

Curriculum Vitae

Dr. Alessia Corrado

WORK EXPERIENCE

PhD student (Oct 2020- present) *Institute of Biostructures and Bioimaging (IBB) – CNR*, Molecular Biotechnology Centre, Turin, Italy

Research Fellow (Nov 2019- present) *Institute of Biostructures and Bioimaging (IBB) – CNR*, Molecular Biotechnology Centre, Turin, Italy **Project:** “Characterization of tumor microenvironment with Magnetic Resonance Imaging (MRI) techniques”. (AIRC MFAG #20153)

Student internship (Oct 2019- Nov 2019) *Institute of Biostructures and Bioimaging (IBB) – CNR*, Molecular Biotechnology Centre, Turin, Italy

Master Thesis Student (Feb 2017- Mar 2019) at *Candiolo Institute IRCCS*, Candiolo (TO), Italy **Project:** “NEDD8 and EGFR are independent therapeutic targets in colorectal cancer”.

EDUCATION

Master Degree in Medical Biotechnologies (Oct 2016- March 2019) at University of Turin - Molecular Biotechnology Center, Turin **Project:** NEDD8 and EGFR are independent therapeutic targets in colorectal cancer

Bachelor Degree in Biological Science (Oct 2013- Oct 2016) at University of Turin **Project:** De-regulation of MHC-I molecules and surface expression of HLA-E as a tumor mechanism of immune-system elusion

PUBLICATIONS

- Consolino, L., Anemone, A., Capozza, M., Carella, A., Irrera, P., **Corrado, A.**, Dhakan, C., Bracesco, M., & Longo, D. L. (2020). “Non-invasive Investigation of Tumor Metabolism and Acidosis by MRI-CEST Imaging”. *Frontiers in oncology*, 10, 161. <https://doi.org/10.3389/fonc.2020.00161>
- Invrea F, Punzi S, Petti C, Minelli R, Peoples MD, Bristow CA, Vurchio V, **Corrado A**, Bragoni A, Marchiò C, Bertotti A, Trusolino L, Bardelli A, Isella C, Carugo A, Draetta GF, Medico E. Synthetic Lethality Screening Highlights Colorectal Cancer Vulnerability to Concomitant Blockade of NEDD8 and EGFR Pathways. *Cancers (Basel)*. 2021 Jul 28;13(15):3805. doi: 10.3390/cancers13153805..
- Longo, DL, Carella, A, Corrado, A, Pirotta, E, Mohanta, Z, Singh, A, Stabinska, J, Liu, G, & McMahon, M. T. A snapshot of the vast array of diamagnetic CEST MRI contrast agents. *NMR in Biomedicine*. 2022; 4715. doi:10.1002/nbm.4715
- Irrera P, Consolino L, Roberto M, Capozza M, Dhakan C, Carella A, Corrado A, Villano D, Anemone A, Navarro-Tableros V, Bracesco M, Dastrù W, Aime S, Longo DL. In Vivo MRI-CEST Tumor pH Imaging Detects Resistance to Proton Pump Inhibitors in Human Prostate Cancer Murine Models. *Cancers (Basel)*. 2022 Oct 7;14(19):4916. doi: 10.3390/cancers14194916.

POSTERS AND ORAL PRESENTATION

- A. Carella, **A. Corrado**, E. Botto, E. Pirotta, D. Villano, R. Gambino, E. Micotti, Dario L. Longo Multiparametric MRI-based approaches to characterize metabolic and invasiveness landscapes in glioblastoma models EMIM 2022 Thessaloniki, Greece 15th-18th March 2022, Oral Presentation
- **A. Corrado**, A. Anemone, A. Carella, D. Villano, E. Pirotta, W. Dastrù D. L. Longo. Assessing the capability of CEST pH-imaging, DCE-MRI and OE-MRI techniques to distinguish between metastatic and non-metastatic breast cancers. EMIM 2022 Congress, Thessaloniki, Greece, 15th-18th March 2022, Oral presentation.
- **A. Corrado**, A. Anemone, A. Carella, D. Villano, E. Pirotta, W. Dastrù D. L. Longo. A non-invasive multiparametric MRI characterization of tumor microenvironment (acidosis, vascularization and hypoxia) to distinguish between metastatic and non-metastatic murine breast cancer models. ISCaM 2022 Congress, Turin, Italy, 29th June-2nd July 2022, Oral presentation
- A. Carella, **A. Corrado**, E. Botto, E. Pirotta, D. Villano, E. Micotti and Dario L. Longo In vivo tumor pH imaging to evaluate metabolic phenotype in two glioblastoma murine models. ISCaM 2022 Congress, Turin, Italy, 29th June-2nd July 2022, Poster presentation
- A. Anemone, E. Pirotta, **A. Corrado**, D. Ambroseccchia, G. Caranta, W. Dastrù, A. Carella, D. L. Longo. Assessing *in vivo* the spatial and temporal evolution of tumor acidosis in a transgenic breast tumor murine model. ISCaM 2022 Congress, Turin, Italy, 29th June-2nd July 2022, Poster presentation

TECHNICAL LABORATORY SKILLS

Molecular Biology: Immunohistochemistry, Immunofluorescence, optical microscope analysis, fluorescence microscope analysis. Practice with laboratory animals

Cell Culture: human cancer cell culture, proliferation assays, vitality, cell counts, drug assays

Experience in main **Magnetic Resonance Imaging (MRI) techniques** as Chemical Exchange Saturation Transfer (CEST) -MRI, Dynamic Contrast-Enhanced (DCE) –MRI e Oxygen Enhanced (OE) –MRI.