

EINLADUNG

Herr Prof. Paul Elliott

University of Oxford, Department of Biochemistry

hält einen Vortrag mit dem Titel:

Understanding specificity within the ubiquitin cascade

Zeit: Donnerstag, 5. Juni 2025, 11.00 Uhr (s.t.)

Ort: MPI Hörsaal, Max-Planck-Institut für molekulare Physiologie

Abstract:

Ubiquitination is achieved through a co-ordinated enzymatic cascade of E1, E2, and E3 ligases. E1 ubiquitin activating enzymes are the initiators of ubiquitination. In most metazoans two E1 ubiquitin activating enzymes exist: UBA1 and the non-canonical E1, UBA6. Recently, we and others have discovered that the E2 and regulator of cell death and development, BIRC6, functions exclusively with UBA6 (Dietz et al. *Science* 2023, 379, 1112-1117). Both UBA6 and BIRC6 are essential for normal development and brain specific UBA6 knockout mice display neurological disorders. Despite their functional importance, how E2 ubiquitin-conjugating enzymes function exclusively with UBA6 is not understood. Through trapping stable complexes of E2s receiving ubiquitin from UBA6 we are uncovering the molecular determinants of E2 specificity. Our work will provide the fundamental molecular understanding crucial for investigating the non-canonical ubiquitination pathway in cellular processes.

Zu diesem gemeinsamen MPI / TUD-CCB-Vortrag sind alle Interessenten herzlich eingeladen.

gez. Dr. M. Gersch (133-2943)