

KATERINA GRAFANAKI BSc, MSc, MD, PhD
Curriculum Vitae

Born: 1974, Hobart Australia

Nationality: Greek, Australian

Work address:

University of Patras
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EDUCATION AND POSITIONS

2011-2016: PhD, University of Patras, School of Medicine Department of Biochemistry

2010-2012: Specialization in Internal Medicine at the Kalavryta General Hospital, Kalavryta, Greece

2009-Today Executive Research Associate of the Unit of Special Biochemical Analyses, University of Patras

2001-2009 M.D., Diploma in Medicine, School of Medicine, University of Thessaly, Larissa, Greece

1997-1998 Masters in Immunology and Allergy (University of Nottingham, U. K.)

Immunity and the Immune system, Research Methods, Library Dissertation, Molecular Allergy, Advanced Immunobiology, Clinical Allergy, Clinical Immunology, Biotechnology, Research Project and Dissertation.

1994-1997 B.Sc. with Honours in Biomedical Sciences (Anglia Polytechnic University, U. K.).

Foreign languages: English (excellent), German (fluent)

WORK AND RESEARCH EXPERIENCE

1. Royal Victoria Infirmary Hospital (Newcastle, U.K) at the ER Department (**April 1993**)
2. Training in biochemical and clinical biochemistry techniques (cell cultures, flow cytometry, MTT viability assays, radiolabelling, immunohistochemistry), University of Nottingham, Dept. of Immunology, School of Medicine, Queens Medical Center και Nottingham City Hospital, UK (**1997-1998**)
3. Teaching Assistant (Biology and Chemistry) of foundation courses candidates for UK Universities (**summer 1997** and **summer 1998**).
4. Research associate at the University of Athens, School of Medicine, Department of Pathophysiology. Training in ELISA, Western Blotting, affinity purification, RIA, CIE (and routine techniques) and detection of autoimmune diseases (**February 1998 – November 1999**).
5. Research Associate for the National Cancer Institute. Training and experience in PBMC isolation, T cell cloning, proliferation assays, cytotoxic assays, immunofluorescence, immortalization assays, flow cytometry (FACS), magnetic cell sorting (MACS) (**1999-2000**).
6. Research associate of the Functional and Clinical Biochemistry group at the Institute for Biomedical Research of Thessaly (**2007-2009**). Training and experience in current Molecular Biology techniques.

7. Scientific and Technical supervision of the the Unit of Special Biochemical Analyses of the University of Patras, Training and experience in Isoelectric focusing and DNA microarrays analysis. **(2009-Today)**.
8. Placement for Medical Internship in Internal Medicine at the Hospital of Kalavryta. **(2010-2012)**.
9. Volunteer work with the Hellenic Red Cross and Samaritans, since 2011.

PARTICIPATION IN RESEARCH GRANTS

1. GSRT 2003, Greece-France Bilateral R&D collaboration (PLATON-EGIDE)
2. Hellenic Society of Orthopaedics & Trauma 2007 (BIOMED Institute, Larissa)
3. Hellenic Society of Orthopaedics & Trauma 2011
4. GSRT 2011 «ARISTEIA» (“Excellence”), “Dissecting the involvement and dynamic networks of tRNA expression, signaling and translation in lung cancer”

ACADEMIC EXCHANGES

LLP-ERASMUS exchange visit at the Laboratory of Prof. Hubert D. Becker, University of Strasbourg, France **December 2008**.

AWARDS

2007, 2nd Conference of the Hellenic Society of Arthroscopy, 1st Prize

MEMBERSHIPS

BSI (British Society of Immunology)
 EAACI (European Academy of Allergology and Clinical Immunology)
 Hellenic Society of Biochemistry and Molecular Biology
 Member of the Hellenic Medical Association
 Member of the Medical Board of Patras

PUBLICATIONS

Dissertations

1. Functional genomic analysis of the effect of retinoid analogues on human keratinocytes (PhD Thesis 2016).
2. The effect of female sex hormones on human airway smooth muscle proliferation. (September 1998, Master’s Research Dissertation).
3. Understanding the immunologic basis of the mechanisms involved in transplantation rejection. (December 1998, Master’s Bibliographic Dissertation)
4. HIV treatment. (April 1997, B. Sc. Thesis)

In peer-reviewed journals

1. Papatheodorou L. K., Malizos K. N., Poultisidis L. A., Hantes M. E., Giannouli S., **Grafanaki K.**, Ioannou M. G., Koukoulis G. K., Protopappas V. C., Fotiadis D. I. and Stathopoulos C. **(2009)** Effect of transosseus application of low-intensity ultrasound at the tendon graft-bone interface healing: Gene expression and histological analysis in rabbits. *Ultrasound Med. Biol.* **35: 576-584**.

