# Despina Vassou

Chemist, Ph.D.

#### PERSONAL INFORMATION

<u>Date of birth:</u> 31/5/1974 <u>Place of birth:</u> Athens, Greece Marital status: married

Children: 2

<u>Tel:</u> 2810391927

E-mail: dvassou@imbb.forth.gr

#### **EDUCATION**

2008 PhD Immunomodulatory actions of opioids

Laboratory of Experimental Endocrinology, Laboratory Medicine, Faculty of Medicine, University of Crete. Supervisor: Prof. E. Castanas (castanas@med.uoc.gr)

2002 MSc Spectroscopic study of the interactions between poly(ethylene glycol), PEG, and

nifedipine.

"Polymer Science and its applications" Polymer Technology, Faculty of Chemistry,

National and Capodistrian University of Athens

1999 BSc Degree in Chemistry

Faculty of Chemistry, Aristotle University of Thessaloniki

# PROFESSIONAL-RESEARCH EXPERIENCE

04/2021-today Research associate. Ancient DNA laboratory, Institute of Molecular Biology

and Biotechnology (IMBB), Foundation for Research & Technology-Hellas

(FORTH). Supervisor: Prof. Nikos Poulakakis

03/2020-03/2021 Research associate. Laboratory of post-genomic applications & ancient DNA lab, Institute of Molecular Biology and Biotechnology (IMBB), Foundation

for Research & Technology-Hellas (FORTH). Supervisor: Dr I. Talianidis

- Head of ancient DNA lab
- Development & Establishment of DNA analysis methods for the ancient DNA lab (DNA extraction, library construction for next generation sequencing, NGS)
- Establishment and implementation of novel methodologies for *de novo* assembly of sequencing data from plants, combining short and long reads from high-throughput sequencing (Whole genome and whole transcriptome sequencing from greek olive and vine varieties, using next generation (Illumina) and 3<sup>rd</sup> generation (Oxford Nanopore) sequencing).
- Scientific support and management of scientific programs in the fields of Agri-food and ancient DNA (deliverables and annual reports writing, financial management, etc)
- Supervision and training of young scientists (under- and post- graduate students)
- Organization of and participation in scientific webinars and seminars
- Support of Post-Genomic Applications Laboratory. Lab management and organization, project implementation, etc

11/2016-02/2020

Research associate. Laboratory of post-genomic applications & ancient DNA lab, Institute of Molecular Biology and Biotechnology (IMBB), Foundation for Research & Technology-Hellas (FORTH). Supervisor: Dr D. Kafetzopoulos

- Head of ancient DNA lab operation
- Development & Establishment of DNA analysis methods for the ancient DNA lab (DNA extraction, library construction for next generation sequencing, NGS)
- Scientific support and management of scientific programs in the fields of Agri-food, Personalized Medicine and ancient DNA (deliverables and annual reports writing, financial management, etc)
- Training of colleagues to personalized medicine sequencing data analysis and curation
- Supervision and training of young scientists (under- and post- graduate students)
- Organization of and participation in scientific webinars and seminars
- Support of Post-Genomic Applications Laboratory. Lab management and organization, project implementation, etc

08/2014-10/2016

Research associate. MINOTECH Genomics Facility, IMBB, FORTH. Supervisor: Dr D. Kafetzopoulos

- MinION (Oxford Nanopore) single-molecule sequencing. Setting up of experimental protocols & workflows to the Facility.
- DNA sequencing (Ion Torrent & Illumina) and microarray (Affymetrix) analysis, development of workflows and methodological procedures.
- Bioinformatic analysis and quality control of data from microarrays and next generation sequencing using dedicated software
- Research programs writing
- Lab management
- Experimental design and completion of the project "Identification and isolation of genes encoding novel psychrophilic enzymes using state-of-the-art technologies" in collaboration with Dr D. Koutsioulis Executive Director of Minotech Biotechnology IMBB-FORTH
- Experimental design and completion of the project "Genotyping of patients with schizotypal disorders using LUMINEX technology" in collaboration with Dr S. Giakoumaki, Assistant Professor in Clinical Neuropsychology, Department of Psychology, University of Crete
- Construction of the MINOTECH Genomics Facility Website

