Curriculum Vitae - Alessandra Corazza

Born Bologna, 2.10.1962 ITALY

Citizen Italian

Address Department of Medicine

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Current position: Assistant Professor in Biophysics

Date from: June 1999

Location: Department of Medicine

University of Udine

- Jan 2023 National Scientific Qualification as Full Professor
- Nov 2021 Coordinator of the PhD program in "Molecular Medicine" (former "Biomedical Sciences and Biotechnology") of the University of Udine
- Oct 2018 now Visiting Professor at Centre for Amyloidosis and Acute Phase Proteins, UCL, London, UK.
- Sept 2016- Sept 2017 Sabbatical leave. Research activity held in the Centre for Amyloidosis and Acute Phase Proteins, UCL, London, UK.

POSTS HELD:

May/95-May/99 Post-Doc at the University of Padova, Italy. Field of research: NMR of Cu(II)-, Cu(I)-

peptides complexes and their redox properties. NMR of Zn-peptides complexes.

Mar/94 - Apr/95 Assistant Researcher at Birkbeck College, Chemistry Dept, UK. Field of research: Bio-

inorganic studies of copper complexes by NMR and X-ray absorption spectroscopy.

QUALIFICATIONS:

Apr/93 PhD in Biophysics University of Padova, Italy Dec/89 Degree in Physics (cum laude) University of Bologna, Italy

RESEARCH SUMMARY:

Over the last twenty years, she has been involved in the study of amyloidogenic proteins, using both NMR spectroscopy and computational methods. In addition to determining the solution structure of amyloidogenic proteins, her work focuses on elucidating the mechanisms underlying the conversion of proteins from their soluble functional state to fibrillar aggregates. To this end, she's investigating the biochemical and biophysical factors that regulate the folding and misfolding of proteins that ultimately lead to aggregation and fibril formation. On this topic, innovative NMR techniques have been used to characterise protein folding at the atomic level.

She's also involved in a project aimed at developing novel compounds that bind to transthyretin to prevent and treat transthyretin amyloidosis. She's co-author of an international patent WO 2022/058733 A1 "Agents for use in the treatment of amyloidosis", 2021.

RECENT GRANTS:

- 2017-2021 ARISLA CALL FOR PROJECTS ON ALS RESEARCH FULL GRANT FULL PROJECT PROPOSAL "TDP-43 STRCT Purification and structure determination of full length TDP-43 finanziato dalla Fondazione AriSla" (Co-Pi)
- 2022-2024 Pfizer Research Grant RFP Junior Investigator Global ATTR Amyloidosis Research ASPIRE "New perspectives in proteolysis- mediated mechanism of transthyretin related amyloidosis: the role of mechanic forces," Pfizer Tracking Number 73552599 (Co-Pi)

 2023-2025 Telethon call "Multiround 21-24 – Round 1 2022 Track Basic" - "Study of the amyloidogenic conversion of V30M, S52P and V122I transthyretin variants by real-time Nuclear Magnetic Resonance: elucidation of the molecular mechanisms leading to different ATTR amyloidosis severity and different drug response" codificato con il n. GMR22T1067 (PI)

PROFESSIONAL ACTIVITIES:

- Member of Consorzio Nazionale Biosistemi Biostrutture
- Member of GiDRM (Italian Discussion Group of Magnetic Resonance)

National and International Collaborations

V. Bellotti (University of Pavia, UCL), Prof. F. Chiti (University of Firenze), B. Brutscher (Centre de Biologie Structurale, Grenoble), M. Dumoulin (University of Liège).

Highlight speaker invitations

- September 2021 XLIX NATIONAL CONGRESS ON MAGNETIC RESONANCE.
- December 2019 Towards a cure for amyloid diseases: a successful example of precision and translational medicine PALAZZO VISTARINO – PAVIA.
- May 2018 PROTEINE 2018, Meeting del Gruppo Proteine della Società Italiana di Biochimica e Biologia Molecolare Verona.
- April 2016 13th International Life Science Meeting IMC FH KREMS.
- June 2014 CECAM Meeting, Genova, Italy.
- June 2012 Israel-Italy meeting, Tel Aviv, Israel.
- August 2011 Amyloid Fibrils, Prions and Precursors: Molecules for Targeted Intervention: International Conference, Halle/Saale, Germany.

She is author of more than 85 scientific publications on peer-reviewed international journals in PubMed.

Udine, 15 February 2023