**電子科学研究所学術講演会／第二十三回目社会創造数学セミナー**

講師：**Jason Swedlow教授** (Centre for Gene Regulation & Expression, University of Dundee, UK, Glencoe Software Ltd., Dundee, UK)

日　　時：平成30年10月22日（月）15:00－16:00

場　　所：北海道大学電子科学研究所　1階会議室

演題：『**OME’s Bio-Formats, OMERO, & IDR: Open Tools for Accessing, Integrating, Mining and Publishing Image Data @ Scale**』

**講演要旨：**

Despite significant advances in biological imaging and analysis, major informatics challenges remain unsolved: file formats are proprietary, storage and analysis facilities are lacking, as are standards for sharing image data and results. The Open Microscopy Environment (OME) is an open-source software framework developed to address these challenges. OME releases specifications and software for managing image datasets and integrating them with other scientific data. OME’s Bio-Formats is a file translator that enables scientists to open and work with imaging data in the software application of their choice. OMERO is an image database application that provides data management and sharing capabilities to imaging scientists. Bio-Formats and OMERO are used in 1000’s of labs worldwide to enable discovery with imaging.

Recently, we have used Bio-Formats and OMERO to build a system for publishing imaging data associated with peer-reviewed publications. This system, the Image Data Resource (IDR) includes image data linked to independent studies from genetic, RNAi, chemical, localisation and geographic high content screens, super-resolution microscopy, and digital pathology. Datasets range from several GBs to tens of TBs. We have also built cloud-based analysis tools portals to catalyse the re-use and re-analysis of published imaging data.

This talk will review our work on these open source image data solutions and present our vision for future image data resources.

主催 電子科学研究所学術委員会

問い合わせ先

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