

INDEPTH's How To Use OMERO-FSU Guidelines

omero.bio.fsu.edu

Last Version

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What is OMERO-FSU?

OMERO-FSU is one of the freely accessible image servers created by [INDEPTH \(twitter\)](#) members. European OMERO servers with mirrored instances of INDEPTH shared data are being established. Other major repositories, such as the Image Data Resource ([IDR](#)) also use the OMERO platform. The OMERO system functions as an image repository that can be accessed via a web browser, allowing users to view, explore, or download 3D image datasets.

OMERO-FSU is set up for "public" access to select folders and their contents. All of these programs are free for use and accessed by conventional web browsers. Therefore, learning to use OMERO will provide lasting and useful skills beyond the simply the use of INDEPTH servers described here.

Public INDEPTH Image data are organized as *Project Folders* :

- **Published datasets**
- **Training datasets**
- **Teaching images**

This guide will describe:

- | | |
|-----------------------------|--|
| (1) For the general public: | How to view public images in OMERO-FSU. |
| (2) For INDEPTH members: | How to submit published datasets. |

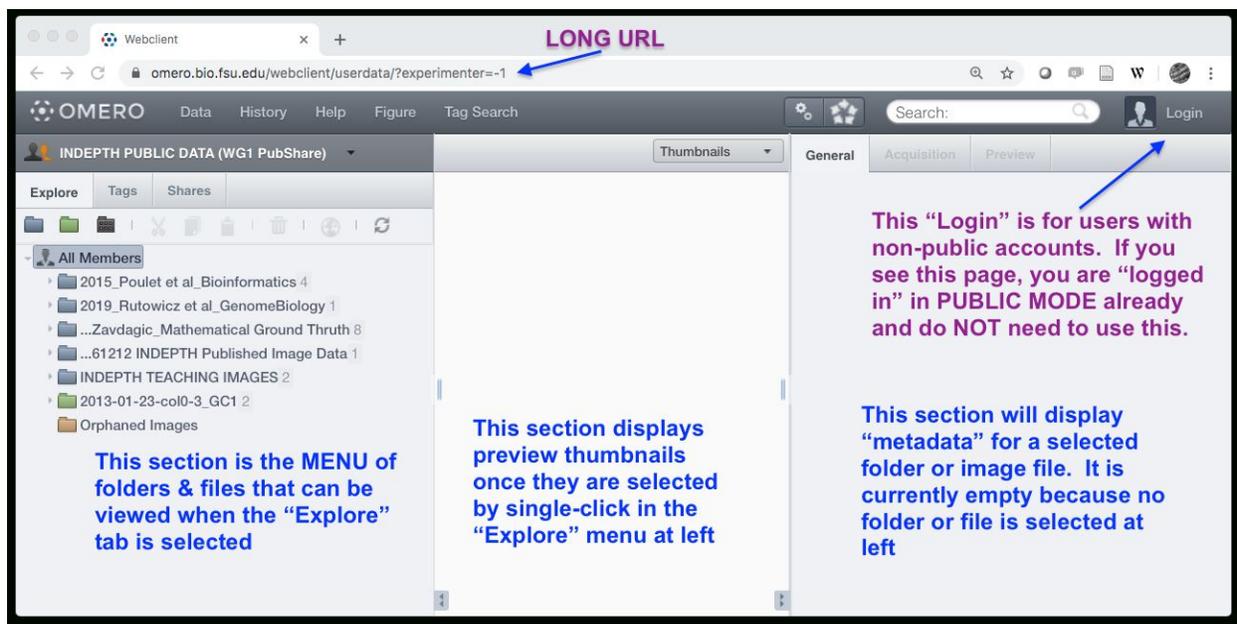
(1) For the general public: **How to view public images in OMERO-FSU** connecting in "public" mode.

To view folders and images in PUBLIC MODE does not require a log in. There is no need to enter a user ID or password. The public mode uses default login and access to all folders set to include the "public" user. Note that each public folders and images have unique URLs that you can save for rapid return to specific datasets or images. Here is what you need to know:

