

## **IOANNA SPYRIDAKI PhD**

### **PERSONAL INFORMATION**

NAME: IOANNA SPYRIDAKI

FATHER'S NAME: MICHAEL

CURRENT EMPLOYMENT: E.D.I.P –BIOLOGIST, PhD

TEACHING EXPERTISE: ANATOMY-HISTOLOGY-EMBRYOLOGY

ADDRESS: SECTOR OF MORPHOLOGY

LABORATORIES OF ANATOMY-HISTOLOGY-EMBRYOLOGY

MEDICAL SCHOOL, UNIVERSITY OF CRETE

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### **EDUCATION**

1987-1992 La Sapienza University Rome, Italy

- Bachelor of Biology with a rating of 'Very Good'.

1991-1992 Istituto Superiore di Sanita Rome, Italy

- Graduate Thesis entitled: " A sperimental strategia for inibire la replicazione dei coronavirus mediante oligonucleitidi antisense: Prespetive limit"

1995 UNITE DES RICKETTSIES Marseille, France

- Training in Techniques: Molecular Biology and Cell Culture

1996-2000 Medical School, University of Crete, Heraklion, Greece

- Doctoral Degree (Ph.D.) with " Excellent " rating, Doctoral Thesis Entitled: " Study of Coxiella burnetii resistance to quinolones ".

### **FOREIGN LANGUAGES**

- Italian
- English

### **ADDITIONAL EXPERIENCE**

Computers: Certificate in Computer VELLUM Certificate (Cambridge Associate). Subjects:

- Text editing (Microsoft Word 2007)
- Spreadsheets (Microsoft Excel 2007)

- Internet Services (MS Internet Explorer 6.0)
- Microsoft Outlook 2007

Experience in using databases and programs:

- GCG
- Oligo
- MedLine

#### **Experience in Techniques:**

Polymerase Chain Reaction (PCR), Restriction Fragment Length Polymorphism (RFLP), Automated DNA Sequencing, Western Blotting, SDS-Polyacrilamide Protein Electrophoresis, Cloning, Pulsed Field Gel Electrophoresis, Enzyme-Linked Immunosorbent Assay (ELISA), Genetics Bacteria, Cell Series Culture (HEL, Vero, MRC5, L929), Isolation of Bacteria from Patients, Sheets and Tick Samples by Shell Vials Technique, Finding the MIC of Intracellular Bacteria, Uptake / Calculation of Intracellular Concentration, Gradient Centrifugation and Quantitative Antigen Measurement.

#### **LABORATORY-RESEARCH EXPERIENCE**

- 1994-2011 Laboratory of Microbiology, School of Medicine, University of Crete
- 2015-present Laboratories of Anatomy-Histology-Embryology
- I have participated in a number of European & national research programs, as a research team member (biologist postdoc) both receiving or not salary.

#### **ORGANIZATION EXPERIENCE**

- 2011-2014 University of Crete Accounting Office, Heraklion (Budget, Commitments for the Purchase of Goods and Labor for the needs of Heraklion University Faculty, & Postings on DIAGNOSIS).
- Member of the Material Receipt Committee of:
  1. Administration & Financial Services of Heraklion University of Crete and
  2. of the Medical School of Crete.
- Member of the Commission for the Evaluation of the Competition Results (2016 & 2017) for the supply of laboratory material to the departments of the University of Crete in Heraklion.
- Member of the Electoral Committee for conducting the electoral process of appointing representatives to the College's Medical Bodies (Deanery, General Assembly of the School, General Assembly of the Department of Morphology)
- 2019: Representative of the members of the Laboratory Teaching Staff Association (EDIP) of the University of Crete, at the Convention of the Morphology Section of the Medical School of Crete.

## REVIEWER

- Microbial Pathogenesis
- Anti-Infective Agents

## TEACHING EXPERIENCE

- 2015 – present: E.D.I.P (Instructor) of Medical School, University of Crete, Heraklion (Sector of Morphology)

### Undergraduate teaching

1. Participation in the teaching of Laboratory Exercises & Lectures of the courses Histology A & B
2. Responsible for the teaching of Laboratory Exercises & Seminars of Musculoskeletal Anatomy course

### Postgraduate teaching

Participation in the instruction of lab skills to PhD students of the Laboratory of Histology-Embryology

## AWARDS

- Awarded the Best Work of the Conference, by the Medical Society of Athens in the Applied Research Subject Module for the research work: Detection and standardization of rickets in Cyprus ticks by PCR-RFLP technique. 22nd Annual Panhellenic Medical Congress, May 1996.

