

BIOGRAPHICAL SKETCH

NAME: Huber, Veronica

AFFILIATION: Translational Immunology Unit, Fondazione IRCCS Istituto Nazionale dei Tumori, Milan, Italy

POSITION TITLE: Senior Staff Scientist

EDUCATION/TRAINING

INSTITUTION AND LOCATION	DEGREE	Completion Date	FIELD OF STUDY
European School Varese (Italy)	Baccalaureate	1990	High School
Westfälische Wilhelms-Universität Münster (Germany)	Medical Internship	1996-1998	Internal Medicine/Pharmacology and Toxicology
Westfälische Wilhelms-Universität Münster (Germany)	MD	2000	Human Medicine
Open University (UK) at Unit of Immunotherapy of Human Tumors, INT	PhD	01/2007	Life Sciences, Thesis title: <i>"Expression of pro-apoptotic molecules by tumour cells and their role in tumour immune escape"</i>
Unit of Immunotherapy of Human Tumors, INT	Postdoc	2007-2010	Tumor immunology
Translational Immunology Unit INT (former: Unit of Immunotherapy of Human Tumors, INT)	Team leader of the Immunomonitoring and Immune Escape Laboratory	Since 2011	Tumor immunology, myeloid-derived suppressor cells, immune suppression and escape and extracellular vesicles (EVs), immune monitoring, biomarkers, immunotherapy resistance mechanisms

Personal Statement

Veronica Huber has a longstanding expertise in tumor immunology and a specific interest in translational research based on clinical need. The Translational Immunology Unit (former Unit of Immunotherapy of Human Tumors) led by Licia Rivoltini, where she works since 2001 after completing her medical studies in Germany, combines clinical experience with established skills in immunomonitoring and genetics, focusing on immune suppression related pathways and immune players, such as myeloid-derived suppressor cells (MDSC). After joining the research group, Veronica contributed to pioneering studies on exosomes, members of the Extracellular Vesicle (EV) family, and her passion for these nanometer-sized vesicles and immune suppressive mechanisms led her to enroll into a PhD project in EV-centered tumor immune escape mechanisms. As postdoc and later on as experienced scientist she continued focusing her research on EV-associated suppressive pathways in cancer patients and in these last years on immune cell monitoring and the resistance mechanisms to current cancer treatments, such as immunotherapies with immune checkpoint inhibitors and targeted therapies. Veronica has received several national and international grants.

Awards & Activities

2004 AACR-Pezcoller Foundation Scholar-in-Training Award, Pezcoller Foundation

1999 Schmiedeberg-Award, German Society Experimental, Clinical Pharmacology & Toxicology, Mainz, Germany

Reviewer for Journals: International Journal of Molecular Sciences; Cell Death and Disease; European Journal of Cancer; Cancer Immunology, Immunotherapy; Clinical Cancer Research; European Journal of Pharmaceutical Sciences; Integrative Cancer Therapies; Journal of Extracellular Vesicles; Theranostics; Cell Biology and Toxicology; Clinical Science; Ecancermedicalscience; International Journal of Pharmaceutics; Journal of Investigative Dermatology; Medicinal Research Reviews; PLOS One; Scientific Reports; Tumor Biology; Future Science; Advances in Clinical Chemistry; Journal of Clinical Medicine; Journal of Extracellular Vesicles; Clinical and Translational Medicine; FEBSOpen; J Immunother of Cancer.

Reviewer for Scientific Foundations: Agency for Health Quality and Assessment of Catalonia (AQuAS), Spain; Israel Science Foundation.

Member of Scientific Societies: American Association for Cancer Research (AACR) 2004-2008; International Society for Proton Dynamics in Cancer (ISPDC) 2010-2013; Società Italiana di Cancerologia (SIC) 2014; International Society for Extracellular Vesicles (ISEV) 2012-2012, 2016, 2018-2019, 2020-2023

Book chapters: Huber V, Filipazzi P, Rivoltini L. Tumor Exosomes and Their Impact on Immunity and Cancer progression. Cancer Immunotherapy (Second Edition) – Immune Suppression and Tumor Growth. (Eds.) George C. Prendergast and Elizabeth M. Jaffee, 2013, Elsevier.

Valenti R, Huber V, Filipazzi P, Iero M, Parmiani G, Rivoltini L. Tumor-Derived Exosomes as Dendritic Cell Modulators. Dendritic Cells in Cancer. (Eds.) Shurin MR; Salter RD, 2009, Springer

Contributions to Science

2001–2004: PhD student 2002-2006, Unit of Immunotherapy of Human Tumors, Fondazione IRCCS Istituto Nazionale Tumori, Milan. Topics: Phenotypic and functional analysis of FasL and TRAIL in colorectal carcinoma cells and release via microvesicles/exosomes. Identification and quantification of colorectal cancer (CRC) microvesicles in plasma of CRC patients by an ad hoc set up modified CEA-RIA. Pioneering studies on tumor exosomes in tumor immune escape mechanisms: FasL expression by melanoma cells and extracellular release of FasL via microvesicles. Identification of such vesicles as exosomes and evaluation of their pro-apoptotic activity on T cells.

2005–2010: Postdoc researcher since 2007, Unit of Immunotherapy of Human Tumors, Fondazione IRCCS Istituto Nazionale Tumori, Milan. Topics: Activity of breast cancer-derived exosomes in countering efficacy of Trastuzumab & Lapatinib therapy. Role of granulocytes in maintenance of chronic inflammation and immune suppression in melanoma, prostate cancer and NHL patients. Analysis of immune suppressive activity of tumor-derived exosomes (melanoma and colorectal cancer) on monocyte differentiation and generation of monocytic myeloid-derived suppressor cells (MDSC). Pro-apoptotic effects of colorectal cancer patients'-derived exosomes on antigen specific T cells.

2011-today: Team leader of the Immunomonitoring and Immune Escape Laboratory, Translational Immunology Unit (former: Unit of Immunotherapy of Human Tumors), Fondazione IRCCS Istituto Nazionale dei Tumori, Milan. Topics: Granulocytic & monocytic MDSCs in cancer patients. Role of tumor extracellular vesicles (EVs) in the generation of MDSCs and involved microRNAs. TRAIL-armed exosomes as novel anti-tumor therapy. Extracellular vesicles in sera/plasma of cancer patients as novel biomarkers of cancer. Study of pH regulators in hepatocellular cancer as potential targets for therapy. Identification of immune-related response/resistance mechanisms and biomarkers detectable in the liquid biopsy of cancer patients undergoing immune- and other cancer therapies in different clinical settings.