

TOPICAL Seminar

Date: 29 June
Time: 13:00-14:00
Venue: 1873-118A



Rune Busk
Damgaard
Associate Professor
Technical University
of Denmark

Feeding the fire: ubiquitin signalling at the interface of inflammation and metabolism

Methionine-1-linked ubiquitin (M1-Ub) signalling is best known for its essential role in immune homeostasis, yet growing evidence suggests important functions in metabolic regulation. Our work focuses on how the M1-Ub machinery, centred on the ubiquitin ligase LUBAC, integrates metabolic and inflammatory signalling pathways. We have identified M1-Ub signalling as a key regulator of cellular adaptation to metabolic stress and uncovered mechanisms by which nutrient excess perturbs ubiquitin-dependent signalling, promoting inflammation and cell death. These findings establish M1-Ub signalling as a critical link between immunity and metabolism and provide new insights into the molecular basis of inflammatory and metabolic disease.

Rune Busk Damgaard is Associate Professor, research group leader for Medical Biotechnology, Department of Biotechnology and Biomedicine, Technical University of Denmark. The talk is hosted by Chao Sun, DANDRITE Group Leader.