

Curriculum vitae et studiorum

Dott. ssa Anna Maria D'Erchia

Anna Maria D'Erchia is a Molecular Biology researcher at Faculty of Biotechnology, University of Bari Aldo Moro, by January 2005.

For several years, her research activity has been focused on the study of the oncosuppressor p53 gene family. In these years, the p53 gene family study has been carried out on: clinician, comparative and functional aspects. The clinical study was focused on the characterization of the p53 gene mutational pattern in primary and secondary liver tumours, and to their correlation to etiologic factors like the hepatitis virus and cirrhosis. The comparative approach has allowed to define the degree of evolution of the different members of the p53 family and to point out many conserved signals in the protein, probably involved in its functional activity. The functional studies are focused on the transactivation activity of the p53 gene family and include the search and functional characterization of new p53 family target genes in order to define the specific functions of p53, p63 and p73 in the different cellular pathway and the family target genes conserved during evolution.

More recently, her research interest has also addressed to the study of alternative splicing in humans, focused on the characterization of alternative transcripts through computational and experimental approaches. In this contest, she participate to the production of ASPicDB, a database that collects and provides public access to the results of genome-wide analysis of alternative transcripts of all human genes and she carried out studies on the *in silico* identification and experimental validation of tumor-specific splice variants. He is currently involved in research projects aimed to the transcriptome characterization in some diseases, based on sequencing through the next-generation sequencing platforms.

She is the author of 18 publications in international journals and an article in an international encyclopedia.