CURRICULUM VITAE

Vassili N. Kouvelis

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1. PERSONAL INFORMATION

Place and date of birth:	Athens, 5 November 1970
Citizenship:	Greek
Work Address:	University of Athens, Faculty of Biology, Dept. Genetics & Biotechnology Panepistimiopolis, Athens 15701, Greece
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2. EDUCATION

9/2008 **Joint Genome Institute (JGI), U.S. Dept. of Energy (DOE), Walnut Creek, CA, USA**
POSTDOCTORAL VISITOR
Research in Genome Analysis and Bionformatics
Advisor: Dr. N. Kyrpides
Research Scope: Complete genome analyses of bacteria with interactive internet based-implemented programs designed on a Linux platform (IMG-ER).

6/2007 ***University of Cyprus, Faculty of Pure & Applied Sciences, Dept. of Biological Sciences, Nicosia, Cyprus***
POSTODOCTORAL VISITOR
Research in Genome Analysis
Advisor: Dr. Vasilis J. Promponas
Research Scope: Study of mitochondrial genomes with programs designed on UNIX and Linux platforms.

2002-2005 ***National & Kapodistrian University of Athens, Faculty of Biology, Dept. of Genetics & Biotechnology, Laboratory of Genetics***
POSTODOCTORAL STUDIES
Research in Microbial Molecular Genetics.
Advisor: Prof. Milton A. Typas
Research Goals: Genetic identification of entomopathogenic fungi of interest, establishing genetic transformation and inactivation of toxic genes of fungal strains intended to be used for biological control of insects (pests), risk assessment of possible mutagenic activity of secondary metabolites.

10/2004-11/2004 ***Eldgenőssisсhe Technische Hochschule (ETH), Institute of Plant Sciences, Phytopathology, Zurich, Switzerland***
POSTODOCTORAL VISITOR
Research in Molecular Microbiology and Biotechnology.
Advisor: Prof. Geneviève Défago.
Research Goal: Molecular discrimination and identification of fungal strains of the genus *Stagonospora* (used as biological control agents of weeds).

1995-1999 &
2001-2002 ***National & Kapodistrian University of Athens, Faculty of Biology, Dept. of Genetics & Biotechnology, Laboratory of Genetics***
Ph. D. in Microbial Genetics and Biotechnology
Advisor: Prof. Milton A. Typas
Dissertation: A study of the mitochondrial genome of the entomopathogenic fungus *Verticillium lecanii*.
Grade: "Excellent" (10/10).

9/1996-12/1996 ***L' Institute National de la Recherche Agronomique (INRA), Laboratoire de la lutte biologique, La Miniere, France***
A study of the entomopathogenic fungus *Beauveria bassiana*
Advisor: Dr. Yvonne Couteaudieur.
Research Goal: The construction of a mitochondrial gene bank of the fungus *Beauveria bassiana* and analysis of its chromosomal organization with the use of the technique of Pulse Field Gel Electrophoresis (PFGE).

1994 ***National & Kapodistrian University of Athens, Faculty of Biology***
B. Sc. in Biology
Grade: "Very Good" (7.18/10).

6/1993 -10/1993 ***University of Greenwich, Greenwich, UK***
ERASMUS fellow
Advisor: Dr. Ian Bruce.
Research Goal: Identification of a restriction endonuclease from a thermophile bacterium (*Thermophilus aquaticus*).

3. EMPLOYMENT HISTORY

2015-today ***National & Kapodistrian University of Athens, Faculty of Biology, Dept. of Genetics & Biotechnology***
Assistant Professor of Genetics and Biotechnology

2009-2015 ***National & Kapodistrian University of Athens, Faculty of Biology, Dept. of Genetics & Biotechnology***
Lecturer of Genetics and Biotechnology

2007-2009 ***National & Kapodistrian University of Athens, Faculty of Biology, Dept. of Genetics & Biotechnology***
RESEARCH ASSOCIATE, University employee
This position covers a) Teaching in the laboratory classes of undergraduate students and b) participation in research activities of the Genetics Laboratory.

