

CURRICULUM VITAE AND BIBLIOGRAPHY – ANTONIO ROSATO

PERSONAL

Name: Antonio Rosato

Place of birth: Camposampiero (Padova), Italy

Date of birth: June 09, 1964

Citizenship: Italian

Address: Via San Giuliano 1, 35010 Borgoricco (PD) Tel: +39-49-9335551 (home); +39-49-8215858 (office); Fax: +39-49-8072854; e-mail: antonio.rosato@unipd.it

PERMANENT EMPLOYMENT

10/01/2014 - present: Associate Professor of Immunology, Department of Surgery, Oncology and Gastroenterology, Immunology and Oncology Section, University of Padova, Italy

17/02/1999 - 09/30/2014: Assistant Professor, Department of Surgery, Oncology and Gastroenterology, Immunology and Oncology Section, University of Padova, Italy

EDUCATION

July 1983: High School Diploma (60/60) at "Liceo Classico C. Marchesi", Padova

July-August 1987: Visiting Medical Student at the "Bone Marrow Transplant Unit", University of San Francisco (U.S.A.)

July 1991: Medical Degree (M.D.), summa cum laude, University of Padova

August 1991: Visiting Graduate at the Department of Medical Oncology, University of Uppsala (Sweden)

December 1991: Medical Licensing Examination, University of Padova

March-May 1993: Visiting Scientist at the Kennedy Institute of Rheumatology (Sunley Division), University of London (winner of a "short-term fellowship" from the European Molecular Biology Organisation (E.M.B.O.))

May 1993: Visiting Scientist at the Department of Anatomy, University of Birmingham (U.K.)

August and September 1995: "United States Medical Licensing Examination" (USMLE) Step 1 e Step 2 (certificate n. 0-541-710-0)

November 1995: Specialization (70/70 with honors) in Allergy and Clinical Immunology, University of Padova

February 1999: Ph.D. Degree in Oncology, University of Padova

FELLOWSHIPS AND SCIENTIFIC AWARDS

1991-1995: fellowship from the Italian Ministry of Education for Specialization

1993: short-term fellowship from the European Molecular Biology Organisation, EMBO

1995: "Virgilio Chini" award for Degree thesis

1995: "Lorenza Cescatti" award from Fondazione Trentina per la Ricerca sui Tumori

1995-1998: fellowship from the Italian Ministry of Education for Ph.D.

GRANTS AND FUNDING

Since February 1999, when he got his first permanent position at the University, Prof. Antonio Rosato has been and is currently responsible for different research projects funded by public and private institutions, which collectively account for over 5.0 Meuro.

SUMMARY OF THE SCIENTIFIC ACTIVITY AND BIBLIOMETRICS

Author of over 150 scientific papers published in ISI-JCR referenced journals

Total IF (JCR Science Edition 2015) > 1000

H-index: 32 (SCOPUS)

CONTRIBUTIONS TO SCIENCE

I have been working in oncology and tumor immunology since almost thirty years, in particular on the analysis of interactions between the immune system and neoplasia, the identification of molecular and cellular prognostic markers, and the study of tumor biotherapies. In this regard, a first major scientific accomplishment was the demonstration that DNA vaccination can be successfully employed to boost a strong T cell-mediated immune response even against self cancer-testis antigens, with the publication of the first paper on the topic from Italy (Rosato et al., Hum Gene Ther, 1997;8:1451-8). Along with the studies on active immunization, I have been long involved in the field of adoptive immunotherapy with T cells redirected through engineering with both “classical” anti-tumor TCR (Bobisse et al., Cancer Res, 2009;69:9385-94; again, the first Italian paper on the topic) and chimeric antigen receptor (Zuccolotto et al., Plos One, 2014:e109427), or “unconventional” cytotoxic T lymphocytes represented by CD4⁺ T cells directed to virus-associated antigens in EBV-related malignancies (Merlo et al., J Immunol, 2010;184:5895-902) and Cytokine-Induced Killer (CIK) cells instructed and retargeted against tumors (Cappuzzello et al., OncoImmunology, 2016;5:e1199311).

An additional major scientific achievement has been the development and preclinical assessment of an entire new platform of drugs based on the conjugation of natural polymers (NP) with different therapeutic moieties, such as cytotoxic molecules (Banzato et al., Clin Cancer Res, 2008;14:3598-606) cytokines (Montagner et al., J Control Rel, 2016;236:79-89), radionuclides (Melendez-Alafort et al., Nucl Med Biol, 2009;36:693-701), carboranes for Boron Neutron Capture Therapy (BNCT) of tumors (Di Meo et al., Macromol Biosci, 2008;8:670-681), and immunogens. This latter aspect is particularly appealing, as Ag-NP bioconjugates are demonstrating a large superiority in terms of adjuvanticity and immunogenicity (even with tumor antigens) compared to Ag administered with classical and clinically used adjuvants, in the absence of any side-effect and toxicity.

Finally, the need to study *in vitro* and *in vivo* the “biological fate” of pharmaceuticals, tumors and T cells (Banzato et al., Nucl Med Biol, 2009;36:525-33; Melendez-Alafort et al., Anti-cancer Agent ME, 2012;12:476-99; Montagner et al., Urol Oncol, 2013;31:1261-69; Montagner et al., Plos One, 2014:e112240) has led me to foster the development of a strong expertise in molecular imaging employing confocal microscopy analysis, scintigraphy, fluorescence and bioluminescence, radionuclide techniques, and more recently digital pathology to study the intimate relationships between tumor infiltrating lymphocytes and tumor tissues.