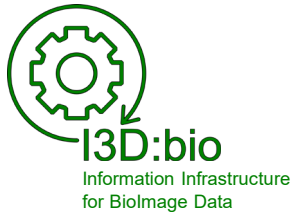


# Research Data Management for Bioimage Data at the HHU

## What are user groups and permission levels in OMERO?



Tom Boissonnet

Adapted from: Schmidt C., Bortolomeazzi M., Boissonnet T., Fortmann-Grote C. *et al.* (2023). I3D:bio's OMERO training material: Re-usable, adjustable, multi-purpose slides for local user training. Zenodo. DOI: 10.5281/zenodo.8323588  
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# User groups in OMERO and where to find them

Find the groups and group members in OMERO.web



Prof Julie



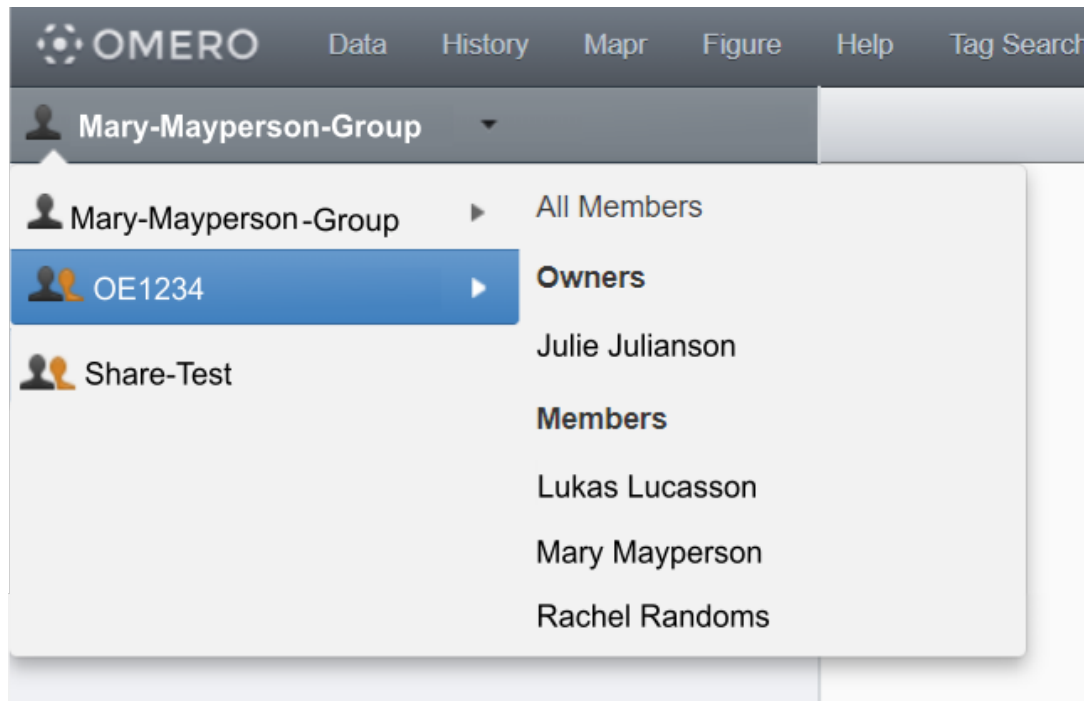
Rachel



Mary



Lukas



# Which types of user groups exist in OMERO?



Prof Julie



Rachel



Mary



Lukas

- Uploaded data belongs to a specific user in a specific group
- In user groups, the users have different roles:
  - Group owner (one or more)
  - Group members
- The OMERO administrator has access to all groups
- Group owners can change group permission levels

## Group permission levels

Private

Read-only

Read-Annotate

Read-Write

## Group permission levels overview:



### Private

Members can only see their own data. The owner can see all data. Good for data storage, but limits any collaboration.



### Read-only

Members can see everyone's data, but not annotate, edit, or delete other's data. Owner has more rights.



### Read-Annotate

Members can view and annotate other's data, but not edit or delete it. Owner has extended rights.



### Read-Write

*Can only be granted by an admin!*

Members can view, annotate, edit or delete other's data. Used as if all members co-own all data. Strong collaboration with high level of trust.