1995-2007 ***National & Kapodistrian University of Athens, Faculty of Biology, Dept. of Genetics & Biotechnology, Laboratory of Genetics***
POSTOCTORAL FELLOW
Participation in Reasearch Programmes of the Genetics Laboratory. In detail:

- "Sequencing of the ethanol-producing strains of the bacterium *Zymomonas mobilis* CP4, ATCC 10988 και ATCC 29191 (subsp. *mobilis* lectotype and phenotypic centrotype), ATCC 29192 (subsp. *pomaceae* lectotype) and *Z. mobilis* sp. NCIB 11163. Sequencing of the plasmids of ZM4 (ATCC 31821) (subsp. *mobilis* lectotype and phenotypic centrotype)" ***Code name*****: CSP_788284** in cooperation with the Joint Genome Institute (JGI) of Department of Energy (DOE), U.S.A. [2007-today].
- "Biological process and exploitation of liquid oil waste: Mechanisms and complete implementation" ***Code name*****: FP-66, 3rd Community Support Programme - General Secretariat of Research and Technology** [2007].
- "Development of a web-based system for the management and analysis of complete sequences of mitochondrial fungal genomes" ***Code name*****: 70/4/8804** [2006-today].
- "Risk Assessment of Fungal Biological Control Agents – RAFBCA" ***Code name*****: QLK1-CT-2001-01391** [2002-2005].
- "Ethanol Fermentation during vinification. Selection and evaluation of yeast strains" ***Code name*****: EPET 98 BI-5** [2000-2001].
- "Biocontrol of important soil dwelling pests by improving the efficacy of insect pathogenic fungi – BIPESCO" ***Code name*****: FAIR6-CT98-4105** [1999].
- "Insect pathogenic fungi for economic, environmentally friendly pest control in the glasshouse" ***Code name*****: AIR-CT94-1352** [1995-1997].

RESEARCH INTERESTS

Main interests:
Molecular Genetics and Genomics of Microorganisms of Biotechnological importance – emphasis on fungal species used as Biological Control Agents; Evolution of mitogenomes in fungal species.

In brief, the following subjects are among my research interests:

- The analyses and comparative studies of whole genomes with an emphasis to the mitochondrial genomes of fungi.

- The phylogenetic, phylogeographic study and the evolutionary relations of fungal species.
- The molecular discrimination and identification of species and strains with molecular markers based on nuclear and mitochondrial genes/regions, as well as other molecular approaches like RFLPs, AFLPs, hybridisations, PCR.
- The pathogenicity mechanisms and the study of pathogenicity genes of entomopathogenic and mycetophilous fungi.
- The genetic mechanisms for the endophytism of entomopathogenic fungi.
- The risk assessment of fungi and their secondary metabolites which are being used as Biological Control Agents for the protection of crops against insect and fungal pests with the application of mutagenicity assay (Ames test).
- The development of molecular tools for the genetic monitoring of basidiomycetes (*Pleurotus nebrodensis*) and plant species (*Stachys virgata*) which are critically endangered or threatened with extinction.
- The genome analyses of several strains of the ethanol-producing bacterium *Zymomonas mobilis*.

RESEARCH ACTIVITY

*From the **13 Research Projects*** in which I have participated until today with different roles (as postgraduate student to PI), three recent indicative research projects are:

Project Title	Funding source	Period	Role
A study of genes and regulatory elements involved in the replication, transcription and repair of the mt genomes of the entomopathogenic species *Beauveria bassiana* & *Metarhizium anisopliae*.	Hellenic Foundation for Research and Innovation (H.F.R. I)	2019-2021	Scientific Supervisor (Principal Investigator)
Assessment of the critically endangered fungal populations of *Pleurotus nebrodensis* in Greece and their *in situ* and *ex situ* conservation	Mohamed bin Zayed Fund	2014-2017	Co-principal Investigator (in cooperation with Ass. Prof. Z. Gonou) – responsible for for the molecular data
Metagenomic analyses of lininolytic microorganisms – Bioconversion of plant by-products to highly valuable products	Thalis Programme (National Strategic Reference Framework - NSRF)	2012-2015	Team Research member (PI: Prof. M. A. Typas)

4. TEACHING EXPERIENCE

05/2014-today ***National & Kapodistrian University of Athens, Faculty of Biology, M. Sc. in Bioinformatics Postgraduate Programme***

