### **CURRICULUM VITAE 26-5-2020**

## **Despina ALEXANDRAKI**

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http://www.biology.uoc.gr/en/personnel/alexandraki-despina

#### **PERSONAL DATA**

Born in Thessaloniki, Greece, August 3, 1952. Nationality Greek

### **EDUCATION-TITLES**

Secondary school education, Arsakeion - Tositseion of Athens, 1970.

B. A. in Biology, University of Athens, Greece, June 1974.

M. A. in Biology, Brandeis University, Waltham, MA, U.S.A., June 1977.

**Ph. D**. in Anatomy-Developmental Biology, Harvard University, Medical Sciences, Boston, MA, U.S.A., June **1982**.

## **Foreign Languages:**

English (Test of English as a Foreign Language -TOEFL, PhD in USA),

French (Diplome d' etude superieur II, Diplome d'etudes françaises Sorbone I)

#### RESEARCH and TEACHING POSITIONS HELD

Research Associate, Harvard University, Medical Sciences, Boston, MA, U. S. A., 1982-1984.

<u>Research Scientist</u>, Foundation for Research and Technology-Hellas, Institute of Molecular Biology and Biotechnology, Greece, **1984-1986**.

Contracted Lecturer, University of Crete, Department of Biology, 1987-1988.

<u>Collaborating Faculty</u>, Foundation for Research and Technology-Hellas, Institute of Molecular Biology and Biotechnology, Greece, 1984-1986. Collaborating Faculty **1987-present.** 

Assistant Professor, University of Crete, Department of Biology, 1988-1994.

Associate Professor, University of Crete, Department of Biology, 1994-2019.

<u>Professor</u>, University of Crete, Department of Biology, **2019-present**.

Professor Emeritus, University of Crete, Department of Biology, 2020-present.

### **RESEARCH EXPERIENCE/ACTIVITIES**

**Undergraduate Research training** in the laboratory of Prof. K. Mitrakos, University of Athens, Greece, 1972: Plant Physiology.

**Undergraduate Research training** in the laboratory of Prof. F. C. Kafatos, University of Athens, Greece, 1974: Chorion proteins in silkmoth oogenesis.

**Postgraduate Research training** in the laboratory of Prof. H. O. Halvorson, Brandeis University, U.S.A., 1974-1975: Ribosomal RNA genes in yeast.

**Postgraduate Research training** in the laboratory of Prof. M. Rosbash, Brandeis University, U.S.A., 1975- 1976: Expression of ribosomal protein genes in oogenesis of *Xenopus laevis*.

**Postgraduate Research training** in the laboratory of Prof. S. Ito, Harvard University, U.S.A., 1976-1977: Electron Microscopy and Scanning Microscopy Methodologies.

**Doctoral Thesis Research** in the laboratory of Prof. J. V. Ruderman, Harvard University, U.S.A., 1977-1982: Transcription and translation in the sea urchin early embryogenesis. Organization and expression of tubulin multigene families in the sea urchin *Lytechinus pictus*.

**Postdoctoral Research** in the laboratory of Prof. J. V. Ruderman, Harvard University, U.S.A., 1982-1984: 1. Analysis of multiple, polymorphic tubulin mRNAs in sea urchin eggs, embryos, and differentiated tissues. 2. Collaboration in research project concerning translationally controlled maternal mRNAs in *Spisula solidissima* embryos.

## Research at IMBB, 1985-present and University of Crete Greece, 1987-present:

- 1. Translational and transcriptional regulation of gene expression in *Saccharomyces* cerevisiae.
- 2. General control of amino acid biosynthesis in *S. cerevisiae* and *Shcizosaccharomyces* pombe.
- 3. Participation in the E. U. BAP, BRIDGE and BIOTECH projects on "DNA Sequencing of the Yeast Genome" (1989-1995). <a href="http://www.mips.biochem.mpg.de/proj/yeast/">http://www.mips.biochem.mpg.de/proj/yeast/</a>)
- 4. Functional analysis of the ferric reductase genes in Saccharomyces cerevisiae.
- 5. The role of Rpb8 subunit shared by the RNA polymerases I, II, III.
- 6. Participation in the E. U. BIOTECHNOLOGY programmes on "Functional Analysis of the Newly Identified Yeast Genes" EUROFAN I (two- hybrid analysis node coordinator) and EUROFAN II (1996-2000). <a href="http://www.mips.biochem.mpg.de/proj/eurofan/index.html">http://www.mips.biochem.mpg.de/proj/eurofan/index.html</a>
- 7. Systematic functional analysis (gene deletion, phenotypes, two-hybrid screens) of newly identified Open Reading Frames in *S. cerevisiae*. [YFR021w, YPL100w,YGR223c and YNL099c,YNL056w,YNL032w,YDR067c). http://www.mips.biochem.mpg.de/proj/yeast/.
- 8. Signal transduction: Transcriptional control of Fe/Cu homeostasis: Dissection of metalloregulated multiprotein complexes in transcription under various culturing conditions. New findings on transcription mechanism per se. a) Structure—function analysis of the Mac1p metalloregulated transcription DNA-binding factor. Functional analysis of newly identified protein interactions with Mac1 (Hir1, Ssn6, Rad9,..) affecting the copper-regulated transcription of *CTR1* (and FRE1) gene, b) Functional analysis of proteins affecting the iron-regulated transcription of FRE2 gene—(Aft1, Ssn6, Nhp6A). Factors linking transcription, cellular stress and DNA damage checkpoint pathways.
- 9. Functional genome wide relation of the transcription factor Aft1 with the checkpoint protein Rad9 under physiological conditions. Functional relationships between Mac1 and Rad9 proteins.
- 10. Mitochondrial dysfunction in neurodegenerative diseases, collaborative project. Single, double, triple gene deletion strain construction for the yeast *GDH1-3* genes. Phenotypic analysis, heterologous expression of human GLUD proteins- structure function studies. Distinct phase specific roles of the yeast Gdh1 and Gdh3 isoforms.
- 11. Aging and longevity: Interaction of genetic and environmental factors, collaborative project. Response of transcriptional networks under DNA damage conditions in yeast. Analysis of DNA damage response mutants in yeast with relevant phenotypes in mammals.