# 03/2010-07/2014 <u>Post-doctoral researcher.</u> Laboratory of post-genomic applications, IMBB, FORTH. Supervisor: Dr D. Kafetzopoulos

 Scientific Project Cooperation "OncoSeed Diagnostics": "Biology of Circulating Tumor cells (CTCs): Metastasis and development of Liquid biopsy methods".
 Isolation and molecular characterization of CTCs using imaging methods.
 Development of methodologies for the molecular characterization of micrometastatic cells. Gene expression profile analysis, genotyping and methylation status analysis of single cells using microarrays and next generation sequencing. Optimization of DNA and RNA amplification methods from single cells and development of methodologies for the evaluation of the protocols (e.g. immunostaining, real time PCR)

- Scientific Project "Hercules": "Medical Genetics and Biomedical Informatics
  Infrastructure in support of early diagnosis, monitoring and treatment of children
  with neurological disorders in Greece". Identification of gene expression profiles
  in the peripheral blood of children with Chronic Neurological Disorders, CND,
  using genotyping and pharmacogenomics microarrays. Development of Biobank
  for the safe collection, storage and manipulation of biological samples from
  children with CND at the Pediatric Clinic of the University General Hospital of
  Heraklion.
- Supervision and training of under- and post- graduate students
- Lab management and organization

03/2008-02/2010

<u>Post-doctoral researcher.</u> Laboratory of Molecular Medicine and Human Genetics, Faculty of Medicine, University of Crete. Supervisors: Assistant Prof. G. Goulielmos, Prof. D.T. Boumpas

- Study of the role of the pro-apoptotic protein Siva in the pathogenesis of Familial Mediterranean fever (FMF)
- Study of the role of pyrin in the activation of NALP-3 inflammasome
- Training of post-graduate students

06/2004-02/2006

<u>Research Associate.</u> Laboratory of Experimental Endocrinology, Laboratory Medicine, Faculty of Medicine, University of Crete. Supervisor: Prof.: E. Castanas

02/2003-03/2004

<u>Chemist.</u> Laboratory of Quality Control, Industry of Veterinary Products, Agrochemicals and Piscicultural Products, VETERIN S.A. (afterwards ALAPIS)

• Development of analytical protocols for the quality control of new products and Quality control of veterinary pharmaceutical products, provenders, etc.

10/2001-09/2002

Research Associate. Applied Spectroscopy Laboratory, Theoretical and Physical Chemistry Institute (TPCI), National Hellenic Research Foundation (NHRF), Athens Supervisors: Dr G. Chrissikos, Dr V. Gionis

- Material characterization with non-destructive vibrational spectroscopy methods (IR, Near-IR, Raman)
- Development of methodologies for the identification and quantification of pharmaceutically active substances with vibrational spectroscopy
- Studies on polymorphism and devitrification of pharmaceutically active substances

01/2000-06/2001

<u>Training and Specialization Fellowship.</u> Institute of Electronic Structure and Laser (IESL), Foundation for Research and Technology (FORTH), Heraclion, Crete. Scientific Supervisor: Prof. S. Anastasiades, FORTH-IESL. Took place at TPCI of NHRF. Supervisors: Dr G. Chrissikos, Dr V. Gionis.

- Material Structure and supramolecular assembly studies using vibrational spectroscopy
- FT-Surface Enhanced Raman (SERS) characterization of polymeric surfaces and interfaces

#### TECHNICAL EXPERIENCE AND RESEARCH SKILLS

## Biochemistry, Cellular and Molecular Biology Methods:

- Ancient samples handling and processing, ancient DNA extraction and library construction. Optimization and standardization of methods and protocols for ancient DNA analysis. Establishment of new protocols in the lab.
- Gene expression profiling & Genotyping analysis studies using Next Generation Sequencing, NGS and microarrays (Design of the experiment, sample manipulation, library construction, sequencing or microarray scanning, data quality control and bioinformatics analysis). Use of Illumina, Ion Torrent and Oxford Nanopore platforms. Experience in a grat variet of applications
- Development of standardized workflows for NGS and Microarrays analysis
- Use of micromanipulators and microinjectors for single-cell isolation
- Membrane and intracellular immunostaining, flow cytometry, immunofluorescence, confocal microscopy.
- DNA technologies (genomic and plasmid DNA isolation, plasmid constructs, site-directed mutagenesis, PCR  $\kappa\alpha$ )
- RNA technologies (isolation, cDNA synthesis, RT- PCR)
- Cellular, nuclear and membrane protein extracts, protein interactions (Western blot, Immunoprecipitation assays), protein quantification with Elisa, Nephelometry and Luminex 100, zelatin zymography (MMPs assay).
- Lymphocytes and monocytes isolation from peripheral blood, cell cultures, radioligand binding assays, cell transfection with plasmid constructs, cell migration, adhesion and spreading, survival, proliferation and apoptosis assays.