Courses and lab courses taught: (a) "Computational Analysis of Biomacromolecular Sequences" (2nd semester)

12/2017-2/2019 ***National & Kapodistrian University of Athens, Faculty of Biology (and University of Pireaus), M.Sc. in Bioeconomy, Circular Economy and Sustainable Development Postgraduate Programme***

Course taught: (a) "Computational Analysis of Biomacromolecular Sequences" (2nd semester) "Biological Resources and Bioproducts"

09/2009-today ***National & Kapodistrian University of Athens, Faculty of Biology, Dept. of Genetics & Biotechnology***

Courses and lab courses taught: (a) "Introduction to Biology" (1st semester) [up to 2016], (b) "Introduction to Biology" (2nd semester at the School of Pharmacy), (c) "Genetics" (4th semester), (d) "Advanced Genetics"/"Molecular Genetics" (5th semester), "Evolutionary Biology" (6th semester) and (e) "Biotechnology" (8th semester)

1995-2008 ***National & Kapodistrian University of Athens, Faculty of Biology, Dept. of Genetics & Biotechnology***

Participation at the preparation and teaching of the laboratory courses of: (a) compulsory courses of "Genetics", and "Introduction to Biology" (b) optional courses of "Biotechnology" and "Human Genetics"

2002-2006 ***National & Kapodistrian University of Athens, Faculty of Biology, Dept. of Genetics & Biotechnology, Laboratory of Genetics***

Participation in the supervision of 3 undergraduate students for their final B. Sc. dissertations (7th – 8th semesters):

2010-today <u>Supervision of Post-doc Researchers, Ph.D., M.Sc. and B.Sc. Dissertations</u>

Number of Postdocs: 1 / No. of Ph. D. students: 4 (Principal Supervisor: 2) / No. of M. Sc students: 1 /No of B. Sc students (*dissertations not shown here*): 14

<u>Postdoc Researcher:</u>

Dr. Chrysanthi Raftopoulou (2017-2018): Designing the web-based databank "MitoFun"

<u>Ph. D. Students (Main Supervisor):</u>

Mrs Alexandra Kortsinoglou (2020-today): Ph. D. Title "Genetic studies of the mechanisms and metabolic pathways implicated in the endophytism of the entomopathogenic fungi of the order Hypocreales"

Mr. Stylianos Varassas (2017-today): Ph. D. Title "A study of genes and regulatory elements involved in the reprication, transcription and repair mechanisms of the mitochondrial genomes of entomopathogenic fungi *Beauveria bassiana* and *Metarhizium anisopliae*".

<u>Other Ph. D. students:</u>

Mr. Vassilis Vangalis (2016-today): Ph. D. Title "Genetic and molecular analyses of the programmed cell death and its correlation to the asexual stage and phytopathogenicity of the ascomycete *Verticillium*"

Dr. Ioannis Papaioannou (2011-2014): Ph. D. Title "Genetic and molecular study of heterokaryosis at the phytopathogenic fungus *Verticillium dahliae*"

Dr. Lugard Eboigbe (2008-2012): Ph. D. Title "The study of pathogenicity genes in the ascomycete fungus *Verticillium dahliae*"

M.Sc. student - "Bioinformatics":

Mrs Maria Ntertilis (2013-2014): M.Sc. Title: " Analyses of mitochondrial genomes with an emphasis on the study of genetic elements implicated to the synteny and transcription of the mtDNA of Pezizomycotina "

5. ADMINISTRATIVE CONTRIBUTION – RESPONSIBILITIES IN THE UNIVERSITY

2010-2011 & 2013-today	Member of the NKUA Faculty of Biology Administrative Board
2011-today	Member of the Committees of (a) "Economic Affairs", (b) "Student Affairs - Education & Syllabus" and (c) "on the Organization of Joint Laboratory Infrastructure" of the Faculty of Biology
2009-2010	Member of the NKUA Faculty of Biology committee for "Buildings & Daily Routine – Electronic Communication"

6. MILITARY SERVICE

5/1999 - 4/2001: Greek Army Second Lieutenant (Reserve Officer)
Specialty: Army Quartermaster Corps
Units where I served as "General Logistics Officer": (a) 88 Anti-Tank Company (in Limnos Island), (b) 11° Army Regiment (at Tripoli).

