

# From Images to Knowledge with ImageJ & Friends

virtual conference

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Conferences



## Towards a community standard image file format for sharing big image data in the cloud

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**Session 1:** 2020-12-02 07:00 UTC – 2020-12-02 11:00 UTC

**Session 2:** 2020-12-02 15:00 UTC – 2020-12-02 19:00 UTC

**Title:**

Towards a community standard image file format for sharing big image data in the cloud

**Keywords**

big data, file formats, community standard, cloud storage, parallel access, sharing, visualization

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**Abstract:**

Bioimaging data, much like the subjects it illuminates, teems with diversity. But rather than driving evolution, differences in nomenclature and data formats inhibit sharing.

For users, translating between data formats is imperfect, time-consuming and must be performed repeatedly. Combined with the growing number of formats and advancements in both data volume and complexity, translation is increasingly a bottleneck.

We will present recent work on a next-generation format that aims to enable a one-time conversion of datasets to a common format as well as the ability to store them on highly-parallel object storage.

We propose that such a next-generation format can revolutionize the sharing of bioimaging data by expediting access and driving discovery. We imagine the same strategy is amenable to image repositories like the BioImage Archive or Image Data Resource, but also a large number of lab and institutional tools.

**Outline (120 min):**

- Introductions (10m)
- The problem of large images in the cloud (Talk) (10m)
- Current efforts and the path towards a community standard (Talk) (10m)
- Accessing cloud hosted image data (Demos & Hands-on)
  - Java: BigDataViewer (20m)
  - Python: napari (20m)
  - Other (Javascript, CLI) (20m)
- Make your own data cloud accessible (Demo) (15m)
- Summary & Questions (Discussion) (15m)