

**CURRICULUM VITAE**  
**Katherine Maria Pappas**  
**2014**

**Date/Place of Birth** 20-07-1966, Athens, Greece  
**Citizenship** Greek (born to a Greek and a US citizen)  
**Family status** Married, two children born in 2003 and 2004  
**Work details** Department of Genetics and Biotechnology, Faculty of Biology, National and Kapodistrian University of Athens, Panepistimiopolis, Athens 15701, Greece  
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### **Biographical Outline**

**1984-1990** BSc Degree, Faculty of Biology, School of Sciences, National and Kapodistrian University of Athens (NKUA) (honors' degree)  
**1989-1990** 'ERASMUS' exchange student at the School of Chemical and Life Sciences, University of Greenwich, and the Department of Microbiology, Division of Life Sciences, King's College, University of London, London, UK (9 months)  
**1991-1997** PhD Thesis, Department of Genetics and Biotechnology, Faculty of Biology, NKUA (honors' degree)  
**1998-1999** Postdoctoral Associate, Department of Genetics and Biotechnology, Faculty of Biology, NKUA  
**1999-2002** Postdoctoral Associate, Department of Microbiology, College of Agriculture and Life Sciences, Cornell University, Ithaca, NY, USA  
**2003-2010** Lecturer, Department of Genetics and Biotechnology, Faculty of Biology, NKUA  
**2010-** Assistant Professor, Department of Genetics and Biotechnology, Faculty of Biology, NKUA (tenured since Oct. 2014)

### **Awards, Scholarships & Stipends**

**1984** State Scholarships Foundation (IKY) award for topmost entry in an academic institution  
**1989-1990** 'ERASMUS-Free Mover' undergraduate student scholarship to conduct research in the School of Chemical and Life Sciences, University of Greenwich (host: Prof. I. J. Bruce), and the Department of Microbiology, Division of Life Sciences, King's College (host: Prof. B. W. Bainbridge), London, UK (research topics: 'Isolation and characterization of the *Burkholderia cepacia* 2,4-D degrading plasmid pIJB1' and 'Mapping of the chromosomal rDNA repeat of *Aspergillus fumigatus*') (Oct. 1989 – Jun. 1990)  
**1992-1996** State Scholarships Foundation (IKY) national scholarship to conduct doctoral dissertation in the field of Genetics (topic: 'Study of conjugative gene transfer in the ethanol-producing bacterium *Zymomonas mobilis*')  
**1992** EU Regional Development stipend to attend the workshop 'Application of novel techniques in the Biochemical & Biomedical Sciences', University of Ioannina, School of Chemistry and School of Medicine, Ioannina, Greece (Nov. – Dec. 1992)  
**1999-2002** Post-doctoral research fellowship provided by NIH grant GM42893 awarded to Prof. S. C. Winans, Dept. of Microbiology, College of Agriculture and Life Sciences, Cornell University, Ithaca NY (topic: 'Interactions between *Agrobacterium* and host plants')  
**2010** NKUA Dean's Office stipend (code 10812) to present research at the 5<sup>th</sup> Annual US DOE-Joint Genome Institute User Meeting, Walnut Creek, CA, USA (see conferences)  
**2011** Greek/Latvian stipend for scientific bilateral exchange between the NKUA and the University of Latvia, Latvia (DPMA 2011/77; travel and stay in Riga Oct. 26-31, 2011)

- 2013** NKUA Dean's Office stipend (code 10812) to present research at the FEMS 2013 International Conference, Leipzig, Germany (see conferences). PhD student G. Savvakis was the stipend recipient and presenter.
- 2014** As above, to present research at the International Conference 'Plant Transformation Technologies (VISCEA)', Vienna, Austria (see conferences)

### **Participation in Research Programs**

- 1992-1994** Greek General Secretariat for Research & Technology (GSRT) PENED Program awarded to Prof. M. A. Typas on the topic 'Conjugative gene transfer in the ethanol-producing bacterium *Zymomonas mobilis*'
- 1995-1997** EU/GSRT/Greek Sugar Industry co-sponsored Program EPET II 323 awarded to Prof. M. A. Typas on the topic 'Genetic enhancement of ethanol-producing organisms aiming to simultaneous ethanol and ice nucleation protein production'
- 1997-1998** EU/GSRT co-sponsored Program PABE (collaborations with Industrial Partners) awarded to Prof. M. A. Typas on the topic 'Molecular typing of sugar-degrading bacteria and fungi isolated in sugarcane fermentations'
- 1999-2002** US NIH grant GM42893 awarded to Prof. S. C. Winans, Dept. of Microbiology, College of Agriculture and Life Sciences, Cornell University, Ithaca, NY, on the topic 'Interactions between *Agrobacterium* and host plants'
- 2002** EU-sponsored research program 'RAFBCA: Risk Assessment of Biological Control Agents' awarded to Prof. M. A. Typas on the topic 'Molecular typing of insecticide fungi – risk assessment with the application of the Ames test' (Aug. – Oct. 2002)
- 2011-** NKUA Research Committee grant 'Kapodistrias', awarding the Department of Genetics & Biotechnology cumulative research activity on the topic 'Structure and function of genes of biotechnological importance'.
- 2012-** National–EU co-funded Research Program 'THALIS'. Network of excellence between the NKUA, the National Technical University of Athens, the Agricultural University of Athens, Harokopeion University, and Lund University, Sweden (network coordinator Prof. M. A. Typas, NKUA); topic: 'Metagenomics of ligninolytic microorganisms – Bioconversion of plant by-products into high-added value products'
- 2012-** National–EU co-funded Research Program 'THALIS'. Network of excellence between the Agricultural University of Athens, the NKUA, the Aristotle University of Thessaloniki, and the South Carolina State University, USA (network coordinator Prof. G. J. Nychas, AUA); topic: 'Biological Investigation Of the Forces that Influence the Life of pathogens having as Mission to Survive in various Lifestyles; BIOFILMS'
- 2013-** EU/GSRT co-sponsored Research Program 'COOPERATION'. Academic – industrial collaboration framework between the National Technical University of Athens, the NKUA, the University of Thessaly, the Centre for Research and Technology Hellas (CERTH), AgrosBiosystems, Motor Oil Hellas, and Planning MC (network coordinator Prof. D. Kekos, NTUA); topic: 'Sustainable Integrated Method for the Production of Lignocellulosic Ethanol - SIMPLE'
- 2014-** ERA-NET (Synthetic Biology - ERASynBio) FP7 submission (under re-evaluation). Network of excellence coordinated by Prof. U. Kalnenieks on the topic 'Bacterial Syntrophic Modules for the Conversion of Waste into Fuels - EZ-FUEL'. Participating teams of Prof. U. Kalnenieks (University of Latvia), Prof. R. Poole, Prof. J. Green, Prof. W. Zimmerman (University of Sheffield), Prof. O. Sawodny, Dr. M. Ederer (University of Stuttgart/Institute of Systems Dynamics), Dr. K. Bettenbrock (Max Planck Institute for Dynamics of Complex Systems, Magdenburg), Ass. Prof. Per Bruheim (Norwegian University of Science and Technology), Ass. Prof. K. M. Pappas (University of Athens, contractor: Max Planck, Magdenburg)

