

ORE 11.00

Prof. ssa Nicole Endlich

University Medicine Greifswald, Dept. of Anatomy and Cell Biology

**State of the art imaging of podocytes
for basic research, diagnosis and drug
screening.**

After her study in chemistry at University of Heidelberg, Prof. Nicole Endlich got a PhD in the Department of Physical Chemistry at University of Heidelberg (1994) and trained as research fellow in the Department of Physiology at University of Heidelberg, in the INSERM group and in the group of Prof. Chambon at IGBMC in Strasbourg, France (1994-1998).

In 1998 she became research fellow of the German Research Foundation (DFG) and group leader in the Department of Anatomy and Cell Biology at University of Heidelberg.

Since 2005 Prof. Nicole Endlich is a principal investigator in the Department of Anatomy and Cell Biology at University Medicine Greifswald. Prof. Nicole Endlich has a long-standing interest in the study of Podocyte biology and glomerular disease with a focus on actin cytoskeleton, mechanical stress and differentiation, studies on the pronephric glomerulus in zebrafish larvae. She is also specialized in imaging with confocal, two-photon, superresolution and electron microscopy.

From 2013 she is Professor for Anatomy and Cell Biology at University Medicine Greifswald.

ORE 14.30

Prof. Antonio Iavarone

Institute for Cancer Genetics, Columbia University , New York (USA)

**The Drivers of oncogenesis in brain
tumors: a model for precision medicine.**

Antonio Iavarone is Professor of Neurology and Pathology in the Institute for Cancer Genetics at Columbia, where his laboratory has recently made several key discoveries on the biology of brain tumors. His laboratory contributed several landmark publications that have recently matured towards clinical trials. The overarching theme of his research program is the dissection of the role of proteins and networks (master regulators) that drive phenotypic states in normal and cancer cells of the brain.

His lab used global and unbiased approaches to identify the genetic and transcriptional drivers of an obscure but incredibly important aberrant phenotype in brain tumors, the mesenchymal transformation of human high grade glioma. This phenotype endows one of the most lethal types of human cancer (the glioblastoma multiforme, GBM) with extremely aggressive features such as the ability to invade the normal brain and form new blood vessels.

Current areas of research include the mechanism of oncogenic transformation by FGFR-TACC fusion proteins, validation and modeling novel glioblastoma gene fusions in the mouse and identification of novel driver genetic alterations relevant to the maintenance of phenotypically recognizable subtypes of brain tumors.