

## Annual Report 2023 – Highlights



CellPAT  
partners  
assembled at  
the annual  
meeting in Ry

### Important events:

- 2 successful PhD defenses from CellPAT PhDs: Kasper Okholm and Laura Teodori
- Ali ShahrokhTash handed in his PhD thesis in 2023 (defense in Feb 2024) and Kirstine Friis Jensen concluded her experiments and will hand in her PhD thesis in spring 2024
- The extension of the funding by DNRF was granted and we are excited to continue CellPAT2.0 for four more years
- Jørgen Kjems and Mette Malle's public lecture on RNA medicine within the high-profile Danish lecture series "Public Lectures in Natural Sciences" ("Offentlige foredrag i Naturvidenskab") reached more than 10,000 people
- Søren Degn received a Lundbeckfonden Ascending Investigator grant and a LEO Foundation Serendipity grant.

### Important events:

- The Jungman lab published their groundbreaking development of a fluorescence microscopy technique that pushes resolution to the Ångström scale in Nature. This technique enables a game-changing precision leap in the study of biological systems.
- Collaborative efforts between Thiel, Jungmann, Degn, and Kjems lab were rewarded through a publication in Nature Communications. Their findings shed light on how B-cells in our immune system respond to antigens, which gives insight into our understanding of autoimmune diseases and how vaccines can be improved.
- A collaboration between the Sutherland and Kjems labs published in Biomaterials explored the role of extracellular matrix in embryonic stem cell differentiation that is driven by nanoscale topography
- CellPat PhD student Kirstine Hymøller visited the lab of Professor Jean Lee at Brigham and Women's Hospital in Boston for 6 months to study carbohydrate-specific pattern recognition molecules. PhD student Kathrine Pedersen visited the lab of Professor Hidde Ploegh at Harvard University in Boston for 6 months to investigate possible patterns for immune system inhibition. PhD student Simon Christian Vinther visited Professor Patrizia Stoitzner's lab Innsbruck Medical University for 4 months to study uptake in Langehans cells.