- 12. Genome wide localization of the Mac1 and Aft1 transcription factors. Analysis of their interdependent recruitment with their role in transcription or other chromatin relation function (multitask proteins).
- 13. Zeocin specifically affects Fe/Cu homeostasis. Transcriptional reprogramming by the radiomimetic, anticancer drug Zeocin.
- We use classical genetics, molecular, biochemical, genome-wide (expression microarrays, ChIP on chip-tilling arrays, ChIP seq, RNA seq) and proteome-wide (yeast two hybrid, TAP purification-Mass spectrometry) approaches available in yeast (and bacteria).

### **TEACHING EXPERIENCE/ACTIVITIES**

Teaching Fellow, Brandeis University, U.S.A.: Introductory Biology, 1975.

Research Scientist-Lecturer-Assistant Prof.-Associate Prof., Professor, Univ. of Crete, Greece:

### **Undergraduate courses:**

- 1. Introductory Biology (Participation one semester compulsory course), 1987, 1988.
- 2. Developmental Biology (one semester compulsory course, participation, 44-52hr), **1989-1990**.
- 3. Developmental Biology BIO119, BIOL305 (one semester compulsory course, 44-52hr), **1990- present**. (Telecourses in the COVID-19 era).
- 4. Cell function and Differentiation (one semester elective course, 22hr), 1990-1994.
- **5.** Topics in Cell cycle regulation and Cellular Differentiation BIO315, BIOL408 (one semester elective course, 22hr), **1995-2011.**
- 6. Applications of Bioinformatics BIO301, BIOL496 (Participation 8hr- one semester course) **2002-2008.**
- 7. Laboratory course in 'Methods in Genetics and Immunology' BIOA301 (Participation 16hr- one semester course), 2003-2014.
- Laboratory course in 'Methods of Analysis of Cellular Processes' BIOL300 (Participation 16-24hr- one semester course), 2014-present. <a href="http://www.biology.uoc.gr/el/department-courses/1384">http://www.biology.uoc.gr/el/department-courses/1384</a>
- 9. Reading Course on various topics BIOL443, 2005-present.
- 10. Three-month practical training in the lab on various projects BIOL444, 2005-present.
- 11. Diploma practical course (6-12 months each) on various projects 1993-2019.
- 12. Practical courses (2-3 months), 1998-2019.
- **13.** Introductory Biology course at the Department of Chemistry (BIO2010-CHEM046) (Participation 2hr in a 40hr course) **2010-2014**, (Participation 8-10hr in a 40hr course) **2015-present.** (Telecourses in the COVID-19 era).

### **Graduate courses:**

- 1. Topics in Developmental Biology (Participation 15hr course), 1984-1991.
- **2.** Topics in Genomics, Graduate Programme of Biology in 'Molecular Biology and Genetics', **1993-1998**.
- 3. Participation in the interdepartmental Graduate Programme of Biology and Medical Sciences in 'Molecular Biology and Biomedicine', **1998-present**. Lab training of rotation students.
  - https://www.imbb.forth.gr/mbb/index.php/en/
- 4. MBB: Genomics: from Structure to Function (Participation in a graduate 15hr course), 1999-2001.
- 5. MBB: Functional analysis of Biological Information, BIO1408, (Participation 7hr in a 40hr course), **2002-present.** (Course responsible since **2007).**

- MBB: Multicellular organization of life, BIO1405 (Participation 4hr in a 48hr course),
   2012-present. MBB has become Interinstitutional Programme (Biology, Medicine, IMBB) since 2018.
- 7. Participation in the Graduate Programme of Biology and Chemistry Departments 'Protein Biotechnology', **2003-present**. Lab training of rotation students. <a href="http://probiotech.biology.uoc.gr/index.php/">http://probiotech.biology.uoc.gr/index.php/</a>.
- 8. Introduction to current technologies in genomics and yeast genomics-proteomics, BIO1506 (Participation 5hr in a 15hr course, Course responsible), **2002-2016**.

Powerpoint presentations available for all courses, laboratory manuals for Laboratory courses.

**Member of many faculty committees** for graduate student's selection, progress, qualifying examinations, examinations for M.A. and Ph.D. Theses (1988-present).

