

Join us and our special guest speaker Prof. Dr. Nicole Endlich from the Department of Anatomy and Cell Biology at Greifswald University Medicine and CEO of NIPOKA GmbH, Germany, for this webinar on "Advances in Microscopy: A Gateway to Enhanced Research, Drug Development, and Diagnostics".

<u>Bruker's Acquifer IM (Imaging Machine)</u> is a fully automated widefield microscope ideal for high-content screening assays and phenotypic screening for small-model organisms. Its static sample holder and moving optics renders it ideal for imaging motion-sensitive samples, such as non-adherent cell cultures or embryos.

In this webinar, Prof. Dr. Nicole Endlich will give an overview of her research on kidney disease and the development of new diagnostic tools. She will speak on:

- Developing high-content screening methods based on a zebrafish larvae model for the identification of potential therapeutic agents
- Combing super resolution-based imaging techniques with multiplex staining and in situ hybridization for the advanced visualization of structure and morphology

Program - Monday, July 29th, 2024 17:00 AM CEST | 8:00 AM PDT | 11:00 EDT

- **17:00 Welcome & Introduction** Dr. Elisabeth Kugler, Bruker Light-Sheet Microscopy
- **17:05** Advances in Microscopy: A Gateway to Enhanced Research, Drug Development, and Diagnostics *Prof. Dr. Nicole Endlich, CEO of NIPOKA , Greifswald University Medicine, Germany*
- 17:45 Q&A
- 18:00 Closing

Please don't hesitate to contact us at productinfo@bruker.com if you have any questions.



Abstract and Biography

Advances in Microscopy: A Gateway to Enhanced Research, Drug Development, and Diagnostics Prof. Dr. Nicole Endlich, CEO of NIPOKA, Greifswald University Medicine, Germany

Prof. Dr. Nicole Endlich's talk offers an insightful exploration into the latest advancements in the microscopy technology and their transformative applications in scientific research, drug development, and diagnostics. A focal point of the presentation is the adoption of zebrafish larvae as an efficient model organism in high-content screening, specifically tailored for kidney research. This model facilitates the effective screening of potential pharmaceuticals. In addition, the presentation will cover innovative, super resolution-based imaging techniques that surpass the capabilities of traditional light microscopy. These techniques, combined with multiplex staining and in situ hybridization, allow the visualization of structures previously undetectable, marking the beginning of a new era in both research methodologies and diagnostic procedures.



Prof. Dr. Nicole Endlich

CEO of NIPOKA, Greifswald University Medicine, Germany

Prof. Dr. Nicole Endlich studied chemistry at the University Heidelberg, where she received her doctorate in physical chemistry. She has over 20 years' experience as a kidney researcher with a focus on podocyte-associated kidney diseases, which account for 80 % of all kidney diseases. She has also worked on the investigation of signaling pathways and the identification of therapeutic agents, mainly in the zebrafish model by developing high-content screening methods in her research unit at the University Medicine Greifswald, where she is Managing Director of the Department of Anatomy and Cell Biology.

Her group has done pioneering work in kidney diagnostics using state-of-the-art super-resolution microscopy. Based on this technology, Prof. Dr. Endlich founded the startup NIPOKA GmbH in 2019, where she is CEO.