# Data sharing in groups & permissions

## Which permissions exist?

Group type: **private**



OMERO  
data / uploaded by



Prof Julie  
(owner)



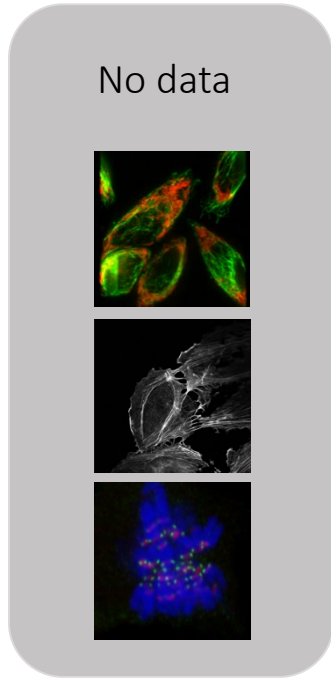
Rachel



Mary



Lukas



View

Annotate

Edit or  
delete

View				
Annotate				
Edit or delete				

# Data sharing in groups & permissions

## Which permissions exist?

Group type: **Read-only**



OMERO  
data / uploaded by



Prof Julie  
(owner)



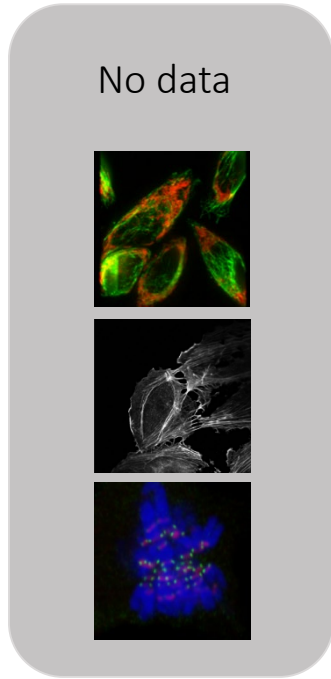
Rachel



Mary



Lukas



View

Annotate

Edit or  
delete

View				
Annotate				
Edit or delete				

# Data sharing in groups & permissions

## Which permissions exist? Group type: **Read-Annotate**



OMERO  
data / uploaded by



Prof Julie  
(owner)



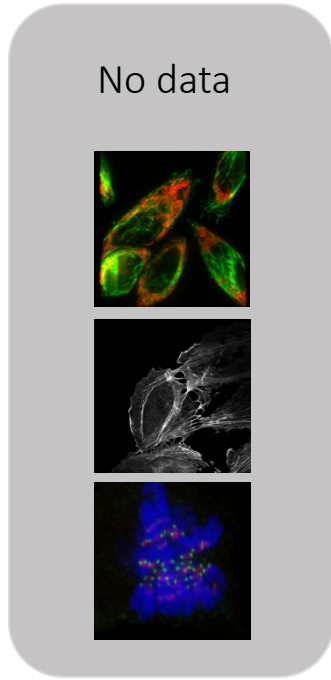
Rachel



Mary



Lukas



View  
Annotate  
Edit or delete

View				
Annotate				
Edit or delete				

# Data sharing in groups & permissions

## Which permissions exist?

Group type: **Read-Write**



OMERO  
data / uploaded by



Prof Julie  
(owner)



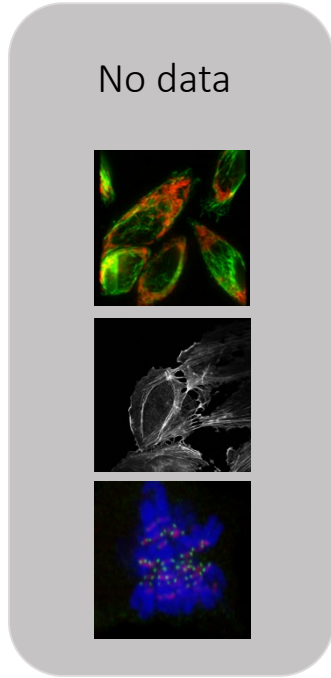
Rachel



Mary



Lukas



View  
Annotate  
Edit or delete

View				
Annotate				
Edit or delete				



# Group rights and their effect on data handling

## Very important / Warning !!!

1) It is possible to move Projects or Datasets to another group.

Beware that if the target group has a more restrictive permission level than the source group, **all user-based annotations may be lost without warning!** Review the OMERO guides and test the procedure with unimportant test folders before moving annotated datasets!

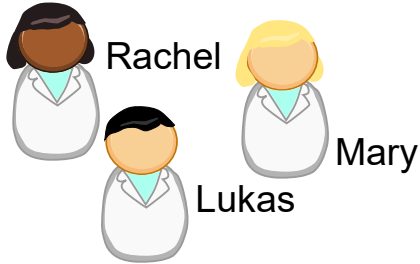
2) Downgrading the permission level of a group to more restrictive leads to **loss of all user-based annotations** except those of the data owner.