## PUBLICATIONS / LECTURES

Dr. Spyridaki has 18 (Scopus) publications (Research and Reviews) in international peer reviewed journals; which have been cited by 305 total citations (Scopus) with an h-index 12 (Scopus).

1. Nikitovic D, Berdiaki A, **Spyridaki I**, Krasanakis T, Tsatsakis A, Tzanakakis GN. Proteoglycans-Biomarkers and Targets in Cancer Therapy. *Front Endocrinol (Lausanne)*. 2018
2. Tzanakakis G, Kavasi RM, Voudouri K, Berdiaki A, **Spyridaki I**, Tsatsakis A, Nikitovic D Role of the extracellular matrix in cancer-associated epithelial to mesenchymal transition phenomenon. *Dev Dyn*. 2018
3. Kavasi RM, Berdiaki A, **Spyridaki I**, Corsini E, Tsatsakis A, Tzanakakis G, Nikitovic D HA metabolism in skin homeostasis and inflammatory disease. *Food Chem Toxicol*. 2017
4. Kavasi RM, Berdiaki A, **Spyridaki I**, Papoutsidakis A, Corsini E, Tsatsakis A, Tzanakakis GN, Nikitovic D. Kavasi RM, Berdiaki A, **Spyridaki I**, Papoutsidakis A, Corsini E, Tsatsakis A, Tzanakakis GN, Nikitovic D. Contact allergen (PPD and DNCB)-induced keratinocyte sensitization is partly mediated through a low molecular weight hyaluronan (LMWHA)/TLR4/NF-κB signaling axis. *Toxicol Appl Pharmacol*. 2019
5. Gikas A, **Spyridaki I**, Psaroulaki A, Kofterithis D, Tselentis Y In vitro susceptibility of *Coxiella burnetii* to trovafloxacin in comparison with susceptibilities to pefloxacin, ciprofloxacin, ofloxacin, doxycycline, and clarithromycin. *Antimicrob Agents Chemother*. 1998.

6. **Spyridaki I**, Gikas A, Kofteridis D, Psaroulaki A, Tselentis Y Q fever in the Greek island of Crete: detection, isolation, and molecular identification of eight strains of *Coxiella burnetii* from clinical samples. *J Clin Microbiol*. 1998
  7. Charvalos E, Peteinaki E, **Spyridaki I**, Manetas S, Tselentis Y Detection of ciprofloxacin resistance mutations in *Campylobacter jejuni gyrA* by nonradioisotopic single-strand conformation polymorphism and direct DNA sequencing. *J Clin Lab Anal*. 1996
  8. **Spyridaki I**, Psaroulaki A, Vranakis I, Tselentis Y, Gikas A. Bacteriostatic and bactericidal activities of tigecycline against *Coxiella burnetii* and comparison with those of six other antibiotics. *Antimicrob Agents Chemother*. 2009
  9. Gikas A, **Spyridaki I**, Scoulica E, Psaroulaki A, Tselentis Y. In vitro susceptibility of *Coxiella burnetii* to linezolid in comparison with its susceptibilities to quinolones, doxycycline, and clarithromycin. *Antimicrob Agents Chemother*. 2001.
  10. **Spyridaki I**, Psaroulaki A, Kokkinakis E, Gikas A, Tselentis Y. Mechanisms of resistance to fluoroquinolones in *Coxiella burnetii*. *Journal of Antimicrobial Chemotherapy* 2002.
  11. • Chaniotis B, **Spyridaki I**, Scoulika E, Antoniou M. Colonization of *Phlebotomus neglectus* (Diptera: Psychodidae), the major vector of visceral leishmaniasis in Greece. *J Med Entomol*. 2000 •
  12. Antoniou M, Economou I, Wang X, Psaroulaki A, **Spyridaki I**, Papadopoulos B, Christidou A, Tsafantakis E, Tselentis Y Fourteen-year seroepidemiological study of zoonoses in a Greek village. *Am J Trop Med Hyg*. 2002 .
  13. Tselentis Y, Psaroulaki A, Maniatis J, **Spyridaki I**, Babalis T. Genotypic identification of murine typhus *Rickettsia* in rats and their fleas in an endemic area of Greece by the polymerase chain reaction and restriction fragment length polymorphism. *Am J Trop Med Hyg*. 1996.
  14. Psaroulaki A, **Spyridaki I**, Ioannidis A, Babalis T, Gikas A, Tselentis Y First isolation and identification of *Rickettsia conorii* from ticks collected in the region of Fokida in Central Greece. *J Clin Microbiol*. 2003 .
  15. **Spyridaki I**, Psaroulaki A, Aransay A, Scoulica E, Tselentis Y Diagnosis of quinolone-resistant *Coxiella burnetii* strains by PCR-RFLP. *J Clin Lab Anal*. 2000;14(2):59-63.
  16. **Spyridaki I**, Psaroulaki A, Loukaides F, Antoniou M, Hadjichristodolou C, Tselentis Isolation of *Coxiella burnetii* by a centrifugation shell-vial assay from ticks collected in Cyprus: detection by nested polymerase chain reaction (PCR) and by PCR-restriction fragment length polymorphism analyses. *Y. Am J Trop Med Hyg*. 2002
  17. Doukakis S, Spyridaki I, Kofterides D, Kastanakis S, Tselentis Y. Molecular epidemiology of murine typhus in a focus in Greece Psaroulaki A, Gikas A, *Medical Microbiology Letters* (1996) .
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18. Loukaidis F, Hadjichristodoulou C, Maniatis Y, Psaroulaki A, Babalis T, Spyridaki I, Economidis P, Tselentis Y Serological and molecular epidemiology of mediterranean spotted fever in Cyprus Medical Microbiology Letters (1996)

