

Prof. **Angelo Poletti** is Professor of Experimental Biology at the Università degli Studi di Milano, Italy. He received his Laurea degree in Chemical and Pharmaceutical Technology (1984), a Master degree in Experimental Endocrinology (1987) and a PhD. in Endocrinological Sciences (1993). For three years (1990-1992) he worked with Prof Bert O'Malley and Nancy L. Weigel at the Department of Cell Biology, Baylor College of Medicine, Houston, TX, USA studying the role of phosphorylation on steroid receptor functions. Presently, he works at the Department of Pharmacological and Biomolecular Sciences (DiSFeB), Centre of Excellence on Neurodegenerative Diseases (CEND) of the Università degli Studi di Milano. He studies the molecular pathological mechanisms of two motor neuron diseases (MNDs): spinal and bulbar muscular atrophy (SBMA) and amyotrophic lateral sclerosis (ALS), both associated to misfolded proteins. These misfolded are neurotoxic and accumulate in neuronal and muscle cells. His main focus is to boost the intracellular protein quality control system to clear misfolded proteins from neurons. His lab recently identified a protective mechanism of a small heat shock protein (HSPB8) mediated by autophagy, which efficiently clear misfolded protein from cells. HSPB8 and the nucleotide exchange factor BAG3, is part of a HSP70/CHIP based routing system controlling the dynamic of degradation. When the HSPB8/BAG3 pathway is activated misfolded proteins are mainly routed via HSP70/CHIP to autophagy, alternatively, BAG1 by binding HSP70/CHIP routes misfolded substrate to proteasome, maintaining a fine tune equilibrium between these PQC system components in presence of misfolded monomeric or aggregated proteins.