



UNIVERSITÀ DEGLI STUDI
DI MILANO

DIPARTIMENTO DI BIOSCIENZE

Seminario

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***“Misfolded glycoprotein recognition in
the ER: does it take one to know one?”***

Ospite: Prof. M. Nardini

Venerdì 18 Giugno 2021 ore 14.30

Zoom meeting

Join URL:

<https://us02web.zoom.us/j/89121713572?pwd=Sk1VSGFzMmFPd0oxaU5KRHJxNSsrUT09>

ID riunione: 891 2171 3572

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Misfolded glycoprotein recognition in the ER: does it take one to know one?

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The Endoplasmic Reticulum (ER) glycoprotein folding Quality Control (ERQC) and Endoplasmic Reticulum Associated Degradation (ERAD) machineries take care of assisted folding and degradation of glycoproteins in the ER – and in so doing ensure healthy glyco-proteostasis. Both the ERQC misfolding sensor (an ER protein called UGGT) and the ERAD misfolding sensor (ER mannosidases called EDEMs) can detect misfolding of eukaryotic N-linked glycoproteins *en route* to secretion – but the molecular details underpinning misfold detection are not known. We discuss published data and more recent observations we collected supporting the hypothesis that UGGT and EDEMs have both evolved to carry out recognition of misfolded glycoproteins *via* intrinsically disordered portions of their own (“it takes one to know one”).