#### Quality control of pharmaceutical products, polymers and other materials

- Development of analytical protocols, use and evaluation of Quality Control techniques (HPLC, UV, IR, Near-IR, FT-Raman, Dissolution Test Apparatus etc). Quality and quantity assays of pharmaceutical products.
- Material characterization with non-destructive vibrational spectroscopy methods (IR, Near-IR, Raman)
- Development of methodologies for the identification and quantification of materials with vibrational spectroscopy
- Polymer characterization and pharmaceutically active substances with Modulated Differential Scanning Calorimetry (DSC, MDSC)
- Material Structure and supramolecular assembly studies
- Characterization of polymeric surfaces and interfaces

#### Processing, evaluation and presentation of results

- Development of protocols & reports for Next Generation Sequencing and Microarrays data. Use of specialized data analysis software for a variety of applications
- Processing & evaluation of high-throughput raw data, optimization of workflows
- Presentation of results
- Results interpretation, scientific papers and programs writing

#### **COMPUTER SKILLS**

2006 ECDL Progress: Word, Excel, Internet.

Very good command of MS Office, Windows, Internet and specialized software for instrument control and bioinformatics analysis of NGS data.

#### LANGUAGES

English (Excellent)

1992 Certificate of Proficiency in English, University of Cambridge

#### FELLOWSHIPS - SEMINARS - WORKSHOPS

- Organization and Hosting of Webinar "Ancient DNA, precision Medicine & Agriculture: Cuting edge post-genomic applications", in memory of Dr. Dimitris Kafetzopoulos. Webinar, 12 March 2021.
- Organization of and Participation in Webinar "Archaeogenetics in the context of the Research Infrastructure HELLAS-CH.gr". Webinar, 24 September 2020.
- Organization, Hosting of and participation in workshop: **Next Generation Sequencing (NGS)** data analysis *IMBB-FORTH*, *Heraklion*, *Greece*, *Feb* 17<sup>th</sup> 2020
- Short term EMBO fellowship on project: Classification of archaeological remains by the means of population-specific genetic markers and comprehensive ancient DNA analysis, June 19-29 2017, Centre for GeoGenetics, National History Museum of Denmark, Copenhagen, training and supervision by Dr. Morten Allentoft, assistant Professor at Geogenetics
- **2nd Annual Ion User Meeting**, Portugal Live Broadcast. 2012 October 9-11, IMBB-FORTH, Heraklion, Crete
- **1st European Ion User Group Meeting,** Berlin, Live Broadcast. 2011 October 25 IMBB-FORTH, Heraklion, Crete
- April Imaging Workshop at Cold Spring Harbor. Workshop on ImageXpress High Content Screening System κατά τη διάρκεια του συνεδρίου The Biology of Cancer: Microenvironment, Metastasis & Therapeutics, Cold Spring Harbor Laboratory, Cold Spring Harbor, New York, April 28<sup>th</sup>, 2011
- **4th Genome Sequencer FLX User Conference** (Roche). Athenaeum InterContinental Hotel, 2010 June 15 –17 Athens
- The 2009 Lectures in Biology: Immunobiology Onassis Foundation Science Lecture Series, 2009 July 27-31 IMBB-FORTH, Heraklion, Crete
- The 2005 Lectures in Biology: Programmed Cell Death and Cell Signaling. Onassis Foundation Science Lecture Series, 2005 July 4-8, IMBB-FORTH, Heraklion, Crete
- **14th Conference of the European Colloid and Interface Society** (ECIS 2000) 2000 September 17-22 Patras.