2. Bariamis S. E., Magoulas G. E., **Grafanaki K.**, Pontiki E., Tsegenidis T., Athanassopoulos C. M., Maroulis G., Papaioannou D. and Hadjipavlou-Litina D. (2015) Synthesis and Biological Evaluation of New C-10 Substituted Dithranol Pleiotropic Hybrids. *Bioorganic & Medicinal Chemistry*, **23**: 7251-7263.
3. Dailiana Z. H., Christou D. C., **Grafanaki K.**, Ioannou M. G., Stathopoulos C., Malizos K. N. and Varitimidis S. (2015) Histological and biochemical evidence related to the collagen quality in torn rotator cuff tendons. *Acta Orthopaedica Belgica* In Press.
4. Petridis T., Giannakopoulou D., Stamatopoulou V., **Grafanaki K.**, Kostopoulos C. G., Papadaki H., Malavaki C.J., Karamanos N. K., Douroumi S., Papachristou D., Magoulas G. E., Papaioannou D. and Drinas D. (2015) Investigation on toxicity and teratogenicity in rats of a retinoid-polyamine conjugate with potent anti-inflammatory properties. *Develop and Reprod Toxicology* In Press.

Book chapters

1. Toumpeki C., Stamatopoulou V., Bikou M., **Grafanaki K.**, Stathopoulos C. and Drinas D. (2014) Targeting RNase P. In: "Antibiotics: Targets, Mechanisms and Resistance" Eds C. Gualerzi, L. Brandi, A. Fabbretti and C. L. Pon **Wiley-VCH Verlag GmbH & Co.** (Chapter 14, pp 355-366).

Abstracts in international conferences

1. Christoforaki P., **Grafanaki K.**, Douliani E., Mamzoridou K. and Syrogiannopoulos G. (2004) Drug utilization study: Homeopathic medicines in Greece. 19th I.M.S.S.C. 6-9 May 2004, Istanbul, TURKEY.
2. **Grafanaki K.**, Christoforaki P., Douliani E., Mamzoridou K. and Syrogiannopoulos G. (2004) Homeopathic medicines: Are they therapeutic agents? 19th I.M.S.S.C. 6-9 May 2004, Istanbul, TURKEY.
3. Christou D. C., Varitimidis S., **Grafanaki K.**, Stathopoulos C., Ioannou M. and Malizos K. N. (2007) Histological and biochemical analysis in torn rotator cuff tendons and post-surgical prognosis. 53rd Orthopaedic Research Society Annual Meeting, February 11-14 2007, San Diego, USA.
4. Christou D. C., Varitimidis S., **Grafanaki K.**, Stathopoulos C., Ioannou M. and Malizos K. N. (2007) Histological and biochemical analysis in torn rotator cuff tendons and post-surgical prognosis. 8th E.F.O.R.T. Congress, May 11-15 2007, Florence, ITALY.
5. Papatheodorou L. K., Poultsidis L. A., Hantes M., **Grafanaki K.**, Stathopoulos C. and Malizos K. N. (2007) Effect of transosseous application of low-intensity ultrasound on gene expression at tendon graft-bone interface in rabbits. 8th E.F.O.R.T. Congress, May 11-15 2007, Florence, ITALY.
6. Papatheodorou L. K., Poultsidis L. A., Hantes M., **Grafanaki K.**, Stathopoulos C. and Malizos K. N. (2007) Transosseous application of Low-Intensity Ultrasound on healing at tendon graft - bone interface in rabbits results in altered gene expression levels. 2nd ESUCB, July 19-20 2007, Halle-Wittenberg, GERMANY.
7. Papatheodorou L. K., Poultsidis L. A., Hantes M., **Grafanaki K.**, Stathopoulos C. and Malizos K. N. (2008) Gene expression analysis in healing at tendon graft-bone interface in rabbits after transosseous application of Low-Intensity Ultrasound. 13th ESSKA, 21-24 May, Porto, PORTUGAL.
8. Papatheodorou L. K., **Grafanaki K.**, Giannouli S., Fotiadis D. I., Stathopoulos C. and Malizos K. N. (2008) Transosseous application of low-intensity ultrasound at the tendon graft-bone

interface affects the healing rate and up-regulates simultaneously the expression of collagen type I and tRNA^{Gly}. 8th IEEE International Conference on Bioinformatics and Bioengineering (BIBE 2008). October 8-10 Athens, GREECE.

