Esplanade Room 157: Sunday, February 22

1:30 PM – 3:00 PM
Allen Institute

BioFile Finder (BFF): An Easy-to-Use, Web-Based Solution for Sharing Image Data and Increasing Transparency
The rapid growth of biological imaging and simulation data has outpaced our ability to efficiently organize, search, and share datasets and results in transparent and reusable ways. Scientific data are often siloed across laboratories, institutions, and storage systems, with critical context locked away in spreadsheets, file paths, or ad hoc metadata conventions.

BioFile Finder is an open-source, web-based application addresses this gap by transforming simple, user-provided metadata files into interactive, searchable, and shareable data catalogs—without duplicating large underlying data files. BFF enables researchers to organize, filter, and explore datasets using arbitrary metadata fields, generate reproducible, linkable dataset views, and launch selected files directly into compatible visualization or analysis tools. Although originally developed for large-scale bioimage data, BFF is intentionally data-type agnostic and has also been applied to simulation outputs (e.g. Simularium files), modeling datasets, and even art museum repositories). BioFile Finder is freely available at bff.allencell.org.

In this exhibitor presentation, we will demonstrate how BFF can be used in practice to curate datasets underlying figures, publications, and collaborative projects, highlighting real-world use cases across microscopy, modeling, and cross-institutional data sharing. Attendees will see how BFF lowers barriers for non-programmers while supporting reproducibility, provenance, and FAIR data principles through metadata-driven exploration rather than centralized data migration.

The session will conclude with an introduction to the Internet of BioImage Data (IBID)—an emerging framework for linking distributed biological datasets through shared metadata rather than centralized storage. We will discuss how tools like BFF can serve as lightweight, user-facing entry points into federated data ecosystems, enabling scalable search, discovery, and reuse across repositories and platforms.

This session will highlight both immediately available tools that may be useful in your lab and longer-term infrastructure directions for making complex scientific data easier to find, explore, and reuse, with substantial time reserved for audience questions and discussion.

Speakers
Gideon Dunster, Scientific Program Manager, Allen Institute
Graham Johnson, Senior Director of Visualization and Data Integration, Allen Institute