CV of Prof. Violetta Cecchetti

1979: Degree in Pharmacy, summa cum laude (University of Perugia);

1980-1983: post-graduate researcher at the Istituto di Chimica Farmaceutica e Tecnica Farmaceutica, University of Perugia with research grants from Welcome (Pomezia), Manetti & Roberts (FI), Società Prodotti Antibiotici (MI), Mediolanum Faramaceutici (MI);

1984-1986: doctoral candidate in the first Doctor of Research Course in Drug Chemistry;

1987: Doctor of Research Degree.

1989-1992: Research assistant;

1992-2000: Associate Professor of Pharmaceutical Chemistry (Faculty of Pharmacy -University of Perugia);

Since 2000: full professor in Pharmaceutical Chemistry (Faculty of Pharmacy -University of Perugia).

From 2005 scientific coordinator of the Medicinal Chemistry section II - Department of "Chimica e Tecnologia del Farmaco", University of Perugia;

From November 2010 Director of the five-year, single-cycle graduate degree in Pharmacy at the University of Perugia;

Member of the "Società Chimica Italiana" and the "American Chemical Society";

Projects reviewer for the Austrian Research Fund (Wissenschaftsfonds-FWF, 2011), and for Italian Research Projects;

Member of the Organizing Committee of X National Biotechnology Congress, 2008 - held at University of Perugia.

She spent working periods as visiting researcher at the Laboratory of Molecular Biophysics, Oxford University (UK) and at the Insitut für Lasermedizin, Heinrich-Heine-Universität (Germany) in order to improve her knowledge on molecular modeling.

The scientific activity, documented in 4 patents and 82 publications in international journals with high impact factors and numerous congress communications, has mainly been addressed towards the design, also assisted by computational techniques, synthesis and biological evaluation of: heterosteroids, non-steroidal anti-inflammatory agents (NSAIDs), heterocyclic compounds with anti-hypertensive activity, potassium channel-activators, and quinolone chemotherapeutic agents.

The aim of the research was the identification of new pharmacological leads and the clarification of their structure-activity relationship and mechanism of action.

Remarkable results have been obtained in the field of chemotherapeutic agents with the development and introduction into therapy of the first once-daily antibacterial fluoroquinolone, rufloxacin (Monos, Qari, Tebraxin).

Recently, the scientific activity has been focused on the identification and optimization of novel antiviral agents-which was supported by the following grants:

Research Projects of National Interest - PRIN 2004(2004037792_006), PRIN 2006 (2006030809_004) and PRIN 2008 (2008CE75SA_002) – Research Unit Coordinator;

Fondazione Cassa di Risparmio di Perugia (2009.010.00413 Bando a tema Ricerca di Base 2009) - Coordinator of Research Projects;

Research Projects of Ministero della Salute & Istituto Superiore di Sanità 2010 "How to counteract the pandemic flu" Research Unit Coordinator.

Most relevant publications in the field of antivirals:

- Barreca M.L., Manfroni G, Leyssen P., Winquist J., Kaushik-Basu N., Paeshuyse J., Krishnan R., Iraci N., Sabatini S., Tabarrini O., BasuA., Danielson U.H.,Neyts J., Cecchetti V. Structure-based discovery of pyrazolobenzothiazine derivatives as inhibitors of hepatitis C virus replication. *J. Med. Chem.* **2013**, *56*, 2270-2282.
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- Barreca, M.L.; Iraci, N.; Manfroni, G.; Cecchetti, V. Allosteric inhibition of the hepatitis C virus NS5B polymerase: *in silico* strategies for drug discovery and development. *Future Med. Chem.* **2011**, *3*, 1027–1055.
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- G Manfroni, Paeshuyse, J., Massari, S., Gatto, B.; Zanoli, S.; Maga, G.; Tabarrini, O.; Cecchetti, V.; Fravolini, A. Neyts, J. Potential NS3 Helicase-Mediated Inhibition of Subgenomic HCV RNA Replication by Acridone Derivatives. *J. Med. Chem.* **2009**, *52*, 3354-3365.
- Gatto, B.; Tabarrini, O.; Massari, S.; Giaretta, G.; Sabatini, S.; Del Vecchio, C.; Parolin, C.; Fravolini, F.; Palumbo, M.;Cecchetti, V. Novel 2-Phenylquinolones as HIV-1 Tat/TAR Inhibitors. *ChemMedChem.* **2009**, *4*, 935-938.
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