

A KJELDGAARD LECTURE



Tuesday 27 November 2018 at 13:15

1324 - 025, (Twin-aud.)

Same location for the PhD session



Marvin Tanenbaum

Hubrecht Institute, The Netherlands

Investigating mRNA translation and decay by live-cell single molecule imaging

Regulation of mRNA translation, the process by which ribosomes translate mRNAs into polypeptides, is a key step in decoding of the genetic information. Regulation of translation is widely used to tune cellular protein levels, and translation-associated quality control pathways ensure production of high quality proteins. We have developed a new method for the long-term imaging of single mRNAs undergoing hundreds of rounds of translation in living cells, enabling quantitative measurements of mRNA translation and decay. This approach reveals precise kinetics of translational regulation and uncovers a surprising heterogeneity in the translation of individual mRNAs within the same cell. The ability to observe translation of single mRNA molecules in live cells for long periods of time provides a powerful new approach to study translation regulation.

Host: Christian Kroun Damgaard, Gene Expression & Gene Medicine
Department of Molecular Biology and Genetics, Aarhus University

The lecture will be followed by a chalk-board session for PhD students

The Kjeldgaard Lecture Series is organised by
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DEPT. OF MOLECULAR BIOLOGY AND GENETICS
AARHUS UNIVERSITY