#### SCIENTIFIC EDITOR OF BOOKS OR BOOK CHAPTERS

Scientific Editor for the translation in Greek of the book: "A Genetic Switch, Phage λ and Higher Organisms" by Mark Ptashne,1992, Blackwell Scientific Publications & Cell Press (Translation by C. E. Kazlaris, 1997, University Press of Crete) (http://www.cup.gr/).

**Scientific Editor** (and translator of a few chapters) for the translation in Greek of the book: **Developmental Biology,** Eleventh Edition, SINAUER, by Scott F. Gilbert and Michael J. F. Barresi <a href="http://lle.devbio.com/">http://lle.devbio.com/</a> (University Press of Crete) (<a href="http://www.cup.gr">http://www.cup.gr</a>) (2019).

**Participation in the translation/editing** in Greek of the book: **'Essential Developmental Biology'** Slack JMW, Wiley-Blackwell Publishing, Wiley-Blackwell, 2<sup>nd</sup> and 3<sup>rd</sup> editions 2006, 2013. Translation 2006 and 2014, Academic Publishers, Basdra & Co. https://www.academicbooks.gr/

**Participation in the translation/editing** in Greek of the book: **"Recombinant DNA":** J.D Watson, J.A. Witkowski, R.M. Myers, A.A. Caudy, W H Freeman & Co, 3<sup>rd</sup> edition, 2006. Translation 2007, Academic Publishers, Basdra & Co.

**Participation in the translation/editing** in Greek of the book: **"The Cell-A molecular approach"** Geoffrey M. Cooper - Robert E. Hausman, 2010, SINAUER, 6<sup>th</sup> and 7<sup>th</sup> editions, Translation 2011 and 2016, Academic Publishers, Basdra & Co.

**Participation in the translation/editing** in Greek of the book: **"Genetics, From genes to genomes"**, Leland Hartwell, Leroy Hood, Michael Goldberg, Ann Reynolds και Lee, 4<sup>th</sup> edition, Mc Graw Hill International, Translation 2014, Utopia Publishing.

**Participation in the translation/editing** in Greek of the book: **"Epigenetics"**, Lyle Armstrong, Garland Science, translation 2020, University Press of Crete) (<a href="http://www.cup.gr/">http://www.cup.gr/</a>).

#### LABORATORY RESEARCH SUPERVISION

- Supervision of **25** practical course undergraduate students, **1997-present**.
- Supervision of 32 topic assignments in reading courses of undergraduate students,
   2005-present.
- Supervision of 11 three-month training of undergraduate students, 2005-present.
- Supervision of **29** diploma undergraduate students, **1992-present**.
- Supervision of **3** foreign visiting students (France, Spain, Poland).

- Supervision for 2 or 3-month training of 51 rotation graduate students, 1984-present.
- Member of 45 graduate qualifying exam committees 1988-present.
- Member of 3 or 2-member committees for 36 Masters theses examinations, 1993present.
- Member of 3-member consulting committees for 42 PhD candidates, 1990-present.
- Member of 7member committees for 116 PhD examination committees 1990present.
- Training and supervision of **four** technical assistants, **1986-2001**.
- Supervision of **eight** Masters students, **1994-1995**, **1999-2000**, **2001-2003**, **2007-2008**, **2014-2015**.
- Supervision of six PhD students, 1989-present.
- Supervision of **four** post-doctoral fellows, **1992-present.**

#### ADMINISTRATIVE EXPERIENCE AT THE UNIVERSITY OF CRETE and IMBB

- Principal investigator of the Yeast Molecular Genetics group, 1988-present.
- First group for 'Genomic DNA sequencing and analysis using manual and automated methods' at IMBB (and Faculty member of the Biology Department), **1989-2000**.
- Member of the committee for graduate student's affairs, Biology Department, University of Crete, 1988-1989, and IMBB-FORTH 1989-1991.
- Member of the Library committee, University of Crete, 1988-2019, and IMBB 1989-1998.
- Member of the University Council 1995-1996.
- Member of the committee for graduate students' affairs of the University of Crete, **2008-2010**.
- Member of the committee for undergraduate students' affairs, Biology Department, University of Crete, **1997-1998**, **2001-2014**.
- Member of the committee for graduate students' affairs and financial affairs of the Graduate Programme of Molecular Biology and Biomedicine at the University of Crete, 1999-2001, 2003-2019.
- Director of A' Sector (Biochemistry, Molecular Biology, Cellular and Developmental Biology) of the Biology Department, **2000-2001**.
- Member (elected) of the Scientific Council of IMBB-FORTH, 2002-2007.
- President of the University committee for Library affairs in Heraklion 2004-2019.
- Member (elected) of the Heraklion Faculty Union (ENIAIOS SYLLOGOS) of the University of Crete, **2004-2012**.
- Member (elected) of the University Council, 2005-2006 and ex officio 2010-2014.
- Chairperson at the Biology Department (elected) 2010-2012 and 2012-2014.
- Vice-Chairperson at the Biology Department (assigned) 2014-2016.
- Member of the committee for undergraduate students' studies programme at the School of Sciences and Engineer, University of Crete, **2013-2016**.
- Director of the Interdepartmental Graduate Programme of the Biology and Medicine Departments, University of Crete, "Molecular Biology and Biomedicine", **2017-2018**.
- Director of the Interinstitutional Graduate Programme of the Biology and Medicine Departments, University of Crete, and IMBB-FORTH, "Molecular Biology and Biomedicine", 2018-2019.