## **PUBLICATIONS**

- 1. Nikolaos Psonis\*, **Despoina Vassou**\*, Dimitris Kafetzopoulos. *Testing a series of modifications on genomic library preparation methods for ancient or degraded DNA*, Analytical Biochemistry, Vol 623, 114193, (2021) <a href="https://doi.org/10.1016/j.ab.2021.114193">https://doi.org/10.1016/j.ab.2021.114193</a>. \*authors with equal contribution
- Nikolaos Psonis, Carlos Neto de Carvalho, Silvério Figueiredo, Eugenia Tabakaki, **Despoina Vassou**, Nikos Poulakakis & Dimitris Kafetzopoulos. *Molecular identification and geographic origin of a post-Medieval elephant finding from southwestern Portugal using high-throughput sequencing*. Sci Rep 10, 19252 (2020). <a href="https://doi.org/10.1038/s41598-020-75323-y">https://doi.org/10.1038/s41598-020-75323-y</a>
- 3. Angeliki Chroni, Loukianos Rallidis, **Despoina Vassou**, Christina Gkolfinopoulou, Paraskevi Papakosta, Maria I. Zervou, George N. Goulielmos, Estela Kiouri, Danae Pappa, Elias Eliopoulos, Dimitris Kardassis. *Identification and characterization of a rare variant in apolipoprotein A-IV*, p.(V336M), and evaluation of HDL functionality in a Greek cohort with extreme HDL cholesterol levels. Arch Biochem Biophys. 2020 Oct; 696 108655. doi:10.1016/j.abb.2020.108655. PMID: 33130088.
- 4. Maraki Sofia, **Vassou Despoina**, Kastanis Grigoris, Stafylaki Dimitra, Masunt Samer, Kapsetakis Petros, Stratidaki Irini, Scoulica Effie. *Wound infection attributed to Pasteurella multocida*

