

# A KJELDGAARD LECTURE



**Thursday 10 October 2019 at 13:15**

1593-012 Aud. (iNANO)

Same location for the PhD session



**Nikolaus Rajewsky**

MDC Berlin, Germany

## Gene Expression in space and time

I will explain recent advances, including our own contributions, in single-cell (multi)omics. I will present unpublished data and show how we can discover design principles of how gene expression drives life in (tissue)-space & time. I will argue that these approaches will transform not only basic science but also clinical pathology, diagnosis, and therapy. I will discuss the specific challenges for Machine Learning in this transformation. I will then present LifeTime, a pan-European Consortium of 90 research institutions and 80 companies that aims to improve healthcare by mapping, understand, and target human cells in disease progression by integrating Machine Learning with single-cell multiomics and organoids.

**Host:** Jørgen Kjems, 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