



# Software control of microscopes, where do we go?

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Modern light microscopes consist of digital cameras and many motorized parts that need to be computer controlled for efficient operation. Software has therefore become an integral part of light microscopy. During the last two decades, the larger microscope companies have moved towards providing fully integrated, “black-box” systems, desirable in some situations, but not easy to modify or extend. Many labs have written their own software code for microscope control, allowing them to develop interesting new approaches. I will discuss some of the basics of interfacing computers and microscopes and present an attempt to provide a general platform of software code to control microscope components that can be used both as affordable (free) solutions and make it easier to operate custom, interesting novel light microscope systems.



## ABOUT the SPEAKER

Nico Stuurman is Director of the Center for Advanced Light Microscopy at the University of California, San Francisco (UCSF), specializing in advanced microscopy techniques and biomedical imaging. Dr. Stuurman has established himself as a leading expert in developing cutting-edge imaging methodologies and scientific software. He is a core developer of Micro-Manager, an open-source microscopy control software, where he plays a crucial role in implementing new features and maintaining the codebase. Dr. Stuurman’s work bridges the gap between complex imaging technologies and practical applications in biological research, making advanced microscopy available to many.

**Monday, October 7 at Noon**  
**1003 Engineering Centers (Tong Auditorium)**

