

PERSONAL DATA: Name: Alessandro Giovinazzo **Citizenship:** Italian; **Work address:** Via Ercole Ramarini, 32, 00015 Monterotondo (RM), Italy.

EDUCATION: 28/05/2020: PhD in Microbiology, Immunology, Infectious Diseases, Transplants, and Related Diseases, excellent quality with honors, School of Medicine and Surgery, Department of Experimental Medicine, University of Rome Tor Vergata, Italy. 24/05/2016: Master's Degree in Industrial Biotechnology, 109/110, School of Mathematics, Physics and Natural Sciences, University of Rome Tor Vergata, Italy.

RESEARCH EXPERIENCE: November 2016 – May 2020: Doctoral Fellowship, Dpt. of Experimental Medicine, University of Rome Tor Vergata, Italy. Studying the involvement of human endogenous retroviruses (HERVs) in cancer development, and their use as biomarkers and potential therapeutic targets for the treatment. Evaluating the effects of COVID-19 infection on the immune system, on the production of pro-inflammatory cytokines in collaboration with the Dpt. of Infectious Diseases at the Policlinico of Tor Vergata. Analyzing the seroprevalence of hepatitis E virus among immunocompromised HIV patients, in collaboration with the virology group of the Dpt. of Experimental Medicine. Developing label-free system for the recognition of vital, necrotic, and apoptotic cells, in collaboration with the Dpt. of Civil Engineering and Computer Science. December 2014 – October 2016 Undergraduate student at School of Medicine and Surgery, Dpt. of Experimental Medicine, studying the pro-tumor activity of the lectin galectin-1; analyzing the antitumor activity of thymosin-alpha 1 protein. March 2014 – May 2016 Undergraduate student at the Fruit Tree Research Centre, Council for Research and Experimentation in Agriculture, Ciampino (RM), Italy, studying a biotechnology system to increase the production of secondary metabolites.

TECHNICAL SKILLS AND COMPETENCES: Peripheral blood mononuclear cells isolation both from buffy coat and whole blood; flow cytometry analysis, antibodies staining for intra- and extra-cellular analysis on whole blood or cells, apoptosis analysis, evaluation and analysis of cellular populations and subpopulations; nucleic acids extraction from cell pellet, whole blood or tissue, nucleic acids quantification by NanoDrop system; ELISA; gene expression analysis by RT Real-Time PCR; analysis of cellular viability, angiogenesis, migration, invasion, toxicity, sphere-formation; hemagglutination; cell line management, culture maintenance and cryopreservation; micropropagation, production and management of plants *in vitro*; elicitation; alcoholic extraction of secondary metabolites; lyophilization; writing and reviewing of papers for scientific journals.

COMMUNICATION IN NATIONAL/INTERNATIONAL CONGRESSES: 1) Preclinical studies on the role of HERVs as potential markers of disease and prognostic of CLL. Petrone V., **Giovinazzo A.**, Balestrieri E. Società Italiana di Microbiologia (SIM) (2019). 2) Microenvironmental changes induce HERVs and embryonic genes expression in cancer cells. **Giovinazzo A.** International Scientific Conference for the PhD course, Rome (2019). 3) Cancer cells expressing HERVs and embryonic factors as target of antiretroviral drugs in therapy. **Giovinazzo A.**, Cipriani C. SIM (2019). 4) HEV seroprevalence in HIV-1 infected patients is associated with other viral hepatitis infection. Yagai B., Piermatteo L., **Giovinazzo A.** SIM (2019). 5) Low number of HEV cases in HIV-1 infected patients in a Roman Hospital. Yagai B., Cerva C., Piermatteo L., **Giovinazzo A.** Società Italiana di Malattie Infettive e Tropicali (2019). 6) Cancer cells with stemness features and expressing HERVs are affected by antiretroviral treatments. **Giovinazzo A.**, Balestrieri E., Petrone V. Cancer Stem Cells, Seefeld (Austria) (2018). 7) Response to antiretroviral treatment of tumor cells expressing human endogenous retroviruses. **Giovinazzo A.**, Balestrieri E., Cipriani C., Petrone V., Argaw-Denboba A. SIM (2018). 8) HERVs are responsive to microenvironmental changes and are associated to phenotype switching. Matteucci C., **Giovinazzo A.**, Gambacurta A., Argaw-Denboba A. Cell Death and Differentiation Journal: 9th Conference on Genes vs Environment in Cancer (2018). 9) Study on the involvement of HERVs in the stemness features of different type of tumors. **Giovinazzo A.**, Balestrieri E., Argaw-Denboba A., Gambacurta A. SIM (2017). 10) The parallel modulation of the inflammatory profile and ERV expression in ASD model. Balestrieri E., **Giovinazzo A.** SIM (2017). 12) Transgenerational modifications of HERVs expression in mouse model of autism induced by VPA. Cipriani C., Matteucci C., Ricceri L., **Giovinazzo A.** SIV (2017). 13) Contribution of the HERV-K in the expansion and maintenance of putative cancer stem cells. Argaw-Denboba A., Balestrieri E., Bucci I., **Giovinazzo A.** SIM (2016).

PUBBLICATIONS: 1) Thymosin alpha 1 mitigates cytokine storm in blood cells from COVID-19 patients. Matteucci C., Minutolo A., Balestrieri E., Petrone V., Fanelli M., Malagnino V., Ianetta M., **Giovinazzo A.**, Barreca F., Di Cesare S., De Marco P., Miele M.T., Toschi N., Mastino A., Sinibaldi Vallebbona P., Bernardini S., Rogliani P., Sarmati L., Andreoni M., Grelli S., Garaci E. (2020). 2) High throughput label free characterization of viable, necrotic and apoptotic human lymphoma cells. De Ninno A., Reale R., **Giovinazzo A.**, Bertani F.R., Businaro L., Bisegna P. Biosensors & Bioelectronics (2020). 3) The Concomitant Expression of HERVs and Embryonic Genes in Cancer Cells under TME changes. **Giovinazzo A.**, Balestrieri E., Petrone V., Argaw-Denboba A., Cipriani C. Cancer Microenvironment (2019). 4) Deciphering cellular biological processes to clinical application: a new perspective for T alpha 1. Matteucci C., Argaw-Denboba A., **Giovinazzo A.**, Garaci E., Tomino C. Expert Opinion on Biological Therapy (2018).