

## The 18th CDB Lecture

## Jan Ellenberg

European Molecular Biology Laboratory (EMBL), Germany

Tuesday, February 21, 2017 11:00 C1F CDB Auditorium

## Systems biology by light and electron microscopy

- from protein complexes via cellular protein networks to embryonic development



Dr. Jan Ellenberg is head of the Cell Biology and Biophysics Unit at European Molecular Biology Laboratory (EMBL) Heidelberg, Germany. He carried out his PhD research in the laboratory of Dr. Jennifer Lippincott-Schwartz at the National Institutes of Health (NIH), where he studied nuclear membrane dynamics by using live cell imaging. After receiving his PhD in 1998 and carrying out a brief postdoctoral study, he started his own lab as an interdisciplinary group leader in Gene Expression and Cell Biology/Biophysics Programmes, at EMBL Heidelberg in 1999. He was appointed head of the Gene Expression Unit in 2006, and has served as the head of the Cell Biology and Biophysics Unit since 2010. His study establishes systems biology of dynamic biological events from the assembly of protein complexes via cellular protein networks to embryonic development. His lecture will cover his multi-disciplinary researches using super-resolving light and high-resolution electron microscopy that reveals the assembly of the nuclear pore complex, high-throughput live microscopy and computational image analysis and modelling to map the dynamic protein networks that drive cellular processes, and light-sheet microscopy that enables in toto imaging of preimplantation mouse development from zygote to blastocyst.

Host: Tomoya Kitajima

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For the abstract of his talk please visit the website: www.cdb.riken.jp/en/activities/2017/academic events/lecture/0221 10059.html

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