ANNA TOSI - CURRICULUM VITAE

Personal data	Name: Anna Tosi Date and place of birth: 14/12/1989, Verona (VR), Italy Citizenship: Italian Work address: Istituto Oncologico Veneto, Via Gattamelata, 64, 35128 Padova (Italy) Phone number: +39 049 8215847 E-mail: tosi-anna@libero.it
Education	2014 – 2016: European PhD in Oncology and Surgical Oncology, University of Padova, Italy. 2014: Qualified as Professional Biologist, University of Parma, Italy. 2013: Master Degree in Medical Biotechnologies, University of Padova, Italy. 2011: Bachelor degree in Biotechnologies, University of Verona, Italy.
Research experience	**2022-Present:** Post-Doc fellow at Veneto Institute of Oncology IOV-IRCCS: identification of potential prognostic and predictive biomarkers in tumor microenvironment of patients with different tumor histotypes; characterization of therapy-induced modifications in the tumor microenvironment of patients enrolled in different clinical trials study; development of integrated models for patient risk stratification. **2017–2022**: Post-Doc position at the Department of Surgery, Oncology and Gastroenterology, Immunology and Oncology Section, University of Padova, Italy: Optimization of 9-colors fluorescence multiplex immunohistochemistry staining of FFPE cancer tissue sections; Digital and quantitative multispectral pathology; gene expression profiling of immune and cancer cells present in the tumor microenvironment. **2014–2016**: PhD student, Oncology and Surgical Oncology program, Padova, Italy: *In Vitro* generation of HLA-A*0201-restricted DEPDC1-Specific Human Cytotoxic T Lymphocytes; Development of breast cancer models *in vivo* using bioluminescence system. **2016**: Visiting PhD Student, Institut National de la Santé et de la Recherche Médicale, Laboratory of Integrative Cancer Immunology, Cordeliers Research Center, Paris, France: Multiplex immunohistochemistry of FFPE colorectal cancer tissue sections. **2013-2014**: Internship at Department of Surgery, Oncology and Gastroenterology, Oncology and Immunology Division, University of Padova, Italy: Development of a new immunodeficient mouse model for cancer research. **2010-2011**: Internship at Department of Biotechnology, Molecular biology laboratory, University of Verona, Italy: Acquisition of molecular biology techniques in a project regarding the genetic transformation of *N. Tabacum* and the response to cadmium treatment.
Technical skills and competences	Multiplex immunofluorescence staining on FFPE tissue slides and analysis using Mantra workstation, inForm Tissue Finder image analysis software, Spatial analyses using phenoptrReports (R studio); RNA extraction from FFPE tumor tissue samples, quantification of total RNA (Nanodrop, Qubit), analysis of RNA quality and integrity (Bioanalyzer), nCounter gene expression analisys (Nanostring); Cell culture, Extraction of PBMC from human blood after Ficoll density gradient, Generation, expansion and *in vitro* culture of cytotoxic T lymphocytes from human blood, Generation of dendritic cells from human blood and mouse bone marrow, Cytotoxic assay (^{51}Cr), Intracellular interferon gamma staining, Immunomagnetic sorting, Cell staining and multiparametric Flow Cytometry analysis (Cell quest and Flow Jo); Cell infection by retrovirus and lentivirus, Transfection of bacteria and eukaryotic cells with plasmidic DNA, DNA amplification through PCR, DNA digestion through restriction endonucleases and agarose gel electrophoresis; ELISA, Cell proteins extraction, Western Blot; Manipulation of mice in SPF animal facility, Tumor models, *In vivo* imaging using IVIS Lumina II Imaging System (Caliper Life Sciences).
Awards	**2022:** NIBIT Science Award for the abstract "Gene expression profiling (GEP) and tumor immune microenvironment analysis of extensive small-cell lung cancer (eSCLC) patients receiving first-line

