

BIOTECHNOLOGY AND BIOSCIENCES SEMINARS



Dipartimento di Biotecnologie e Bioscienze – UNIMIB

Thursday, October 10, 2024, 4:30 p.m., U3-BIOS building, room U3-08

Integrative Antibody Discovery for Challenging Protein Aggregates

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Abstract: Protein aggregation drives neurodegeneration, but studying this process is challenging due to the structural and chemical diversity of the aggregates. While antibodies are valuable research tools, they often struggle to bind specifically to these diverse protein species. To address this, we developed an antibody discovery platform that combines protein design and directed evolution, expanding the repertoire of target biomolecules. Our approach generated antibodies that specifically target amyloid-beta and alpha-synuclein toxic aggregates, key in Alzheimer's and Parkinson's. Our results provide insights into the mechanisms of these pathologies and identify potential therapeutic targets.

Host: Francesco Peri

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