



Panagiotis Dritsas

Patras, Achaia (Greece) place of birth: Volos, Magnesia

date of birth: March 10 1995

e-mail: dritsas.p@upnet.gr

Languages

Greek

- Native

English

- Certificate of Proficiency in English (Proficiency), University of Michigan (Level C2)

Work Experience

Scientific Researcher

2019-2022

IonianAlgae Project title: "Isolation of microalgae native of the Ionian Sea and their use in the production of high added value products".

2017-2020

INVALOR Project title: "Research Infrastructure for Waste Valorization and Sustainable Management".

2017

(06.2017-07.2017)

Intern

Internship in the Greek Agricultural Organization Demetra – Institute of Plant Protection (Patras).

Education

Department of Biology, University of Patras, Greece

11.2019 – Present

PhD Student in Microbiology, Department of Biology, University of Patras, Patras (Greece)

Title of PhD thesis: Isolation of new strains of microalgae from the Ionian Sea, biochemical characterization and adaptive evolution of selected strains.

2017-2019

Master of Science in "Biological Technology: Research and Applications" GPA: 9.71/10.00

Title of Master thesis: Studies on the assimilation of glycerol and lipogenesis in the fungus *Umbelopsis isabellina* and the yeast *Yarrowia lipolytica*.

2013-2017

Bachelor in Biology. GPA: 7.62/10.00

Title of Diploma thesis: Co-assimilation of glycerol and glucose in the fungus *Umbelopsis isabellina*

University Tutor

Lectures and laboratory courses (Department of Biology, University of Patras, Greece)

2017-2023

Microbiology

2018-2023

Applied Microbiology

2021-2023

Molecular Genetics

2022

Genetics

Scholarships

Hellenic Foundation for Research and Innovation - H.F.R.I.

(04.2022-present) European Union and Greek General Secretariat for Research and Innovation “3rd Call for H.F.R.I. Scholarships to Ph.D. Candidates”.
Foundation of Ph.D. thesis | Department of Biology, University of Patras, Greece

Training

(09.2022)

European Cooperation in Science and Technology - COST

2nd YEAST4BIO TRAINING SCHOOL, LONDON (UK): “Metabolite profiling approaches in non-conventional yeast”. Royal Holloway University of London and Imperial College London, London, United Kingdom

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

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
- Geographic Information System (GIS Software)

Publications

Panagiotis Dritsas & George Aggelis (2023) Studies on the co-metabolism of glucose and glycerol in the fungus *Umbelopsis isabellina*. Carbon Resour. Convers. <https://doi.org/10.1016/j.crcon.2023.03.008>

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. <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 & G. Aggelis. "Investigation of the possibility of biotechnological exploitation of newly isolated microalgae from the Gulf of Patras". 17th Workshop of Master Students of Biology Department of the University of Patras, June 8 2023, Conference and Cultural Centre of the University of Patras. (poster)

S. Patsialou, **P. Dritsas**, Y. Kotzamanis, G. Aggelis, A. G. Tekerlekopoulou, D. V. Vayenas. "Cultivation of marine microalgae, native of the Ionian Sea, in open raceway pond - Production of high-value compounds". 4th International Conference for Bioresource Technology for Bioenergy, Bioproducts & Environmental Sustainability, May 15 2023, Lake Garda, Italy. (poster)

P. Dritsas, E. Asimakis, G. Tsiamis & G. Aggelis. "Isolation of new microalgal strains from the Gulf of Patras (Greece) and investigation of their potential biotechnological applications". 4th International Conference for Bioresource Technology for Bioenergy, Bioproducts & Environmental Sustainability, May 15 2023, Lake Garda, Italy. (poster)

P. Dritsas, E. Asimakis, G. Tsiamis & G. Aggelis. "Lipid production of microalgae isolated from the Ionian Sea of Greece". 2023 AOCS Annual Meeting & Expo, May 3 2023, Denver, Colorado, USA. (oral)

P. Dritsas & G. Aggelis. "Growth of the oleaginous fungus *Umbelopsis isabellina* on blends of glucose and glycerol and their effect on lipid production" 2023 AOCS Annual Meeting & Expo, May 2 2023, Denver, Colorado, USA. (poster)

P. Dritsas, C. Anagnostakis, G. Aggelis. "Utilization of glycerol by heterotrophic and autotrophic microorganisms: 4 short stories from the Laboratory of Microbiology of the University of Patras". 1st One-Day Conference – Utilization of Glycerol "From waste to high added-value bioeconomy products", April 6 2023, Cultural Centre of Roumeliotes. **(oral)**

P. Dritsas, E. Asimakis, G. Tsiamis & G. Aggelis. "Isolation of microalgae from marine waters of the Ionian Sea and their biochemical characterization". 16th Workshop of Master Students of Biology Department of the University of Patras, June 2 2022, Conference and Cultural Centre of the University of Patras. **(oral)**

P. Dritsas. "The use of microalgae for the production of high-added value products and the prospect of their utilization by the aquaculture of Greece". One-Day Conference "INVALOR Research Infrastructure - Valorization of Industrial and Agro-Industrial Waste and By-products for the Production of New Added-Value Materials", March 29 2021, Online. **(oral)**

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 Workshop of Master 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