

Team leader of P1 team: Prof. Claudiu T. SUPURAN

Positions: **2017- present; 2014 – 2017; 2012-2014: Full Professor; Associate Professor; Assistant Professor**, at the Neurofarba Department, Section of Pharmaceutical and Nutriceutical Sciences, University of Florence, Italy; **2006 – 2012: Research Professor** at the Department of Chemistry Ugo Schiff, University of Florence, Italy; **2010 – Visiting professor**, University of La Plata, Argentina.

Education: **1991: Ph.D Chemistry**, PhD thesis: “Design of inhibitors and activators of carbonic anhydrase”; **1987: BSc Chemistry** - Polytechnic University of Bucharest, Romania.

Editorial activity: **Editor-in-Chief (selected)** of Expert Opinion on Therapeutic Patents, Journal of Enzyme Inhibition and Medicinal Chemistry, Current Enzyme Inhibition; International Journal of Molecular Sciences; **Senior Editor (selected)** of Current Topics in Medicinal Chemistry.

International conferences: **10+** in the **organizing** committee (notable: International Carbonic Anhydrase Conference), **50+** as **invited speaker** (details in Section B3.2)

Fellowships: **1994:** University of Florida, Gainesville and University of Washington, Seattle.

Research contacts: team leader in Consortia funded by the EU and drug companies (details in Section B3.2).

Expertise fields: enzyme inhibitors and activators, carbonic anhydrases, chemistry of sulfonamides, sulfamates and sulfamides, quantitative structure-activity relationship (QSAR) studies, antiviral/antitumor drugs, amino acid derivatives; medicinal chemistry.

Scientific achievements are **centered on selective inhibitors and activators of carbonic anhydrase (CA) isoforms**, with various applications in the fight against various diseases. My work led to the **discovery of a large number of inhibitors** belonging to the sulfonamide, sulfamide or sulfamate classes with good affinity (C. T. Supuran, et. al., *Carbonic anhydrase inhibitors*, Med. Res. Rev, **19**, 2003) - **378 independent citations** (310 in the last 10 years); **one of the sulfonamides discovered entered to Phase I clinical trials in 2014 for the treatment of advanced, metastatic solid tumors, actually in Phase Ib/II**. Since then, I **discovered several completely new classes of CA inhibitors**, as well as their mechanism of action: (i) **the coumarins**, which act as “prodrug” inhibitors; (ii) **the polyamines** (spermine, spermidine, etc) which anchor to the zinc-coordinated water molecule; (iii) **the dithiocarbamates**, which coordinate to the metal ion within the CA active site; (iv) **the xanthates**, which bind in a similar manner to the dithiocarbamates. My results were published in more than 1300 scientific papers in international journals; 4 books; 70 book chapters, whose international impact/recognition in the field is reflected by: **Hirsch factor** (WoS): **102**, **Number of citation** (WoS, independent citations) > **18600**. **Hirsch factor** (Google Scholar): **133**, **Number of citations** (Google Scholar) >70900. In 2013, Lab Times recognized me as **the most cited author in the area of Pharmacology & Toxicology** (LabTimes 2013, 5, 38).