

KJELDGAARD Lecture - Professor Helen Walden

Wednesday 3 May 2023 at 13:15 —14:00

Followed by PhD-session at 14:30 —15:00

(Coffee and cake will be served between lecture and PhD-session)

1871-120 (MBG Auditorium)

Host: Daan van Aalten



Prof. Helen Walden

- Professor of Structural Biology
 - Head of School of Molecular Biosciences
- University of Glasgow, Scotland, UK

Regulation of DNA repair by monoubiquitin signals

The Fanconi Anemia DNA repair pathway is needed to fix DNA interstrand crosslinks. At the heart of the pathway is a single monoubiquitin signal which is attached to two homologous proteins, FANCD2 and FANCI. Both the assembly and the removal of the signal are required for completion of interstrand crosslink repair. My lab focusses on understanding the mechanisms of assembly, functional consequence, and removal of specific ubiquitin signals. I will present our biochemical and structural data defining each of these steps, from how a single site is targeted for modification, what the addition of ubiquitin does to the ID2 complex, how each ubiquitin signal has a distinct function, and how the signal is removed from a specific site.