

Associazione Italiana di Calorimetria e

Analisi Termica

Personal information

Name: Bruno Pagano Location: Naples, IT AICAT member since: 2010



Position: Associate Professor of Medicinal Chemistry (CHIM/08)

Affiliation: Department of Pharmacy, University of Naples Federico II, Via D. Montesano 49, 80131 Napoli



Education and positions: Degree in Chemistry, University of Naples Federico II (2003); Postgraduate fellowship from the University of Salerno for research activity abroad, carried out at National Institute for Medical Research, London, UK (2004); PhD in Pharmaceutical Sciences, University of Salerno (2008); FEBS Fellowship, Randall Division of Cell and Molecular Biophysics, King's College London, UK (2008); Postdoctoral Fellow at the Faculty of Pharmacy, University of Salerno (2008-2011); Assistant Professor at the Department of Pharmacy, University of Naples Federico II (2011-2018); Associate Professor of Medicinal Chemistry, Department of Pharmacy, University of Naples Federico II (2018 up to date).

Main fields of interest: Physico-chemical characterization of the structure and stability of biological macromolecules (proteins and nucleic acids); studies of biomolecular interactions (protein-protein, protein-nucleic acid, drug-protein, drug-nucleic acid).

Methods: Differential scanning calorimetry (DSC), isothermal titration calorimetry (ITC), circular dichroism (CD), UV spectroscopy, fluorescence, surface plasmon resonance (SPR), microscale thermophoresis (MST), docking, molecular dynamics simulations.

Professional activities: Associate Editor of *Frontiers in Chemistry*. Guest Editor of the *Journal of Thermal Analysis and Calorimetry* for the Special Issue "Recent Development in the Field of Calorimetry, Thermal Analysis and Applied Thermodynamics" (2017). Member of the Committee of the PhD program in Pharmaceutical Sciences of University of Naples Federico II. Member of the Board of the Department of Pharmacy (2016-2018), and of the Council of the School of Medicine and Surgery, University of Naples Federico II (2017-2018).

Publication record (September 2019): 70 peer-reviewed papers, one book chapter, citations >1520, h-index: 23

Equipments: Nano DSC and Nano ITC (TA Instruments); Jasco J-815 spectropolarimeter, V-630 spectrophotometer, and FP-8200 spectrofluorometer (Jasco); Biacore X100 (GE Healthcare); Monolith NT.115 (NanoTemper Technologies).

5 most important publications:

Gajarský M, Živković ML, Stadlbauer P, Pagano B, Fiala R, Amato J, Tomáška L, Šponer J, Plavec J, Trantírek L. Structure of a stable G-hairpin. *J. Am. Chem. Soc.* (2017), 139, 3591-4.

Di Maro S, Zizza P, Salvati E, De Luca V, Capasso C, Fotticchia I, Pagano B, Marinelli L, Gilson E, Novellino E, Cosconati S, Biroccio A. Shading the TRF2 recruiting function: a new horizon in drug development. *J. Am. Chem. Soc.* (2014), 136, 16708-11.

Limongelli V, De Tito S, Cerofolini L, Fragai M, Pagano B, Trotta R, Cosconati S, Marinelli L, Novellino E, Bertini I, Randazzo A, Luchinat C, Parrinello M. The G-triplex DNA. *Angew. Chem. Int. Ed. Engl.* (2013), 52, 2269-73.

Cavaliere P, Pagano B, Granata V, Prigent S, Rezaei H, Giancola C, Zagari A. Cross-talk between prion protein and quadruplex-forming nucleic acids: a dynamic complex formation. *Nucleic Acids Res.* (2013), 41, 327-39.

Pagano B, Martino L, Randazzo A, Giancola C. Stability and binding properties of a modified thrombin binding aptamer. *Biophys. J.* (2008), 94, 562-9.