

Thursday, April 3, 2023, 2:30 p.m., room U28-02 / Webex (U3-06*)

U28 - U3 - Research Meeting

Molecular footprints of protein aggregation

Prof. Frank Sobott

Chair in Biomolecular Mass Spectrometry University of Leeds, UK

Abstract: In this contribution we will discuss a structural MS toolbox which comprises a comprehensive set of methods to characterize stoichiometry, global size and shape of amyloid related proteins such as α synuclein and IAPP, implicated in Parkinson's disease and Type 2 diabetes, respectively, as well as their oligomerization /aggregation and interactions. We are developing methods which address aspects of dynamic and heterogeneous protein conformations and assemblies, both in vitro and in vivo, using an integrated structural approach based on "mass spectrometry and top down structure sensitive fragmentation, limited digestion, ion mobility, H/D exchange, crosslinking and surface mapping techniques (e.g. covalent labelling by Fast Photochemical Oxidation of Proteins) in combination with electron microscopy and other biophysical approaches. Together with computational modelling, this will allow us to significantly improve our fundamental understanding of key species which are implicated in debilitating neurodegenerative diseases.

Host: Prof.ssa Rita Grandori

*Gli attestati di partecipazione saranno consegnati solo ai partecipanti in presenza in aula U3-06.

Gli attestati di partecipazione al seminario sono validi anche per l'acquisizione dei CFU, per informazioni visitare la pagina del seminario

btbs.unimib.it

-

Twitter: @BtBsUNIMIB

-

YouTube channel: BtBsUNIMIB

-

infobtbs@unimib.it



Iscriviti alla mailinglist per i BtBs Seminars



btbs.unimib.it



Calendario BtBs Seminars 2023