

## Curriculum vitae Dr. Clelia Giannini

Assistant Professor of Organic Synthesis at Chemistry Department of University of Milan UNIMI.

Graduated cum Laude, in 1996 at University of Naples, Dr Giannini received her Ph. D. in 2001 in "Sostanze Naturali Farmacologicamente Attive", defending a thesis titled "Studi strutturali su composti bioattivi di origine marina e su proteine coinvolte in malattie genetiche". From 2000 to 2002 post-doc fellowship from the Medical Research Council (UK) to work in the NMR laboratory of Dr. Annalisa Pastore, Division of Molecular Structure, National Institute for Medical Research, Mill Hill, London; project: structural characterization of proteins involved in genetic diseases such as Frataxin and Ataxin I. From 2002 to 2004, post-doc position at Dipartimento di Chimica Organica e Industriale, Università di Milano, in professor Maiorana Group, and at Dipartimento di Chimica Inorganica, Metallorganica e Analitica, Università di Milano in Professor Renato Ugo Group; project: synthesis and characterization of peptide nucleic acids and heterohelicenes. From 2005 to present, permanent position as researcher in Organic Chemistry at Chemistry Department of University of Milan. She is author of 35 peer-reviewed international publications

### Scientific activity:

- a) Application of Ionic Liquids in organic chemistry as solvents and as liquid support for peptide synthesis
- b) Synthesis and characterization of Peptides and Peptide Nucleic Acids (PNA)
- c) Synthesis and characterization of organic photo luminescent compounds

### Selected Publications (2013-2018)

- 1) L. Poletti, C. Giannini "Ionic liquid mediated synthesis of peptide nucleic acids dimers" *Tetrahedron* 69, 1940-1944, 2013 <https://doi.org/10.1016/j.tet.2012.12.050>
- 2) G. Eidelshstein, S. Halamish, I. Lubitz, M. Anzola, C. Gannini, A. Kotlyar "Synthesis and Properties of Conjugates between Silver Nanoparticles and DNA-PNA Hybrids" *Journal of Self-Assembly and Molecular Electronics (SAME)* Vol. 1, 69–84, 2013 doi: 10.13052/same2245-4551.113
- 3) C. Giannini "Critical survey covering the year 2013: New trends in heterocyclic chemistry" From Seminars in Organic Synthesis, "A. Corbella" Summer School, 39th, Gargnano, Italy, June 15-19, 2014, 301-326, 2014
- 4) G. Eidelshstein; M. Fattal; G. Avishai; B. Kempinski; C. Giannini; A. Kotlyar "Preparation, characterization and manipulation of conjugates between gold nanoparticles and DNA" *Nanomaterials*, 6(9), 2016 doi:10.3390/nano6090167
- 5) E. Lucenti; A. Forni; C. Botta; L. Carlucci; C. Giannini; D. Marinotto; A. Previtali; S. Righetto; E. Cariati "H-Aggregates Granting Crystallization-Induced Emissive Behavior and Ultralong Phosphorescence from a Pure Organic Molecule" *Journal of Physical Chemistry Letters* (2017), 8(8), 1894-1898 DOI: 10.1021/acs.jpcllett.7b00503
- 6) S. Zanella; S. Angerani; A. Pina; P. Lopez Rivas; C. Giannini; S. Panzeri; D. Arosio; M. Caruso; F. Gasparri; I. Fraietta; et al. "Tumor Targeting with an isoDGR-Drug Conjugate" *Chemistry - A European Journal* (2017), 23(33), 7910-7914 DOI:10.1002/chem.201701844
- 7) G. Fumagalli, B. Stella, I. Pastushenko, F. Ricci, M. S. Christodoulou, G. Damia, D. Mazza, S. Arpicco, C. Giannini, L. Morosi, F. Dosio, P. A. Sotiropoulou, and Daniele Passarella "Hetero-Nanoparticles by self-assembly of doxorubicin and cyclopamine conjugates" *ACS Med. Chem. Lett.*, 2017, 8 (9), pp 953–957 DOI: 10.1021/acsmchemlett.7b00262
- 8) E. Lucenti, A. Forni, C. Botta, L. Carlucci, C. Giannini, D. Marinotto, A. Pavanello, A. Previtali, S. Righetto and E. Cariati "Cyclic Triimidazole Derivatives: Intriguing Cases of Multiple Emissions and RT Ultralong Phosphorescence" *Angew. Chem. Int. Ed.* 2017, 56, 16302–16307 *Angew. Chem.* 2017, 129, 16520–16525 10.1002/anie.201710279
- 9) S. Deyev, G. Proshkina, O. Baryshnikova, A. Ryabova, G. Avishai, L. Katrivas, C. Giannini, Y. Levi-Kalisman, A. Kotlyar, Selective staining and eradication of cancer cells by protein-carrying DARPIn-functionalized liposomes, *European Journal of Pharmaceutics and Biopharmaceutics* (2018) doi: <https://doi.org/10.1016/j.ejpb.2018.06.026>