- transmitted by a dog. Genome analysis classified the isolate to a distinct phylogenetic lineage and revealed new virulence traits. In preparation
- 5. Dimitris Nasias, Katerina Dalakoura-Karagkouni, **Despoina Vassou**, Giorgos Papagiannakis, Ariadni Papadaki, Dimitris Kardassis, *Transcriptome analysis of the adipose tissue in a mouse model of metabolic syndrome identifies gene signatures related to disease pathogenesis*, Genomics, 2020, 112, 6, 4053-4062, <a href="https://doi.org/10.1016/j.ygeno.2020.06.053">https://doi.org/10.1016/j.ygeno.2020.06.053</a>
- Dimitris Nasias, Ioannis Evangelakos, Vasilis Nidris, **Despoina Vassou**, Erika Tarasco, Thomas A. Lutz, Dimitris Kardassis. (2019) Significant changes in hepatic transcriptome and circulating miRNAs are associated with diet-induced metabolic syndrome in apoE3L.CETP mice. J Cell Physiol. 2019; 234: 20485–20500. https://doi.org/10.1002/jcp.28649
- 7. Lies Laenen, Valentijn Vergote, Liana Eleni Kafetzopoulou, Tony Wawina Bokalinga, Despoina Vassou, Joseph A. Cook, Jean-Pierre Hugot, Ward Deboutte, Peter T. Witkowski, Panja Köppen-Rung, Detlev H. Krüger, Martina Ličková, Alexander Stang, Lucia Striešková, Tomáš Szemeš, Janusz Markowski, Janusz Hejduk, Dimitris Kafetzopoulos, Marc Van Ranst, Richard Yanagihara, Boris Klempa Piet Maes. A novel hantavirus of the European mole, Bruges virus, is involved in frequent Nova virus co-infections. Genome Biology and Evolution. 2018;10(1):45-55. doi: 10.1093/gbe/evx268
- 8. Lefteris Koumakis, Alexandros Kanterakis, Evgenia Kartsaki, Maria Chatzimina, Michalis Zervakis, Manolis Tsiknakis, **Despoina Vassou**, Dimitris Kafetzopoulos, Kostas Marias, Vassilis Moustakis, George Potamias (2016) *MinePath: Mining for Phenotype Differential Sub-paths in Molecular Pathways* PLOS: Computational Biology 12(11):e1005187.doi:10.137 1/journal. pcbi.1005187
- 9. **Despoina Vassou**, Stilianos Arhondakis, Kalliopi Kalantzaki, Michalis Zervakis, Dimitris Kafetzopoulos (2015) *Towards Single-Cell Gene Expression Profiling: Assessing Amplification Biases*. 6th European Conference of the International Federation for Medical and Biological Engineering IFMBE Proceedings Vol 45, pp 598-601
- 10. Argyro Repa, George K. Bertsias, Eleni Petraki, Christianna Choulaki, **Despoina Vassou**, Konstantinos Kambas, Dimitrios T. Boumpas, George Goulielmos, Prodromos Sidiropoulos (2015) Dysregulated production of interleukin-1β upon activation of the NLRP3 inflammasome in patients with familial Mediterranean fever. *Hum Immunol.* 76(7) pp488-95.
- 11. Stelios Sfakianakis, Ekaterini S Bei, Michalis Zervakis, **Despoina Vassou** and Dimitrios Kafetzopoulos (2014). On the Identification of Circulating Tumor Cells in Breast Cancer, *Biomedical and Health Informatics, IEEE Journal of*, vol. 18, no.3, p.773-82. Featured Article
- 12. Maria Tsekrekou, Dimitris Mavroudis, Dimitris Kafetzopoulos, **Despoina Vassou** (2012) Stem Cell Characters in Primary and Metastatic Tumour Establishment. Chapter 25 in *Stem Cells and Human Diseases* R. Srivastava, S. Shankar, Springer, p. 533-575
- 13. **Vassou, D.,** Notas, G., Hatzoglou, A., Castanas, E. & Kampa, M. Opioids increase bladder cancer cell migration via bradykinin B2 receptors. (2011) *Int J Oncol* 39, pp 697-707.
- 14. Goulielmos, G.N., Petraki, E.\*, **Vassou, D.\*,** Eliopoulos, E., Iliopoulos, D., Sidiropoulos, P., Aksentijevich, I., Kardassis, D. and Boumpas, D.T. The role of the pro-apoptotic protein Siva in the pathogenesis of Familial Mediterranean fever: A structural and functional analysis (2010) *Biochemical and Biophysical Research Communications*, 402, pp. 141-146. \*authors with equal contribution
- 15. **D. Vassou**, E. Petraki, E. Eliopoulos, D. Iliopoulos, I. Aksentijevich, P. Sidiropoulos, D. Kardassis, D. T. Boumpas, G. N. Goulielmos. Role of the pro-apoptotic pyrin-interacting protein Siva in the pathogenesis of familial Mediterranean fever. *Ann Rheum Dis* 2010, **69**, A29-A30
- D. Vassou, E. Bakogeorgou, M. Kampa, H. Dimitriou, A. Hatzoglou and E. Castanas. Opioids modulate constitutive B-lymphocyte secretion. *International Immunopharmacology*, 2008, 8, 634-644

- 17. K. L. A. Chan, S. G. Kazarian, **D. Vassou**, V. Gionis and G. D. Chryssikos. In situ high-throughput study of drug polymorphism under controlled temperature and humidity using FT-IR spectroscopic imaging. *Vibrational Spectroscopy* 2007, 43, 221–226
- 18. **D. Vassou**, V. Gionis and G. D. Chryssikos. Glassy drugs: A Raman investigation of binary dihydropyridine systems. *Physics and Chemistry of Glasses* 2005, **46**, (2),144-147
- 19. K. L. A. Chan, O. S. Fleming, S. G. Kazarian, **D. Vassou**, G. D. Chryssikos and V. Gionis. Polymorphism and devitrification of nifedipine under controlled humidity: a combined FT-Raman, IR and Raman microscopic investigation. *Journal of Raman Spectroscopy* 2004, 35, 353–359

#### UNDER REVISION OR IN PREPARATION

- 1. Staikou V., Sianis P.D., **Vassou D.**, Psonis N., Allentoft M.E., Iliopoulos G. Middle Helladic Tombs at Nydri Plain, Lefkas Island. Archaeological and Palaeoanthropological Study. Journal of Greek Archaeology.(revised and under review)
- 2. Psonis N. **Vassou D.**, NicolaouL., RoussiakisS., IliopoulosG., PoulakakisN., &SfenthourakisS. Ancient mitogenomics of the extinct Cyprus pygmy hippopotamus. (in preparation)
- 3. Bibi C. Androniki, Kollias Anastasios, Astrinaki Maria, **Vassou Despoina**, Kafetzopoulos Dimitris, Kalantidis Kriton, Moschou N. Panagiotis. DNA Preparation in Vitis vinifera L. For Third Generation Sequencing (in preparation)

