

From Images to Knowledge with ImageJ & Friends

virtual conference

Nov 30 - Dec 2, 2020

Stephan Preibisch, Stephan Saalfeld, Anna Kreshuk,
Pavel Tomancak and Virginie Uhlmann

hhmi | janelia
Conferences



Scripting Micro-Manager

Tutors: Nico Stuurman (nico.stuurman@ucsf.edu)
Henry Pinkard (henry.pinkard@gmail.com)

Session 1: 2020-12-01 01:00 UTC – 2020-12-01 05:00 UTC

Session 2: 2020-12-02 17:00 UTC – 2020-12-02 21:00 UTC

Title: Scripting Micro-Manager

Instructors: Nico Stuurman & Henry Pinkard

Abstract: Micro-Manager (<https://micro-manager.org>) is Open Source software for microscope equipment automation. It consists of a device abstraction layer with a C-interface that can be used from multiple programming environments. It also includes a user interface targeted to microscopists written in Java, with programmable functionality for image and image metadata handling. Although many experiments can be successfully executed using just the user interface, the ability to augment its functionality by writing simple scripts can be very powerful. This tutorial will provide an introduction to the Micro-Manager 2.0 api(s), and how to use them from the build-in Beanshell scripting environment. We will do so by all participants writing a few Beanshell scripts, increasing in complexity, using emulated, "demo" hardware components. For those interested in using Python, the "Pycro-Manager" bridge to Micro-Manager will be introduced, and participants are welcome to use Python instead of Beanshell. Participants should have a recent build of Micro-Manager 2.0 installed (<https://micro-manager.org>) and have some working knowledge of the Micro-Manager user interface. For those wishing to script using Python, please have a Python environment installed that includes Pycro-Manager (see <https://github.com/micro-manager/pycro-manager>).

Nico Stuurman is the author of MicroManager, and Henry Pinkard developed pycro-manager.