## **OTHER ACADEMIC ACTIVITIES**

• Member of many faculty (also lecturer and teaching assistant) election/promotion committees at the Department of Biology (University of Crete), 1990-2019.

- Invited member of many faculty election/promotion committees (>30 committees):
   University of Athens, University of Thessaloniki, University of Thessalia, University of Ioannina, University of Thraki, University of Sterea Ellada, University of Aegian, 1990-2019.
- Reviewer for the scientific journals: Journal of Biological Chemistry, Molecular Microbiology, Molecular General Genetics, Yeast, Eukaryotic Cell, FEBS Journal (European Journal of Biochemistry), Archives of Virology, PLOS Genetics,...
- Proposal evaluator: peer reviewing of scientific proposals in European Union (FP5)2000, reviewing of scientific proposals for Greek Industry (ΣΕΒ)-2013, reviewing of
  scientific proposals of National Science Foundation-2003, reviewing of scientific
  proposal of the Greek Ministry of Education (HERAKLEITOS)- 2003, reviewing of
  scientific proposal of the Greek Ministry Education, EDBM\_34, (ESPA 2014-2020)2017-2018.

#### **MEMBERSHIPS**

- HUGO member since 9/5/1995.
- Member of the American Society of Microbiologists 1984-1996, 2008-present.
- Member of the Finance and Policy Committee for the International Conferences on Yeast Genetics and Molecular Biology, since June 14th 1995.
- Member of the Union of Greek Biologists (PEV).
- Member of the Hellenic Proteomic Society.
- Member of the Hellenic Society of Biochemistry and Molecular Biology (EEBMB).
- Member of the Hellenic Society 'Microbiokosmos'.

### **ACADEMIC FELLOWSHIPS AND FUNDING**

- 1. Undergraduate studies, 'honorary fellowship I.K.Y.', 1973.
- 2. 'Rosenstiel Fellowship' for graduate studies at Brandeis University, 1974-1976.
- 3. 'Jeffries Wyman Fellowship' for graduate studies at Harvard University, 1977-1982.
- 4. **NIH** postdoctoral fellowship (awarded to Prof. J. V. Ruderman, "Analysis of tubulin genes in sea urchins") at Harvard University, 1982-1984.

## **As Principal Investigator**

- 5. Internal funding at IMBB, 1984-2019.
- 6. Programme of the **Greek Ministry of Industry, Energy and Technology** General Secretariat of Science and Technology. "Isolation of cyclin homologs in yeast", 1987-1989, (2,500,000 drs).
- 7. **BAP programme of the European Community** on "Yeast Genome Sequencing and Functional analysis" Jan.1989-Dec.1990 (co-contractor with George Thireos) (50,000 ecu and Greek matching funds 3,300,000 drs). (Scientific coordinator: Andre Goffeau).
- 8. **BRIDGE programme of the European Community** on "Yeast Genome Sequencing" Jan.1991-Dec.1992 (contractor) (100,000 ecu and Greek matching funds 5,588,000 drs). (Scientific coordinator: Andre Goffeau).
- 9. **BIOTECH I programme of the European Union** on "Yeast Genome Sequencing" Jan.1993-June1995 (contractor) (100,000 ecu). (Scientific coordinator: Andre Goffeau).
- 10. **BIOTECH II programme of the European Union** on "Yeast Genome Sequencing" Jan.1994-Dec 1995 (contractor) (100,000 ecu). (Scientific coordinator: Andre Goffeau)
- 11. **Special Account of the Univ. of Crete**, "Functional analysis of unknown function yeast genes", 1994-1996, (1,000,000 drs) (scientific coordinator).