7. ADDITIONAL INFORMATION

FOREIGN LANGUAGES

	Speak	*Write*
English	Excellent	Excellent
French	Very good	Very good

COMPUTERS

Excellent knowledge of PC's applications: MS Windows – based programmes for text editing and presentations (MS Office: Word, Excel, PowerPoint), biological (DNASTAR) and phylogenetic (PAUP, PHYLIP, PAML, CONSEL, MrBayes) applications, Internet (Explorer, Mozilla). Good knowledge of programmes designed on UNIX and Linux platforms.

PROFESSIONAL SOCIETIES AND ACTIVITIES

- Member of the Panhellenic Society of Biosciences (1995-today)
- Member of the Hellenic Society for Biological Sciences (1995-today)
- Member of the Hellenic National Initiative "Mikrobiokosmos" (2007-today)

- Founding member of the Hellenic Society for Computational Biology and Bioinformatics (2007-today)
- Member of the European Mycological Association (EMA; 2011-today)
- Member of the Society for Molecular Biology and Evolution (SMBE; 2020-today)

REVIEWER TO SCIENTIFIC JOURNALS AND RESEARCH PROGRAMMES

- Guest editor in "Frontiers in Microbiology", "Frontiers in Fungal Biology" and "Frontiers in Genetics" (2020-today).
- Reviewer to scientific journals: "Annals of Microbiology" (2013-2014), "Biomed Research International" (2013), "Dendrobiology" (2011), FEMS Yeast Research (2015), "Fungal Biology" (2011, 2014, 2019-2020), "Frontiers in Microbiology" (2017), "Gene" (2016, 2017), "Genes" (2017), "Journal in Applied Microbiology" (2007, 2014), "Journal of Food Science" (2012), "International Journal of Molecular Sciences" (2016, 2019), "International Journal of Medicinal Mushrooms - IJMM" (2013), "Letters in Applied Microbiology" (2007, 2010-11, 2013), "Microorganisms" (2017, 2020) "Molecular Biology and Evolution" (2017), "Mycological Research" (2008), "PLoS one" (2013-2015, 2019-2020), PLoS Pathogens (2019), Scientific Reports (2019).
- Evaluator of research programmes for the Pest Management Center, Agriculture and Agri-Food, Ministry of Agriculture, Canada (2007)

8. PUBLICATIONS

8.1. MONOGRAPHS

8.1.1. Kouvelis V. N. (2002). "A study of the mitochondrial genome of the entomopathogenic fungus *Verticillium lecanii*." Thesis Dissertation, Laboratory of Genetics, Dept. of Genetics & Biotechnology, Faculty of Biology, National & Kapodistrian University of Athens.

8.2. ARTICLES IN INTERNATIONAL SCIENTIFIC JOURNALS

8.2.1. Kortsinoglou A.M., Saud Z., Eastwood D.C., Butt T.M., **Kouvelis V.N.** (2020). The mitochondrial genome contribution to the phylogeny and identification of *Metarhizium* species and strains. *Fungal Biology* 124: 845-853.

8.2.2. Megarioti A.H., **Kouvelis V.N.** (2020). The coevolution of fungal mitochondrial introns and their Homing Endonucleases (GIY-YIG and LAGLIDADG). *Genome Biology and Evolution* 12: 1337-1354.

8.2.3. Dervisi I., Valassakis C., Agaloy A., Papandreou N., Podia V., Haralambidis K., Iconomidou V.A., **Kouvelis V.N.**, Spaink H.P., Roussis A. (2020). Investigation of the interaction of DAD1-LIKE LIPASE 3 (DALL3) with Selenium Binding Protein 1 (SBP1) in *Arabidopsis thaliana*. *Plant Science* 191: 110357.

8.2.4. Kortsinoglou A.M., Korovesi A.G., Theelen B., Hagen F., Boekhout T., **Kouvelis V.N.** (2019). The mitochondrial intergenic regions *nad*1-*cob* and *cob*-*rps*3 as molecular identification tools for pathogenic members of the genus *Cryptococcus*. *FEMS Yeast Research* 19: foz077.