- 2014-** Partnership in the BBSRC Network ‘Crossing biological membranes: Engineering the cell-environment interface to improve process efficiency (CBMNet)’, BBSRC Networks in Industrial Biotechnology and Bioenergy (UK). Coordinators: Prof. J. Green (University of Sheffield), Prof. G. Thomas (University of York)

### **Principal Investigator in Research Programs**

- 2004-2005** NKUA Research Committee grant ‘Kapodistrias’ (70/4/7809) awarding the topic ‘Study of quorum sensing in the ethanol-producing bacterium *Zymomonas mobilis*’
- 2006-2007** NKUA Research Committee grant ‘Kapodistrias’ (70/4/7809) awarding the topic ‘Study of toxicity and other traits induced in high population densities of the ethanol-producing bacterium *Zymomonas mobilis*’
- 2006-2008** EU/GSRT co-sponsored grant ‘R&T Collaborations between Greek and non-European Institutions – Program EPAN’ for Greek - US bilateral collaboration between the University of Athens and Cornell University (18-months; GSRT no. 05-NONEU-273/RC no. 9324), on the topic ‘Study of cell-cell communication in the ethanol-producing bacterium *Zymomonas mobilis*’ (proposal ranked 1<sup>st</sup> in Life Sciences)
- 2008-** US Department of Energy - Joint Genome Institute and NKUA bilateral collaboration (FY2008\_CSP\_788284); topic: ‘Sequencing of *Zymomonas mobilis* strains CP4, ATCC 10988 and ATCC 29191 (subsp. *mobilis* lectotype and phenotypic centrotypic), ATCC 29192 (subsp. *pomaceae* lectotype) and *Z. mobilis* sp. NCIB 11163. Sequencing of strain ZM4 (ATCC 31821) plasmids.’ (of the three topmost evaluated proposals)  
<http://www.jgi.doe.gov/sequencing/cspseqplans2008.html>  
<http://www.jgi.doe.gov/sequencing/why/CSP2008/zmobilis.html>  
*Received letters of support from Prof. P.L. Rogers (University of New South Wales), Prof. H. Lawford (University of Toronto), Prof. H. Sahm (Juelich Research Centre), Prof. G. Stephanopoulos (MIT), Prof. T. Jeffries (University of Wisconsin), Prof. C. Drainas (University of Ioannina)*
- 2008-2009** NKUA Research Committee grant ‘Kapodistrias’ (70/4/7809) awarding the topic ‘Genomic analysis in six strains of the ethanol-producing bacterium *Zymomonas mobilis*’
- 2010-** US Department of Energy - Joint Genome Institute and NKUA bilateral collaboration (FY2010\_CSP\_52); topic: ‘Resequencing *Zymomonas mobilis* industrial strain ZM4. Sequencing *Zymomonas mobilis* transcriptomes’  
<http://www.jgi.doe.gov/sequencing/cspseqplans2010.html>  
*Received letters of support from Prof U. Kalnenieks (University of Latvia), Prof D. Eveleigh (Rutgers University)*
- 2013-** EU/GSRT co-sponsored Research Program ‘COOPERATION’. Academic – industrial collaboration framework between the National Technical University of Athens, the NKUA, the University of Thessaly, the Centre for Research and Technology Hellas (CERTH), AgrosBiosystems, Motor Oil Hellas, and Planning MC (network coordinator Prof. D. Kekos, NTUA); topic: ‘Sustainable Integrated Method for the Production of Lignocellulosic Ethanol - SIMPLE’. NKUA team co-PI (with Prof. M. A. Typas).  
*Shortlisted in submissions that did not receive funding*
- 2007** ERC-StG (Young Investigators) EU Call, topic ‘Genome-wide studies and metabolic engineering for the bioethanol-producing bacterium *Zymomonas mobilis*- ZYMOGEN07’
- 2009-2011** National–EU joint Research Program ‘THALIS’ (network coordinator), title ‘Comparative genomics and the study of metabolic and energetic networks in the ethanol-producing bacterium *Zymomonas mobilis*: a Systems Biology approach for the optimization of ethanol and high-added-value compound production (ZYMOSSYS)’. Network of excellence between the NKUA, the University of Ioannina, the Aristotle University of Thessaloniki, the National Research Foundation, the National Technical University, the University of Latvia, and the Technical University/ EPFL-Switzerland.

## **Other Research and Professional Activities**

### **I. Nucleotide Sequence Submitter**

- 1999-2004** Involved in sequencing, primary annotation and NCBI GenBank submissions:
- *Z. mobilis* subsp. *mobilis* industrial strain CP4 plasmid pCP4.2, 32623 bp (EU709732)
  - *Z. mobilis* subsp. *mobilis* industrial strain CP4 *recA* gene, 1574 bp (AY101392)
  - *Z. mobilis* subsp. *mobilis* ATCC 10988 plasmid pZMO1, 1651 bp (AJ009975) (deposited by Prof. C. Drainas)
  - *Z. mobilis* subsp. *mobilis* industrial strain CP4 IS element IS*Zm1068*, 1100 bp (AF012441)
- 2010-** Joint submissions with the US DOE-Joint Genome Institute:
- *Z. mobilis* subsp. *mobilis* industrial strain ZM4 chromosome AE008692.2, 2056363 bp (joint submission with the US DOE - Oak Ridge National Laboratory)
  - *Z. mobilis* subsp. *mobilis* industrial strain ZM4 plasmids 37066 bp (CP001881.1), 33915 bp (CP001882.1), 32801 bp (CP001883.1), 32400 bp (CP001884.1), 30952 bp (CP001885.1)
  - *Z. mobilis* subsp. *mobilis* NCIMB 11163 chromosome, 2124771 bp (CP001722.1)
  - *Z. mobilis* subsp. *mobilis* NCIMB 11163 plasmids 53380 bp (CP001723.1), 40818 bp (CP001724.1), 4551 bp (CP001725.1)
  - *Z. mobilis* subsp. *pomaceae* ATCC 29192 chromosome, 1989865 bp (CP002865.1)
  - *Z. mobilis* subsp. *pomaceae* ATCC 29192 plasmids 37387 bp (CP002866.1), 34161 bp (CP002867.1)
  - *Z. mobilis* subsp. *mobilis* ATCC 10988 chromosome, 2021773 bp (CP002850.1)
  - *Z. mobilis* subsp. *mobilis* ATCC 10988 plasmids 32479 bp (CP002851.1), 32283 bp (CP002852.1), 1692 bp (CP002853.1), 18461 bp (CP002854.1), 4023 bp (CP002855.1), 2750 bp (CP002856.1)
  - *Z. mobilis* subsp. *mobilis* ATCC 29191 chromosome, 1961306 bp (CP003704)
  - *Z. mobilis* subsp. *mobilis* ATCC 29191 plasmids 18350 bp (CP003705), 14947 bp (CP003706), 13742 bp (CP003707)
  - *Z. mobilis* subsp. *mobilis* CP4 chromosome, 1998637 bp (CP006818)
  - *Z. mobilis* subsp. *mobilis* CP4 plasmids 36892 bp (CP006891), 33915 bp (CP006892), 32400 bp (CP006893), 30952 bp (CP006894), and 30,440 bp (CP006895)
- 2008 -** Provides US DOE-JGI web content regarding *Z. mobilis* (<http://genome.jgi-psf.org/>)
- 2009-** Has provided information to the ATCC and NCIMB Type Culture Collections regarding *Z. mobilis* strain identity/taxonomy

