

PERSONAL INFORMATION

Family name / First name: **Tsikou Daniela**

Address: Papanastasiou 68, Larisa

E-mail: dtsikou@bio.uth.gr, tsikoudaniela@gmail.com



EDUCATION

16/01/2006 – 19/01/2010 **PhD**

Laboratory of Molecular Biology, Department of Agricultural Biotechnology, Agricultural University of Athens, Greece

PhD thesis: “Characterization and biochemical role of the genes involved in carbon metabolism in *Lotus japonicus* nodules”

05/11/2002 – 23/07/2004 **Masters**

MSc in Agricultural Biotechnology (Credit: 9.66/10)

Department of Agricultural Biotechnology, Agricultural University of Athens, Greece

Master’s thesis: “Functional analysis of the N-terminal of the protein and dynamics of expression of the *TRH1* gene in different genetic backgrounds of Arabidopsis”

01/10/1997 – 10/07/2002 **BSc**

Diploma in Agriculture (Credit: 6.92/10)

Department of Agriculture, Aristotle University of Thessaloniki, Greece

Diploma thesis: «Control of heredity of tobacco genetically modified plants»

CURRENT POSITION

06/04/2017 – present **Post-doc**

Department of Biochemistry and Biotechnology, University of Thessaly, Greece

Fellowship for post-doctoral research, State Scholarship Foundation, Greece

PREVIOUS POSITIONS

15/03/2015 – 31/03/2017 **Post-doc**

Centre for Carbohydrate Recognition and Signalling (CARB), Department of Molecular Biology, Aarhus University, Denmark

Project: “miRNAs involved in *Lotus japonicus* nodulation”

20/12/2013 – 28/02/2015 **Post-doc**

Department of Biochemistry and Biotechnology, University of Thessaly, Greece

01/09/2010 – 15/07/2013 **Lecturer under contract**

Department of Biochemistry and Biotechnology, University of Thessaly, Greece

01/03/2010 – 31/08/2010 **Post-doc**
Department of Sustainable Agriculture, Mediterranean Agronomical Institute of Chania,
Greece

15/09/2004 – 15/01/2006 **Research Assistant**
Institute of Biology, National Centre for Scientific Research “Demokritos”, Greece

VISITING RESEARCHER

15/08/2014-14/09/2014 & 01/09/2013-31/10/2013
Centre for Carbohydrate Recognition and Signalling (CARB), Department of Molecular
Biology, Aarhus University, Denmark (Dr. Simona Radutoiu’s lab)

11/02/2013-15/03/2013 & 09/04/2012-28/04/2012
Department of Plant Systems Biology, Technical University of Munich, Freising, Germany
(Prof. Claus Schwechheimer’s lab)

15/09/2008-12/10/2008
John Innes Centre, Department of Metabolic Biology, Norwich, UK (Prof. Trevor Wang’s lab)

05/07/2008-18/07/2008
University of Poitiers, Bâtiment Botanique, Poitiers, France (Dr. Remi Lemoine’s lab)

FELLOWSHIPS AND AWARDS

27/11/2013 – 20/06/2014
University Scholarship for teaching, University of Thessaly, Greece

01/09/2013 – 31/10/2013
STSM (short term scientific mission) fellowship, EU: Endophytes cost Action FR1103

16/01/2006 – 16/07/2009
Scholarship for post-graduate studies, State Scholarship Foundation, Greece

TEACHING ACTIVITIES

01/09/2010 – 20/06/2014
Department of Biochemistry and Biotechnology, University of Thessaly, Greece
Courses: Molecular and Developmental Plant Biology (full course), Plant Biotechnology
(laboratory course)
Lectures in the Postgraduate Program: “Molecular Biology-Molecular Genetics”

15/10/2008 – 11/02/2010
Technological Institute of Larisa, Greece

Laboratory courses: Biotechnology and Genetics

MEMBERSHIPS OF SCIENTIFIC SOCIETIES

2005

Member, Hellenic Society of Biochemistry and Molecular Biology

2014

Member, International Society for Molecular Plant-Microbe Interactions

LANGUAGES

Greek (native)

English (fluent)

French (basic)