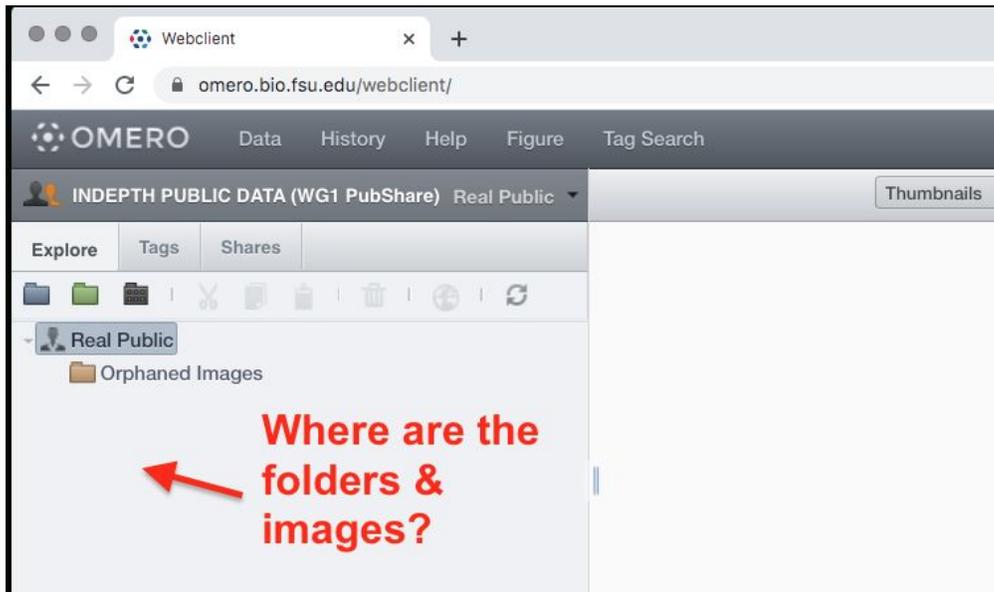
Go to the OMERO-FSU site in a web browser using the following URL:

<https://omero.bio.fsu.edu/webclient/userdata/?experimenter=-1>

Note: This long URL will *log you in as public and display all the public folders in the left sidebar menu*. Your initial entry screen should look like this:



WHERE ARE THE FILES & FOLDERS? (the blank entry window problem)



Sometimes the public entry site looks blank with no folders displayed. When that happens, you need to follow three steps to display the desired folders contained in the "INDEPTH PUBLIC DATA (WG1 PubShare)" group.

HOW TO DISPLAY THE "MISSING" FOLDER

3-Step Method To Display Public Folders (if not already displayed)

STEP 1
CLICK ONCE on the MENU BAR at the TOP of this LEFT PANEL
That will open a DROP-DOWN MENU

Where are the folders & images?

STEP 2
CLICK and HOLD to CHOOSE INDEPTH PUBLIC DATA -
That will open a DROP-DOWN MENU at the Right.

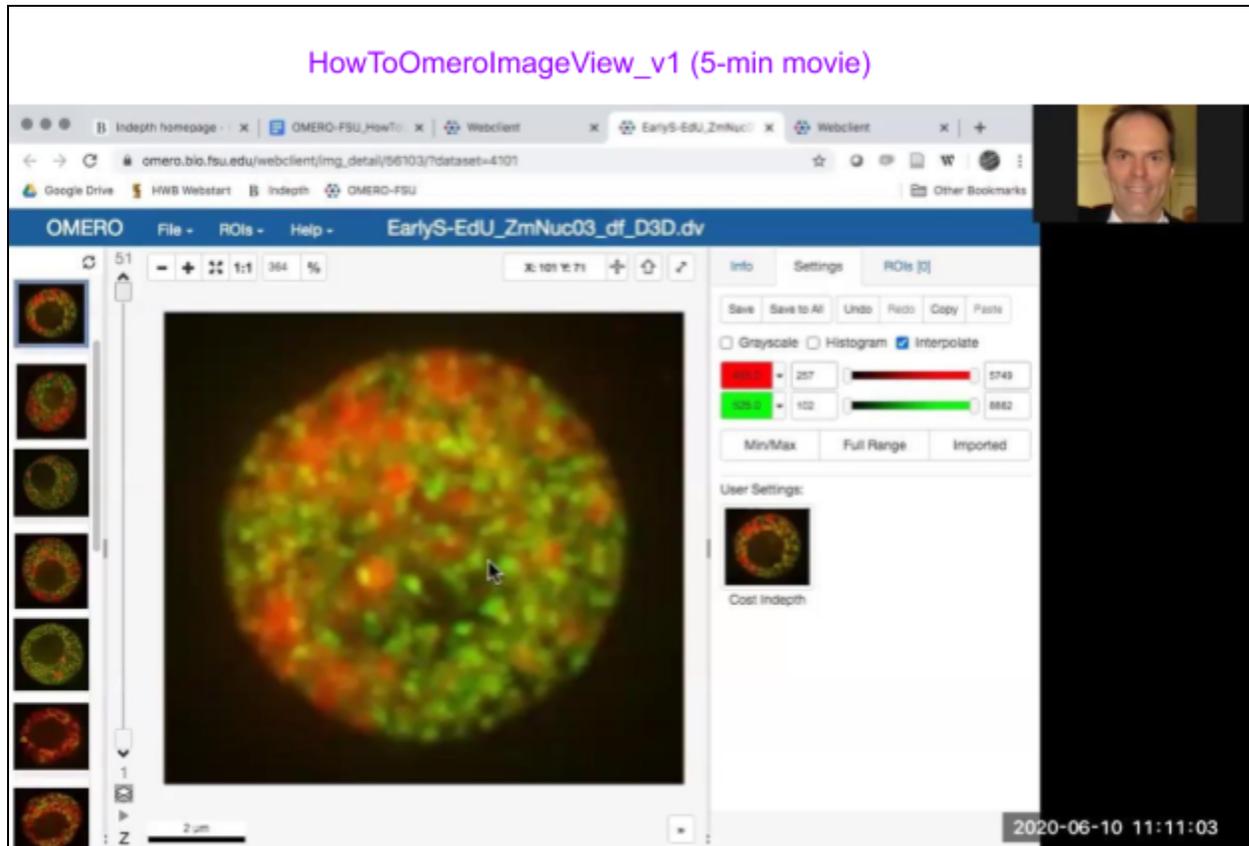
STEP 3
CHOOSE ALL MEMBERS by moving mouse from left to right after clicking on item in Step-2.

