

Brief CV of Nicoletta Potenza



Education

2000: PhD in Molecular Biology and Biochemistry, University *Federico II* of Naples (Italy).

1996: *Dottore in Scienze Biologiche* (equivalent to a Master of Science degree in Biology), same university as above.

Main appointments

2019 – present: Associate Professor of Molecular Biology

2017 Associate Professor qualification in Molecular Biology; General Biochemistry; Genetics; Applied Biology

2008 - 2018: *Ricercatore Universitario* (equivalent to assistant professor) of Molecular Biology, Department of Environmental, Biological and Pharmaceutical Sciences and Technologies, University of Campania “L. Vanvitelli”

2003 - present: Teaching activity at the Second University of Naples, now University of Campania “L. Vanvitelli”. Currently Chair of Advanced Molecular Biology (Master degree in Biology) and Chair of Laboratory of Molecular Biology Course (Master degree in Molecular Biotechnology).

2003-2008: post-doctoral fellow at the Department of Life Sciences of the Second University of Naples, supported by a fellowship in Molecular Biology (*Assegno di Ricerca*) from the Second University of Naples and by a fellowship from the national project “Genomics for applied research”

2000-2003: post-doctoral fellow at the Stazione Zoologica Anton Dohrn of Naples supported by a three year fellowship from Fondazione Italiana per la Ricerca sul Cancro (FIRC).

2000, summer months: *Visiting Scientist* in the laboratory of prof. D. Goodenough, Department of Cell Biology, Harvard Medical School, Boston, MA, USA

Main Areas of Expertise

In the first years of scientific research, dr. Potenza carried out projects aimed at highlighting some mechanisms of gene regulation using first invertebrates as an experimental model and later mice. In particular, her studies aimed at understanding the functional correlations and differences among ras oncogenes by in vitro (RNAi on cell culture) and in vivo studies (production of knock-in mouse models). The knock-in mouse models revealed that K-ras and H-ras had overlapping function during development, but K-ras had an unexpected unique role in cardiovascular homeostasis.

Successively, her research was focused on non-coding RNA. In particular, she assigned to a human microRNA a novel function in counteracting HBV replication. Dr. Potenza currently is working on three projects: 1) Role of miRNAs in HBV infection progressing to hepatocarcinoma; 2) Profiling of microRNAs for diagnostic and/or prognostic purposes; 3) Unveiling the antitumor activity of phytochemical compounds in collaboration with prof. Antonio Fiorentino group.

In 2007 she was awarded the “De Conciliis Prize” for Studies in Molecular Biology from the Academy of Sciences of Naples.

Prof. Potenza has authored more than 40 articles in international peer-reviewed journals (758 total citations in Scopus database) and one international patent; she attended several national and international meetings, also as invited speaker.

She is member of the Editorial board of the international journals “RNA&disease” and “RNA” (Specialty Section of the journals "Frontiers in Molecular Biosciences" and "Frontiers in Genetics"). She also serves as referee for several international peer-reviewed journals and for the evaluation of national and international projects.