/>	344	...	...	...	...
<input type="checkbox"/>	343	...	...	...	...
<input type="checkbox"/>	342	...	...	...	...

# Administration web interface



## User tracking

## Project tracking

Simons Electron Microscopy Center - Project Administration



Log Out

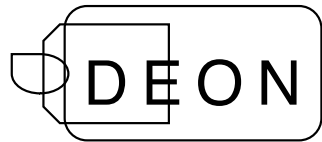
### Pending Registration

User ID	Username	First Name	Last Name	Email	Institution	Finalize	Deny	No Action	Booked	Training	LDAP	Forums
131	gpr111	Leah	Yan	leahyan@princeton.edu	COLU	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
132	gpr112	Tyler	Quin	tylerquin@princeton.edu	MSSM	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
133	gpr113	John	Colomo	johncolomo@princeton.edu	MSSM	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
135	gpr115	Steph	Wentler	stephw@princeton.edu	COLU	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
146	gpr146	Angela	Yan	angelayan@princeton.edu	MSSM	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
147	gpr147	Tim	Wentler	timwentler@princeton.edu	RU	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
148	gpr148	Chris	Phelan	chrisphelan@princeton.edu	NYU	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
149	gpr149	Jonathan	Wu	jonwu@princeton.edu	COLU	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
150	gpr150	William	Phelan	willphelan@princeton.edu	COLU	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
151	gpr151	Steve	Wentler	stevewentler@princeton.edu	Misc	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
153	gpr153	Mark	Wentler	markwentler@princeton.edu	CUNY	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

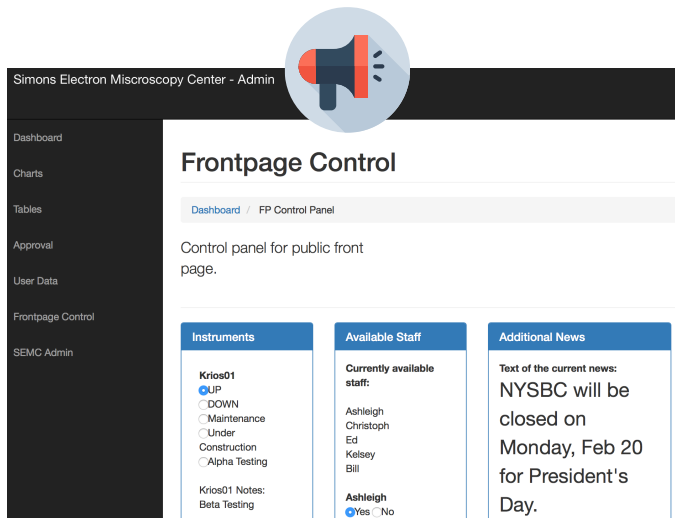
### Pending Projects

Issue#	Subject	Description	Approve	Deny	No Action
3734	Application of the Rapid (RPM) workflow	Project created by user: [redacted] Project name: Application of the Rapid (RPM) workflow complete when data images of the Rapid (RPM) workflow (RPM) complete in use. The overall goal is to image the complete and intermediate regions of the cell surface membrane receptor complex. This study will provide an initial analysis of the complete membrane receptor complex in use. In addition, the team developed several data that control the biological activity of the cell surface membrane receptor complex in addition to their functional properties. They provide underlying imaging tools to determine the full length cell surface membrane receptor, which is the long term goal of the other study. The Rapid (RPM) workflow (RPM) complete use that demonstrated in use with RPM in use. This study supports a mechanism to use the Rapid (RPM) workflow (RPM) as a substitute of our other study in use with RPM. A second mechanism on the Rapid (RPM) workflow (RPM) complete in use preparation. We are waiting the complete again this week for analysis of the complete in use at the RPM. We will send you the data in use. There are no comments associated with the study.	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
3939	Workflow	Project created by user: [redacted] Project name: Workflow complete when data images of the Rapid (RPM) workflow (RPM) complete in use. The overall goal is to image the complete and intermediate regions of the cell surface membrane receptor complex. This study will provide an initial analysis of the complete membrane receptor complex in use. In addition, the team developed several data that control the biological activity of the cell surface membrane receptor complex in addition to their functional properties. They provide underlying imaging tools to determine the full length cell surface membrane receptor, which is the long term goal of the other study. The Rapid (RPM) workflow (RPM) complete use that demonstrated in use with RPM in use. This study supports a mechanism to use the Rapid (RPM) workflow (RPM) as a substitute of our other study in use with RPM. A second mechanism on the Rapid (RPM) workflow (RPM) complete in use preparation. We are waiting the complete again this week for analysis of the complete in use at the RPM. We will send you the data in use. There are no comments associated with the study.	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

