

BIOGRAPHICAL SKETCH

NAME: ARMANDO GIUSEPPE LICATA

POSITION TITLE: Staff Scientist

EDUCATION/TRAINING

INSTITUTION AND LOCATION	DEGREE	Completion Date	FIELD OF STUDY
The Open University (UK)	PHD	ongoing	Life Sciences
Università degli Studi Di Milano	MSc	12/2019	Food and Science Technology
Università degli Studi Di Milano	BS	12/2017	Food and Science Technology

A. Personal Statement

As a molecular and computational biologist with a strong foundation in food microbiology and extensive experience in genomics and bioinformatics, I am a Staff Scientist at Fondazione IRCCS Istituto Nazionale dei Tumori. My current research is centered on the role of the microbiota in carcinogenesis and tumor progression, with a particular focus on squamous cell carcinoma. I possess a broad skillset in next-generation sequencing (NGS) technologies, including library preparation and data analysis for various 'omics' applications. My expertise extends to developing bioinformatic tools for microbial read extraction from RNA-seq data.

I have a proven track record of mentoring students and fellow scientists in NGS protocols and data analysis. Through collaborations with diverse research groups, I have contributed to data analysis efforts and co-authored several research articles. My experience in both wet lab techniques and computational biology allows me to bridge the gap between data generation and biological interpretation. I am confident that my expertise, collaborative spirit, and dedication to research make me a valuable contributor to any scientific endeavor.

Ongoing and recently completed projects that I would like to highlight include:

- Principal Investigator: "Interconnections Between Aging, Epigenetics, and Gut Microbiota: Implications for Cancer Therapy and Outcome Prediction (AEGIs)". Funded by the 2024 Institutional research grant of the Fondazione IRCCS Istituto Nazionale dei Tumori di Milano. (Funding: 55.000 €).
- Co-Investigator: "The ecology of HPV-related cancers: bridging biology between head and neck cancer and cervical cancer to discover mechanisms of response in primarily chemo or chemoradiotherapy treated tumors". Funded by the 2023 Institutional research grant of the Fondazione IRCCS Istituto Nazionale dei Tumori di Milano. (Funding: 50.000 €).

B. Positions, Scientific Appointments, and Honors

Positions and Scientific Appointments

- 2023–Present: Staff Scientist (Research department) | Integrated biology of rare tumors unit, Fondazione IRCCS Istituto Nazionale dei Tumori, Milan, Italy
- Aug 2023–Sep 2023: Fellow Researcher (school of infection & immunity, computational biology), University of Glasgow, Glasgow, UK

- Mar 2020–Feb 2021: Fellow Researcher (Molecular Mechanisms, Metagenomics) | (Research department) Integrated biology of rare tumors unit, Fondazione IRCCS Istituto Nazionale dei Tumori, Milan, Italy
- Mar 2020–Feb 2021: Regulatory and Quality Assurance Assistant, Truffini & Reggè Pharmaceuticals, Milan, Italy

Honors

2025

Award for Best talk at the PhD students meeting, Mario Negri Milan

Citations:

Iacovacci J, **Licata A.G.**, Alfieri S., Calareso G. Cavalieri S. Cavallo A., Franceschini M., Licitra L., Orlandi E., Valdagni R., Zoppi M., Iacovelli NA, De Cecco L., Rancati T., The baseline salivary microbiota of head and neck cancer patients captures hypoxia and immune characteristics of the tumour microenvironment and predicts prognosis. (Submitted, Co-first author)

Gurizzan C., **Licata A.G.**, Luigi Lorini, Piazza C., Mattavelli D., Paderno A., Battocchio S., Ardighieri L., Bozzola A., Resteghini C., Magri C., Romani C., Lenoci D., Lucchetta M., Serafini M. S., De Cecco L., Bossi P. The Interplay of Hypoxia, Inflammation, and Microbiota as Indicators of Malignant Transformation in Oral Potentially Malignant Disorders. *Oral oncology*, (2025)
<https://doi.org/10.1016/j.oraloncology.2025.107583>, (Co-first author)

Licata A.G., Zoppi M, Dossena C., Rossignoli F., Rizzo D., Marra M., Gargari G., Mantegazza G., Guglielmetti S., Bergamaschi L., Nigro O., Chiaravalli S., Massimino M., De Cecco L. 2025. QIIME2 enhances multi-amplicon sequencing data analysis: a standardized and validated open-source pipeline for comprehensive 16S rRNA gene profiling. *Microbiol Spectr* 13:e01673-25. <https://doi.org/10.1128/spectrum.01673-25>

Licata A.G., Ciniselli CM, Sorrentino L, Arianna Micali, Maria Grazia Daidone, Marcello Guaglio, Manuela Gariboldi, Paolo Verderio, Loris De Cecco, Maurizio Cosimelli, Peritoneal fluid COVID-19 testing in patients with a negative nasopharyngeal swab: prospective study, *BJS*, Volume 110, Issue 4, April 2023, Pages 504–505, <https://doi.org/10.1093/bjs/znad019>