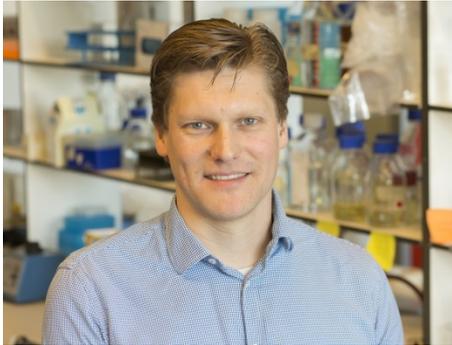


# “Using light to dissect and direct cellular organization and dynamics”

## Lecturer:

Prof. Dr. Lukas Kapitein



## University:

Utrecht University

## Abstract:

In my lecture, I will highlight two recent breakthroughs from the lab. First of all, we successfully engineered a system to control the transport and positioning of intracellular components with light. This allows us to directly explore the functional consequences of organelle mislocalization. In addition, we have engineered novel probes for the super-resolution imaging of microtubules, the intracellular biopolymers that serve as tracks for intracellular transport. These novel probes allow us to better resolve microtubule organization in dense cellular compartments, such as the axons and dendrites of neurons.