- 12. Biotechnology programme of the **European Union**: **EUROFAN 1** "Network for the Functional analysis of Yeast Genes Discovered by Systematic DNA Sequencing", initial funding for Oct.1995-Oct 1997. (Consortium coordinator (Two-hybrid screenings) 26,600 ecu, contractor 42,600 ecu). (Scientific coordinator: Steven Oliver).
- 13. **EUROFAN 1**, Consortium coordinator («Two-hybrid screenings») (26,600 ecu) (Scientific coordinator: Steven Oliver BIO4-CT95-0080).
- 14. Programme of the **Greek Ministry of Industry, Energy and Technology** General Secretariat of Science and Technology, **PENED**, "Transcriptional regulation of the the ferric reductase *FRE2* gene in *Saccharomyces cerevisiae*", January 1996-December 1997, (8,000,000 drs) (scientific coordinator).
- 15. **Biotechnology programme of the European Union: EUROFAN 2** "Network for the Functional analysis of Yeast Genes Discovered by Systematic DNA Sequencing", Oct.1997-Dec 1999. (contractor, 60,000 ecu). (Scientific coordinator: Steven Oliver).
- 16. Programme of the **Greek Ministry of Industry, Energy and Technology** General Secretariat of Science and Technology, **PENED99**, "The use of unicellular eukaryotic yeasts to produce and characterise proteins of biotechnological and medical interest", January 2000-June 2001, (13,500,000 drs) (scientific coordinator). (Contractors: Avgi Mamalaki, Vassilis Bouriotis).
- 17. **European Union Programme** 'Molecular analysis of chromatin modification by coactivator and co-repressor complexes' 2000-2004 (Coordinator lannis Talianides HPMD-CT-2000-00002)
- 18. Programme of the **Greek Ministry of Industry, Energy and Technology** General Secretariat of Science and Technology, **EPET II**, in collaboration with N. Panopoulos, January 2000-June 2001, (6,500,000 drs). (Coordinator: A. Tsaftaris)
- 19. Programme of the **Greek Ministry of Industry, Energy and Technology** General Secretariat of Science and Technology, **PENED2001**, "Protein interactions- Bioreactive molecules" September 2002-2005 (24,000,000 drs, contractor) (Coordinator Avgi Mamalaki).
- 20. Programme of the Greek Ministry of Industry, Energy and Technology- General Secretariat of Science and Technology, PENED2001, "Study of enzymes from extremophile organisms: Designing enzyme stability and catalytic properties" September 2002-2005 (24,000,000 drs, contractor) (Coordinator Vassilis Bouriotis, contractor Michael Kokkinidis).
- 21. Programme of the **Greek Ministry of Education, HRAKLEITOS**, 2002-2005 (34,000 euro) "Biochemical pathways of eukaryotic cell death" (Coordinator).
- 22. Programme of the **Greek Ministry of Education**, **PYTHAGORAS**, 2004-2006 (65,000 euro) "Pathways of oxidative response in *Saccharomyces cerevisiae*" (Coordinator).
- 23. Programme of the **Greek Ministry of Industry, Energy and Technology** General Secretariat of Science and Technology, **PENED2003**, "The role of Fras proteins in the structural/functional assembly and coherence between epidermis and chorion in physiological and pathological states. Apoptotic mechanisms in psoriasis" 1/12/05-30/11/08 (112.500,00 euro contractor) (Coordinator Georges Chalepakis University of Crete, Partnership: D. Alexandraki, V, Galanopoulos, A, Toska, S, Kruger-Krassanaki).
- 24. **Special Account of the Univ. of Crete, 093.02731**, 'Functional analysis of the DNA damage checkpoint protein ScRad9 role in metalloregulated transcription', 2008-2009 (3.000,00 euro) (scientific coordinator).
- 25. **09SYN-13-901**, Operational Programme «Competitiveness and Entrepreneurship» (**OPCE II**)-"Cooperation", National Strategic Reference Framework (NSRF) 2007-2013, "Development of a National Network in Genomics and Systems Biology Research" grant co-funded by the EU and the Greek State (partner 53.000,00 euro) (Coordinator: D. Kafetzopoulos).

- 26. **THALIS-"GenAge"-380228**, Operational Programme «Competitiveness and Entrepreneurship» (**OPCE II**)-"-"Cooperation", National Strategic Reference Framework (NSRF) 2007-2013 grant co-funded by the EU and the Greek State. "Aging and longevity: Interaction of genetic and environmental factors". (partners Tavernarakis, Lygerou, Gonos, Tzamarias, Tokatlidis) (Partner, 78,000 euro) (Coordinator: G. Garinis).
- 27. **THALIS, OΠΣ 377226**, Operational Programme «Competitiveness and Entrepreneurship» (**OPCE II**)-"Cooperation", National Strategic Reference Framework (NSRF) 2007-2013 grant co-funded by the EU and the Greek State. "Mitochondrial disfunction in neurodegenerative diseases", (partner 50.000,00 euro) (partners K. Tokatlidis. E. Dounia) (Coordinator: A. Plaitakis).
- 28. **Greek Ministry of Education,** programme of continuous education, , 07.08.73.12.01 'New methodologies in molecular, cellular and computational biology with applications in biomedicine' (coordinator for the Biology Department of the University of Crete. Partners: Medical Schools of the University Crete and University of Patras.) (250.000,00 euro-approved but not funded).

## Funding of graduate students in my group (fellowships)

- Short term EMBO Fellowships for two of my graduate students to work in European laboratories: Alexandra Voutsina- Andres Sentenac Paris (1996), Kalliopi Gkouskou-Susana Rodrigues-Navarro, Valencia (2007).
- The Onassis Foundation, Scholarship for Christos Andreadis PhD Studies in Molecular Biology and Biomedicine, Heraklion, Crete, Greece (awarded to 1 student per year)
- The Propondis Foundation, Scholarship for Christos Andreadis PhD Studies in Molecular Biology and Biomedicine, Heraklion, Crete, Greece
- I.K.Y.-Competitive National Fellowship for the PhD candidate Dimitra Dialynaki 2016-August 2019.