LIST OF PUBLICATIONS

1. Katsarou D, Omirou M, Liadaki K, **Tsikou D**, Delis C, Garagounis C, Krokida A, Zambounis A, Papadopoulou KK (2016) Glucosinolate biosynthesis in *Eruca sativa*. *Plant Physiology and Biochemistry*. 109:452-466
2. Delis C, Krokida A, Tomatsidou A, **Tsikou D**, Beta RA, Tsioumpekou M, Moustaka J, Stravodimos G, Leonidas DD, Balatsos NA, Papadopoulou KK (2016) AtHESPERIN: A Novel Regulator of Circadian Rhythms with Poly(A)-degrading Activity in Plants. *RNA biology*. 13(1): 68-82
3. Tanou G, Minas IS, Karagiannis E, **Tsikou D**, Audebert S, Papadopoulou KK, Molassiotis A (2015) The impact of sodium nitroprusside and ozone in kiwifruit ripening physiology: a combined gene and protein expression profiling approach. *Annals of Botany* 116(4):649-62
4. Krokida A, Delis C, Geisler K, Garagounis C, **Tsikou D**, Peña-Rodríguez LM, Katsarou D, Field B, Osbourn AE, Papadopoulou KK (2013) A metabolic gene cluster in *Lotus japonicus* discloses novel enzyme functions and products in triterpene biosynthesis. *New Phytologist* 200(3):675-90
5. **Tsikou D**, Kalloniati C, Fotelli MN, Nikolopoulos D, Katinakis P, Udvardi MK, Rennenberg H, Flemetakis E (2013) Cessation of photosynthesis in *Lotus japonicus* leaves leads to reprogramming of nodule metabolism. *Journal of Experimental Botany* 64(5):1317-32
6. Nol N, **Tsikou D**, Eid M, Livieratos IC, Giannopolitis CN (2012) Shikimate leaf disc assay for early detection of glyphosate resistance in *Conyza canadensis* and

relative transcript levels of EPSPS and ABC transporter genes. *Weed Research* 52: 233–241

7. Shegani M, **Tsikou D**, Velimirovic A, Afifi H, Karayanni A, Gazivoda A, Manevski K, Manakos I, Livieratos IC (2012) *Citrus tristeza* virus on the island of Crete: a survey and detection protocol applications. *Journal of Plant Pathology* 94(1): 71-78
8. Mathioudakis MM, Veiga R, Ghita M, **Tsikou D**, Medina V, Canto T, Makris AM, Livieratos IC (2012) Pepino mosaic virus capsid protein interacts with a tomato heat shock protein cognate 70. *Virus research* 163(1): 28-39
9. Fotelli MN, **Tsikou D**, Kolliopoulou A, Aivalakis G, Katinakis P, Udvardi MK, Rennenberg H, Flemetakis E (2011) Nodulation enhances dark CO₂ fixation and recycling in the model legume *Lotus japonicus*. *Journal of Experimental Botany* 62(8): 2959-71
10. **Tsikou D**, Stedel C, Kouri ED, Udvardi MK, Wang TL, Katinakis P, Labrou NE, Flemetakis E (2011) Characterization of two novel nodule-enhanced α -type carbonic anhydrases from *Lotus japonicus*. *Biochimica et Biophysica Acta* 1814(4): 496-504
11. Fasseas MK, **Tsikou D**, Flemetakis E, Katinakis P (2011) Molecular and biochemical analysis of the α -class carbonic anhydrases in *Caenorhabditis elegans*. *Molecular Biology Reports* 38(3): 1777-85
12. Tsitoura P, Andronopoulou E, **Tsikou D**, Agalou A, Papakonstantinou MP, Kotzia GA, Labropoulou V, Swevers L, Georgoussi Z, Iatrou K (2010) Expression and membrane topology of *Anopheles gambiae* odorant receptors in lepidopteran insect cells. *PloS one* 5(11): e15428
13. Fasseas MK, **Tsikou D**, Flemetakis E, Katinakis P (2010) Molecular and biochemical analysis of the beta class carbonic anhydrases in *Caenorhabditis elegans*. *Molecular Biology Reports* 37(6): 2941-50
14. Kalloniati C, **Tsikou D**, Lampiri V, Fotelli M, Rennenberg H, Chatzipavlidis I, Fasseas C, Katinakis P, Flemetakis E (2009) Characterization of a *Mesorhizobium loti* α -type carbonic anhydrase and its role in symbiotic nitrogen fixation. *Journal of Bacteriology* 191: 2593-2600

ANNOUNCEMENTS IN CONFERENCES

Oral presentations:

1. **Tsikou D**, Yan Z, Abel N.B, Holt D.B, Ried D.E, Stougaard J, Markmann K. (2016) A micro RNA acts as a signal in systemic control of nodulation symbiosis. *12th European Nitrogen Fixation Conference*, August 25-28, Budapest, Hungary

2. Iatrou K, Agalou M, Andronopoulou E, Douris V, Eliopoulos E, Georgoussi Z, Koussis K, Labropoulou V, Swevers L, **Tsikou D**, Tsitoura P. (2009) Mosquito olfaction as target for malaria control. *60th Meeting, Hellenic Society of Biochemistry and Molecular Biology*, November 20-22, Athens, Greece.

Posters:

3. **Tsikou D**, Ramirez EE, Psarrakou IS, Isono E, Schwechheimer C, Radutoiu S, Papadopoulou KK. (2014) The involvement of an U-box E3 ubiquitin ligase from *Lotus japonicus* in the interaction with symbiotic microbes. *XVI IS-MPMI Congress*, July 6-10, Rhodes, Greece

4. Krokida A, Delis C, Geisler K, Garagounis C, **Tsikou D**, Peña-Rodríguez LM, Katsarou D, Field B, Osbourn AE, Papadopoulou KK. (2013) Biosynthetic gene clusters for triterpenes in legumes. *TERPNET, 11th international meeting on biosynthesis, function and biotechnology of isoprenoids in terrestrial and marine organisms*, June 1-5, Kolymvari, Crete, Greece