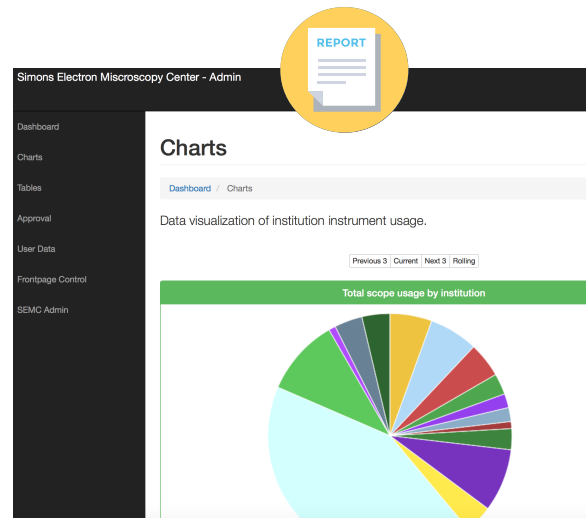
# Administration web interface



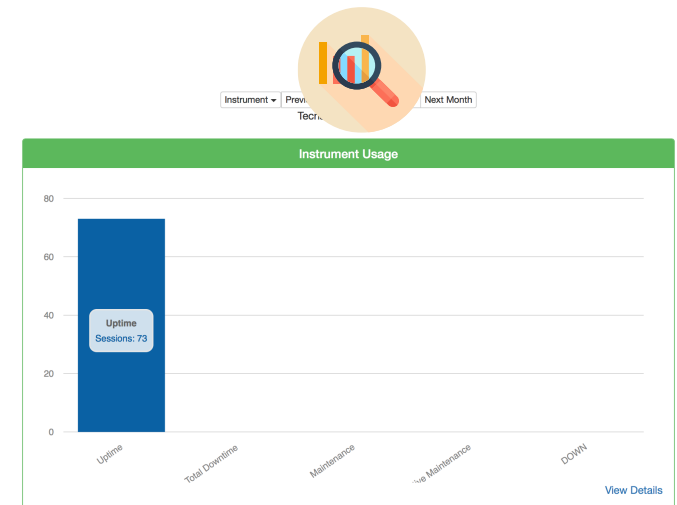
Facility announcements



Facility use



Facility statistics



# A scalable user management platform

Current project scope:  
**DEION**



User & Project registration



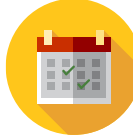
Sample storage management



Dissemination



User & Project tracking



Instrument scheduling



Facility announcements



User & Project normalization



Data storage and processing management



Facility use



User account management



User notification & reminders



Facility statistics



User accessible webtools



Remote data collection



Staff support



# Simons Electron Microscopy Center

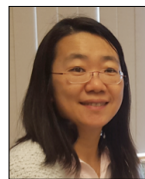
NEW YORK STRUCTURAL BIOLOGY CENTER  
Simons Electron Microscopy Center



Anchi Cheng  
Res. Staff Scientist



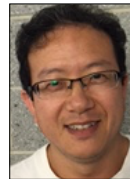
Sargis Dallakyan  
Res. Programmer



Zhening Zhang  
Res. Scientist



Carl Negro  
Res. Programmer



Alex Wei  
Technician



Phil Baldwin  
Staff Scientist



Clint Potter  
Director



Bridget Carragher  
Director



Yong Zi Tan  
Grad. Student



Venkat Dandey  
Post Doc.



Alex Noble  
Post Doc.



Micah Rapp  
Grad Student



Priyamvada Acharya  
Embedded Post Doc.



Giovanna Scapin  
Embedded Scientist



Julia Brasch  
Embedded Post Doc.



Bill Rice  
EM Manager



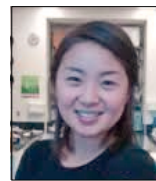
Ed Eng  
Staff Scientist



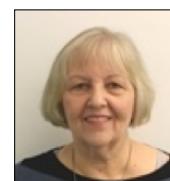
Ashleigh Raczkowski  
Senior Technician



Kelsey Jordan  
Technician



Laura Kim  
Research Associate



Crystal Premo  
Administrator



National Resource for Automated Molecular Microscopy  
<http://nramm.nysbc.org>

Questions?