#### PRESENTATIONS IN CONFERENCES-SEMINARS

- 1. Nikolaos Psonis, **Despoina Vassou**, Loucas Nicolaou, Nikos Poulakakis, Spyros Sfenthourakis, Dimitris Kafetzopoulos. *Mitogenomics of the extinct Cyprus dwarf hippopotamus* Ancient Biomolecules of Plants, Animals, and Microbes (Virtual Conference) March 29th 31st 2021, Wellcome Genome Campus, UK.
- 2. **Despoina Vassou** participation with two presentations, "Ancient DNA lab An introduction" & "Research in Archaeogenetics, Applications & Services". (2020) Webinar "Archaeogenetics in the context of the Research Infrastructure HELLAS-CH.gr", 24 September 2020.
- 3. **Despoina Vassou**, Host of the **Next Generation Sequencing (NGS) data analysis** Workshop, participation with two talks: *Introduction to DNA sequencing technologies & Bioinformatics analysis: The precision medicine paradigm (2020) IMBB-FORTH, Heraklion, Greece, Feb 17<sup>th</sup>*
- 4. Dimitris Nasias, **Despoina Vassou**, Giorgos Papagiannakis, Ariadni Papadaki and Dimitris Kardassis. *Changes in adipose tissue transcriptome of apoE3L.CETP mice during the development of the metabolic syndrome* 70th Annual Conference of the Hellenic Society of Biochemistry and Molecular Biology (HSBMB) (2019), Athens, Nov 29th-Dec 1st
- 5. Ioannis Patramanis, Eugenia Tabakaki, **Despoina Vassou**, Nikolaos Psonis, Varvara Papadopoulou, Pavlos Pavlidis & Dimitris Kafetzopoulos. *Using population demographic models to simulate the colonization of ancient Amvrakia (Greece) during the Second Greek colonization (8th 6th century BCE.)* (2019) EMBO | EMBL Symposium: Reconstructing the Human Past. EMBL Heidelberg, Germany, 31 Mar 3 Apr
- 6. **Despoina Vassou** Ancient DNA Analysis Workshop (WS-5.6) *Handling & Experimental procedures session* (2018) Workshop in International Council of Museums, International Committee for Documentation (ICOM's CIDOC) Conference, Heraklion Crete 29 Sep-5 Oct
- 7. **Despoina Vassou**, Eugenia Tabakaki, Nikolaos Psonis, Dimitris Kafetzopoulos. *Ancient DNA lab: A new view to the past.* (2017) 11<sup>th</sup> Scientific retreat FORTH, Heraklion, Crete, 13-14 Oct
- 8. **Despoina Vassou**, *Next generation sequencing: Applications, Perspectives & Challenges* (2017), IMBB Colloquium, IMBB-ITE, May 26<sup>th</sup>.
- 9. Emmanouil Saloustros, Helen Latsoudis, **Despina Vassou**, Irene Stratidaki, Niki-Antonia Gounalaki, Vasiliki Fadouloglou, Ioannis Drositis, Emmanouil Kontopodis, Kitty Pavlakis, Dimitrios Mavroudis, Nikolaos Androulakis, and Dimitrios Kafetzopoulos (2017) *The pursue of*