### **II. Journal Reviewer/Editor**

- 2008 -** Invited reviewer for the journals: Archives of Microbiology (Springer), Molecular Biology Reports (Springer), BMC Genomics (BioMed Central), Nucleic Acids Research (Oxford University Press), Molecular Microbiology (Blackwell), Journal of Applied Microbiology (Wiley), Plasmid (Elsevier), The ISME Journal (Nature Publishing Group), BMC Microbiology (BioMed Central), Biotechnology for Biofuels (BioMed Central), BioMed Research International (Hindawi Publishing Corporation), Applied Microbiology and Biotechnology (Springer), Antonie van Leeuwenhoek Journal of Microbiology (Springer)
- 2011-** Editorial board member in the 'Journal of Biotechnology and Biomaterials', OMICS Publishing Group
- 2013-2014** Guest editor in the journal Frontiers in Microbiology – Frontiers in Microbial Physiology and Metabolism (Nature Publishing Group), Research Topic and e-Book titled "Genetic and genome-wide insights into microbes studied for Bioenergy". Invited co-editors: Dr. Shane Yang (US DOE NREL), Prof. Nigel Minton (University of Nottingham/BSBEC), Prof. Ed

Lewis (University of Leicester), Ass. Prof. Biswarup Mukhopadhyay (VirginiaTech).  
[http://www.frontiersin.org/microbial\\_physiology\\_and\\_metabolism/researchtopics/genetic\\_and\\_genome-wide\\_insigh/1807](http://www.frontiersin.org/microbial_physiology_and_metabolism/researchtopics/genetic_and_genome-wide_insigh/1807)

### **III. Proposal Reviewer, Evaluator & Public Service Expert**

- 2009** Invited proposal reviewer by the British Royal Society, UK (Dec. 2009)
- 2010-2013** Appointed member of the Greek Food Safety Authority (EFET), Scientific Committee (ESET), Greek Ministry of Health
- 2010** Invited proposal reviewer by the Greek General Secretariat for Research and Technology (GSRT), Ministry of Education (Framework 'International Bilateral Proposals', Jun. 2010)
- 2010-** Appointed International Mentor by the American Society for Microbiology (Oct. 2010)
- 2013** Appointed by the Belgian Science Policy Office (BELSPO) to evaluate the University of Ghent BCCM/LMBP Plasmid and DNA Library Collection, March – April '13
- 2013** Invited proposal reviewer by the Greek GSRT, Ministry of Education (Framework 'Excellence', Jul. 2013)

### **IV. Invited Speaker & Conference Committee Member or Chair**

- 2008** Organizing committee member at the 1<sup>st</sup> Panhellenic Conference 'Microbiokosmos I: Our unexplored microbial treasure', December 12-14, NCSR 'Demokritos', Athens, Greece
- 2010** Invited speaker at the US DOE Oak Ridge National Laboratory – Bioenergy Science Center, TN, USA (March 24<sup>th</sup>, 2010)
- 2010** Scientific committee member at the 3<sup>rd</sup> Panhellenic Conference 'Microbiokosmos III: microbes in health, nutrition and the environment', December 16-18, 'Noesis' Centre, Thessalonica, Greece
- 2011** Organizing committee member at the 62<sup>nd</sup> Conference of the Hellenic Society for Biochemistry and Molecular Biology, December 9-11, Eugenides Foundation, Athens, Greece
- 2012** Organizing committee member and Chair at the 3<sup>rd</sup> World Conference on Biotechnology 'Biotechnology-2012', September 13-15, Hyderabad National Convention Centre, Hyderabad, India
- 2013** Organizing committee member, Scientific Advisor for Track 8 'Microbial Genetics' and Chair at the 'International Conference on Genetic Engineering & Genetically Modified Organisms (Genetic Engineering-2013)', August 12-14, Raleigh, NC, USA
- 2013** Organizing Committee Member and Chair at the 6<sup>th</sup> International Scientific Conference on Climate Change and the Environment (Promitheas), October 9-11, NKUA (Kostis Palamas Building), Athens, Greece
- 2014** Invited speaker at the University of Wisconsin-Madison, Department of Bacteriology / US DOE Great Lakes Bioenergy Research Center, WI, USA (September 25<sup>th</sup>, 2014)
- 2014** Organizing Committee Member and Chair at the 7<sup>th</sup> International Scientific Conference on Climate Change and the Environment (Promitheas), October 8-10, NKUA (Kostis Palamas Building), Athens, Greece
- 2014** Organizing and Scientific committee member at the 9<sup>th</sup> Conference of the Hellenic Society for Computational Biology and Bioinformatics - HSCBB14, October 10-12, Agricultural University of Athens, Greece
- 2015** Organizing and Scientific committee member at the 6<sup>th</sup> Panhellenic Conference 'Microbiokosmos VI', April 3-5, National Research Foundation, Athens, Greece
- 2015** Organizing committee member and Chair at the 37<sup>th</sup> Symposium on Biotechnology for Fuels and Chemicals (37<sup>th</sup> SBFC) of the Society for Industrial Microbiology and Biotechnology (SIMB), April 27-30<sup>th</sup>, San Diego, CA, USA



## **V. Member of Societies and Associations**

Member of the: American Society for Microbiology (ASM), American Association for the Advancement of Science (AAAS), American Chemical Society (ACS), European Science Foundation (ESF), International Society for Plasmid Biology (ISPB), Hellenic Society for Biological Sciences (HSBS), Hellenic Society of Biochemistry and Molecular Biology (HSBMB), Hellenic Society for Computational Biology and Bioinformatics (HSCBB), Hellenic Society for Biotechnology (HSB), Hellenic Society for Microbiology 'Mikrobiokosmos'(MBK)

## **Academic Responsibilities**

### **I. Administrative**

- 2005-** Member of the Faculty of Biology, NKUA, Administrative Board
- 2005-2007** Examiner for graduate students enrolling in the NKUA Faculties of Biology and Pharmacy (examined subject: Biology). Substitute examiner since 2007.
- 2006-2007** Elected member of the NKUA Administrative Council (Senate)
- 2007-2009** Member of the Faculty of Biology, NKUA, committees for Maintenance, Research & PR activities
- 2008 -** Responsible for Radiation Safety in the Dept. of Genetics and Biotechnology, Faculty of Biology, NKUA
- 2009-** Member of the Faculty of Biology, NKUA, committees for Faculty Curriculum, Museums and Environmental Policies
- 2008-** Member of electoral bodies for faculty appointments in the following institutions: Faculty of Biology, NKUA (2008); the Faculty of Agricultural Biotechnology, Agricultural University of Athens (2008, 2010); the Faculty of Biology, University of Patras (2010); the School of Sciences and Technologies, Department of Biological Applications and Technologies, University of Ioannina (2012)
- 2012-** Provided English versions for the Faculty of Biology, NKUA, web pages and the Faculty Diploma Supplement
- 2014-** Member of the Faculty of Biology, NKUA, committee for the EU 'ERASMUS' framework for student exchange

