



EMINENT SCIENTIST AND OUTSTANDING SCHOLAR OF THE YEAR 2020 EUROPE



Dr. Immacolata Andolfo

Dr. Immacolata Andolfo, PhD, a renowned scientist and outstanding scholar – is currently the principal investigator of a funded European project of the European Hematology Association at University of Naples “Federico II” and analytic responsible of molecular diagnosis within the medical genetics’ unit of childhood diseases, headed by Prof. Iolascon, at CEINGE Biotechnologie Avanzate Institute in Italy.

Since 2007, Dr. Andolfo’s major interest was the study of the genetic bases of both Mendelian and complex diseases. Through the program of postgraduate Residency school in Medical Genetics, she gained experience in designing and realizing research projects in the same field. She was first involved in studies related to the field of cancer genetics, particularly in the genetics of Medulloblastoma development and miRNA involved in the regulation of Notch signaling pathway. Subsequently, Dr. Andolfo dealt with the study of genetics of rare disorders, particularly hereditary anemias. In this latter field, her main interest became the study of hereditary hemolytic anemia caused by transport defects, mainly “dehydrated hereditary stomatocytosis” (DHS). Indeed,

Dr. Andolfo firstly contributed to the identification of the causative genes of these conditions in 2012-2014; subsequently becoming one of the leading scientists for the genetics and epidemiology of DHS. During her post-doctoral experience, she successfully conducted important genetic studies on molecular genetics and pathophysiology of DHS and other hereditary anemias. This called for her participation at several national and international conferences.

Since 2014, through the PhD program in Molecular Genetics and Medical Biotechnologies, Dr. Immacolata Andolfo continued to be a valuable collaborative scientist, conducting and substantially contributing to numerous studies on genetics of hereditary anemias. She gradually enlarged the collaborations with national and international groups and was invited to deliver several talks on this innovative topic (4 invited talks at international conferences, 4 invited talks at national conferences, 10 oral presentations). Indeed, in 2018, she won the “Campania Got Rarer Talent” of the Rare Diseases Association, for her study on the identification and characterization of PIEZO1 gene in DHS.

Moreover, she is currently the principal investigator of a funded European project, Junior Research Grant 2018, 3978026, of the European Hematology Association (EHA), aims to elucidate the genetic bases of DHS.

She is currently expanding her research interests in the field of iron metabolism with particular interest to the hepatic aspect and to the link with the cation plasma membrane transport and hepcidin regulation.

Dr. Andolfo also serves as an associate editor for a few peer reviewed journals such as *American Journal of Hematology and Scientific report* and reviewer for international journals such as *Blood*, *Hematology*, and *Haematologica*. She is a member of the European Society of Haematology (EHA) since 2012 and of Italian Society of Human Genetics (SIGU) since 2018.

In March 2018 Dr. Andolfo got the National Academic Habilitation as Associate Professor, sector 06/A1 Medical Genetics.

During her career, she supervised the activity of 4 undergraduate fellows, 4 PhD students and 1 technician.

Her scientific contributions are: 51 articles (total citations: 1558, h-index: 21, i10-index: 32 [Google Scholar]); h-index: 17 [Scopus], in international peer reviewed journals, 17 as first-author, 7 as corresponding author; and 7 review articles.

Dr. Immacolata Andolfo, PhD has been selected for the 'EMINENT SCIENTIST OF THE YEAR 2020' International Award of IRPC based on her unique research excellence and contribution in the field of "**Dehydrated Hereditary Stomatocytosis (DHS)**" along with her academic and professional expertise in the Genetics of Rare Disorders.