5. Krokida A, Delis C, Garagounis C, Katsarou D, Field B, **Tsikou D**, Geisler K, Peña-Rodríguez LM, Osbourn AE, Papadopoulou KK. (2011) A biosynthetic gene cluster for triterpenes in legumes. *TERPNET, 10th international meeting: biosynthesis and function of isoprenoids in plants, microorganisms and parasites*, May 22-26, Kalmar, Sweden

6. **Tsikou D**, Udvardi MK, Wang T, Katinakis P, Flemetakis E. (2009) Effects of photosynthetic carbon limitation caused by extended dark in nodule metabolism in *L. japonicus*. *60th Meeting, Hellenic Society of Biochemistry and Molecular Biology*, November 20-22, Athens, Greece.

7. Fragogeorgi G, Flemetakis E, **Tsikou D**, Dimou M, Aivalakis G, Katinakis P. (2009) Δ -1-pyrroline-5-carboxylate synthetase gene expression in two durum wheat cultivars differing in their salinity tolerance. *60th Meeting, Hellenic Society of Biochemistry and Molecular Biology*, November 20-22, Athens, Greece.

8. Fasseas MK, **Tsikou D**, Flemetakis E, Katinakis P. (2009) Further molecular and biochemical characterization of carbonic anhydrases in *Caenorhabditis elegans*. *60th Meeting, Hellenic Society of Biochemistry and Molecular Biology*, November 20-22, Athens, Greece.

9. Andronopoulou E, **Tsikou D**, Kotzia G, Laspi V, Efrose RC, Labropoulou V, Swevers L, Georgoussi Z, Iatrou K. (2007). Cell-based high throughput screening platforms for identification of odorant mimetics for the malaria mosquito vector, *Anopheles gambiae*. *59th Meeting, Hellenic Society of Biochemistry and Molecular Biology*, December 7-9, Athens, Greece.

10. **Tsikou D**, Fotelli MN, Nikolopoulos D, Koliopoulou A, Katinakis P, Flemetakis E. (2007) Dark CO₂ fixation in symbiotic nodules: A job for carbonic anhydrases? *59th Meeting, Hellenic Society of Biochemistry and Molecular Biology*, December 7-9, Athens, Greece.

11. **Tsikou D**, Ott T, Krombas P, Udvardi MK, Katinakis P, Flemetakis E. (2007) A real-time RT-PCR based platform for gene expression studies during symbiotic nitrogen fixation in *Lotus*

japonicus. 59th Meeting, Hellenic Society of Biochemistry and Molecular Biology, December 7-9, Athens, Greece.

12. Fasseas M, **Tsikou D**, Fletmetakis E, Katinakis P. (2007) Molecular and biochemical characterization of carbonic anhydrases in *Caenorhabditis elegans*. 59th Meeting, Hellenic Society of Biochemistry and Molecular Biology, December 7-9, Athens, Greece.

13. Kalloniati C, Lampiri V, Fotelli MN, **Tsikou D**, Chatzipavlidis J, Katinakis P, Fletmetakis E. (2006) Molecular and biochemical characterization of *Mesorhizobium* a-type carbonic anhydrase provides evidence for a link between CO₂ hydration and nitrogen fixation. 58th Meeting, Hellenic Society of Biochemistry and Molecular Biology, Patra, Greece.

14. **Tsikou D**, Efröse RC, Kalliampakou K, Stedel C, Udvardi MK, Katinakis P, Fletmetakis E. (2006) Molecular and biochemical characterization of *Lotus japonicus* nodule specific α -type carbonic anhydrases. 7th European Nitrogen Fixation Conference, July 22-26, Aarhus, Denmark

15. **Tsikou D**, Douris V, Andronopoulou E, Labropoulou V, Swevers L, Georgoussi Z, Iatrou K. (2006) Cloning of *Anopheles gambiae* antennal odorant receptors and functional expression in silkworm cells. The 5th International Symposium on Molecular Insect Science, May 20-24, Tucson, Arizona, USA.

16. Douris V, Andronopoulou E, **Tsikou D**, Morou E, Balatsos N, Labropoulou V, Swevers L, Georgoussi Z, Iatrou K. (2005) Multiple biotechnological applications of *LEPCELL EXPRESS*, a molecular insect cell-based expression system. 57th Meeting, Hellenic Society of Biochemistry and Molecular Biology, Athens, Greece.

17. Douris V, **Tsikou D**, Stefanou D, Labropoulou V, Swevers L, Iatrou K. (2005) *LEPCELL EXPRESS*: A modular insect cell-based expression platform for multiple biotechnological applications. 27th Scientific Conference, Hellenic Society for Biological Sciences, 12-14 May, Nafplio, Greece.

18. Andronopoulou E, Labropoulou V, Douris V, **Tsikou D**, Iatrou K. (2005) Identification of antennal proteins interacting with odorant binding proteins of the malaria mosquito vector *Anopheles Gambiae*. 27th Scientific Conference, Hellenic Society for Biological Sciences, 12-14 May, Nafplio, Greece.