### **II. Teaching**

- 1990-1999** Teaching assistant in the undergraduate student laboratory courses for 'Genetics' (2<sup>nd</sup> year; Mendelian Genetics: *Drosophila* and maize crosses - Human Genetics - Microbial Genetics - Population Genetics) and 'Biotechnology' (4<sup>th</sup> year; Molecular Cloning) in the Faculty of Biology, NKUA
- 2003-** As faculty member of the Faculty of Biology, NKUA, teaches in the following undergraduate courses:
- 'Introduction to Biology' (2007) (1<sup>st</sup> semester course)  
Lecture: 'Recombinant DNA Technology' (6 hrs)  
Laboratory course: 'The nature of the Gene' (3 hrs per class, 6 classes per week)
  - 'Genetics' (2004 -) (4<sup>th</sup> semester course)  
Lectures: 'Gene Regulation' (10 hrs) and 'Mutagenesis' (5 hrs)  
Laboratory course: 'Microbial Genetics (Mutagenesis in *Aspergillus* and *Escherichia* as models – Mutant isolation and study – DNA repair – Use of antibiotic resistance traits to establish gene horizontal and vertical transfer, and gene induction' (4 series, 3-hrs per class, 4-7 classes per week; Laboratory course supervisor)

- ‘Advanced Genetics’ (2005 -) (5<sup>th</sup> semester course)  
Lectures: ‘Transposable Elements’(4 hrs), ‘Genetic Engineering’ (8 hrs), student seminars (2-4 hrs)
  - ‘Biotechnology’ (2004 -) (8<sup>th</sup> semester course)  
Lecture: ‘Molecular Plant Biotechnology’ (6 hrs)  
Laboratory course: ‘Molecular Cloning’ (4 series, 3-hrs per class, 2 classes per week; Laboratory course supervisor)
- Teaching in the Faculty of Philosophy and History of Science, NKUA:
- ‘General Biology’ (2014-) (3<sup>rd</sup> semester course)  
Lectures: ‘Recombinant DNA Technology’ (3 hrs) and ‘The microbial world’(3 hrs)

Post-graduate lectures:

- ‘Bacterial cell-cell signaling’ in the MSc course ‘Microbial Biotechnology’, Faculty of Biology, NKUA, and the departmental course for PhD students (2005 -)
- ‘Principles in genomics, transcriptomics and proteomics’ in the MSc course ‘Bioinformatics’, Faculty of Biology, NKUA (2010 -)

Author of chapter ‘Molecular Plant Biotechnology’ for the 4<sup>th</sup> year ‘Biotechnology’ course hand-out (covers plant genomic analysis, plant transformation methods: direct or *A. tumefaciens*-mediated, transgenic plant technology, genetic marker containment, plastid transformation and the generation of transplastomic plants)

### **III. Supervision of BSc Dissertations**

*Faculty of Biology student supervision*

- G. Villias (2004-2005) ‘Replication and stability regions in plasmid pCP4.2 of the industrial *Zymomonas mobilis* strain CP4’
- E. Stavrou (2004-2006) ‘Study of quorum sensing in *Zymomonas mobilis*’
- V. Koumpena (2006-2007) ‘Transformation of *Arabidopsis thaliana* by *Agrobacterium tumefaciens* - *Escherichia coli* mixed infection’ (in collaboration with Ass. Prof. K. Haralampidis, Dept. of Botany, Faculty of Biology, NKUA)
- E. Pappa (2006-2007) ‘Construction of biotechnologically important *recA* and *radA* knock-out strains for the ethanol producing bacterium *Zymomonas mobilis* CP4’
- A. Tsoupras (2008-2009) ‘Organic analysis of *Z. mobilis* supernatants – detection of signaling or toxicity-related compounds’ (in collaboration with Prof. C. Demopoulos, Dept. of Biochemistry, Faculty of Chemistry, NKUA)
- A. Damoulaki (2008-2009) ‘Genetic and physiological studies of pheromone production in *Zymomonas mobilis*’
- G. Savvakis (2008-2009) ‘Study of genes involved in homologous recombination in *Zymomonas mobilis*’
- N. Pantelaiou (2008-2010) ‘Construction of species-specific vectors for *Zymomonas mobilis* that express cellulose-degrading enzymes’ (in collaboration with Prof. A. Typas, Dept. of genetics & Biotechnology, Faculty of Biology, NKUA)
- A. Andrea (2010-2011) ‘Genetic and physiological study of the *Zymomonas mobilis* antagonism against other bacteria’
- E. Davidova (2011-2013) ‘Study of transformation in an ethanologenic bacterium’
- C. Skrekas (2012-2013) ‘Cloning and study of the LexA repressor from the ethanol-producing bacterium *Zymomonas mobilis*’
- N. Taliouras (2012-2013) ‘Study of plasmids of different *Zymomonas mobilis* strains via bioinformatic and molecular approaches’
- A. Zafeiri (2012-2013) ‘Genetic evolution of bacterial strains that exhibit complex phenotypes’

applying methods of biological chemistry' (primary supervisor Dr G. Skrettas, National Hellenic Research Foundation, Athens)

- E. Derveni (2013-2014) 'Cell-cell signaling dependent gene induction in proteobacteria'
- M. Papaggeli (2013-2014) 'Development of mutagenesis tools in the ethanol-producing *Zymomonas mobilis*'
- P. Poulis (2014-2015) 'Transcriptional regulation of SOS genes in *Z. mobilis*'
- K. Siaka (2014-2015) 'Study of the antagonism of *Z. mobilis* against  $\alpha$ - and  $\gamma$ -proteobacteria'
- M. Roussou (2015-) 'Metabolic enhancement in the ethanol-producing *Zymomonas mobilis*' (in collaboration with Prof. M. A. Typas)

#### *Erasmus Placement student supervision*

- M. Vryonidou (2014-) 'Transcriptional profiling in biofilms of common food pathogens' (University of Surrey, UK)

#### *Supervision of undergraduate student placements in external institutions*

- V. Diakogiannaki (2012) 'Study of esterase enzyme reactions in the alga *Nannochloropsis*' School of Chemical Engineering, Department of Synthesis and Development of Industrial Processes, NTUA (primary supervisor, Prof. F. Kolisis)

#### **IV. Supervision of MSc Theses (primary supervisor)**

- M. Peternelji (2008-2009; recipient of the Greek Ministry of Education scholarship to conduct research in Greece), MSc Thesis in 'Biotechnology', University of Ljubljana, Slovenia, topic 'Methods for *Arabidopsis thaliana* transformation using *Escherichia coli* as transgene donor' (examined at the Biotechnological Faculty, University of Ljubljana, Ljubljana)
- A. Damoulaki (2010-2011), MSc Thesis in terms of the MSc course 'Implications of Biology in the Biomedical Sciences', co-administered by the Faculties of Biology and Medicine, NKUA, topic 'Study of biofilm formation in a fermenting bacterium'
- G. Savvakis (2010-2011), MSc Thesis in terms of the MSc course 'Bioinformatics', Faculty of Biology, NKUA, topic 'Study of DNA repair in the ethanol producing *Zymomonas mobilis*'
- A. Desiniotis (2012-2013), MSc Thesis in terms of the MSc course 'Bioinformatics', Faculty of Biology, NKUA, topic 'Bioinformatic study of the genome sequence of the ethanol-producing bacterial strain *Zymomonas mobilis* ATCC 29191'
- V. Tampakopoulou (2013-2014), MSc Thesis in terms of the MSc course 'Bioinformatics', Faculty of Biology, NKUA, topic 'Bioinformatic search for genes implicated in cell-cell signaling networks in genome sequences of the biotechnological bacterium *Zymomonas mobilis*'

