Resource Summary Report

Generated by PRECISE-TBI on Sep 7, 2026

OME - Open Microscopy Environment

RRID:SCR_008849
Type: Tool

Proper Citation

OME - Open Microscopy Environment (RRID:SCR_008849)

Resource Information

URL: http://www.openmicroscopy.org/site

Proper Citation: OME - Open Microscopy Environment (RRID:SCR_008849)

Description: Open tools to support data management for biological light microscopy produced by a multi-site collaborative effort among academic laboratories and a number of commercial entities. Designed to interact with existing commercial software, all OME formats and software are free, and all OME source code is available under the GNU General public license or through commercial license from Glencoe Software. OME is developed as a joint project between research-active laboratories at the Dundee, NIA Baltimore, and Harvard Medical School and LOCI. In addition, OME has active collaborations with many imaging and informatics groups. While many other applications could use OME''s architecture and design, their specific implementation is focused on biological and biomedical imaging. Those interested in applying OME''s technology to other applications should contact the developers. OME work is divided into several different standards and software projects: * Bio-Formats: A Java-based library for reading and writing over 90 microscopy file formats. * OMERO Software: The Java-based OMERO software project, which currently includes tools for storing, visualizing, managing, and annotating microscopic images and metadata. * OME-XML & OME-TIFF: The OME-XML and OME-TIFF file format specifications, which are open file formats for sharing microscope image data. * OME Server: This was the original OME server project which has now ended and is a legacy product. It implements image-based analysis of cellular dynamics and image-based screening of cellular localization or phenotypes, and included a fully developed version of the 2003 version of OME-XML Schema language.

Abbreviations: OME

Synonyms: Open Microscopy Environment

Resource Type: data or information resource, narrative resource, software resource, source code, standard specification

Defining Citation: PMID:15892875, PMID:20513764

Keywords: light microscopy, imaging, biomedical imaging, image, microscope, biomedical

Related Condition: Aging

Availability: GNU General Public License, Commercial license, (Glencoe Software)

Resource Name: OME - Open Microscopy Environment

Resource ID: SCR_008849

Alternate IDs: nlx_146268

Record Creation Time: 20220129T080249+0000

Record Last Update: 20260905T132629+0000

Ratings and Alerts

No rating or validation information has been found for OME - Open Microscopy Environment.

No alerts have been found for OME - Open Microscopy Environment.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 8 mentions in open access literature.

Listed below are recent publications. The full list is available at PRECISE-TBI .

Newman ZL, et al. (2017) Input-Specific Plasticity and Homeostasis at the Drosophila Larval Neuromuscular Junction. Neuron, 93(6), 1388.

Ferrando-May E, et al. (2016) Advanced light microscopy core facilities: Balancing service, science and career. Microscopy research and technique, 79(6), 463.

Tomlinson CD, et al. (2013) XperimentR: painless annotation of a biological experiment for the laboratory scientist. BMC bioinformatics, 14, 8.

Orloff DN, et al. (2013) The cell: an image library-CCDB: a curated repository of microscopy data. Nucleic acids research, 41(Database issue), D1241.

Li F, et al. (2013) Chapter 17: bioimage informatics for systems pharmacology. PLoS computational biology, 9(4), e1003043.

Prodanov D, et al. (2011) Data ontology and an information system realization for web-based management of image measurements. Frontiers in neuroinformatics, 5, 25.

Melvin A, et al. (2011) The chromatin remodeler ISWI regulates the cellular response to hypoxia: role of FIH. Molecular biology of the cell, 22(21), 4171.

Conrad C, et al. (2010) Automated microscopy for high-content RNAi screening. The Journal of cell biology, 188(4), 453.