# OMERO – Default user groups at the HHU

owner

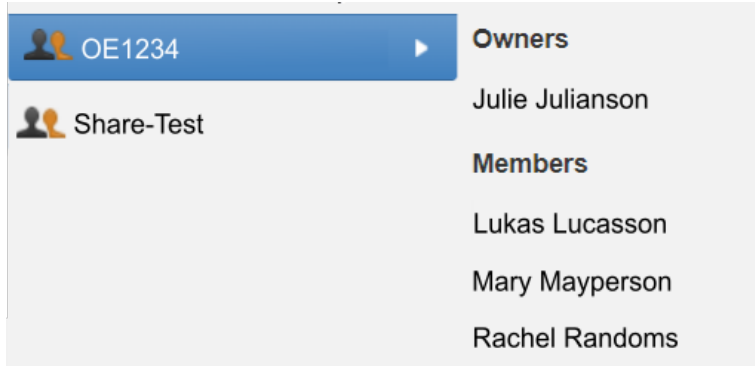


members



Default group 1:

- According to „Arbeitsgruppe“
  - PI (with group owner rights)
  - All OMERO users of the same organisational unit are members
  - Group name: Equals the Arbeitsgruppe (AG\_####)
  - Group type: **Read-Annotate** (can be changed by owner)



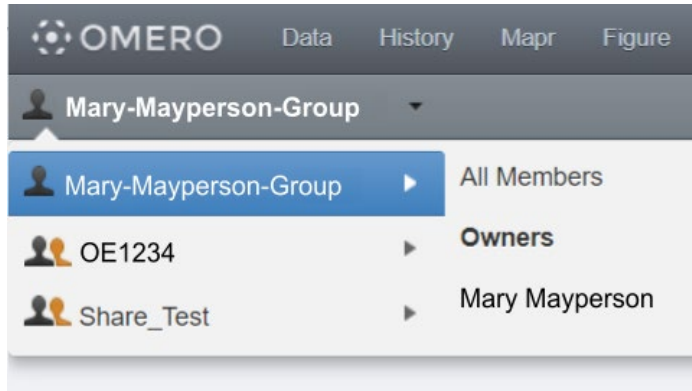
# OMERO – Default user groups at the HHU

**owner**



**members**

as invited by  
the owner



**Default group 2:**

- Personal group of each researcher
  - Researcher (with group owner rights)
  - Owner can invite other members
  - Group name:  
„Firstname-Lastname-Group“
  - Group type: **Private**  
(can be changed by owner)

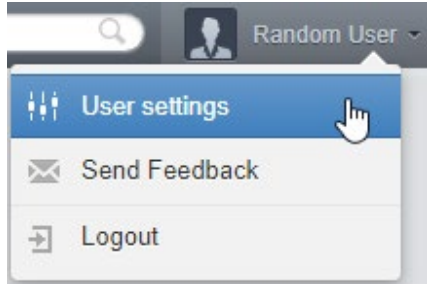
## OMERO – Group administration

**If specific other groups are required,  
please contact the OMEMO administrator**

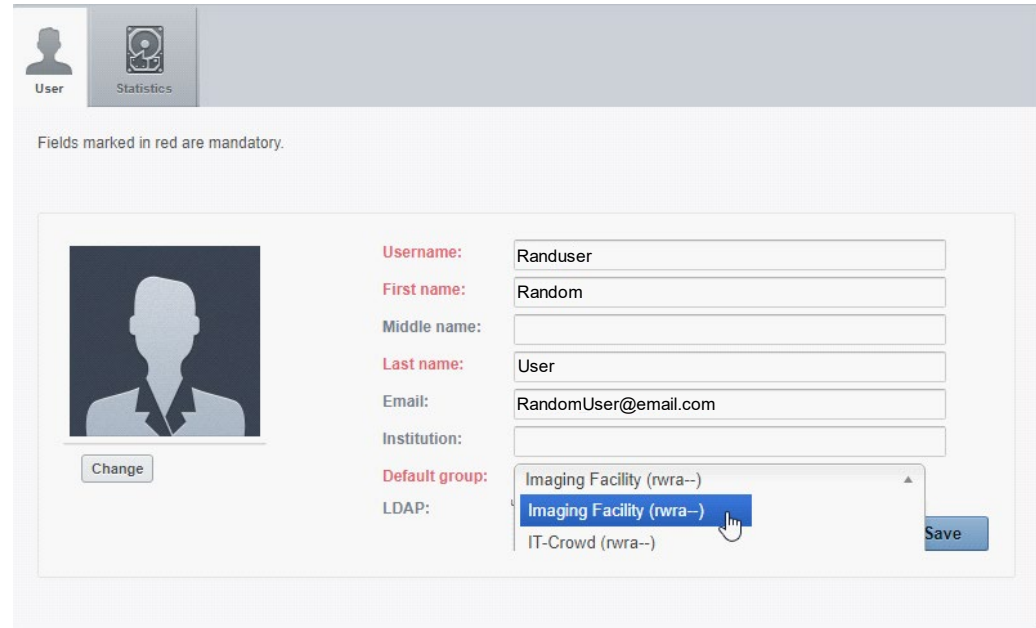


# Change group settings in OMERO (here: as *member* in different groups)

1) Upper right corner (OMERO.web)