#### **V. External examiner in MSc Thesis**

- D. Kapasa (2009), MSc Thesis in terms of the MSc course 'Microbial Biotechnology' Faculty of Biology, NKUA, topic 'Study of protein interaction networks instigated by gene-fusions in selected microorganisms' (primary supervisor Dr. S. Kossida, BRFAA, Athens)

#### **VI. Supervision of PhD Theses (Primary supervisor)**

- G. Savvakis (2012-) 'Study of the SOS response in the ethanologenic bacterium *Zymomonas mobilis*', Faculty of Biology, NKUA
- S. Fragolaki (2014-) 'Evaluation of novel inhibitors of the hepatitis C virus as therapeutic biomarkers' (principal investigator Dr. H. Boleti, Hellenic Pasteur Institute, Athens)

#### **VII. Supervision of PhD Theses (Counseling Committee)**

- I. Papaioannou (2009-) 'Study of heterokaryosis in the plant-pathogen *Verticillium dahliae*', Faculty of Biology, NKUA (primary supervisor Prof. M. A. Typas)



- I. Loizou-Kotta (2009-) ‘Molecular mechanisms controlling expression and function of the Hepatitis C virus polyprotein aminoterminal domain’, Pasteur Institute, Athens (primary supervisor Dr. P. Mavromara)
- A. Athanasopoulos (2010-) ‘Study of the genetic and biological role of isosomal proteins in the fungus *A. nidulans*’, NCSR ‘Democritos’ (primary supervisor Dr. V. Sophianopoulou)

### **VIII. External Examiner in PhD Theses**

- M. Kalamvoki (2005) ‘Study of the biological function of non-structural protein NS5A of the Hepatitis C virus’, Pasteur Institute, Athens (primary supervisor: Dr. P. Mavromara)
- D. Ghikas (2007) ‘Study of mitochondrial genomes of entomopathogenic fungi’, Faculty of Biology, NKUA (primary supervisor Prof. M. A. Typas)
- M. Billini (2008) ‘Study of Na<sup>+</sup>/H<sup>+</sup> antiporters in the cyanobacterium *Synechococcus* sp. 7942’, NCSR ‘Demokritos’, Athens (primary supervisor Dr. V. Sophianopoulou)
- A. Roumelioti (2009) ‘Genes coding for intracellular traffic and membrane localization of cationic amino acid transporters’, NCSR ‘Demokritos’, Athens (primary supervisor Dr. V. Sophianopoulou, NCSR ‘Democritos’)
- V. Kosti (2013) ‘Genetic, molecular, biochemical and biophysical studies of structure-function relations of transmembrane purine transporters’, Faculty of Biology, NKUA (primary supervisor Assoc. Prof. G. Diallinas)
- N. Arvanitis (2013) Study of native plasmids of the ethanol-producing bacterium *Zymomonas mobilis*, Faculty of Chemistry, University of Ioannina, Ioannina (primary supervisor: Prof. C. Drinas)
- I. Loizou-Kotta (2014) (see counseling committee, above)
- I. Pappaioannou (2014) (see counseling committee, above)
- A. Kirtzalidou (2014) ‘Study of probiotic properties of the human enteric microflora’, Harokopeion University, Athens (primary supervisor Assist. Prof. A. Kyriakou)
- M.F. Adegboye (2013) ‘Phylogenetic Screening for Possible Novel Antibiotic Producing Actinomycetes from Ngaka Modiri Molema District in North West Province’, Faculty of Agriculture, Science and Technology, North-West University, South Africa (primary supervisor Assoc. Prof. B. B. Olubukola)

## **Publications**

### **I. Dissertations**

**Pappas K. M.** (1990) ‘Genetic and microscopic study of exopolysaccharide secretion for the obligate methylotrophic bacterium *Methylomonas methylovora*’, BSc dissertation, Department of Genetics and Biotechnology and Department of Botany, Faculty of Biology, NKUA

**Pappas K. M.** (1997) ‘Study of conjugative gene transfer in the ethanol-producing bacterium *Zymomonas mobilis*’, PhD dissertation, Department of Genetics and Biotechnology, Faculty of Biology, NKUA

### **II. Invited Author in Book Chapters**

**1. Pappas K. M.** and Cevallos, M. A. (2011) ‘Plasmids of the *Rhizobiaceae* and their role in interbacterial and transkingdom interactions’. In ‘Biocommunication in Soil Microorganisms’ (ed. Günther Witzany), series ‘Soil Biology’ (vol. 23; Series ed. A. Varma), Springer, pp 295-338.

**2. Pappas K. M.** (2011) ‘Mini-Mu transposon mutagenesis of ethanologenic *Zymomonas mobilis*’. In ‘Strain Engineering: Methods and Protocols’ (ed. J. Williams), series ‘Methods in Molecular Biology’ (vol. 765; series ed. J. Walker), Humana Press, pp. 415-434.

**III. Publications in Peer-Reviewed Journals**

1. **Pappas, K. M.**, Galani, I., and Typas, M. A. (1997) Transposon mutagenesis and strain construction in *Zymomonas mobilis*. *Journal of Applied Microbiology* **82**: 379-388
2. Arvanitis, N., **Pappas, K. M.**, Kolios, G., Afendra, A., Typas, M. A., and Drainas, C. (2000) Characterization and replication properties of the *Zymomonas mobilis* ATCC10988 plasmids pZMO1 and pZMO2. *Plasmid* **44**: 127-137
3. Galeros, M.\*, **Pappas, K. M.\***, Beletsiotis, V., and Typas, M. A. (2001) IS1068, an IS5-like insertion element from *Zymomonas mobilis*. *Archives of Microbiology* **175**: 323-333 \*: co-contributors
4. Zhang, R.-g., **Pappas, T.**, Brace, J. L., Miller, P. C., Oulmassov, T., Molyneaux, J. M., Anderson, J. C., Bashkin, J. K., Winans, S. C., and Joachimiak, A. (2002) Structure of a bacterial quorum-sensing transcription factor complexed with pheromone and DNA. *Nature* **417**: 971-974
5. **Pappas, K. M.**, and Winans, S. C. (2003) A LuxR-type regulator from *Agrobacterium tumefaciens* elevates Ti plasmid copy number by activating transcription of plasmid replication genes. *Molecular Microbiology* **48**: 1059-1073
6. **Pappas, K. M.**, and Winans, S. C. (2003) The RepA, RepB autorepressors and TraR play opposing roles in the regulation of a Ti plasmid *repABC* operon. *Molecular Microbiology* **49**: 441-455
7. **Pappas, K. M.**, and Winans, S. C. (2003) Plant transformation by coinoculation with a disarmed *Agrobacterium tumefaciens* strain and an *Escherichia coli* strain carrying mobilizable transgenes. *Applied and Environmental Microbiology* **69**: 6731-6739
8. **Pappas, K. M.**, Winegart C. L., and Winans, S. C. (2004) Chemical communication in proteobacteria: biochemical and structural studies of signal synthases and receptors required for intercellular signaling. *Molecular Microbiology* **53**: 755-769 (review)
9. **Pappas, K. M.** (2008) Cell-cell signaling and the *Agrobacterium tumefaciens* Ti plasmid copy number fluctuations. *Plasmid* **60**: 89-107 (review)
10. 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. L., Chang, Y.-J., Samatova, N. F., and Brown, S. D.\* (2009) Improved genome annotation for *Zymomonas mobilis*. *Nature Biotechnology* **27**: 893-894 (\*co-corresponding)
11. 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
12. Kouvelis, V. N., Wang, C., Skrobek, A., **Pappas, K. M.**, Typas, M. A., and Butt, T. M. (2011) Assessing the toxigenicity and mutagenicity effects of secondary metabolites produced by fungal Biological Control Agents employing the Ames assay and the Vitotox® test. *Mutation Research* **722**: 1-6
13. Kouvelis, V. N., Davenport, K., Brettin, T., Bruce, D., Detter, C., Tapia, R., Han, C., Damoulaki, A., Kyrpides, N. C., Typas, M. A., and **Pappas, K. M.** (2011) Genome sequence of the ethanol-producing *Zymomonas mobilis* subsp. *pomaceae* lectotype ATCC 29192. *Journal of Bacteriology* **193**: 5049-5050
14. **Pappas, K. M.**, Kouvelis, V. N., Saunders, E., Brettin, T. S., Bruce, D., Detter, C., Balakireva, M., Han, C., Savvakis, G., Kyrpides, N.C., and Typas, M.A. (2011) Genome sequence of the ethanol-producing *Zymomonas mobilis* subsp. *mobilis* lectotype ATCC 10988. *Journal of Bacteriology* **193**: 5051-5052
15. Tsoupras, A. B., Demopoulos, C. A., and **Pappas, K. M.** (2012) Detection of platelet-activating factor (PAF) and its metabolic enzymes in the ethanologenic bacterium *Zymomonas mobilis*. *European Journal of Lipid Science and Technology* **114**: 123-133
16. 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., and **Pappas, K. M.** (2012) Complete genome sequence of the ethanol-producing *Zymomonas mobilis* subsp. *mobilis* centrotpe ATCC 29191. *Journal of Bacteriology* **194**: 5966-5967

