Panagiotis Dritsas

Date of birth; 10/03/1995 | Patras, Achaia | e-mail: dritsas.p@upnet.gr

Education

- **11/2019-Present Day;** PhD Student in Microbiology, Department of Biology, University of Patras, Patras (Greece)
- **2017-2019**; Postgraduate Student in Biology/Biological Technology, Department of Biology, University of Patras, Grade; 9.71/10.00
- **2017 (01/06/2017-31/07/2017);** Internship in the Greek Agricultural Organization Demetra Institute of Plant Protection (Patras)
- **2013-2017**; Undergraduate Student, Department of Biology, University of Patras, Grade; 7.62/10.00
- **2010-2013;** Graduate of 5th High School of Patras, Grade; 19.00/20.00

ACADEMIC WORK

- **PhD thesis;** "Isolation of new strains of microalgae from the Ionian Sea, biochemical characterization and adaptive evolution of selected strains". Laboratory of Microbiology, Department of Biology, University of Patras. Supervisor; George Aggelis (*in progress*)
- Master thesis; "Studies on the assimilation of glycerol and lipogenesis in the fungus *Umbelopsis isabellina* and the yeast *Yarrowia lipolytica*".
 Laboratory of Microbiology, Department of Biology, University of Patras, Grade; 10.00/10.00.
 Supervisor; George Aggelis
- **Diploma thesis (bachelor);** "Co-assimilation of glycerol and glucose in the fungus *Umbelopsis isabellina*".

Laboratory of Microbiology, Department of Biology, University of Patras, Grade; 10.00/10.00. Supervisor; George Aggelis

Skills & Abilities

Microbiological Cultures

- Liquid, solid, aerobic and anaerobic
- Isolation of microorganisms (bacteria, yeasts, fungi) from environmental samples and tissues. Isolation of microalgae from seawater. Development of new protocols.

Microbiological techniques

- Microbial cells and subcellular organelles of microorganisms staining
- Microscopy of cells and liposomes (optical, fluorescent, confocal microscope).
- Photometric analyses

Specialized microbiological techniques

- Determination of microbial cell mass
- Extraction of intracellular and extracellular lipids
- Trans-esterification of lipids
- Biochemical characterization of cell mass. Determination of intracellular components (proteins, polysaccharides, etc.).
- Enzymatic activity determination of intracellular and extracellular enzymes

Analytical Techniques

- High Performance Liquid Chromatography (HPLC)
- Gas Chromatography (GC)

Techniques of Biochemistry and Molecular Biology

- Polymerase Chain Reaction, PCR
- Enzyme-linked Immunosorbent Assay (ELISA)
- Electrophoresis

Other

• Transmission of viruses to healthy plants mechanically or by the use of insects

Foreign Languages Skills

ENGLISH

- Certificate of Proficiency in English (Proficiency), University of Michigan (Level C2)
- First Certificate in English, University of Cambridge (Level B2)
- Pearson Test of English General (Level 3)

Information Technology Skills

- KeyCERT IT Basic Certification in the modules: Computer Usage and File Management, Text Processing, Spreadsheets, Internet Services, Databases, Presentations.
- IBM SPSS Statistics
- Adobe Photoshop
- Origin Lab
- GIS

EXPERIENCE

PARTICIPATION IN EU/NATIONAL PROJECTS

- **IonianAlgae:** Project title: "Isolation of microalgae native of the Ionian Sea and their use in the production of high added value products". 2019-2022.
- Achaean Pomegranate: Project title: "Optimization of pomegranate tree cultivation in Achaia and development of innovative products". 2019-2021.
- **INVALOR:** Project title: "Research Infrastructure for Waste Valorization and Sustainable Management". 2017-2020.

PUBLICATIONS

- Hatim A. El-Baz, Ahmed M. Elazzazy, Tamer S. Saleh, Panagiotis Dritsas, Jazem A. Mahyoub, Mohammed N. Baeshen, Hekmat R. Madian, Mohammed Alkhaled & George Aggelis (2020) Single cell oil (SCO) based bioactive compounds: I. Enzymatic synthesis of fatty acid amides using SCOs as acyl group-donors and their biological activities. Appl. Biochem. Biotechnol. https://doi.org/10.1007/s12010-020-03450-3
- Marianna Dourou, Panagiotis Dritsas, Mohamed N. Baeshen, Ahmed Elazzazy, Ammar Al-Farga & George Aggelis (2020) High-added value products from microalgae and prospects of aquaculture wastewaters as microalgae growth media. FEMS Microbiol Lett, 367, 2020, fnaa081. doi: https://doi.org/10.1093/femsle/fnaa081

HANDBOOK/BOOK CHAPTERS

• Aggelis, G., Dourou, M. & **Dritsas**, **P.** (2019). "BACFRESH" company. https://kainotomia.bacfresh.gr.

CONFERENCES/MEETINGS

- **P. Dritsas**, M. Dourou, G. Aggelis: "Co-metabolism of glucose and glycerol in the fungus *Umbelopsis isabellina*". 8th One-Day Conference Greek Lipid Forum, June 21 2019, National Hellenic Research Foundation, Athens. (oral)
- **P. Dritsas** & G. Aggelis: "Adaptive evolution of the yeast *Yarrowia lipolytica* in balanced-growth media and artificial selection for isolation of citric acid over-producing strains". 14th One-Day Conference of the Master's Degree Students of Biology Department of the University of Patras, May 16 2019, Library and Information Center's (LIC) of the University of Patras Main Room. (poster)
- **P. Dritsas** & G. Aggelis: "Adaptive evolution of the yeast *Yarrowia lipolytica* and artificial selection for isolation of citric acid over-producing strains." 46th Annual Conference on Yeast, May 7-10 2019, Smolenice, Slovakia. *The Poster had been selected for a short presentation to the Poster Highlight session*. (poster)
- M. Dourou, **P. Dritsas**, S. Papanikolaou & G. Aggelis: "Glycerol and glucose used as co-substrates negatively affect growth of *Umbelopsis isabellina*." 44th Annual Conference on Yeast, May 2-5 2017, Smolenice, Slovakia. (poster)

ATTENDANCE OF CONFERENCES/MEETINGS

- Conference of Educational Politics "Leadership in Education", March 16-17 2018, Conference and Cultural Centre of the University of Patras
- One-Day Conference "Communication in biology systems and applications in bionanotechnology", June 28 2017, Conference and Cultural Centre of the University of Patras
- 12th One-Day Conference of the Master's Degree Students of Biology Department of the University of Patras, May 11 2017, Conference and Cultural Centre of the University of Patras
- 67th Annual Conference of the Hellenic Society for Biochemistry and Molecular Biology (HSBMB), November 25-27 2016, "Karolos Papoulias" Conference Center of the University of Ioannina
- 22nd Scientific Congress for Hellenic Medical Students (22nd E.S.F.I.E.), May 13-15, Conference and Cultural Centre of the University of Patras
- One-Day conference «Dependence on drugs: Disease or Personal Choice?», February 22 2016, Agora Argiri Events Hall, Patras
- 16th Conference of Medical Chemistry, Medical Chemistry; Design & Development of Pharmaceutical Products, November 11 2015, Conference and Cultural Centre of the University of Patras
- "2nd Clinical Course of Internal Medicine for Medical Students and Medical Graduates", October 9-11 2015, Agora Argiri Events Hall, Patras
- "Medical Career's Day Medical Research & Internship", November 7 2014, Agora Argiri Events Hall, Patras