

Curriculum Vitae, Mauro Freccero

Current Position: Full Professor in Organic Chemistry.

P.I. of an Organic Synthesis Unit at Pavia University, Italy, since 2002.

Head of the Ph.D. School in Chemical and Pharmaceutical Sciences at Pavia University, since 2013.

Professional career

4-2016 ; present. Professor 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. Prof. Freccero authored **114 publications**, **108** in peer review international journals, 4 book chapters and 2 international patents [H-index 35, citations 3502, <https://scholar.google.it/citations?user=hlzA26cAAAAJ&hl=it&oi=ao>; H-index 33, citations 2920 (Web of Science); H-index 32, citations 3072 (Scopus)].

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

Most important financed projects.

1) 2007-2009. Project: AIRC IG2007-5049: "Novel irreversible protein kinase inhibitors targeting a conserved active site cysteine" Local Coordinator of the Organic Synthesis research unit (Funding: 20 K€)

2) 2009-2015. Project: FIRB-IDEA RBID082ATK_003: "New drug for anticancer targeted therapy" Unit coordinator: (Funding: € 480 K€).

2011-2013. Project: PRIN 2009MFRKZ8. "Selective Molecular Devices Targeting "G-Quadruplexes" P.I. and National Coordinator. (Total funding € 250.6 K€; Funding to the PV unit: 88.4 K€).

3) 2013-2016. Project: AIRC IG2013-14708: "Photoactive molecules targeting telomeric G-quadruplex as multimodal agents in anticancer therapy" Project P.I. (Funding € 265 K€).

4) 2014-2019. Project within the 7 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€).

Teaching experiences. Organic Chemistry III and Laboratory for chemists (an advanced course, since 2001). Organic Chemistry for Biotechnology (since 2001), both at Pavia University. Organic Chemistry for Biotechnology, and Chemistry for the International MD Program (in English) at UniSR (Università Vita-Salute San Raffaele), Milan, Italy, from 2008 to 2016.