	platinum-etoposide plus atezolizumab (PEA)". **2022:** Poster Presentation Award at Spatial Biology Congress - The Next Frontier for the abstract "The immune landscape of HPV-positive and HPV-negative oropharyngeal squamous cell carcinoma: an in depth immunoprofiling and spatial analysis unveils a rationale to target treatment-naïve tumors with immune checkpoint inhibitors". **2022**: Selection of a figure published in the article by Dieci et al. (doi: 10.1158/1078-0432.CCR-21-2260) as cover of Clinical Cancer Research Journal Volume 28, Issue 2. **2016:** Travel Grant from "14th CIMT Annual Meeting", Mainz, Germany. **2016**: Award travel grant from Boehringer Ingelheim Fonds, Stiftung für medizinische Grundlagenforschung.
Publications	- Massa D, **Tosi A**, Rosato A, Guarnieri V, Dieci MV. "Multiplexed In Situ Spatial Protein Profiling in the Pursuit of Precision Immuno-Oncology for Patients with Breast Cancer". Cancers 2022, 14, 4885. https://doi.org/10.3390/cancers14194885 - **Tosi A**, Parisatto B, Menegaldo A, Spinato G, Guido M, Del Mistro A, Bussani R, Zanconati F, Tofanelli M, Tirelli G, Boscolo-Rizzo P, Rosato A. "The immune microenvironment of HPV-positive and HPV-negative oropharyngeal squamous cell carcinoma: a multiparametric quantitative and spatial analysis unveils a rationale to target treatment-naïve tumors with immune checkpoint inhibitors", J Exp Clin Cancer Res. 2022 Sep 20;41(1):279. doi: 10.1186/s13046-022-02481-4 - Griguolo G*, **Tosi A***, Guarneri V, Dieci MV, Fineberg S, Rossi V, Ventura V, Bauchet L, Jacob J, Rigau V, Jacot W, Rosato A, Darlix A, Conte PF. "Immune microenvironment profiling of breast cancer brain metastases using multiplex immunofluorescence", *co-first authors. Neuro Oncol. 2022 May 24;noac136. doi: 10.1093/neuonc/noac136 - Romani P, Nirchio N, Arboit M, Barbieri V, **Tosi A**, Michielin F, Shibuya S, Benoist T, Wu D, Hindmarch C, Giomo M, Urciuolo A, Giamogante F, Roveri A, Chakravarty P, Montagner M, Calì T, Elvassore N, Archer S, De Coppi P, Rosato A, Martello G, Dupont S. "Mitochondrial fission links ECM mechanotransduction to metabolic redox homeostasis and metastatic chemotherapy resistance". Nature Cell Biology, 2022 Feb;24(2):168-180. doi: 10.1038/s41556-022-00843-w. - **Tosi, A**.; Nardinocchi, L.; Carbone, M.L.; Capriotti, L.; Pagani, E.; Mastroeni, S.; Fortes, C.; Scopelliti, F.; Cattani, C.; Passarelli, F.; et al. Reduced Interleukin-17-Expressing Cells in Cutaneous Melanoma. Biomedicines 2021, 9(12), 1930. https://doi.org/10.3390/biomedicines9121930 - Dieci M.V*, Guarneri V*, **Tosi A**, Bisagni G, Musolino A, Spazzapan S, Moretti G, Vernaci G.M, Giarratano T, Magni G, Lo Mele M, De Salvo G.L, Rosato A, Conte P. "Neoadjuvant chemotherapy and immunotherapy in Luminal B breast cancer: results of the phase II GIADA trial", *co-first authors. Clin Cancer Res 2022;28:308–17. DOI: 10.1158/1078-0432.CCR-21-2260 - **Tosi A**, Cappellesso R, Dei Tos A.P, Rossi V, Aliberti C, Pigozzo J, Fabozzi J, Sbaraglia M, Blandamura S, Chiarion-Sileni V, and Rosato A. "The immune cell landscape of metastatic uveal melanoma correlates with overall survival", Experimental & Clinical Cancer Research 2021 May 4;40(1):154. doi: 10.1186/s13046-021-01947-1. - Dalla Pietà A, Carpanese D, Grigoletto A, **Tosi A**, Dalla Santa S, Pedersen G.K, Christensen D, Meléndez-Alafort L, Barbieri V, De Benedictis P, Pasut G, Montagner I.M., Rosato A. "Hyaluronan is a natural and effective immunological adjuvant for protein-based vaccines", Cellular & Molecular Immunology 2021 May;18(5):1197-1210. doi: 10.1038/s41423-021-00667-y. - Narducci MG*, **Tosi A***, Frezzolini A, Scala E, Passarelli F, Bonmassar L, Monopoli A, Accetturi MP, Cantonetti M, Antonini Cappellini GC, De Galitiis F, Rosato A, Picozza M, Russo G and D'Atri S. "Reduction of T Lymphoma Cells and

	Immunological Invigoration in a Patient Concurrently Affected by Melanoma and Sezary Syndrome Treated With Nivolumab", 2020, Front. Immunol. 2020 Sep 25;11:579894. doi: 10.3389/fimmu.2020.579894. *co-first authors. - Sommaggio R, Cappuzzello E, Dalla Pietà A, **Tosi A**, Palmerini P, Carpanese D, Nicolè L, Rosato A. "Adoptive Cell Therapy of Triple Negative Breast Cancer with Redirected Cytokine-Induced Killer Cells", OncoImmunology, 2020. https://doi.org/10.1080/2162402X.2020.1777046 - **Tosi A**, Dalla Santa S, Cappuzzello E, Marotta C, Walerich D, Del Sal G, Zanovello P, Sommaggio R, Rosato A. "Identification of a HLA-A*0201-restricted immunogenic epitope from the universal tumor antigen DEPDC1", OncoImmunology, 2017. http://dx.doi.org/10.1080/2162402X.2017.1313371 - Cappuzzello E, **Tosi A**, Zanovello P, Sommaggio R, Rosato A. "Retargeting cytokine-induced killer cell activity by CD16 engagement with clinical-grade antibodies", OncoImmunology, 2016. http://dx.doi.org/10.1080/2162402X.2016.1199311
Reviewer for international journals	**2022:** Journal of Experimental & Clinical Cancer Research