## **INVITED SPEAKER IN CONFERENCES AND COURSES**

- 1. Workshop on Biochemical Education, sponsored by the International Union of Biochemistry, Thessaloniki, May 1988.
- 2. BIOPYΛ, 6-hour teaching on methodologies of Molecular Biology and Genetic Engineering, Athens, June 1991.
- 3. 1st EUROFAN, Biotechnology meeting. Louvain-La-Neuve, Belgium, March 28-31, 1996.
- 4. 2nd EUROFAN, Biotechnology meeting. Manchester-UMIST, UK, February 20-23, 1997.
- 5. EUROFAN'98, The Third Meeting. Noordwijkerhout, NL, May 16-19, 1998.
- Genome Sequence and Comparative Analysis: Advanced Workshop in Biotechnology, organized by the European Commission, in the framework of the Biotechnology R&D Programme (1999 – 2000), Thessaloniki, Greece November 21-25, 1999.
- 7. EEBE (Biological Society) 23rd Conference, Chios, Greece May 24-27, 2001.
- 8. SMYTE 19 (Small Meeting on Yeast Transport and Energetics), Chania, Crete, Greece, September 14-17, 2001.
- 9. P.E.V. (Union of Greek Biologists) 2<sup>nd</sup> Meeting on Health. Molecular information and perspectives. Athens October 5-6, 2001.
- 10. Graduate Lecture 'Metalloregulated Transcription in *S. cerevisiae*' at the University of Athens, in Microbial Biotechnology, 12-12-2003.
- 11. UNESCO Workshop in Bioiformatics, University of Crete and IMBB, September 13-18 2004.
- 12. Graduate Lecture 'Metalloregulated Transcription in *S. cerevisiae*' at the University of Athens, in Microbial Biotechnology, 3-12-2004.

- 13. Graduate Lecture 'Metalloregulated Transcription in *S. cerevisiae*' at the University of Athens, in Microbial Biotechnology, 9-1-2006.
- 14. Yeast Genome 10th anniversary, and joint meeting of the French consortium Génolevures, 7-9-2006 "Académie Royale de Belgique", Brussels.
- 15. Hellenic Proteomics Society, Workshop on Proteomics, 'Protein interactions in yeast', 24-11-2006.
- 16. Graduate Lecture 'Yeast Genomics/Proteomics/Metalloregulated Transcription in *S. cerevisiae*' at the University of Athens, in Microbial Biotechnology, 8-1-2007.
- 17. Seminars at the Institute of Biology at ΕΚΕΦΕ 'Democritos' 'New metalloregulated transcriptional complexes in the unicellular Yeast 9-2-2007.
- 18. Workshop presentation 'New role for the *S. cerevisiae* Rad9 DNA damage checkpoint protein in metalloregulated transcription', XXIIIrd International Conference on Yeast Genetics and Molecular Biology, Melbourne, Australia, July 1 July 6, 2007.
- 19. Graduate Lecture 'Yeast Genomics/Proteomics/Metalloregulated Transcription in *S. cerevisiae*' at the University of Athens, in Microbial Biotechnology, 9-2-2008.
- 20. Graduate Lecture 'Yeast Genomics/Proteomics/Metalloregulated Transcription in *S. cerevisiae*' at the University of Athens, in Microbial Biotechnology, 9-1-2009.
- 21. Graduate Lecture 'Yeast Genomics/Proteomics/Metalloregulated Transcription in *S. cerevisiae*' at the University of Athens, in Microbial Biotechnology, 17-2-2010.

## **PUBLICATIONS (REFEREED)**

- 1. **Alexandraki, D.**, and Ruderman, J. V. (1981). Sequence heterogeneity, multiplicity and organization of  $\alpha$  and  $\beta$ -tubulin genes in sea urchins. **Molec. Cell. Biol.** 1, 1125-1137.
- Ruderman, J. V., and Alexandraki, D. (1983). Organization and expression of the tubulin gene families in the sea urchin. J. Submicroscopic Cytology and Pathology 15, 349-352. (Paper presented at the International Conference on Development and Function in Cilia and Flagella, Siena, Italy, July 1982.)
- 3. **Alexandraki, D.,** and Ruderman, J. V. (1983). Evolution of  $\alpha$  and  $\beta$ -tubulin genes as inferred by the nucleotide sequences of sea urchin cDNA clones. **J. Molec. Evol.** 19, 397-410.
- 4. **Alexandraki, D.**, and Ruderman, J. V. (1985). Multiple polymorphic  $\alpha$  and  $\beta$ -tubulin mRNAs are present in sea urchin eggs. **Proc. Natl. Acad. Sci. USA** 82, 134-138.
- 5. **Alexandraki, D.,** and Ruderman, J. V. (1985). Expression of  $\alpha$  and  $\beta$ -tubulin genes during development of sea urchin embryos. **Develop. Biol.** 109, 436-451.
- Tzamarias, D., Alexandraki, D., and Thireos, G. (1986). Multiple cis-acting elements modulate the translational efficiency of GCN4 mRNA in yeast. Proc. Natl. Acad. Sci. USA 83, 4849-4853.
- 7. Oliver, S. G., ...**Alexandraki, D.**, ...Galland, P., ...Thireos, G., Tzermia, M, ...and Sgouros, J. G. (1992). The complete DNA sequence of yeast chromosome III. **Nature**, 357, 38-46.
- 8. Tzermia, M. Horaitis, O. and **Alexandraki**, **D**. (1994). The complete sequencing of a 24.6 kb segment of yeast chromosome XI identified the known loci *URA1*, *SAC1* and *TRP3*, and revealed 6 new open reading frames including homologues to the threonine dehydratases, membrane transporters, hydantoinases and the phospholipase A2-activating protein. **Yeast** 10, 663-679.
- 9. **Alexandraki, D.** and Tzermia, M. (1994). Sequencing of a 13.2 kb segment next to the left telomere of yeast chromosome XI revealed five open reading frames and recent recombination events with the right arms of chromosomes III and V. **Yeast** 10, S81-S91.
- Georgatsou E. and Alexandraki, D. (1994). Two distinctly regulated genes are required for ferric reduction, the first step of iron uptake in Saccharomyces cerevisiae. Molec. Cell. Biol. 14, 3065-3073.