9. Papatheodorou L. K., Malizos K. N., Hantes M., **Grafanaki K.**, Karantanas A. and Stathopoulos C. (2010) Low-Intensity ultrasound enhances tendon graft-bone interface healing in anterior cruciate ligament reconstruction: a biochemical and image analysis in human. 14th ESSKA 9-12 June Oslo, NORWAY.
10. Varitimidis S., Daliana Z., Christou D., Ioannou M., Chaldi L., Stathopoulos C., **Grafanaki K.** and Malizos K. N. (2010) Histological and biochemical evidence related to the collagen quality in torn rotator cuff tendons. 11th Triennial Congress of the International Federation of Societies for Surgery of the Hand. 31 October – 4 November 2010, Seoul, KOREA.
11. Evangelou K., **Grafanaki K.**, Anastasakis D., Georgiou C, Stathopoulos C. and Megas P. (2014) Investigation of changed value levels of miRNAs that regulate inflammation in painful loosened total hip arthroplasties. EORS 22nd Annual Meeting, 2-4 July 2014, Nantes, France.
12. Anastasakis D., Skeparnias I., Apostolidi M., **Grafanaki K.**, Papakyriakou A. and Stathopoulos C. (2014) Characterization of mammalian PNLDC1: a novel and specific poly(A) ribonuclease. FEBS-EMBO Conference. August 30th – Sept 4th Paris, FRANCE.
13. Anastasakis D., **Grafanaki K.**, Kontos C., Skeparnias I., Apostolidi M., Konstantinidou P., Alexopoulos P., Gioutlakis A., Kostopoulou O. N., Dougenis D., Kalpaxis D. L., Drinas D., Moschonas N. K., Scorilas A. and Stathopoulos C. (2014) Monitoring the expression dynamics of networks controlling tRNA expression, signaling and translation in lung cancer. 25th tRNA Conference 21-25 Sept Kyllini, GREECE.

Abstracts in national conferences

1. Papatheodorou L. K., Poultisidis L. A., Malissovass N., **Grafanaki K.**, Stathopoulos C. and Malizos K. N. (2006) Effect of transosseous application of low-intensity ultrasound on gene expression at tendon graft-bone interface healing in rabbits. 6th Congress of the Hellenic Society of Clinical Chemistry and Clinical Biochemistry, Athens 9-11 November 2006.
2. Malissovass N., Papatheodorou L. K., Poultisidis L. A., **Grafanaki K.**, Malizos K. N. and Stathopoulos C. (2006) Increased expression levels of cytoplasmic tRNA^{Gly} gene are correlated with elevated collagen synthesis at tendon graft-bone interface healing in rabbits. 6th Congress of the Hellenic Society of Clinical Chemistry and Clinical Biochemistry, Athens 9-11 November 2006.
3. Papatheodorou L. K., Poultisidis L. A., Malissovass N., **Grafanaki K.**, Stathopoulos C. and Malizos K. N. (2006) Molecular investigations on ligamentization of low-intensity ultrasound at tendon graft-bone interface healing. 4th Congress of the Orthopaedic Research Section of the Hellenic Society of Surgical Orthopaedics and Traumatology, Porto Heli 24-26 November 2006.
4. Papatheodorou L. K., Poultisidis L. A., Hantes M., **Grafanaki K.**, Stathopoulos C. and Malizos K. N. (2007) Gene expression analysis in healing at tendon graft -bone interface in rabbits after transosseous application of low-Intensity ultrasound 9th National Conference of Connective Tissue Research, Athens 10-12 May 2007.
5. Papatheodorou L. K., Poultisidis L. A., Hantes M., **Grafanaki K.**, Stathopoulos C. and Malizos K. N. (2007) Molecular investigations at tendon graft-bone interface healing in rabbits after transosseous application of low-intensity ultrasound. Ultrasound 8th National Conference of Ultrasound, Athens 1-4 June 2007.
6. Papatheodorou L. K., Poultisidis L. A., Hantes M., **Grafanaki K.**, Stathopoulos C. and Malizos K. N. (2007) Gene expression analysis in healing at tendon graft -bone interface in rabbits after transosseous application of low-intensity ultrasound 2nd Congress of the Hellenic Arthroscopic Society, Athens 11-15 June 2007.