17. Pinto, U., **Pappas, K. M.**, and Winans, S. C. (2012) The ABCs of plasmid replication and segregation, *Nature Reviews Microbiology* **10**: 755-765
18. 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., and **Pappas, K. M.** (2014) Finished genome of *Zymomonas mobilis* subsp. *mobilis* strain CP4, an applied ethanol-producer. *Genome Announcements* **2**: e00845-13
19. Savvakis, G., and **Pappas, K. M.** (2014) Construction and characterization of a *Zymomonas mobilis* *recA* strain. *Journal of Applied Microbiology (in submission)*
20. Desiniotis, A., Kouvelis, V. N., Typas, M. A., and **Pappas, K. M.** (2014). Comparative genomic analysis of the *Zymomonas mobilis* subsp. *mobilis* centrotypic ATCC 29191 leads to insights regarding the *Zymomonas* species. *Frontiers in Microbial Physiology (e-book, ed. K. M. Pappas; in submission)*

***In preparation:***

21. **Pappas, K. M.**, Krimitzas, A., Villias, G., and Typas, M. A. (2012) Plasmids of the *Zymomonas mobilis* industrial strain CP4. *Journal of Bacteriology*
22. Peternelji, M., Koumpena, V., Haralampidis, K. and **Pappas, K. M.** (2012) *Arabidopsis thaliana* transformation with the use of *E. coli* as transgene donor. *BMC Biotechnology*

