

Prof. Giorgio Valle
University of Padua

Short curriculum vitae

1971-1978: University of Milan, Department of Biology. University studies and post-graduate research.

1978-1984: University of Warwick (UK), post-doctoral fellow in the group of Developmental Biology, initially with Prof. Hugh Woodland, then with Prof. Alan Colman.

1984: Research Scientist at the University of Padua

1998: Associate professor at the University of Padua

2004: Full professor at the University of Padua

The activity at the University of Padua is at the Department of Biology and at the Interdepartmental Biotechnology Centre (CRIBI) where since 1993 he is responsible for the Group of Bioinformatics and Genomics. Currently in the Valle research group there are about 15 people working full time at different levels, in collaborative projects as well as autonomous projects.

Main research projects

1990-1997: EU Yeast Genome Project

1993-2007: Telethon Project for the characterization of muscle genes

1997-2000: EU Yeast Functional Genomics Project

1998-2001: EU Arabidopsis Genome Project

1999-2002: Analysis of transcripts of human muscle (PRIN1999)

2001-2007: Bioinformatics for Genomics and Proteomics (FIRB2001)

2004-2007: Genomics and post-genomics of *Photobacterium profundum* (FIRB2001)

2005-2007: Genomic adaptation to high pressure (PRIN2005)

2005-2007: Tomato Genome Project (MiPAF)

2005-2009: Tomato Genome Project (FIRB 2003)

2005-2009: Grape Genome Project (VIGNA, MiPAF)

2009-2011: Wheat genome project (MiPAF)

2010-2011: Olive genome project (MiPAF)

2010-2012: CHROMUS: Epigenetics of muscle differentiation (Cariparo)

2010-2012: Ankrd2 signaling and gene expression during muscle differentiation (Unipd)

2012-2014: EPIGEN: National "Flag Project" for Epigenetics.

2013-2017: "BIOINFOGEN: Bioinformatics for personal genomics" (UniPD Strategic Project)

Scientific interests

The expertise and scientific interests are articulated into three sectors: Genomics, Bioinformatics and Molecular Biology.

Genomics and post-genomics.

In this field he has been engaged in the genomic study of several organisms, from bacteria to the most complex organisms such as plants and animals.

These studies range from the primary analysis and assembly of genomes to

functional post-genomics studies of transcriptomics, proteomics and epigenetics. More recently he is focusing his interest on the functional interpretation of human genomic variants both at germinal and somatic levels. Bioinformatics.

In the bioinformatics sector his group is active in developing novel algorithms for the analysis of biological sequences of DNA and protein; moreover, the research group is working on the development of bioinformatics tools to facilitate the management and the analysis of "Next Generation Sequencing" (NGS) data.

Molecular Biology.

The Valle Research Group is working on the development of new methods related to NGS, as well as on the functional study of some muscle proteins.

Experimental approaches

DNA sequencing, laboratory automation, analysis of genetic markers, analysis of gene expression by microarrays and RNA-seq, analysis of miRNA, analysis of protein interactions, functional characterization of genes and proteins, bioinformatics.

Organizing activities.

He is active in several scientific societies, in particular in the Italian Society of Bioinformatics (BITS) of which he is one of the founding members, and Elixir-ITA, the Italian branch of the European Bioinformatics Network. He is a member of the International Society for Computational Biology and of the Human Genome Organization (HuGO). From 2007 to 2013 he has been responsible of the doctorate in Biotechnology of the University of Padua. From 2008 to 2014 he has been the Director of CRIBI, the Interdepartmental Biotechnology Centre of the University of Padua. Since December 2015 he is President of the Faculty Member for Degree in Molecular Biology, Master Degrees in Molecular Biology and Master Degree in Health Biology. Between 2016 and 2018 he has been a member of the Committee for the Italian National Scientific Habilitation for University professorship in Molecular Biology.

Bibliometrics from Google Scholar (April 2019):

<https://scholar.google.it/citations?user=ywH1v0UAAAAJ&hl>

Number of citations: 26672 of which 8730 since 2014

H-Index: 50 of which 34 since 2014

i10-Index 103 of which 68 since 2014