

CURRICULUM VITAE

NAME: Dimitris Mossialos

DATE OF BIRTH: 1-11-1970

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EDUCATION

1989-1994 BSc in Biology Aristotle University of Thessaloniki, Greece

1994-1995 MSc in Molecular Biology and Biotechnology with Distinction, Vrije
Universiteit Brussel, Belgium

1996-2000 PhD with Greatest Distinction, Vrije Universiteit Brussel, Belgium.

Dissertation title: Endogenous and Exogenous Siderophore Uptake Systems in
Pseudomonas fluorescens and *Pseudomonas aeruginosa*.

1999-2000 Postgraduate Diploma in Management with Distinction, Vrije Universiteit
Brussel, Belgium.

Spoken Languages: Greek (Mother Tongue) English (Excellent), Italian (Fluently),
French (Basic Knowledge).

ACADEMIC AND PROFESSIONAL EXPERIENCE

1996-2000 Member of Flanders Interuniversity Institute of Biotechnology (VIB)

2000-2003 Postdoctoral Research Associate, Imperial College London, UK

2003-2004 Military Service (Microbiologist)

2005-2006 Postdoctoral Research Associate, Universite de Lausanne (UNIL),
Switzerland

April 2007-August 2011 Lecturer in Microbial Biotechnology. Department of
Biochemistry & Biotechnology, University of Thessaly

August 2011- Assistant Professor in Microbial Biotechnology. Department of
Biochemistry & Biotechnology, University of Thessaly

TEACHING EXPERIENCE

Academic years 1998-2000 Vrije Universiteit Brussel, Belgium . Teaching of Practical Course in Molecular Microbiology (MSc level)

Academic year 2001-2002 Imperial College London, UK. Supervision of Diploma thesis (1 undergraduate and 1 MSc)

Academic years since 2007 Department of Biochemistry & Biotechnology, University of Thessaly. Teaching of General Biology and Immunology in academic year 2007-2008. Teaching of Microbiology-Virology and Animal Biotechnology since 2007. Teaching of Postgraduate courses (MSc):1) Environmental and Food Microbiology 2) Infectious Diseases since 2007. **Supervisor** of 14 undergraduate Diploma theses and 15 MSc theses.

RESEARCH ACTIVITY

1. **Research interests:** Molecular microbiology with emphasis on pseudomonad biology (High-affinity iron uptake systems, oxidative stress, cyanogenesis, gene regulation, antibiotic resistance) Biotechnological Application of pseudomonads in Agriculture and Environment. Characterization of microbiota in insects (*Cydia pomonella*) and aquacultures fishes (*Dicentrarchus labrax* L.). Antimicrobial properties of Greek honey. Microbial diversity of biodeteriorated art and historical objects (e.g. manuscripts, wall paintings).

Member of:

- General Society of Microbiology (UK)
- European Federation of Biotechnology
- Greek scientific society Microbiocosmos
- Society for Invertebrate Pathology
- COST Action 862 “Bacterial toxins for Insect control”

Reviewer

- Journal of Antimicrobial Chemotherapy
- Journal of Biological Chemistry
- Journal of Microbiology and Biotechnology
- Journal of Medicinal Food
- Annals of Microbiology
- Journal of Biological Research

- New Biotechnology
- BioMed Research International
- PLOS ONE
- Letters in Applied Microbiology
- Molecules
- Marine Drugs
- Current Medicinal Chemistry
- BMC Microbiology
- **Member of Editorial Board of Biotechnology Letters**

Invited lectures

National: 4, International: 2 (Since 2007)

Research Grants (2007-today)

- University of Thessaly Research Committee 2007: Coordinator (Budget 5,788 Euros)
- Postgraduate Programs “Biotechnology-Quality assessment in Nutrition and Environment” and “Molecular Biology and Genetics Applications-Diagnostic Markers” Department of Biochemistry and Biotechnology UTH (Total funding 32,200 Euros)

PUBLICATIONS

- 1) Mathioudakis M.M., R.S. Veiga, T. Canto, V. Medina, **D. Mossialos**, A.M. Makris and I. Livieratos (2013) Pepino mosaic virus triple gene block protein 1 (TGBp1) interacts with and increases tomato catalase 1 activity to enhance virus accumulation. *Mol. Plant Pathol.* **14(6): 589-601**
- 2) Pournaras S., R. Kock, **D. Mossialos**, A. Mellmann, V. Sakellaris, C. Stathopoulos, A.W. Friedrich and A. Tsakris (2013) Detection of a phylogenetically distinct IMP-type metallo- β -lactamase, IMP-35, in CC235 *Pseudomonas aeruginosa* from Dutch-German border region (Euregio). *J. Antimicrob. Chemother.* **68(6): 1271-1276**
- 3) Anthimidou E. and **D. Mossialos*** (2013) Antibacterial activity of Greek and Cypriot honeys against *Staphylococcus aureus* and *Pseudomonas aeruginosa* in comparison to manuka honey. *J. Med. Food* **16(1): 42-47**
- 4) Stagos D., N. Portesis, C. Spanou, **D. Mossialos**, N. Aligiannis, E. Chaita, C. Panagoulis, E. Reri, L. Skaltsounis, A.M. Tsatsakis and D. Kouretas (2012)

