

Graziano Pesole is full professor of Molecular Biology in the University of Bari and Director of the Institute of Biomembranes and Bioenergetics of the National Research Council. He has since long carried out research activity in the fields of bioinformatics, comparative genomics and molecular evolution. In particular, his interests are computational approaches for the identification of regulatory elements in non-coding genome regions, alternative splicing and functional analysis of untranslated regions of eukaryotic mRNAs. Most recently his research interests addressed the analysis of high-throughput sequencing data produced by next-generation sequencing platforms, particularly those focused on the study of the transcriptome and metagenomics. He has developed several specialised database including (UTRdb/UTRsite) collecting mRNA untranslated sequences and related regulatory motifs involved in the post-transcriptional regulation of gene expression, and ASPicDB an information resource for alternative splicing analysis. He has also developed widely used analysis software and algorithms which are available through the web. Within his studies on molecular evolution, he has contributed to the development of new analysis methodologies and has carried out several studies on the evolution of mitochondrial genome at the intraspecies level, in order to clarify some aspects of the origin of modern man, and at the interspecies one to reconstruct mammal phylogeny and to study the evolutionary dynamics of the mitochondrial genome of Tunicata.

He leads an interdisciplinary research group including molecular biologists, computer scientists and mathematicians.

He coordinated research units in several research project funded by national (MIUR, CNR, Telethon, AIRC, AISM) and international (EU, NIH) agencies, and has filed an international patent for the selection of primers for RNA fingerprinting.

He is a member of the editorial Board of international journals (BMC Bioinformatics, BMC Genomics, Computational Biology and Chemistry, Briefings in Bioinformatics; Comparative and Functional Genomics; International Journal of evolutionary Biology), author of over 160 papers published in international journals (>7000 citations, ISI h-index=38) and co-author of books on Bioinformatics, Genomics and Molecular Biology published by italian (Zanichelli, Ambrosiana, Gnocchi) and international (Wiley) editors.

For further information see www.pesolelab.it.