8.2.5. Korovesi A.G., Ntertilis M., **Kouvelis V.N.** (2018). Mt-*rps*3 is an ancient gene which provides insight into the evolution of fungal mitochondrial genomes. *Molecular and Phylogenetics Evolution* 127: 74-86. (IF_{2011}: 4.412) Αναφορές συνολικά: 2 Ετεροαναφορές: 2

8.2.6. **Kouvelis V.N.**, Teshima H., Bruce D., Detter C., Tapia R., Han C., Tampakopoulou V.-O.,Goodwin L., Woyke T., Kyrpides N.C., Typas M.A., Pappas, K.M. (2014). Finished genome of Zymomonas mobilis subsp. mobilis strain CP4, an applied ethanol producer. Genome Announcements 2: e00845-13.

8.2.7. Krimitzas A., Pyrri I., **Kouvelis V.N.**, Kapsanaki-Gotsi E., Typas M.A. (2013). A phylogenetic analysis of Greek isolates of Aspergillus species based on morphology, nuclear and mitochondrial gene sequences. *Biomed Research International* 2013:260395. doi: 10.1155/2013/260395.

8.2.8. Desiniotis A., **Kouvelis V.N.**, Davenport K., Bruce D., Detter C., Tapia R., Han C., Goodwin L.A., Woyke T., Kyrpides N.C., Typas M.A., Pappas, K.M. (2012). Complete genome sequence of the ethanol-producing Zymomonas mobilis subsp. mobilis centrotype ATCC 29191. *Journal of Bacteriology* 194: 5966-5967.

8.2.9. **Kouvelis V.N.**, Davenport K.W., Brettin T.S., Bruce D., Detter C., Han C.S., Nolan M., Tapia R., Damoulaki A., Kyrpides N.C., Typas M.A. and Pappas K.M. (2011). Genome Sequence of the Ethanol-Producing Zymomonas mobilis subsp. pomaceae Lectotype Strain ATCC 29192. Journal of Bacteriology 193: 5049-5050.

8.2.10. Pappas K. M., **Kouvelis V.N.**, Saunders E., Brettin T.S., Bruce D., Detter C., Balakireva M., Han C.S., Savvakis G., Kyrpides N.C. and M.A. Typas (2011). Genome Sequence of the Ethanol-Producing *Zymomonas mobilis* subsp. *mobilis* Lectotype Strain ATCC 10988. *Journal of Bacteriology* 193: 5051-5052.

8.2.11. **Kouvelis V.N.**, Wang C., Skrobek A., Pappas, M.A., Typas M.A., Butt T.M. (2011). Assessing the cytotoxic and mutagenic effects of secondary metabolites produced by several fungal biological control agents with the Ames assay and the VITOTOX® test. *Mutation Research: Genetic Toxicology and Environmental Mutagenesis* 722: 1-6.

8.2.12. Ghikas* D.V., **Kouvelis* V.N**. and Typas M.A. (2010). Phylogenetic and biogeographic implications inferred by mitochondrial intergenic region analyses and ITS1-5.8S-ITS2 of the entomopathogenic fungi *Beauveria bassiana* and *B. brongniartii*. *BMC Microbiology*: 10: 174.
* = authors contributed equally

8.2.13. Yang S., Pappas, K.M., Hauser L.J., Land M.L., Chen G.-L., Hurst G.B., Pan C., **Kouvelis V.N.**, Typas M.A., Pelletier D.A., Klingeman D.M., Chang Y.-J., Samatova N.F., and Brown S.D. (2009). Improved genome annotation for *Zymomonas mobilis*. *Nature Biotechnology*: 27: 893-894.

8.2.14. **Kouvelis V.N.**, Saunders E., Brettin T.S., Bruce D., Detter C., Han C., Typas M.A., and Pappas K.M. (2009). Complete genome sequence of the ethanol producer *Zymomonas mobilis* NCIMB 11163. *Journal of Bacteriology* 191: 7140-7141.

