

CURRENT POSITION

- Full Professor in Applied Biology at the Department of Biology, University of Naples Federico II, Napoli.
- Research Associate at IEOS of CNR, Napoli.
- Group leader of the "Stem Cell Biology laboratory at Biogem Research Institute, Ariano Irpino
- Scientific Tutor of Preclinical and Translational Research Laboratory of the CROB Institute, Potenza

Training and Education

- International Master II Level in Biojurisdiction
Biojuridics and Biolaw: Animal experimentation
LUMSA University of Rome, Rome, Italy
- PhD in Applied Biology XVII cycle
University Federico II of Naples, Naples, Italy
- Master degree in Scienze Biologiche
University Federico II of Naples, Naples, Italy

Teaching Activity

Holder of the following teachings in BIO/13 al Dipartimento di Biologia, Università di Napoli "Federico II", Napoli, Italia

- INTRODUZIONE ALLE BIOTECNOLOGIE E BIOLOGIA
- METODOLOGIE DI DIFFERENZIAMENTO CELLULARE
- CELLULE STAMINALI NELLO STUDIO DEL SISTEMA NERVOSA
- BIOLOGIA APPLICATA ALLA RIPRODUZIONE E ALLO SVILUPPO

Scientific Activity

During his PhD in Applied Biology, he carried out his scientific activity at the International Institute of Genetics and Biophysics of C.N.R. in Naples, in the group directed by Dr. Michele D'Urso. Subsequently, he continued his studies as a Visiting Fellow at the National Institute on Aging (NIA, National Institutes on Health) in Baltimore (USA) directed by Dr. Minoru Ko. The scientific work carried out in these years has led to the identification of genes related to germ cell aging and chromosomal stability of murine embryonic stem cells.

The research activity of the last years aims at understanding the molecular mechanisms underlying the differentiation and de-differentiation of stem cells. In particular, the research activity has been focused on the molecular characterization of the transition of embryonic stem cells into endodermal progenitor cells. These studies allowed the identification of novel markers of endodermal tissues ontogeny (mainly pancreas and stomach) both in vitro and in vivo through generation of genetically modified mouse models. Recently, the research group coordinated by Geppino Falco, has developed ex vivo three-dimensional differentiation models of gastric organoids to improve and deepen the understanding of the cellular and molecular processes underlying endodermal differentiation. This study has allowed establishing important scientific collaborations also in the preclinical field. The research group is involved in highly productive collaborations with

developmental research, bioinformaticians, and cancer research specialists and has been involved in project aimed to understand common features between stem cell, and tumor cells. He received several International and Nation Merit Award in the field of cell biology.

Scientific literature

He is a co-author of more than 64 articles published in peer-reviewed journals (H-index 25 and has over 2700 citations).

- <https://orcid.org/0000-0001-6193-7233>

Participation In The Creation Of The Enterprise.

- CaWur is a company developed in the biotechnology field that has as its mission the optimization of ex vivo organoid platform to enhance personalized drug treatments.
<http://www.CaWur.it>
- US Patent NIH (DHHS) Ref. No. E-088-2007/0-EIR-00 The patent (<http://www.freepatentsonline.com/20120129161.pdf>) covers, in particular, methods of identification of specific subpopulations of stem cells and methods of stabilization of telomeres of embryonic stem cells.

Main Awarded grant

- 2008 Scientific coordinator

Project "Identification of pancreatic progenitor cells".

Marie Curie Grant (PIRG-GA-2008, reference number 239519).

- 2011 Unit Scientific coordinator

Project: "Role of free D-Aspartate in neuronal processes and NMDA receptor-dependent behaviors relevant to schizophrenia".

FIRB/MIUR (reference code RBFR10XCD3_002).

- 2015 Scientific coordinator

Project: "Pancreatic Progenitor Cells: innovative tool to dissect onset of pathological pancreatic cellular remodeling".

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University of Naples, Federico II; Intesa San Paolo.

- 2018 Unit Scientific coordinator

Project: "Development of Innovative Therapeutic Approaches for treatment-resistant neoplastic diseases".

POR FESR 2014-2020 SATIN.

- 2022 Unit Scientific coordinator

Project: Strengthening of Biobanking and Biomolecular Resources Research Infrastructure of Italy (BBMRI).

PNRR, Missione 4 Progetto IR0000031