### **International Announcements**

1. A. Psaroulaki, A. Gikas, S. Doukakis, I. Spyridaki, D. Kofteridis, S. Kastanakis, Y. Tselentis. Molecular epidemiology of murine typhus in a focus in Greece. European Society of Chemotherapy. 4th Scientific Meeting, 1996.

2. F. Loukaidis, C. Hadjichristodoulou, Y. Maniatis, A. Psaroulaki, T. Babalis, I. Spyridaki, P. Economidis, Y. Tselentis. Serological and molecular epidemiology of Mediterranean Spotted fever in Cyprus. European Society of Chemotherapy. 4th Scientific Meeting, 1996.

3. A. Gikas, I. Spyridaki, D. Kofteridis, A. Charvalou, A. Psaroulaki, Y. Tselentis. Isolation and genotypic identification of *Coxiellaburnetii* in 158 cases of Q fever. European Society of Chemotherapy. 4th Scientific Meeting, 1996.

4. A. Psaroulaki, C. Hadjichristodoulou, F. Loukaides, I. Spyridaki, Y. Tselentis. Seroepidemiological survey of murine typhus in the island of Cyprus. FEMS Supported Meeting, 1998.

5. A. Psaroulaki, I. Spyridaki, C. Hadjichristodoulou, F. Loukaides, Y. Tselentis. Identification of rickettsiae from 1888 ticks, collected from 50 regions of Cyprus, using polymerase chain reaction. FEMS Supported Meeting, 1998.

6. F. Loukaides, A. Psaroulaki, I. Spyridaki, C. Hadjichristodoulou, Y. Tselentis. *Coxiellaburnetii* in ticks, goats, sheep and humans in Cyprus: Detection, Isolation, and Molecular Identification of Six Strains. American Society for Rickettsiology (ASR), joint meeting, Marseille 1999.

7. D. Kofteridis, A. Gikas, I. Spyridaki, A. Psaroulaki, L. Vamvakas, I. Tselentis. Clinical response of Q fever infection to Makrolides. The fourth international conference on macrolides, azalides, streptogramins and ketolides, Barcelona 1998.

8. I. Spyridaki, A. Gikas, D. Kofteridis, A. Psaroulaki, L. Vamvakas, Y. Tselentis. In vitro susceptibility of *Coxiellaburnetii* to clarithromycin. The fourth international conference on macrolides, azalides, streptogramins and ketolides, Barcelona 1998.

9. I. Spyridaki, A. Psaroulaki, T. Babalis, Y. Tselentis. Isolation and identification of spotted fever group rickettsiae from ticks collected in central Greece. FEMS Supported Meeting, 1998.