8.2.15. Pantou* M.P., **Kouvelis* V.N.** and Typas M.A. (2008). The complete mitochondrial genome of *Fusarium oxysporum*: insights into fungal mitochondrial evolution. *Gene* 419: 7-15
* = authors contributed equally

8.2.16. **Kouvelis V.N.**, Sialakouma A. and Typas M.A. (2008). Mitochondrial gene sequences alone or combined with ITS region sequences provide firm molecular

criteria for the classification of *Lecanicillium* species. *Mycological Research* 112: 829-844.

8.2.17. **Kouvelis V.N.**, Ghikas D.V., Edgington S., Typas M.A., and Moore D. (2008). *Molecular characterisation of isolates of Beauveria bassiana obtained from overwintering and summer populations of Sunn Pest (Eurygaster integriceps)*. *Letters in Applied Microbiology* 46: 414-420.

8.2.18. Pramateftaki P.V., **Kouvelis V.N.**, Lanaridis P. and Typas M.A. (2008). The complete mitochondrial genome sequence of the wine yeast *Candida stellata*: intra-species distribution of a novel group-IIB1 intron with eubacterial affiliations. *FEMS Yeast Research* 8: 311-317.

8.2.19. Pantou M.P., **Kouvelis V.N.** and Typas M.A. (2006). The complete mitochondrial genome of the vascular wilt fungus *Verticillium dahliae*: a novel gene order for *Verticillium* and a diagnostic tool for species identification. *Current Genetics* 50: 125-136.

8.2.20. Ghikas D.V., **Kouvelis V.N.** and Typas M.A. (2006). The complete mitochondrial genome of the entomopathogenic fungus *Metarhizium anisopliae* var. *anisopliae*: gene order and *trn* gene clusters reveal a common evolutionary course for all Sordariomycetes, while intergenic regions show variation. *Archives of Microbioliology* 185 (5): 393-401.

8.2.21. Pramateftaki P.V., **Kouvelis V.N.**, Lanaridis P. and Typas M.A. (2006). The mitochondrial genome of the wine yeast *Hanseniaspora uvarum*: a unique genome organization among yeast/fungal counterparts. *FEMS Yeast Research* 6: 77-90.

8.2.22. **Kouvelis V.N.**, Ghikas D.V. and Typas M.A. (2004). The analysis of the complete mitochondrial genome of *Lecanicillium muscarium* (synonym *Verticillium lecanii*) suggests a minimum common gene organization in mtDNAs of Sordariomycetes: phylogenetic implications. *Fungal Genetics and Biology* 41: 930-940.

8.2.23. Zare R, **Kouvelis V.N.**, Typas M.A. and Bridge P.D. (1999). Presence of a 20 bp insertion/deletion in the ITS1 region of *Verticillium lecanii*. *Letters in Applied Microbiology* 28: 258-262.

8.2.24. **Kouvelis V.N.**, Zare R, Bridge P.D. and Typas M.A. (1999). Differentiation of mitochondrial subgroups in the *Verticillium lecanii* species complex. *Letters in Applied Microbiology* 28: 263-268.

8.3. ARTICLES IN INTERNATIONAL CONFERENCES/SYMPOSIUMS

*5 Selected participations out of my **25 participations** to international conferences.*

8.3.1. Chrisitnaki, A. Theelen, B., Dawson, T.L., Boekhout T., **Kouvelis, V.N.** (2020). Comparative mitogenomic analysis of *Malassezia furfur* and its potential for genetic fingerprinting and diagnostics. The 4th International Workshop on *Malassezia* [International Union of Microbiological Societies (IUMS) Congresses], Daejeon, South Korea (October 12-16), pp. 28. (Poster)

8.3.2. **Kouvelis V.N.**, Pyrri I., Krimitzas A., Kapsanaki-Gotsi E., Typas M.A. (2014). Mitochondrial gene analysis combined with nuclear sequences and morphological data provide new insights into phylogenetic affinities within the genus *Aspergillus*. The 10th International Mycological Progress (IMC10), Bangkok, Thailand, August 4-8, p. 420. (Invited Oral presentation)

8.3.3. Ntertili M., Kirmitzoglou I., Promponas V.J., Typas M.A., **Kouvelis V.N.** (2013). MitoFun: a curated web-based database of complete mitochondrial genomes offers comparative genome analysis of Fungi. EMBO Conference - Comparative Genomics of Eukaryotic Microorganisms: Complexity Patterns in Eukaryotic Genomes, San Feliu de Quixols, Spain October 19-24, p. 118-119. (Poster)

