

Dr Dimitrios P. Vlachakis

BSc, MSc, MPhil, PhD, FGS, MRSB (UK), MRSC (UK), MRSM (UK)

Associate Professor in Genetics

Genetics Laboratory, Biotechnology Department
School of Applied Biology and Biotechnology
Agricultural University of Athens



 *darkdna.gr*

CURRICULUM VITAE

October 2022



ABOUT ME...

I am a passionate drug hunter.

I am a medical biochemist with postgraduate, doctoral and postdoctoral studies in the eminent fields of genetics, epigenetics, evo-devo, medicinal chemistry and drug discovery. In 2017, I was elected Assistant Professor in Genetics at the Genetics Laboratory, Biotechnology Dept of the Agricultural University of Athens. I am also appointed as a Principal Investigator at the Clinical, Experimental Surgery & Translational Research Unit of the Biomedical Research Foundation of the Academy of Athens, and an Affiliated Researcher (Associate Professor Level) at the University Research Institute of Maternal and Child Health and Precision Medicine, School of Medicine, National and Kapodistrian University of Athens. I am appointed Vice President of E.O.F.'s Committee on the Evaluation and Compensation of Medicines for Human Use (Evaluation Committee) and E.O.F.'s Representative of Greece in the European Commission. I have served as Editor in Chief of the Journal of Molecular Biochemistry (2012-2020) and serve as the deputy editor in chief for EMBnet journal since 2017. I have been elected P&PR PC chair of EMBnet and was recently elected member of EMBnet's Executive Board. To date, I have published 237 original articles in peer-reviewed scientific journals, including high-profile journals such as Cell Metabolism, Autophagy and Science Advances. I am a co-inventor in 5 scientific patents and have been on the receiving end of numerous grants and awards.



ABOUT MY GROUP...

I lead the Dark DNA Group (darkdna.gr). We are part of the Genetics & Computational Biology Group at the Genetics Laboratory (headed by Prof. Elias Eliopoulos), Biotechnology Dept of the Agricultural University of Athens. Our research interests revolve around three distinct, yet intersecting, areas: i) The functional role of long non-coding RNAs, ii) Stress mechanisms and homeostasis via nuclear receptors & iii) Computational and molecular virology. How life began and what drives evolution? How can it be that more than 60% of the human genome is of viral origin? We now know that viruses have seriously influenced the course of life on our planet and that retro-transposable elements in some species make up the majority of their genome. We develop and apply our research to a repertoire of scientific domains. Namely, we have been investigating the role of nuclear receptors in gene expression and regulation and in particular the role of the glucocorticoid receptor in stress. Then, we look into the realm of viruses and in particular into the ssRNA family of flaviviridae and ebola virus for the investigation of the genetic elasticity of viral genomes (antigenic drift/shift) and how epigenetics could annihilate current vaccination protocols. Finally, recently, we have embarked onto the very fascinating field of neurodegeneration, with the genetic and structural study of LRRK2. In our lab, we use a wide spectrum of methodologies ranging from state-of-the-art bioinformatics, molecular modelling and hypercomputing pipelines to traditional genetic and biochemistry in vitro and in vivo techniques. On one hand, we have developed our own software for machine learning, deep learning and data mining for multimodal fusion of information from genetic, structural and physicochemical analyses. On the other hand, we use DNA engineering, SDM, cloning, expression and protein purification techniques to biologically test and evaluate the validity and reliability of our models.

1. PERSONAL DETAILS

Name: **Dimitrios P. Vlachakis**
Position: **Associate Professor in Genetics**

Lab/ University: **Dark DNA Group
Genetics Laboratory
Biotechnology Department
School of Applied Biology and Biotechnology
Agricultural University of Athens**

Work Address: 75 Iera Odos, 11855, Athens, Greece
Telephone Work: +30 210 5294323

Birthplace: Exarchia, Athens
Nationality: Hellenic

Marital status: Magical, with Konstantina & Anna (wife & daughter)

Email: dimvl@aua.gr
Website Group: <http://darkdna.gr>
Website Lab: <http://geneticslab.gr>

CURRICULUM VITAE OVERVIEW

- **BSc Honors Degree in Biology and Biochemistry**
- **MSc in Molecular Modelling and Quantum Mechanics**
- **PhD in Genetics and Antiviral Drug Design**

- International Patents 5
- Published Monography scientific articles 5
- Published Peer - Reviewed Scientific Books 9
- In-house Developed Genetics and Bioinformatics Software Tools 17
- Invited Speaker and Published Conference Proceedings 71

- **Funded Competitive Research Grants as Coordinator or PI 16**

- **Published Peer - Reviewed Articles in International Journals 237**
- Published Articles Indexed in PubMed Database 140
- Published Articles Indexed in Scopus Database 121
- Published Articles Indexed in Google Scholar Database 223

- H-index based on Scopus 19
- H-index based on Google Scholar 25
- i10-index based on Google Scholar 65
- Citations based on Scopus 1034
- Citations based on Google Scholar 1941

welcome to the...

dark DNA group

VISIT our WEBSITE at: darkdna.gr