- Correlation of total polyphenolic content with antioxidant and antibacterial activity of 24 extracts from Greek domestic Lamiaceae species. *Food Chem Toxicol.* **50(11): 4115-4124**
- 5) Nikolouli K. and **D. Mossialos*** (2012) Bioactive compounds synthesized by non-ribosomal peptide synthetases and type-I polyketide synthases discovered through genome-mining and metagenomics. *Biotechnol. Lett.* **34(8): 1393-1403**
 - 6) Amoutzias, G.D., Y. He, J. Gordon, **D. Mossialos**, S.G. Oliver and Y. Van De Peer (2010) Posttranslational regulation impacts the fate of duplicated genes. *Proc. Natl. Acad. Sci USA* **107(7): 2967-2971**
 - 7) Papagiannoulis A., K.D. Mathiopoulos and **D. Mossialos*** (2010) Molecular detection of the entomopathogenic bacterium *Pseudomonas entomophila* using Polymerase Chain Reaction (PCR). *Lett. Appl. Microbiol* **50(3): 241-245.**
 - 8) Ryall, B., H. Mitchell, **D. Mossialos*** and H.D. Williams (2009) Cyanogenesis by the entomopathogenic bacterium *Pseudomonas entomophila*. *Lett. Appl. Microbiol.* **49(1): 131-135**
 - 9) Humair, B., N. Gonzalez, **D. Mossialos**, C. Reimann and D. Haas (2009) Temperature-responsive sensing regulates biocontrol factor expression in *Pseudomonas fluorescens* CHA0. *ISME J.* **3(8): 955-965**
 - 10) **Mossialos, D.*** and G.D. Amoutzias (2009) Role of siderophores in cystic fibrosis pathogenesis: foes or friends? *Int. J. Med. Microbiol.* **299 (2): 87-98.**
 - 11) Amoutzias, G., Y., Van de Peer, and **D. Mossialos***. (2008) Evolution and taxonomic distribution of nonribosomal peptide and polyketide synthases. *Future Microbiol.* **3: 361-370.**
 - 12) **Mossialos, D.*** and Amoutzias G. (2007) Siderophores in fluorescent pseudomonads: new tricks from an old dog. *Future Microbiol.* **2:387-395.**
 - 13) Ramstedt, M., R., Houriet, **D., Mossialos, D.**, Haas, and HJ Mathieu. (2007) Wet chemical silver treatment of endotracheal tubes to produce antibacterial surfaces. *J. Biomed. Mater. Res. B Appl. Biomater.* **83(1): 169-180**
 - 14) Ramstedt, M., N., Cheng, O., Azzaroni, **D., Mossialos, H.J.**, Mathieu and W.T. Huck. (2007) Synthesis and characterization of Poly (3-sulfopropylethacrylate) brushes for potential antibacterial applications. *Langmuir:* **23(6): 3314-3321.**
 - 15) Zlosnik, J., G.R., Tavankar, J.G., Bundy, **D., Mossialos, R.**, O'Toole and H.D. Williams. (2006) Investigation of the physiological relationship between the cyanide insensitive oxidase and cyanide production in *Pseudomonas aeruginosa*. *Microbiology SGM* **152(5): 1407-1415.**
 - 16) **Mossialos, D.,** G.R., Tavankar, J., Zlosnik and H.D. Williams. (2006) Defects in a quinol oxidase lead to loss of KatC activity in *Pseudomonas aeruginosa*: KatC activity is temperature dependent and it requires an intact disulphide bond formation system. *Biochem. Biophys. Res. Commun.* **341: 697-702.**
 - 17) Tavankar, G.R., **D., Mossialos** and H.D. Williams. (2003) Mutation or overexpression of a terminal oxidase leads to a cell division defect and multiple antibiotic sensitivity in *Pseudomonas aeruginosa*. *J. Biol. Chem.* **278: 4524-4530.**
 - 18) Pirnay, J.P., De Vos, **D., Mossialos, A.**, Vanderkelen, P. Cornelis and M., Zizi. (2002) Analysis of the *Pseudomonas aeruginosa oprD* gene from clinical and environmental isolates. *Environ. Microbiol.* **4: 872-882.**

- 19) Mossialos, D.,** U., Ochsner, C., Baysse, P., Chablain, J.P., Pirnay, N., Koedam, H., Budzikiewicz, D.U., Fernandez, M., Schafer, J., Ravel and P. Cornelis. (2002). Identification of new, conserved, non-ribosomal peptide synthetases from fluorescent pseudomonads involved in the biosynthesis of the siderophore pyoverdine. *Mol. Microbiol.* **45**: 1673-1685.
- 20) Mossialos, D.,** J.M., Meyer, H., Budzikiewicz, U., Wolff, N., Koedam, C., Baysse, V., Anjaiah and P. Cornelis. (2000) Quinolobactin, a new siderophore of *Pseudomonas fluorescens* ATCC 17400, the production of which is repressed by the cognate pyoverdine. *Appl. Environ. Microbiol.* **66**: 487-492.
- 21) Lim, A., D., De Vos, M., Brauns, D., Mossialos, A., Gaballa, D., Ding and P., Cornelis.** (1997) Molecular and immunological characterization of OprL, the 18 kDa, outer-membrane peptidoglycan-associated lipoprotein (PAL) of *Pseudomonas aeruginosa*. *Microbiology SGM* **143**: 1709-1716.
- * Corresponding author
 - Total IF (2013) 84.082
 - Mean IF 4.003
 - Citations 496 (Scopus)
 - H index 11