8.3.4. Milic N., Kostidis S., Stavrou A., Gonou-Zagou Z., **Kouvelis V.N.**, Fokialakis N. (2012). A polyphasic approach (metabolomics, morphological and molecular analyses) in the systematics of *Cladobotryum* species in Greece. International Congress on Natural Products Research, New York, USA, July 28-August 1. (Poster) The Abstract of this work was published in scientific journal "*Planta Medica*" as follows: Milic et al., (2012). *Planta Med* 78: PG14, DOI: 10.1055/s-0032-1320657

8.3.5. Ntertili M., Typas M.A., **Kouvelis V.N.** (2012). Fungal Mitochondrial Genomes: an Excellent Source for Phylogenetic and Species Identification Studies. FEBS/EMBO Course: Mitochondria in Life, Death and Disease, Heraklion, Greece, May 9-13, p. 160. (Poster – 3rd Prize)

8.4. ARTICLES IN PROCEEDINGS OF GREEK CONFERENCES/SYMPOSIUMS

*5 Selected participations out of my **32 participations** to national conferences.*

8.4.1. Kortsinoglou A., Kouvelis V.N. (2019). The role of tRNA genes and their intergenic regions in the structure, diversity and evolution of fungal mithochondrial genomes. 8th National Conference of the Hellenic Society 'Mikrobiokosmos', National Research Foundation, Patras, Greece (April 18-20), p. 146. (Poster)

8.4.2. Christinaki A., Kouvelis V.N. (2019). Mitochondrial ribosomal RNA genes unveil the phylogenetic relationship among fungi. 8th National Conference of the Hellenic Society 'Mikrobiokosmos', National Research Foundation, Patras, Greece (April 18-20), p. 105. (Poster)

8.4.3. Avgerinou E., Kouvelis V.N. (2017). Intron diversity in fungal mitochondrial genomes. 7th National Conference of the Hellenic Society 'Mikrobiokosmos', National Research Foundation, Athens, Greece (April 7-9), pp. 137-138. (Poster)

8.4.4. Korovesi A.G., Ntertilis M., **Kouvelis V.N.** (2017). *rps*3 gene and its role to the evolution of fungal mitochondrial genomes. 7th National Conference of the Hellenic Society 'Mikrobiokosmos', National Research Foundation, Athens, Greece (April 7-9), pp. 145-146. (Invited Oral Presentation)

8.4.5. Varassas S.P., Ntertilis M., **Kouvelis V.N.** (2017). The evolution of nuclear genes and mitochondrial regulatory elements implicated in the mitochondrial genome transcription in Ascomycota. 7th National Conference of the Hellenic Society 'Mikrobiokosmos', National Research Foundation, Athens, Greece (April 7-9), pp. 141-142. (Poster – 3rd Prize)

8.5. BOOK CHAPTERS

8.5.1. Typas M.A. and **Kouvelis V.N.** (2012) Assessing genotoxic effects of microbial products. In "Beneficial Microorganisms in Agriculture, Food and the

Environment: Safety Assessment and Regulation" (Sundh I., Wilcks A. and Goettel M.S, eds.) CABI Publications, pp. 256-274.

8.5.2. Typas M.A. and **Kouvelis V.N.** (2011). Phylogenetic Analysis of the entomopathogenic fungi. In "Microbial insecticides: Principles and Applications" (Borgio F.J. and Kawar N.S., eds.). Nova Science Publications, pp. 121-148.

8.5.3. Typas M.A., Pantou M.P. and **Kouvelis V.N.** (2011). MtDNA and rDNA: Two different evolutionary lines combined for genetic differentiation, taxonomy and phylogeny in ascomycetes. XVI European Mycological Congress Chalkidiki, Greece pp. 170-188

8.5.4. **Kouvelis V.N.** and Typas M.A. (2000). The use of mt DNA gene probes for the molecular typing and differentiation of *Verticillium lecanii* isolates. In "Advances in *Verticillium*. Research and disease management" (Tjamos E.C., Rowe R.C., Heale J.B. and Fravel D.R., eds.) pp. 63-68, APS Press, Minnesota USA.