2) See user settings and choose default group

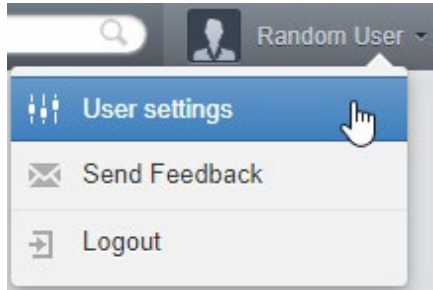


Fields marked in red are mandatory.

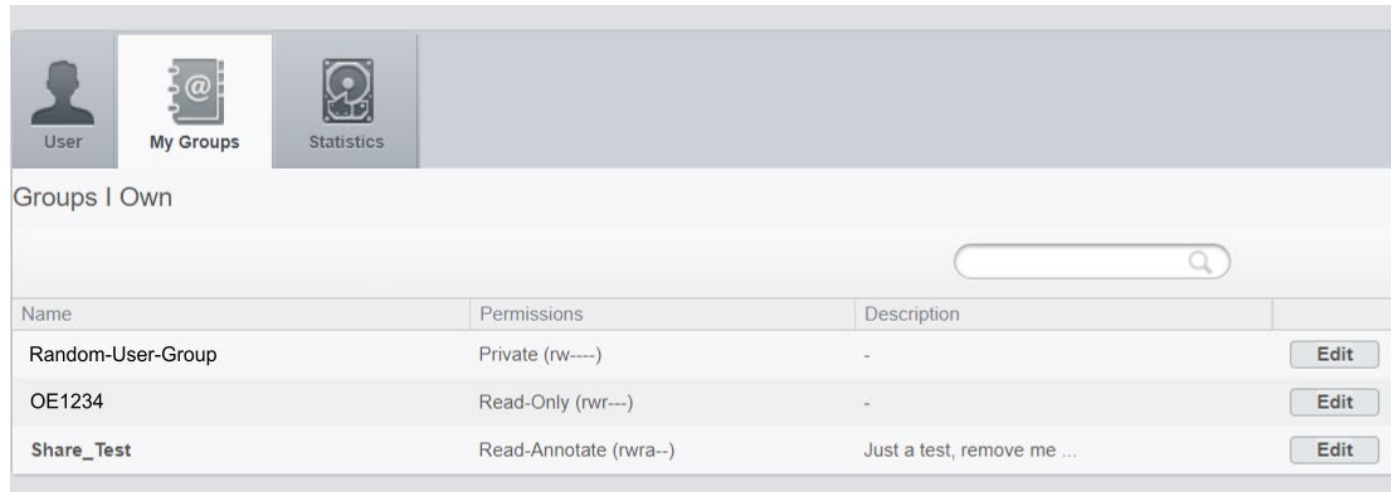
<b>Username:</b>	<input type="text" value="Randuser"/>
<b>First name:</b>	<input type="text" value="Random"/>
<b>Middle name:</b>	<input type="text"/>
<b>Last name:</b>	<input type="text" value="User"/>
<b>Email:</b>	<input type="text" value="RandomUser@email.com"/>
<b>Institution:</b>	<input type="text"/>
<b>Default group:</b>	<input data-bbox="1213 827 1646 919" type="text" value="Imaging Facility (rwa--)"/>
<b>LDAP:</b>	<input data-bbox="1213 860 1452 886" type="text" value="Imaging Facility (rwa--)"/>

# Change group settings in OMERO (here: as *group owner*)

1) Upper right corner (OMERO.web)



2) See group settings and edit as needed



Name	Permissions	Description	
Random-User-Group	Private (rw----)	-	<a href="#">Edit</a>
OE1234	Read-Only (rwr---)	-	<a href="#">Edit</a>
Share_Test	Read-Annotate (rwr--)	Just a test, remove me ...	<a href="#">Edit</a>

## OMERO – Default group for new users

- New users are allocated to the "default" group
- The OMEMO administrator will move you to your PI's group
- **NOTE:** *Do not upload data to OMEMO before you are sure to be in the correct group!*
- Change your user settings to set your default group

# Contact

Please review the additional information material available on the website:

<https://wiki.hhu.de/display/CAi/OMERO+usage>

Contact:

- [tom.boissonnet@hhu.de](mailto:tom.boissonnet@hhu.de) (OMERO administrator)
- [stefanie.weidtkamp-peters@hhu.de](mailto:stefanie.weidtkamp-peters@hhu.de) (Light Microscopy Core Facility)