- genetic mechanisms underlying supreme response to Pazopanib treatment American Association for Cancer Research, Washington DC, USA, 1-5 April.
- 10.Lies Laenen, Valentijn Vergote, Se Hun Gu, Liana E. Kafetzopoulou, **Despoina Vassou**, Joseph A. Cook, Dimitris Kafetzopoulos, Marc Van Ranst, Detlev H. Krüger, Richard Yanagihara, Boris Klempa, Piet Maes (2016) *Bruges Virus, A Newfound Hantavirus in the European Mole, Contradicts Host-Specificity*. X International Conference on HFRS, HPS and Hantaviruses, Colorado State University, Fort Collins, Colorado, USA, 31 May -3 June.
- 11. **Despoina Vassou** (2016) *MinoTech Genomics Facility-IMBB. State-of-the-art technologies for genomics analyses* IMBB-FORTH Retreat, Heraclion Crete, May 20-21
- 12. **Despoina Vassou**, Michalis Gounis, Stilianos Arhondakis, Michalis Zervakis, Dimitris Kafetzopoulos (2015). *Molecular and functional characterization of CTCs*. Control of Cell Polarity and Movement in Cancer, Glasgow, Scotland, July 5 8
- 13. **Despoina Vassou**, Konstantinos Lilakos, Dimitris Kafetzopoulos (2015) *Development of Single-Cell Genotyping, Gene Expression Profiling, & Genome methylation profiling for Circulating Tumour Cells*. London Calling (conference hosted by Oxford Nanopore Technologies). London, England, May 15-16
- 14.Dimitris Kafetzopoulos, **Despoina Vassou**, Stilianos Arhondakis, Kalliopi Kalantzaki, Michalis Zervakis (2015). *Challenges and solutions for single CTC gene expression profiling and molecular characterization*. The Biology of Cancer: Microenvironment, Metastasis & Therapeutics, Cold Spring Harbor Laboratory, Cold Spring Harbor, New York, May 12–16
- 15. Karagiannopoulou L., Zouraraki C., **Vassou D.**, Karamaouna P., Kafetzopoulos D., Roussos P., Bitsios P., Giakoumaki S.G. (2015) *The Genome-Wide associated schizophrenia risk variant rs10520163 affects Prepulse Inhibition and executive functions: Preliminary findings from the PreMES cohort.* 4th International Congress on Neurobiology and Therapeutics, 14-17 May, Agios Nikolaos, Crete, Greece.
- 16. Zouraraki C., Karamaouna P., **Vassou D.**, Karagiannopoulou L., Kafetzopoulos D., Roussos P., Bitsios P., Giakoumaki S.G. (2015) *Differential effects of polymorphisms associated with schizophrenia on cognition and quality of life: Findings from the schizophrenia high-risk PreMES cohort.* 4th International Congress on Neurobiology and Therapeutics, 14-17 May, Agios Nikolaos, Crete, Greece.
- 17.**D. Vassou**, S. Arhondakis, K. Kalantzaki, M. Zervakis, D. Kafetzopoulos (2014). *A novel approach for classification of single CTCs expression profiles*. Advances in Circulating Tumour Cells [ACTC]: from Basic Research to Clinical Practice, Rethymno, Crete, 8-11 October.
- 18. Despoina Vassou, Chris Zoumadakis, Frosso Konstantaki, Anastasia Vasileiou, Maria Tsekrekou, Sevasti Gaspari & Dimitris Kafetzopoulos (2013). Isolation & Molecular Characterization Of Circulating Tumor Cells: A challenging problem demanding multidisciplinary approaches. 100 YEARS CRETE 30 YEARS FORTH: Scientific Workshop, FORTH, Heraklion, Crete, July 12-13.
- 19. **Despoina Vassou**, (2012) Unraveling the heterogeneity of Circulating Tumor Cells with single cell analysis. Approaches to isolation and molecular characterization, IMBB Colloquium, IMBB-ITE, April 6th
- 20.**D. Vassou**, M. Tsekrekou, D. Mavroudis, D. Kafetzopoulos. (2012). *Molecular characterization of Circulating Tumor Cells*. Advances in Circulating Tumour Cells (ACTC): from Basic Research to Clinical Practice, Vouliagmeni, Athens, Greece, September 26-29.
- 21. **Despina Vassou**, Maria Tsekrekou, Aliki Siganou, Dimitris Mavroudis, Dimitris Kafetzopoulos (2011). *Isolation and Single-Cell Molecular Profiling of Circulating Tumor Cells*. The Biology of Cancer: Microenvironment, Metastasis & Therapeutics, Cold Spring Harbor Laboratory, April 26 30, Cold Spring Harbor, New York.
- 22.M. Tsekrekou, **D. Vassou**, A. Siganou, D. Mavroudis and D. Kafetzopoulos (2011). *Evaluation of Isolation and Single-Cell Molecular Profiling Methods for CTCs*. Stem Cells, Cancer and Metastasis. Keystone Symposia, March 6 11, Keystone Colorado.

