

## CURRICULUM VITAE

**Surname:** D'ONOFRIO  
**Name:** GIUSEPPE  
**Nationality:** Italian  
**Place and date of birth:** Naples, July 20th, 1955  
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**Position:** Permanent researcher (II° Level)

### Education

1974 -1979 Undergraduate Studies at the University of Naples  
Degree (Laurea) in Biological Sciences “*cum laude*”  
Thesis: High turnover cerebral DNA.

**Foreign Languages** English and French

### Research experience

1976-1981 - Research fellow at the I.I.G.B. (International institute of Genetics and Biophysics) of Naples, under the supervision of Prof. A. Giuditta.  
Research subject: the role of nucleic acids in rat brain during deprivation of paradoxical sleep.

- Guest research associate at the Neurobiology Institute of Göteborg (Sweden), under the supervision of Prof. H. Hydén.  
Research subject: synthesis of DNA in rat brain during learning.

1983-1988 - Research fellow at the Stazione Zoologica A. Dohrn of Naples, Dept. of Biochem., under the supervision of Dr. A. D'Aniello and Prof. J.M. Denucè (Nijmegen, Holland).  
Research subjects: biological roles of D-amino acids and D-amino acid oxidase in *Octopus vulgaris* and effect of ions on the hatching of *Loligo vulgaris* embryo.

- 1989 - 1992
- Permanent researcher at the Stazione Zoologica A. Dohrn of Naples.
  - Fellowship at the Laboratory of Molecular Genetics, Institute J. Monod , University of Paris VII, Paris (France), directed by Dr. G. Bernardi.
- Research subject: Organization and Evolution of Human Genome -
- 1993
- Fellowship at the INSERM U321, Hôpital de la Pitié, Paris (France) directed by Dr. M.J. Chapman

Research subject: Cloning and Expression of the Lp(a).

- 1994-1997 - Stazione Zoologica A. Dohrn of Naples  
Dept. Marine Biology directed by Dr. D. Marino  
Research subject: evolutionary aspects of Dinoflagellates  
with particular attention to the family of Calciodinellacee.
- 1998 - 2007 - Stazione Zoologica A. Dohrn of Naples  
Laboratory of Molecular Evolution directed by Dr. G. Bernardi  
Research subject: Genome organization and evolution of deuterostome genomes.
- 2008- 2015 - Stazione Zoologica A. Dohrn of Naples  
Research subject: Testing the metabolic rate hypothesis for DNA base composition  
variability among marine organisms.

## Organizative and Scientific Coordinations

- 1989 Instructor for the Training course on "Biotin labelling in the detection of DNA"  
University of Harare (Zimbabwe)/ (UNESCO)
- 1996 – 2007 Member of the PhD Committee SZN (**OPEN University**) - Naples -Italy
- 2003 Director of Bioinformatics course (**ICRO - UNESCO**) Naples -Italy
- 2004 – 2007 Officer of the International Union of Biological Science (**IUBS**)  
<http://www.iubs.org/iubs/pastboards/2004board.html>
- 2008-2015 Member of “Collegio dei Docenti”, Bioinformatic course –  
**University Federico II** (Naples -Italy) –
- 2012 **EMBO** Practical course: Bioinformatics and Comparative Genome  
Analyses –May 7th-13th Naples (Italy)

## Invited Speaker

- 2001 Symposium "Chromosomes: Structure, Function and Evolution", Puntarenas - Costa Rica
- 2002 The First Waterfront Symp of Human Genome Sci. (WASH), Tokyo - Japan
- 2004 STRAPP04:Molecules, networks, populations, Dresden - Germany
- 2004 Bioinformatics for Genome Analysis, Kolkata – India
- 2005 ICRO-UNESCO-EMBO International Workshop, San Jose -Costa Rica
- 2005 6<sup>th</sup> Anton Dohrn Workshop Evolutionary Genomics, Ischia – Italy
- 2007 Y3 – The third Yamaha Symposium, Hayama - Japan
- 2009 ISMG2009 – Okinawa - Japan

## Tutor

- 1996 - 1998 E. Busico Thesis: 5.8S gene: a useful tool to infer phylogeny among Dinoflagellates
- 2006 - 2007 E. Bruno Thesis: Gene structure and functional role of Dbx1 in deuterostomes
- 2007 - 2010 L. Berna' PhD Thesis: Genome comparative analysis of deuterostomes
- 2009 - 2012 A. Chaurasia PhD Thesis: Functional Classes of Genes in Fish and Mammals
- 2011 - 2015 A. Tarallo PhD Thesis: Habitat e Genoma negli organismi marini

41. A Chaurasia, A Tarallo, L Bernà, M Yagi, C Agnisola, **D'Onofrio G.** (2014). Length and GC Content Variability of Introns among Teleostean Genomes in the Light of the Metabolic Rate Hypothesis PLOS ONE DOI: 10.1371/journal.pone.01038
40. Bernà L., Chaurasia A., Angelini C., Federico C., Saccone S., **D'Onofrio G.** (2012). The footprint of metabolism in the organization of mammalian genomes. *BMC Genomics* 13 (1), 174
39. Bernà L., **D'Onofrio G.**, Alvarez-Valin F. (2012). Peculiar patterns of amino acid substitution and conservation in the fast evolving tunicate *Oikopleura dioica*. *Mol Phylogenet Evol.* 62:708-17
38. A. Chaurasia, E. Uliano, L. Bernà, C. Agnisola, **G. D'Onofrio** (2011). Does Habitat Affect the Genomic GC Content? A Lesson from Teleostean Fish: A Mini Review. In: *Fish Ecology*. Nova Science Publishers, Inc. Hauppauge NY (USA) pp 61-80.
37. E. Uliano, A. Chaurasia, L. Bernà, C. Agnisola, **G. D'Onofrio** (2010). Metabolic rate and genomic GC. What we can learn from teleostean fish. *Marine Genomics* 3:29-34
36. L. Bernà, F. Alvarez-Valin, **G. D'Onofrio** (2009) How fast is the sessile ciona? *Comp Funct Genomics*. doi: [10.1155/2009/875901](https://doi.org/10.1155/2009/875901)
35. **G. D'Onofrio**, Ghosh, T. C., Saccone S. (2007) Different functional classes of genes are characterized by different compositional properties. *FEBS Letters* 581: 5819-5824
34. **G. D'Onofrio**, Ghosh, T. C. (2005). The compositional transition of vertebrate genomes: an analysis of the secondary structure of the proteins encoded by human genes. *Gene* 345:27-33
33. Arhondakis, S., Auletta, F., Torelli, G., **D'Onofrio G.** (2004). Base composition and expression level of human genes. *Gene* 325, 165-169
32. Clay O, Arhondakis S, **D'Onofrio G.**, Bernardi G. (2003). LDH-A and alpha-actin as tools to assess the effects of temperature on the vertebrate genome: some problems. *Gene* 317,157-160.