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- 4. Paraskevi Mara, George S. Fragiadakis, Fotios Gkoundromichos, Evdokia Toumpanaki and Despina Alexandraki. Investigating the growth phase dependent roles of the glutamate dehydrogenase isoforms Gdh1 and Gdh3 in S. cerevisiae, in preparation.

JOURNAL	IF 2016-18			IF total	
		Full	Suppl.	Full	Suppl.
		papers		papers	
Developmental Biology	3	1		3	
EMBO Journal	9.9	2		19.8	
FEBS Letters	3.623	1		3.623	
Gene	2.498	1		2.498	
Journal of Biological Chemistry	4.125	1		4.125	
Journal of Molecular Evolution	2.434	1		2.434	
Journal of Submicroscopic Cytology	0.73	1		0.73	
Molecular and Cellular Biology	4.398	2		8.796	
Nature	40.137	4		160.548	
Nucleic Acids Research	10.162	2		20.324	
PNAS	9.7	2		19.4	
The FEBS Journal	4.53		2		(9.06)
The Journal of Cellular Biochemistry			3		
Yeast	2	6	3	12	(18)
Microbial Cell Factories	3.831	1		3.831	
Current Genetics	3.5	2		7	
				268.109	

Citations: 1928, minus self- 1884, 58.27 average citations/item, h-index: 14 (Web of Science 26-5-2020)

**Citations: 3023,** 234 since 2015, **h-index: 17** (Google Scholar 26-5-2020)

### **REVIEW PAPER PUBLICATION IN BOOK (NON REFEREED)**

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- 64. Dimitra Dialynaki, George S. Fragiadakis, Pantelis Topalis, Irini Stratidaki, Niki Gounalaki and **Despina Alexandraki**. The anticancer drug zeocin specifically affects copper regulated transcription and other essential molecular pathways, in *S. cerevisiae*. **Chemical Biology of disease**. 15-18 September 2017, Heraklion, Crete, Greece. [Poster and Oral presentation]

- 65. Konstantinos Barsakis, Konstantina Koukourikou, Antonis Klonizakis, George S. Fragiadakis, Farbod Babrzadeh, Michael N. Mindrinos, **Despina Alexandraki** and Christoforos Nikolaou. Genome-wide localization and inter-dependence of Aft1 and Mac1 transcription factors in *S. cerevisiae*. **12th Conference of the Hellenic Society for Computational Biology and Bioinformatics HSCBB17**, October 11-13, 2017, Athens, Greece. [Poster]
- 66. Dialynaki D., Fragiadakis G.S., Topalis P., Stratidaki I., Gounalaki N., **Alexandraki D.** The anticancer drug zeocin specifically affects copper regulated transcription and other essential molecular pathways in *S. cerevisiae*. **11th Scientific Conference of FORTH**, Heraklion, Greece, October 13-14 2017. [Poster]
- 67. Stavropoulou A., Laskou M., Dialynaki D. and **Alexandraki D**. A story of two copper-proteins: Mac1 transcription factor and Sod1 Cu/Zn peroxide dismutase. 21<sup>st</sup> conference of Postgraduate Chemistry students, May 15-17, 2019, Heraklion, Crete, Greece. [Poster-1<sup>st</sup> award]
- 68. Dimitra Dialynaki, George S. Fragiadakis, Pantelis Topalis, Irini Stratidaki, Niki Gounalaki and Despina Alexandraki, The Anti-Cancer Drug Zeocin Affects Copper/Iron-Regulated Transcription and Causes Metabolic Reprogramming in *S. cerevisiae*. **29**<sup>th</sup> **International Conference on Yeast Genetics and Molecular Biology**, Gothenburg, Sweden, 18-22 August, 2019. [Poster]
- 69. Antonios Klonizakis, Konstantinos Barsakis, George S. Fragiadakis, Pantelis Topalis, Irini Stratidaki, Niki Gounalaki, Despina Alexandraki and Christophoros Nikolau. Extensive genomic interactions between two *S. cerevisiase* transcription factors. **Hellenic Bioinformatics 12**, 11-13 October, 2019, Heraklion, Crete, Greece. [Poster]
- 70. Dimitra Dialynaki, George S. Fragiadakis, Pantelis Topalis, Irini Stratidaki, Niki Gounalaki and Despina Alexandraki, The Anti-Cancer Drug Zeocin Affects Copper/Iron-Regulated Transcription and Causes Metabolic Reprogramming in *S. cerevisiae*. **12th Scientific Conference of FORTH**, Patras, Greece, October 14-16 2019. [Poster]
- 71. Antonios Klonizakis, Konstantinos Barsakis, George S. Fragiadakis, Pantelis Topalis, Irini Stratidaki, Niki Gounalaki, Despina Alexandraki and Christophoros Nikolau. Extensive genomic interactions between two *S. cerevisiase* transcription factors. **12th Scientific Conference of FORTH**, Patras, Greece, October 14-16 2019. [Poster]
- 72. Stavropoulou A., Laskou M., Dialynaki D. and **Alexandraki D**. A story of two copper-proteins: Mac1 transcription factor and Sod1 Cu/Zn peroxide dismutase. **12th Scientific Conference of FORTH**, Patras, Greece, October 14-16 2019. [Poster]
- 73. Dimitra Dialynaki, George Fragiadakis, Konstantinos Palikaras, Christina Ploumi, Pantelis Topalis, Niki Gounalaki, Irene Stratidaki and **Despina Alexandraki**. The Anti-Cancer Drug Zeocin Affects TORC1 pathway, mitochondrial function and autophagy, in *S. cerevisiae*. **12th Scientific Conference of FORTH**, Patras, Greece, October 14-16 2019. [Poster]

