

Alicia Lundby

Alicia Lundby is Professor of Molecular Cardiology at the University of Copenhagen, where she leads the Cardiac Proteomics & Systems Biology Group. She holds an M.Sc. in Physics and a Ph.D. in Health and Medical Sciences from the University of Copenhagen. During her pre- and post-graduate training, she conducted research at the University of California San Diego, the RIKEN Brain Science Institute in Japan, and the Broad Institute of Harvard and MIT.

She received advanced training in quantitative mass spectrometry-based proteomics and phosphoproteomics as a postdoctoral fellow in the laboratory of Prof. Jesper V. Olsen at the Novo Nordisk Foundation Center for Protein Research. In 2015, she established her independent research group, integrating deep proteomics with cardiac electrophysiology and multi-modal data analysis to uncover molecular mechanisms underlying cardiac disease.

Her group has developed methods to quantify protein abundances and signaling pathways directly from human patient heart tissue. Combined with functional studies in matched model organisms, these approaches enable data-driven identification of dysregulated proteins and signaling networks in cardiac pathologies. The Lundby Group focuses on data-driven experimental strategies that pair state-of-the-art proteomics with orthogonal datasets—including human population genomics, single-cell and spatial transcriptomics, and pharmacovigilance—to reveal proteins and pathways of central importance in molecular cardiac pathology.