



Online microscopy and histology resources

Version 3

Zbigniew Mikulski¹

¹La Jolla Institute for Allergy and Immunology

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La Jolla Institute Microscopy Core



Zbigniew Mikulski

La Jolla Institute for Allergy...



ABSTRACT

There is a wealth of microscopy-related information online. This document lists the ones we know and like. Click on the document tab to see the list!

TAGS

microscopy

histology

Show tags

Document body

Microscopy theory and practice:

iBiology Microscopy Course

<https://www.ibiology.org/ibioeducation/taking-courses/ibiology-microscopy-course.html>

Fourier transformation explained by 3Blue1Brown

<https://www.youtube.com/watch?v=spUNpyF58BY>

Vendor websites with lots of information about microscopy

<https://www.microscopyu.com/>

<http://zeiss-campus.magnet.fsu.edu/>

<https://www.leica-microsystems.com/science-lab/>

Spectra viewers

<http://www.nightsea.com/sfa-sharing/fluorescence-spectra-viewers/>

Powerful spectra database of fluorescent proteins and probes by Talley Lambert

<https://www.fpbases.org/>

Image analysis:

Analyzing fluorescence microscopy images with ImageJ by Pete Bankhead

<https://petebankhead.gitbooks.io/imagej-intro/content/>

Image analysis forum for ImageJ, Fiji, CellProfiler, KNIME, Icy, Ilastik, scikit-image, and friends

<https://forum.image.sc>

Image analysis forum for QuPath

<https://groups.google.com/forum/#!forum/qupath-users>

QuPath tutorials

<https://www.youtube.com/channel/UCqepVnS1QsB7B8nBA9T91EQ/playlists>

Fiji manual with tutorials by Cameron J. Nowell

<https://cloudstor.aarnet.edu.au/plus/index.php/s/bxRU7kkoj2rljCh#pdfviewer> - manual

<https://cloudstor.aarnet.edu.au/plus/index.php/s/xdwcNFp0kafaNNN> - tutorial data

Immunolabeling:

Search for well-referenced antibodies

<https://www.citeab.com/>

Open access, online antibody tool

<https://www.antibodypedia.com>

Machine learning-based antibody search

<https://www.benchsci.com/>

Constantly improving panel of validated human antibodies used in clinical trials

<http://www.nordiqc.org/>

Antibody performance following fixation

<https://www.thermofisher.com/us/en/home/life-science/cell-analysis/cell-analysis-learning-center/cell-analysis-resource-library/ebioscience-resources/antibody-fixation-considerations.html>

Learn more about tissue markers with Protein Atlas

<https://www.proteinatlas.org/humanproteome/tissue+specific>

General cell and tissue staining protocols

<https://www.cellsignal.com/contents/resources/protocols/resources-protocols>

Histology:

Great explanation of HE stain optimization

<https://www.youtube.com/watch?v=n8VeoXDBDyA>

Histology of a normal human lymph node (+IHC)

<https://www.youtube.com/watch?v=RHFzY4ZeYk>

Normal skin histology

<https://www.youtube.com/watch?v=yQQ2Dmz42Vs>

Immunohistochemistry in normal skin

<https://www.youtube.com/watch?v=rNbWCTNUqug>

<https://www.youtube.com/watch?v=4EmIkhO10uw>

Medical School Pathology by John R. Minarcik, MD

https://www.youtube.com/watch?v=SK89_DNoA5Q&list=PL3oAYNQ024sijkTwmK4MliyV1Nmv2xZX&index=1

Online course - Histology: Using Microscopy to Study Anatomy and Identify Disease

Start dates 7 January 2019 and 15 July 2019

<https://www.futurelearn.com/courses/histology>

A practical guide to the histology of the mouse

<http://www.wiley.com/WileyCDA/WileyTitle/productCd-1119941202.html>

Data analysis and visualization:

Statistics for biologists

<https://www.nature.com/collections/qghhqm>

Make a difference: the alternative for p-values

<http://thenode.biologists.com/quantification-of-differences-as-alternative-for-p-values/research/>

Plots of data by Marten Postma and Joachim Goedhart

<https://huygens.science.uva.nl/PlotsOfData/>

Getting Started in R by Saghir Basjir and Dirk Eddelbuettel

<https://github.com/eddelbuettel/gsir-te>

Colour schemes and templates, color-blind friendly - excellent resource by Paul Tol

<https://personal.sron.nl/~pault/>

Tools:

Handbrake - open source video transcoder

<https://handbrake.fr/downloads.php>

XnView - free photo viewer, image resizer, batch converter

<https://www.xnview.com>

VLC media player - open source video player

<https://www.videolan.org/vlc/index.html>



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