In the footsteps of Antoni van Leeuwenhoek
basic microscopy course

23 - 27 October, 2017

This course teaches you the application of a range of imaging possibilities within the Centre for Microscopy at the AMC, the VUmc and the NKI-AvL. They are presented in lectures, discussions and hands-on demonstrations. The individual research projects of the attending participants will be discussed in relation to the demonstrated techniques, allowing exchange of ideas with fellow participants and microscopy experts and operators. The course is a guide to implement cellular imaging in your own research project. A part of the participants could bring their sample for analysis after consulting with the organization first.

Topics covered include: basic principles of microscopy and confocal laser scanning microscopy, specimen preparation and staining methods, quantitative analysis of microscopic images (e.g. Image J), electron microscopy techniques, Imagestream, ultramicroscope and 2-photon, live cell imaging (e.g. inverted automated fluorescence and Total Internal Reflection Fluorescence)

During this course you will:
- Become proficient in basic microscopy
- Understand the operation and function of a transmitted light, fluorescence, confocal and electron microscope, as well as in imaging flow cytometry
- Learn about preparation techniques and assay systems
- Learn about many applications of the technologies of wide field (e.g. transmission, fluorescence) microscopy, imaging flow cytometry, confocal microscopy, scanning and transmission electron microscopy
- Get a good background in 2D and know basics of 3D digital image analysis

Date: October 23 – 27, 2017
Location: AMC, NKI-AvL and VUmc
Target audience: PhD students AMC, NKI-AvL and VUmc working on an oncology project. When possible, postdocs and technicians with their own research project can also attend
Price: Free of charge
ECTS: 1.6
Information: Esther Ruhé (e.ruhe@vumc.nl)
Registration: www.ooa-graduateschool.org/cms/course-program/
Registration deadline: September 23