7. Papatheodorou L. K., Poultisidis L. A., Hantes M., **Grafanaki K.**, Stathopoulos C. and Malizos K. N. **(2007)** Molecular investigations at tendon graft-bone interface healing in rabbits after transosseous application of low-intensity ultrasound. Ultrasound 8th National Conference of Ultrasound, Athens 1-4 June 2007.
8. Stathopoulos C., Giannouli S., Labrou M., Kyritsis A., **Grafanaki K.**, Maniatis A and Pournaras, S. **(2008)** Mechanisms of cell wall synthesis in *Staphylococcus aureus*. Correlation with oxacillin resistance. 5th National Conference of Medical Biopathology, Thessaloniki 9-12 April 2008.
9. **Grafanaki K.**, Katsogridaki G., Pournaras S. and Stathopoulos C. **(2009)** Correlation of leptin levels with metabolic risk factors for cardiovascular disease. Hellenic Society of Biochemistry and Molecular Biology NEWSLETTER, 55.
10. Anastasakis D., Maragozidis P., Kyritsis A., **Grafanaki K.**, Balatsos N.A.A. and Stathopoulos C. **(2010)** Effect of PAN2 deadenylase silencing on the expression of essential genes that regulate major cellular pathways. Hellenic Society of Biochemistry and Molecular Biology NEWSLETTER, 56.
11. Fakiolas S., **Grafanaki K.**, Apostolidi M., Anastasakis D., Sakellaropoulos G., Drinas D and Stathopoulos C. **(2012)** Analysis of the effect of known antipsoriasis drugs on the expression of the whole human genome using DNA microarrays. 3rd Conference of the Panhellenic Union of Bioscientists. Patras 18-20 October 2012.
12. Evangelou K., **Grafanaki K.**, Anastasakis D., Stathopoulos C. and Megas P. **(2013)** Investigation on the expression levels of miRNAs which regulate inflammation in painful relaxed hip arthroplasties. 69th Annual Congress of the Hellenic Society of Surgery and Trauma, Athens 3-5 October 2013.
13. Anastasakis D., Skeparnias I., Apostolidi M., **Grafanaki K.**, Papakyriakou A. and Stathopoulos C. **(2013)** Studies on human *pnlc1*: a *parn* paralog encoding a novel DEDD deadenylase. Hellenic Society of Biochemistry and Molecular Biology NEWSLETTER, 59.
14. Anastasakis D., **Grafanaki K.**, Kontos C., Skeparnias I., Apostolidi M., Konstantinidou P., Alexopoulos P., Gioutlakis A., Dougenis D., Drinas D., Moschonas N.K., Scorilas A. and Stathopoulos C. **(2014)** Monitoring the expression dynamics of networks controlling tRNA expression, signaling and translation in lung cancer. Hellenic Society of Biochemistry and Molecular Biology NEWSLETTER, 60.
15. **Grafanaki K.**, Anastasakis D., Fakiolas S., Magoulas G., Malavaki C.J., Kontos C., Scorilas A., Karamanos N.K., Papaioannou D., Drinas D. **(2014)** Functional genomic analysis of a novel retinoid-polyamine conjugate exhibiting anti-inflammatory and anti-cancer properties. Hellenic Society of Biochemistry and Molecular Biology NEWSLETTER, 60.
16. Anastasakis D., **Grafanaki K.**, Kontos C., Skeparnias I., Apostolidi M., Konstantinidou P., Alexopoulos P., Gioutlakis A., Dougenis D., Drinas D., Moschonas N.K., Scorilas A. and Stathopoulos C. **(2015)** Monitoring the expression dynamics of networks controlling tRNA expression, signaling and translation in lung cancer. 37th Hellenic Society of Biological Sciences Conference, Volos 21-23 May 2015.
17. **Grafanaki K.**, Anastasakis D., Kontos C., Spadidea P, Magoulas P., Papaioannou D., Scorilas A. and Drinas D. **(2015)** The retinoid-polyamine conjugate RASP exhibits anti-tumour activity through effects on cell cycle regulation. Hellenic Society of Biochemistry and Molecular Biology NEWSLETTER, 61.
18. Dimitrios Anastasakis, Christos Kontos, **Katerina Grafanaki**, Anthony Marchand, Ilias Skeparnias, Georgia G. Kourmoutou, Ourania N. Kostopoulou, Panagiotis Alexopoulos, Dimitrios Dougenis, Denis Drinas, Fabrice Jossinet, Dimitrios L. Kalpaxis, Andreas Scorilas and Constantinos Stathopoulos. **(2015)** The transcriptomic profile of tRNAs, tRFs, miRNAs and their related genes suggests modulation of essential translation factors which promote elevated protein synthesis in Non Small Cell Lung Cancer. Hellenic Society of Biochemistry and Molecular Biology NEWSLETTER, 61.