

Pellegrino Sara

Associated Professor (fixed-term researcher)

Education:

2012: Advanced Course on Patent and Trademark (University of Milano)

2005: Ph. D. in Medicinal Chemistry (University of Milano)

2002: Master Degree in Pharmaceutical Chemistry and Technology (University of Milano)

Working experience:

2005-2012: Post-doctoral fellowship at DISFARM (University of Milano)

2010: Visiting scientist at the peptide synthesis laboratory (ICRM-CNR Milano)

2004, 2005: Vigoni fellowship (University of Regensburg, Germany)

a.y 2012 – 2013 → today: Scientific committee member of the “Pharmaceutical Science” Ph. D. course

a.y 2012 – 2013 → today: Faculty board member of “Pharmaceutical Chemistry and Technology” degree

a.y. 2013 – 2014 → a.y. 2014 - 2015: Member of UNIMIVAL “Ricerca sulla valutazione di UNIMI”

Teaching activity

a.y. 2012 – 2013 → today: “Organic chemistry laboratory for Organic Chemistry II” (degree in “Pharmaceutical Chemistry and Technology”)

Research Interests:

- Peptide synthesis and their application in biology, nanomaterials and catalysis
- Synthesis and conformational analysis of peptidomimetics
- Chemical synthesis and structural characterization of protein domains
- Diastereo- and enantio- selective synthesis of unnatural amino acids
- Hetero- and carbo-cycles synthesis

Selected publications:

1) Bonetti A., Pellegrino S., Das P., Yuran S., Bucci R., Ferri N., Meneghetti F., Castellano C., Reches M., Gelmi M. L. “Dipeptide Nanotubes Containing Unnatural Fluorine-Substituted β 2,3-Diarylamino Acid and L-Alanine as Candidates for Biomedical Applications”, *Org. Lett.*, **2015**, *17*, 4468.

2) Pellegrino S., Bonetti A., Clerici F., Contini A., Moretto A., Soave R., Gelmi M. L. “1H-Azepine-2-oxo-5-amino-5-carboxylic Acid: a 310 Helix Inducer and an Effective Tool for Functionalized Gold-Nanoparticles” *J. Org. Chem.*, **2015**, *80*, 5507.

3) Pellegrino S., Contini A., Gelmi M.L., Lo Presti L., Soave R., Erba E. “Asymmetric modular synthesis of a semirigid dipeptide mimetic by cascade cycloaddition/ring rearrangement and borohydride reduction” *J. Org. Chem.*, **2014**, *79*, 3094.

4) Pellegrino S., Ronda L., Annoni C., Contini A., Erba E., Gelmi M.L., Piano R., Paredi G., Mozzarelli A., Bettati S. “Molecular insights into dimerization inhibition of c-Maf transcription factor” *Biochimica et Biophysica Acta - Proteins and Proteomics*, **2014**, *12*, 2108.

5) Pellegrino S., Ruscica M., Magni P., Vistoli G., Gelmi M. L. “Antiproliferative activity on human prostate carcinoma cell lines of new peptidomimetics containing the spiroazepinoindolinone scaffold” *Bioorg. Med. Chem.* **2013**, *21*, 5470

6) Pellegrino, S.; Contini, A.; Clerici, F.; Gori, A.; Nava, D.; Gelmi, M. L. “1H-Azepine-4-amino-4-carboxylic acid: a new α,α disubstituted ornithine analogue capable of inducing helix conformations in short Ala-Aib pentapeptides” *Chemistry- a European Journal*, **2012**, *18*, 8705.