10. I. Spyridaki, A. Gikas, D. Kofteridis, A. Psaroulaki, Y. Tselentis. Q fever in the Greek island of Crete: Molecular identification of eight strains of *Coxiellaburnetii* from clinical samples. FEMS Supported Meeting, 1998.

11. A. Gikas, I. Spyridaki, D. Kofteridis, A. Psaroulaki, Y. Tselentis. In vitro susceptibility of *Coxiellaburnetii* to trovafloxacin and its comparison with five other antibiotics. FEMS Supported Meeting, 1998.

12. I. Spyridaki, A. Psaroulaki, A. Aransay, E. Scoulica, Y. Tselentis. Transformation of *Coxiellaburnetii* to Quinolone-Resistant strain. Detection of a new pefloxacin resistance

mutation in *CoxiellaburnetiigyrA* by direct DNA sequencing and PCR-RFLP. American Society for Rickettsiology (ASR), Joint Meeting, Marseille 1999.

13. Kavasi R.-M., Fanouraki G., Berdiaki A., GiataganaEi., Spyridaki I., Tsatsakis A., Tzanakakis G., Nikitovic D. (2018) Hyaluronan / Toll like receptor 4 (TLR4) signaling axis contributes to epidermal keratinocyte activation. Interdisciplinary congruences in immuno-dermatology, Bucharest, Romania. 27-29 September 2018.

14. Nikitovic D., Berdiaki A., GiataganaEi., Voudouri K., Sifaki M., Spyridaki I., Tsatsakis, A., Tzanakakis G. Genistein through a RTK / glycosaminoglycan axis inhibits WM9 and M5 melanoma cells' growth. Interdisciplinary conferences in immuno-dermatology, Bucharest, Romania, 27-29 September 2018.

15. R-M. Kavasi, A. Berdiaki, I. Spyridaki, A. Papoutsidakis, E. Corsini, A. Tsatsakis, G.N. Tzanakakis, D. Nikitovic, University of Crete. "Dissecting the Role of Hyaluronan and Toll-Like Receptor Signaling (TLR) in Sterile Skin Inflammation: New Roles for Ancient Gatekeepers of the Immune System?" Innogly, COST Action Meeting, 1st Symposium, 23-25th October 2019, Santiago De Compostela (Spain).

### **Announcements in Greek**

1. A. Psaroulakis, I. Maniatis, I. Spiridaki, T. Babalis, V. Haniotis, T. Gozadinos, I. Zellentis. Ecological study of endemic typhus in Chalkida. 20th Panhellenic Medical Congress, Athens, May 1994.

2. I. Spyridakis, D. Kofteridis, A. Gikas, A. Psaroulakis, I. Maniatis, T. Babalis, I. Zelentis. Detection, Isolation and Cultivation of *C. burnetii* strains by shell vials technique. 21st Annual Panhellenic Medical Congress, Athens, May 1995.

3. A. Psaroulakis, I. Maniatis, I. Spyridaki, M. Antoniou, T. Babalis, I. Zelentis. Detection and Genotyping of Greek typhi *R. typhi* strains. 21st Annual Panhellenic Medical Congress, Athens, May 1995.

4. A. Psaroulakis, F. Loukadis, I. Maniatis, I. Spyridaki, H. Hatzichristodoulou, S. Zervos, A. Hatzipanagis, I. Zellentis. Detection and standardization of ricketts in Cyprus ticks by PCR-RFLP technique. 22nd Annual Panhellenic Medical Congress, May 1996.

5. D. Kofteridis, L. Bouros, I. Papadakis, I. Barbounakis, I. Spyridakis, A. Gikas, I. Zelentis. Q Fever pneumonia and radiological findings. 8th Panhellenic Congress of Thoracic Diseases, 1996.

### **RESEARCH INTERESTS**

Initially Dr Spyridaki has studied the:

- molecular detection, identification and isolation of *Coxiella burnetii* from ticks and blood human
- in vitro susceptibility of *C. burnetii* strains to antibiotics and
- In vitro resistance of *C. burnetii* to quinolones.

From 2015 the research interests of Dr Spyridaki have been focused on matrix pathobiology, especially the study of the role of matrix molecules in disease, including the propagation and progression of cancer and inflammation.

**USEFUL LINKS**

[www.scopus.com/](http://www.scopus.com/)