How to VIEW and ADJUST IMAGES in OMERO

DOUBLE CLICK ON THE PICTURE BELOW TO OPEN THE DRAWING WITH MOVIE

or launch the movie directly here: [HowToOmeroImageView_v1.mp4](#)

https://drive.google.com/file/d/1seOptyWf0X5d8eqjWX_EadU1yuEoalyC/view?usp=sharing



(2) For INDEPTH members: **How to submit published datasets.**

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EMAIL Letter from INDEPTH WG1 - sent May 1, 2020

From apsantos@itqb.unl.pt

RE: **INDEPTH- Collection of 3D plant nuclei image datasets**

As you might know, one of INDEPTH's objectives is to showcase a collection of 3D images of plant nuclei generated in our community and provide the first repository of its kind. The popular Image Data Repository (IDR) (<https://idr.openmicroscopy.org/about/>) does not contain any plant datasets and INDEPTH members are encouraged to submit their published dataset there.

To facilitate this procedure and also to provide premium access to unpublished datasets to INDEPTH members (under confidentiality agreement), we propose the use of an OMERO-based repository for INDEPTH members only. This repository has been created by Dr Hank Bass at Florida State University and populated with a few images from several INDEPTH members. Please have a look here to see already available data. In the near future, a direct access to this server and guidelines for uploading images will be published on the INDEPTH website.

We envision three main uses of this repository (*, see concrete example below)

1. **teaching**: for education purposes
2. **training**: for software benchmarking
3. **sharing with collaborators**: to facilitate collaboration

You can of course choose to indicate the purpose for which you want to share your images. Note that the access to these images is granted to INDEPTH members only upon signing a confidentiality agreement thereby securing that image datasets will not be used beyond the purposes indicated.

* Some concrete example for each purpose: (1) images used in a Training School on 3D image processing, (2) some INDEPTH collaborators develop their own image processing tool for segmenting 3D signal in the nucleus, measure their position etc. the more real datasets they have the better the software can be improved. If your dataset is used, you will of course be accredited. (3) you might share images with a defined collaborative work, or kindly make your images available for colleagues who would like to make measurements in replicate image datasets and compare with own images - the same way we use available RNAseq or ChIPseq from other labs

We welcome submission of

- **unpublished images** - kindly made available, under a confidentiality agreement for one or all of the three purposes mentioned above

- **published images** - ultimately published images will be transferred on IDR (OMERO-based)

Specifically, we would appreciate it if you could answer this email informing us whether you are still willing to share images and if yes, approximately how many and of which type. At this stage you can be brief in the description. We will then come back to you with detailed instructions to upload your images, provide basic information, the type of purpose you agree on and the confidentiality agreement.

We are aware that this task will require a bit of your time and highly appreciate your efforts in advance. In the mid-term we hope to create a dynamic repository, visible and useful to the scientific community beyond plant sciences.

Think of it, in the future your dataset could be featured in a renowned journal, fancy public outreach animation or as demo-dataset in a new software/module, if not part of a collaborative research article presenting novel findings based on your work!

Thank you in advance for your efforts and contribution,

Kind regards,

Ana Paula and Dimiter Prodanov (INDEPTH WG1 leaders - Workgroup "Quantitative imaging and analysis of the plant nucleus in 3D")

Christophe Tatout and Célia Baroux (chair and co-chair of the INDEPTH action)

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How to submit image data into the INDEPTH OMERO Repository Archive?

Contact INDEPTH members Ana Paula Santos (apsantos@itqb.unl.pt) or Dimiter Prodanov (Dimiter.Prodanov@imec.be) to obtain instructions on how to proceed. Images should be organized in logical folders related to the publication, given thoughtful names, and with associated metadata which will be used to fill out a required information sheet. Datasets from a single publication will be housed in a "Project Folder" that is assigned a unique INDEPTH accession number as part of the curation.