

Curriculum Vitae, Mauro Freccero

Current Position: P.I. of an Organic Synthesis Laboratory
Full Professor in Organic Chemistry
President of “Centro Grandi Strumenti” (CGS, Pavia University)

Professional career

4-2016 ; present. Professor at Pavia University.
1-10-2019; 30-9-2021 Vice-Chancellor for Research at the University of Pavia, Italy.
10-2013; 2-2019. Head of the Ph.D. School in Chemical and Pharmaceutical Sciences at Pavia University
10-2008; 2-2017. Adjunct Professor at Vita-Salute San Raffaele University
10-2002; 3-2016. Associate Professor at Pavia University.
9-1996; 9-2002. Assistant Professor at Pavia University.
1-1996; 9-1996. Post-doctorate at the Dept. of Organic Chemistry, Pavia University
8-1994; 12-1995. Post-doctorate at the Dept. of Chemistry, Dublin City University (DCU), Dublin (Ireland).
Beginning of 1994. R&D Chemist, at ACS Dobfar S.p.A., fine chemicals, MI (Italy).
3-1993; 10-1993. Visiting Scientist, Dep. of Chemistry & Biochemistry, University of Maryland USA.
1990-1993. Ph.D in Chemistry, at the Dept. of Chemistry, Pavia University.
1990. Degree in Chemistry (110/110 cum laude) at the University of Pavia.



Publications and citation statistics. 136 publications, 129 in peer review int. journals, 4 book chapters, 2 international patents.
[H-index 44, citations 5414, [google-scholar-citations](#); H-index 41, citations 4501 (Scopus)].

Research interests: organic synthesis and binding properties of selective ligands, targeting G-quadruplex (G4) in human telomeres and oncogene promoters for theranostic applications (i.e.: targeted anticancer therapy, and fluorescence emission diagnostic). Currently, MF is developing selective ligands targeting G4 in the HIV-1 genome as conceptually new antiviral drugs, also developing effective transient and activatable reactants [quinone metide and reactive oxygen species (ROS)] targeting DNA secondary structures.

Mentoring: 48 undergraduate students, 14 PhD students, and 10 postdoctorates.

Most important financed projects:

2022-2025 PNRR, PE13, *One Health Basic and Translational Research Actions addressing Unmet Needs on Emerging Infectious Diseases*. Coordinator of the Organic Synthesis Uni at UniPV: (247 K€).

2009-2015. Project: FIRB-IDEA RBID082ATK_003: “New drug for anticancer targeted therapy” Unit coordinator: (480 K€).

2011-2013. Project: PRIN 2009MFRKZ8. “Selective Molecular Devices Targeting "G-Quadruplexes" P.I. (250.6 K€).

2013-2016. Project: AIRC IG2013-14708: “Photoactive molecules targeting telomeric G-quadruplex as multimodal agents in anticancer therapy” P.I. (265 K€).

2014-2020. Project within the 7th FRAMEWORK PROGRAMME, HIV LTR G-4 (Consolidator Grant, no: 615879): “G-quadruplexes in the HIV-1 genome: novel targets for the development of selective antiviral drugs”. Second beneficiary of a “Two-beneficiary contract”. (PV Funding: 659.6 K€).

Most Important References: *Nucleic Acids Res.* 2020, 48, 4627 [10.1093/nar/gkaa186](#). *J. Am. Chem. Soc.* 2018, 140, 14528 [10.1021/jacs.8b05337](#). *Nucleic Acids Res.*, 2018, 46, e115 [10.1093/nar/gky607](#). *Angew. Chem. Int. Ed.* 2017, 56, 7520 [10.1002/anie.201702096](#). *J. Med. Chem.* 2015, 58, 9639 [10.1021/acs.jmedchem.5b01283](#).