8.5.5. Typas M.A., Mavridou A. and **Kouvelis V.N.** (1998). Mitochondrial DNA differences provide maximum intraspecific polymorphism in the entomopathogenic fungi *Verticillium lecanii* and *Metarhizium anisopliae*, and allow isolate detection/identification. In "Molecular Variability of Fungal Pathogens" (Bridge P., Couteaudier Y. and Clarkson J, eds.) pp.: 227-237. CAB International Wallingford Oxon, UK.

8.6. GENOME – GENE SUBMISSIONS

GENOMES

*Selected genomes from the **1 complete fungal** and **4 complete bacterial** genomes and the **11 complete mitochondrial genomes** in which I was involved in their sequencing and annotation*

- *Metarhizium brunneum* ARSEF 4556, complete genome at ENA - Accession Number: PRJNA608152 (2020).
- *Metarhizium brunneum* ARSEF 4556 mitochondrion, complete genome at ENA - Accession Number: LR792747 (2020).
- *Beauveria bassiana* strain Bb147 mitochondrion, complete genome at GenBank - Accession Number: EU100742 (2010).
- *Zymomonas mobilis* subsp. *mobilis* NCIMB 11163 chromosome, complete (and its plasmids) at GenBank – Accession Number: NC_013355 (NC_013357, NC_013356, NC_013358) (2009).

GENES

*Selected genes and intergenic regions from the **1.227 nuclear and mitochondrial regions** in which I was involved in their sequencing and annotation*

- *Metarhizium* spp., mitochondrial genes and intergenic regions of nad4, nad4-atp8, rnl-rps3, rps3, rns, trnI-trnW, trnW-rnl and ITS at ENA (2020)-Accession Number: LR792360-LR792390, LR792685-LR792715, LR777829-LR777858, LR792270-LR792299, LR777918-LR777947, LR792300-LR792330, LR792331-LR792359, LR792748-LR792770, respectively.

- *Cryptococcus* spp., mitochondrial intergenic regions of nad1-cob and cob-rps3 at ENA (2019)-Accession Number: LR657305–LR657317 and LR657318–LR657329, respectively.
- *Aspergillus* spp., nuclear ribosomal regions ITS1-5.8S-ITS2 and IGS, nuclear genes benA and rpb2 and mitochondrial genes nms and cox1 at GenBank (2012) - Accession Numbers: EU982008 – EU982182.
- *Beauveria bassiana* strains, nuclear ribosomal regions ITS1-5.8S-ITS2, mitochondrial intergenic regions nad3-atp9 and atp6-rns at GenBank (2010) - Accession Numbers: FJ972862 - FJ973076.

8.7. INVITED SPEAKER IN INTERNATIONAL CONFERENCES

8.7.1 Kouvelis VN (2019). Fungal Genome Analyses and Phylogeny. 1st Practical Workshop – "Fungal Infections: From epidemiology to treatment. Theoritical and practical aspects". Athens, 2-5 October, https://fungalworkshop 2019.com

8.7.2 Kouvelis V.N., Pyrri I., Krimitzas A., Kapsanaki-Gotsi E., Typas M.A. (2014). Mitochondrial gene analysis combined with nuclear sequences and morphological data provide new insights into phylogenetic affinities within the genus *Aspergillus*. The 10th International Mycological Progress (IMC10), Bangkok, Thailand, August 4-8, p. 420.

8.7.3 Kouvelis V.N. (2011). Genetic Identification of the entomopathogenic fungi and its contribution to their selection as Biological Control Agents. BIT 1st International Symposium of Mycology, Beijing 29 July – 1 August 2011, p. 259.

8.7.4 Typas M.A., Pantou M.P., Kouvelis V.N. (2011). MtDNA and rDNA: Two different evolutionary lines combined for genetic differentiation, taxonomy and phylogeny in ascomycetes. XVI European Mycological Congress Chalkidiki, Greece pp. 170-188.

8.7.5 Kouvelis V.N., Tavoularis S.N., Pantou M.P., Ghikas D.V. and Typas M.A. (2004). Genetic fingerprinting of fungal BCAs and risk assessment of their metabolites. ETH Zurich 20 November 2004.