- 23.D. Vassou, E. Petraki, E. Eliopoulos, D. Iliopoulos, I. Aksentijevich, P. Sidiropoulos, D. Kardassis, D.T. Boumpas and G.N. Goulielmos (2010). The role of the pro-apoptotic, pyrin-Siva in the pathogenesis of Familial Mediterranean fever (FMF). interacting protein of Rheumatology Research, Bamberg, Abstracts of the 30th European Workshop Germany, March 4-6.Ann Rheumatic Diseases 69 (suppl. 2):A29, 69:A29-A30 doi:10.1136/ard.2010.129619f
- 24.E. Petraki, **D. Vassou**, E. Eliopoulos, D. Iliopoulos, I. Aksentijevich, P. Sidiropoulos, D. Kardassis, D. T. Boumpas, G. N. Goulielmos (2010). European Human Genetics Conference, June 12 15, Gothenburg, Sweden. Eur. J. Hum. Genet. 18 (suppl. 1):279.
- 25.E. Petraki, D. Vassou, E. Eliopoulos, D. Iliopoulos, I. Aksentijevich, P. Sidiropoulos, D. Kardassis, D. T. Boumpas, G.N. Goulielmos (2010). SIVA is unlikely to contribute to the pathogenesis of Familial Mediterranean Fever (FMF): A genetic, structural biological and functional study. Autoinflammation 2010, 6th International Congress on FMF and SAID, 2-6 September Royal Tropical Institute (KIT), Amsterdam, the Netherlands.
- 26.**D. Vassou**, E. Eliopoulos, E. Petraki, P. Sidiropoulos, E. Thymiakou, D. Gumucio, D. Kardassis, D. T. Boumpas, G. N. Goulielmos (2009). *Implication of the pro-apoptotic protein Siva in the pathogenesis of Familial Mediterranean Fever (FMF)*. Annual European Congress of Rheumatology (EULAR 2009), June 10<sup>th</sup>-13<sup>th</sup>, Copenhagen.
- 27.M. Kampa, V. Pelekanou, **D. Vassou** and E. Castanas (2008). *Erythropoietin and steroid membrane initiated actions interact in breast cancer cells leading to enhanced cell survival*. 20th Meeting of the European Association for Cancer Research, July 5<sup>th</sup>-8<sup>th</sup>, Lyon, France.
- 28.G.N. Goulielmos, E. Petraki, **D. Vassou**, E. Fragouli, P. Sidiropoulos, D. Gumucio, D.T. Boumpas, E. Eliopoulos (2008). *Genetics and molecular pathways of the Familial Mediterranean Fever (FMF): Unraveling the mechanisms for inflammation and fever through molecular modeling of the PRYSPRY domain of pyrin.* Abstracts of the Marie Curie ToK programme "DRUGDESI" "Workshop on Molecular Modelling: Approaches to Computational Biophysics", December 5<sup>th</sup> 6<sup>th</sup>, Athens.
- 29. **Despoina Vassou,** Prodromos Sidiropoulos, Dimitrios T. Boumpas and Giorgos N. Goulielmos (2008). *Elucidation of the role of the pro-apoptotic protein Siva in the pathogenesis of Familial Mediterranean Fever*. 20<sup>th</sup> Panhellenic Congress of the Hellenic Society for Reumatology, November 26<sup>th</sup>-29<sup>th</sup>, Athens.
- 30.**D. Vassou**, M. Kampa, A. Hatzoglou, E. Castanas (2007). *A novel interaction of opioids with the Bradykinin B2 receptor promotes cancer cell migration*. 59th Hellenic Congress of the Hellenic Society for Biochemistry and Molecular Biology, December 7th-9th, Athens
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# RECCOMEDATIONS

Dr Iannis Talianidis Tel 2810-391162, email: <a href="mailto:talianid@imbb.forth.gr">talianid@imbb.forth.gr</a>
Dr John Vontas Tel 2810-391136, email: <a href="mailto:vontas@imbb.forth.gr">vontas@imbb.forth.gr</a>

Dr Dimitris Kardassis Tel 2810394549, email: <a href="mailto:kardasis@imbb.forth.gr">kardasis@imbb.forth.gr</a>
Dr Michalis Zervakis Tel 2821037206, email: <a href="mailto:michalis@display.tuc.gr">michalis@display.tuc.gr</a>