**IV. Conference Presentations and Abstracts**

1. **Pappas, K. M.** and Typas, M. A. (1992) ‘A comparative study of exopolysaccharide secretion between wild-type and mutants of the obligate methylotroph *Methylomonas methylovora*’, National Conference of the Hellenic Society for Biological Sciences and the Biological Sciences Foundation of Cyprus, Nicosia, Cyprus (April 28- May 3), pp. 113
  2. **Pappas, K. M.** and Typas M. A. (1995) ‘Detection of the conjugal transfer properties of a 32 Kb *Zymomonas mobilis* plasmid’, European Science Foundation (ESF) Network Workshop on Molecular Biology and Ecology of Plasmid - Mediated Gene Transfer, Birmingham, UK (May 12-15), attached abstract
  3. **Pappas, K. M.**, Galani, I. and Typas, M. A. (1996) ‘Transposon mutagenesis in *Zymomonas mobilis*’, 5th International Symposium on Bacterial Genetics and Ecology (BAGECO 5), Nauplion, Greece (May 25-29), pp.186
  4. Galeros, M., **Pappas, K. M.** and Typas, M. A. (1996) ‘The detection of mobile elements on the 32.0-Kb conjugative plasmid of *Zymomonas mobilis*’, 5th International Symposium on Bacterial Genetics and Ecology (BAGECO 5), Nauplion, Greece (May 25-29), pp. 32
  5. **Pappas, K. M.** and Typas, M. A. (1996) ‘ Restriction and functional analysis of pZMO6, *Zymomonas mobilis* 32 Kb plasmid species’, ‘Plasmid Biology 1996’ - International Symposium on Plasmid Molecular Biology, Graz, Austria (September 1-5), pp. 109-110
  6. **Pappas, K. M.**, and Typas, M. A. (1999) ‘The 32-Kb plasmid system of *Zymomonas mobilis*’, First Symposium of the EU-concerted action ‘Mobile elements’ contribution to bacterial adaptability (MECBAD)’, Strasbourg, France (April 23-27), pp. 119-120
  7. Arvanitis, N., **Pappas, K. M.**, Kolios, G., Afendra, A., Typas, M. A. and Drainas, C. (1999) ‘Nucleotide sequence analysis the *Zymomonas mobilis* ATCC 10988 plasmids pZMO1 and pZMO2’, 48<sup>th</sup> Annual Conference of the Hellenic Society of Biochemistry and Molecular Biology (HSBMB), Athens, Greece (January 15-17), pp. 64-65
  8. as in (7), 6<sup>th</sup> International Symposium on ‘Bacterial Genetics and Ecology’ (*BAGECO 6*), Florence, Italy (June 20-24), pp. 130
  9. **Pappas, K. M.**, and Typas, M. A. (1999) ‘The 32-kb plasmid family of *Zymomonas mobilis* strain CP4: study of plasmid pZMO6 as a representative’, 6<sup>th</sup> International Symposium on Bacterial Genetics and Ecology (*BAGECO 6*), Florence, Italy (June 20-24), pp. 22-23
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10. Beletsiotis, E. A., **Pappas, K. M.**, and Typas, M. A. (2000) 'Isolation and characterization of the *recA* gene of the ethanol producing bacterium *Zymomonas mobilis*', 22<sup>nd</sup> Annual Meeting of the Hellenic Society for Biological Sciences (EEBE), Skiathos, Greece, pp. 170
11. Zhu, J., **Pappas, T.**, Chai, Y and Winans, S. C. (1999) 'The *A. tumefaciens* TraR regulator requires its autoinducing ligand for protein folding, protease resistance and dimerization', Gordon Research Conferences (Transcription Factors), Salve Regina University, Newport RI (July 14-19)
12. **Pappas, T.**, and Winans, S. C. (2001) 'Structure and functions of TraR, the *Agrobacterium tumefaciens* quorum-sensing dependent transcriptional regulator', Infection and Pathobiology Forum (Cornell University), Auburn NY (April 23-27)
13. **Pappas, T.\***, and Winans, S. C. (2001) 'Biochemical and Structural Analysis of a TraR-Pheromone-DNA Ternary Complex', ASM Conference on Cell-Cell Communication in Bacteria, Snowbird, Utah (July 6-9), pp. 15
14. **Pappas, T.**, and Winans, S. C. (2001) 'Quorum-Dependent Transcriptional Regulator TraR Structure and Role in the Octopine-Type Ti Plasmid Replication', 22<sup>nd</sup> Crown Gall Conference, Atlanta, GA (November 16-18), pp. 9
15. **Pappas, K. M.\***, and Winans, S. C. (2002) 'Cell-cell communication in bacteria: Structure and function of a quorum sensing-dependent transcriptional regulator', 24<sup>th</sup> Symposium of the Hellenic Society for Biological Sciences (EEBE), Eretria, Euvoia (May 23-26), pp. 226
16. Cho, H., **Pappas K. M.**, and Winans S. C. (2004) 'Copy number control of Ti plasmid by intercellular signalling', ASM Conference on Cell-Cell Communication in Bacteria, Banff, Alberta, Canada (July 23-27), pp. 74
17. **Pappas T.**, and Winans S. C. (2004) 'Plant transformation by *Escherichia coli* – *Agrobacterium tumefaciens* co-infection', *Plasmid Biology 2004*, International Symposium on Plasmid Molecular Biology, Corfu, Greece (September 15-21), pp. 34 – **poster awarded**
18. **Pappas K. M.\*** (2006) 'Copy number control of the oncogenic Ti plasmid of *Agrobacterium tumefaciens* by plasmid repressors and extracellular signals', 28<sup>th</sup> Symposium of the Hellenic Society for Biological Sciences (EEBE), Ioannina, Greece (May 18-20), pp. 327-328
19. Villias G., and **Pappas K. M.** (2006) 'Identification of replication and partitioning regions on the 32-kb plasmid pCP42 of the industrial ethanol producer *Zymomonas mobilis* strain CP4', 28<sup>th</sup> Symposium of the Hellenic Society for Biological Sciences (EEBE), Ioannina, Greece (May 18-20), pp. 33-34
20. Stavrou, E. E., and **Pappas K. M.** (2006) 'Study of quorum sensing properties of the ethanol producing bacterium *Zymomonas mobilis*', 28<sup>th</sup> Symposium of the Hellenic Society for Biological Sciences (EEBE), Ioannina, Greece (May 18-20), pp. 385-386
21. **Pappas, K. M.**, Cho, H., and Winans, S. C. (2006) 'Plant-released and interbacterial signals co-regulate Ti plasmid copy number and *Agrobacterium*-mediated tumorigenesis of plants', ESF-EMBO International Symposium on 'Bacterial Networks: Joining the Strengths of Structure- and Systems Biology to Reach Synthetic Biology', St Feliu de Guixols, Costa Brava, Spain (October 14-19), pp. 17
22. same as above, (2007) 9<sup>th</sup> International Symposium on Bacterial Genetics and Ecology (*BAGECO 9*), Microbial Community Networks, Wernigerode, Germany (June 23-27), pp. 84
23. Stavrou E.E., and **Pappas K. M.** (2007) 'Investigating quorum sensing in the ethanol producing bacterium *Zymomonas mobilis*' ASM Conference on Cell-cell Communication in Bacteria, Austin TX (October 7-10), pp. 72
24. **Pappas K. M.** (2008) '*Zymomonas mobilis* – a model organism for bioethanol production', JGI-DOE Microbial Genomics and Metagenomics Workshop, Walnut Creek, CA (January 7-11)
25. Koumpena, V., Haralampidis, K., and **Pappas, K. M.** (2008) '*Arabidopsis thaliana* transformation using *Escherichia coli* transgene donors and *Agrobacterium tumefaciens* intermediates', 33<sup>d</sup> International FEBS Congress (11<sup>th</sup> IUBMB), Athens, Greece (June 28-July 3), pp. 364
26. Stavrou, E.E., and **Pappas, K. M.** (2008) 'Quorum sensing in *Zymomonas mobilis*', 33<sup>d</sup> International FEBS Congress (11<sup>th</sup> IUBMB), Athens, Greece (June 28-July 3), pp. 261



27. **Pappas, K. M.\*** (2008) 'Genomic analysis for the ethanol producer *Zymomonas mobilis*', 1<sup>st</sup> National Conference of the Hellenic Society for Microbiology 'Mikrobiokosmos': 'Our unexplored microbial environment', Nuclear Research Centre 'Demokritos', Athens (December 12-14), pp. 28-29
28. Tsoupras, A., Damoulaki, A., Stavrou, E., and **Pappas, K. M.** (2008) 'Cell-cell signaling in *Zymomonas mobilis*', 1<sup>st</sup> National Conference of the Hellenic Society for Microbiology 'Mikrobiokosmos: Our unexplored national microbial environment', Nuclear Research Centre 'Demokritos', Athens (December 12-14), pp.45-26.
29. Tsoupras, A., Demopoulos C. and **Pappas, K. M.** (2009) 'Detection of PAF and PAF-basic metabolic enzymes in the bacterium *Zymomonas mobilis*, 60<sup>th</sup> Conference of the Hellenic Society of Biochemistry and Molecular Biology (HSBMB), Zappeio Megaron, Athens (November 20-22), pp. 268
30. Savvakis, G., Beletsiotis, E., Typas, M. A., and **Pappas, K. M.** (2009) 'Construction of a *recA* knock-out strain for the ethanol producer *Zymomonas mobilis* CP4', 2<sup>nd</sup> National Conference of the Hellenic Society for Microbiology 'Mikrobiokosmos' (MBK2), Caravel, Athens (December 4-6), pp. 112-113
31. **Pappas, K. M.** (2010) 'Genomics of the ethanol-producing *Zymomonas mobilis*', 5<sup>th</sup> Annual Joint Genome Institute User Meeting, Walnut Creek, CA (March 24-26), pp. 47
32. Savvakis, G., Beletsiotis, E., Typas, M. A., and **Pappas, K. M.** (2010) 'Construction of a *recA* knock-out strain of the ethanol producing *Zymomonas mobilis* CP4', 32<sup>nd</sup> Conference of the Hellenic Society for Biological Sciences (EEBE), Karpenisi, Greece (May 20-22), pp. 330-331
33. Pappa, E., and **Pappas, K. M.** (2010) 'Isolation and characterization of the DNA-repair gene *radA* from the ethanol-producing bacterium *Zymomonas mobilis*', 32<sup>nd</sup> Conference of the Hellenic Society for Biological Sciences (EEBE), Karpenisi, Greece (May 20-22), pp. 306-307
34. Kouvelis, V. N., Typas, M. A., **Pappas, K. M. et al.** (2010) 'The complete genomes of three ethanol-producing *Zymomonas mobilis* strains: Insights in comparative genomics'. 5<sup>th</sup> Conference of the Hellenic Society for Computational Biology and Bioinformatics (HSCBB10), Alexandroupolis, Greece (October 17-19), pp 41 – **F1000 Poster Award:** <http://posters.f1000.com/P687>
35. (as before) 3<sup>d</sup> National Conference of the Hellenic Society for Microbiology 'Mikrobiokosmos' (MBK3), Thessaloniki, Greece (December 16-18), pp. 58-59
36. **Pappas, K. M.\*** (2010) 'Interbacterial or transkingdom signaling and plasmid copy number in the *Rhizobiaceae*'. 3<sup>d</sup> National Conference of the Hellenic Society for Microbiology 'Mikrobiokosmos' (MBK3), Thessaloniki, Greece (December 16-18), pp. 110-111
37. Tsoupras, A. B., Kouvelis, V. N., Demopoulos, C. A., **Pappas, K. M.**, and Typas, M. A. (2010) 'In vitro anti-inflammatory activities of *Beauveria bassiana* lipid molecules towards platelet activating factor (PAF)'. 3<sup>d</sup> National Conference of the Hellenic Society for Microbiology 'Mikrobiokosmos' (MBK3), Thessaloniki, Greece (December 16-18), pp. 138-139
38. Damoulaki, A., Tsoupras, A., and **Pappas, K. M.** (2011) 'Quorum sensing in ethanol-producing *Zymomonas mobilis* strains'. 33<sup>rd</sup> Conference of the Hellenic Society for Biological Sciences (EEBE), Edessa, Greece (May 19-21), pp. 70-71
39. Andrea, A., and **Pappas, K. M.** (2011) 'The antagonistic behavior of *Zymomonas mobilis* against other microorganisms'. 33<sup>rd</sup> Conference of the Hellenic Society for Biological Sciences (EEBE), Edessa, Greece (May 19-21), pp. 18-19
40. As in 33. 11<sup>th</sup> International Conference on Bacterial Genetics and Ecology (*BAGECO 11*), Biotechnology of an Evolving Global Economy, Corfu, Greece (May 29- June 2), pp. 54
41. Savvakis, G., and **Pappas K. M.** (2011) 'Study of DNA repair in the bioethanol-producer *Zymomonas mobilis*'. 11<sup>th</sup> International Conference on Bacterial Genetics and Ecology (*BAGECO 11*), Biotechnology of an Evolving Global Economy, Corfu, Greece (May 29- June 2), pp. 61
42. **Pappas, K. M.** (2011) 'Genomics of a bioethanol-producing bacterium'. 5<sup>th</sup> European Conference on Prokaryotic and Fungal Genomics (ProkaGENOMICS 2011), Göttingen, Germany (September 18-21), pp. 45