## **COURSES AND CONFERENCES ATTENDED**

- INSERM conference on "Structure and Expression of Eukaryotic Genomes", Paris, France, September 1980.
- EMBO course on "Yeast Genetics and Molecular Biology", ETH, Zurich, Switzerland, July 1987.
- 3. **Cold Spring Harbor Laboratory** meeting on Translational Control, CSH, New York, September 1987.
- 4. **EMBO course** on "DNA SEQUENCING: approaches, automated methods and analysis", EMBL, Heidelberg, Germany, November 1987.
- EEC course on "Computer analysis of DNA sequencing data", MIPS, Martinsried, FRG, February 1990.

- 6. **EEC course** on "Functional analysis of yeast genes", part of the EEC chromosome III sequencing project, CGM, Gif sur Yvette, France, March 1990.
- 7. **EEC meeting** on "Genome analysis in the EC", Elounda, Crete, Greece, May 1991.
- 8. "Evolution and development" (Thirty years after the Jacob-Monod paradigm). Hersonissos, Crete, October 1991.
- 9. **Practical course** in "PCR-targeting of yeast genes", Biozentrum, University of Basel, Switzerland, 5-11/11/ 1995.
- 10. **Practical course** in "Mass-murder of yeast chromosome XI genes", Pasteur Institut, Paris, France, 7-20/ 1/1996.
- 11. **Final European Conference** of the Yeast Genome Sequencing Network, September 25-28, 1996
- XIX International Conference on Yeast Genetics and Molecular Biology. Rimini, Italy, May 25-30, 1999.
- 13. **SUMMER SCHOOL** on Molecular Biology and Biomedicine, Crete, Greece, September 1998.
- 14. **Functional Genomics**/ The human touch. Third annual conference in Goeteborg, 31 August-1 September, 2000.
- 15. The Onassis Foundation Science Lecture Series, The 2002 Lectures in Biology: <u>Cell Signalling in Health and Disease</u>, Heraklion, Crete, July 15-19. <a href="https://www.forth.gr/onassis/index.php?show=lectures">https://www.forth.gr/onassis/index.php?show=lectures</a>
- 16. **The Onassis Foundation Science Lecture Series,** The 2003 Lectures in Biology: <u>Signal Peptides and Cell Trafficking</u>, Heraklion, Crete, July 14-18.
- 17. **The Onassis Foundation Science Lecture Series,** The 2004 Lectures in Biology: <u>Genomics,</u> Bioinformatics and beyond, Heraklion, Crete, July 12-16.
- The Onassis Foundation Science Lecture Series, The 2005 Lectures in Biology: <u>Programmed Cell Death and Cell Signaling in Development and Disease</u>, Heraklion, Crete, July 17-21.
- 19. **SUMMER SCHOOL** on Protein Biotechnology, Crete, Greece, June 22-25, 2005.
- 20. **The Onassis Foundation Science Lecture Series,** The 2006 Lectures in Biology: <u>Brain Plasticity: From Molecules to Behavior,</u> Heraklion, Crete, July 14-18.
- 21. **SUMMER SCHOOL** on Protein Biotechnology, Crete, Greece, May 23-27, 2007.
- 22. **SUMMER SCHOOL** on Protein Biotechnology, Crete, Greece, June 4-7, 2008.
- 23. 1st Meeting of Microbiokosmos, Athens, Greece, 27-7-2008.
- 24. Developmental circuits in aging. **EMBO Workshop**. 25-28 May 2015, Heraklion, Crete, Greece.
- 25. **The Onassis Foundation Science Lecture Series,** The 2015 Lectures in Biology: Stem Cells: From basic biology to translational research, Heraklion, Crete, July 6-10.
- 26. **The Onassis Foundation Science Lecture Series,** The 2018 Lectures in Biology: <u>Eukaryotic Transcription and its Regulation</u>, Heraklion, Crete, July 16-20.
- 27. **The Onassis Foundation Science Lecture Series,** The 2019 Lectures in Biology: <u>Genome Editing</u>, Heraklion, Crete, July 8-12.