43. Savvakis, G., and **Pappas K. M.** (2011) 'Study of SOS regulation in the ethanologenic *Zymomonas mobilis*'. 6<sup>th</sup> Conference of the Hellenic Society for Computational Biology and Bioinformatics (HSCBB11), Patras, Greece (October 14-16), pp. 29 – **presentation awarded**.
44. (as above; oral presentation). 4<sup>th</sup> National Conference of the Hellenic Society for Microbiology 'Mikrobiokosmos' (MBK4), Ioannina, Greece (October 21-23), pp. 28-29 – **oral presentation awarded**.
45. **Pappas, K. M.\*** (2012) 'Comparative genomics of a bioethanol producer'. 3<sup>rd</sup> World Congress in Biotechnology (Biotechnology-2012), Hyderabad National Convention Centre, Hyderabad, India (September 13-15)
46. 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., and **Pappas, K. M.** (2012) 'Analysis of the genome sequence of the ethanol-producing *Zymomonas mobilis* subsp. *mobilis* centrotypic ATCC'. 7<sup>th</sup> Conference of the Hellenic Society for Computational Biology and Bioinformatics (HSCBB11), Herakleion, Crete (October 14-16), pp. 29 (oral presentation)
47. Tampakopoulou, V., Damoulaki, A., and **Pappas, K. M.** (2012) 'Study of biofilm formation in wild type strains and mutant derivatives of the ethanologenic bacterium *Zymomonas mobilis*'. 5<sup>th</sup> National Conference of the Hellenic Society for Microbiology 'Mikrobiokosmos' (MBK5), Agricultural University of Athens, Athens, pp. 54-55 (oral presentation)
48. Desiniotis, A., and **Pappas, K. M.** (2012) 'Genomic analysis of *Zymomonas mobilis* subsp. *mobilis* ATCC 29191: comparative, structural and functional insights', 5<sup>th</sup> National Conference of the Hellenic Society for Microbiology 'Mikrobiokosmos' (MBK5), Agricultural University of Athens, pp. 228-229
49. (as above; 2013) 8<sup>th</sup> Annual Joint Genome Institute User Meeting, Walnut Creek, CA (March 26-28), pp. 19-20
50. Davydova, E., and **Pappas, K. M.** (2013) 'Study of transformation in different strains of the ethanol-producing bacterium *Zymomonas mobilis*'. 35<sup>th</sup> Conference of the Hellenic Society for Biological Sciences (EEBE), Nauplion, Greece (May 23-25), pp. 250-251
51. Savvakis, G., and **Pappas, K. M.** (2013) 'Characteristics of a *recA* mutant and *in silico* analysis of SOS regulation in the ethanol-producing *Zymomonas mobilis*'. FEMS-2013 International Congress, Leipzig, Germany, July 21-25
52. (as above) (2013) 64<sup>th</sup> Conference of the Hellenic Society of Biochemistry and Molecular Biology (HSBMB), Eugenides Foundation, Athens (December 5-8) Young Scientists Forum (oral presentation)
53. **Pappas, K. M.\*** (2013) '*Escherichia coli* as gene donor in transgenic plant technology', International Congress on Genetic Engineering & Genetically Modified Organisms, Raleigh-Brownstone University, Raleigh, North Carolina (August 12-14), pp. 113
54. **Pappas, K. M.\*** (2014) '*Escherichia coli* can act as an *in planta* gene donor for the creation of transgenic plants', Plant Transformation Technologies III (VISCEA), Vienna, Austria (February 12-14), pp. 13
55. Emmanouilidou, E., Taliouras, N., Tampakopoulou, V., Davenport, K., Bruce, D., Detter, C., Tapia, R., Han, C., Land, M. L., Hauser, L., Chang, Y.-J., Pan, C., Kouvelis, V. N., Goodwin, L. A., Woyke, T., Kyrpides, N. C., Typas, M. A., and **Pappas, K. M.** (2014) 'Insights into the *Zymomonas mobilis* plasmidome', Cold Spring Harbor Laboratory Meeting on 'Plasmids: History and Biology', Cold Spring Harbor, NY, September 21-23 (no book of abstracts; distributed as hand-out)
56. Emmanouilidou, E., Taliouras, N., Tampakopoulou, V., and **Pappas, K. M.** (2014), as above, 9<sup>th</sup> Conference of the Hellenic Society for Computational Biology and Bioinformatics - HSCBB14, Agricultural University of Athens, Greece (October 10-12), pp. 91-92
57. Efthimiou, G., **Pappas, K. M.**, and Typas, M. A. (2014) 'A bioinformatic and literature-based analysis of the molecular mechanisms involved in biofilm formation by *Salmonella enterica* subsp. *enterica* serovar Typhimurium and *Staphylococcus aureus* COL (MRSA)', 9<sup>th</sup> Conference of the Hellenic Society for Computational Biology and Bioinformatics - HSCBB14, Agricultural University of Athens, Greece (October 10-12), pp. 75-76

*Underlined are the oral presentations (\* invited); highlighted are the awarded presentations*

**Languages:** English (Cambridge Proficiency in English - honours), German (Mittelstufe)

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