

PERSONAL DETAILS

Date of birth: 16-2-1963
Place of birth: Cairo, Egypt
Nationality: Greek
Marital status: Married with two children
Military service: Fulfilled

1. BASIC AND UNIVERSITY STUDIES – TITLES

- 1980: Graduation 1st Lyceum of Athens**, Plaka, Athens
- 1989: Bachelor of Economics**, Department of Economics, University of Piraeus
- 1989: Bachelor of Technical Education** (1986-1989), Department of Marine Studies, Aquaculture at Nordland Høyskolesenteret i Bodø, Bodø, Norway (dissertation theses: 1. Self-pollution in on-growing farms and 2. Larval cultures of the flatfish *Pleuronectes platessa*). Supervisor S. Skreslet (Stig.Skreslet@hibo.no).
- 1994: Degree in Biology Master of Science** (1990-1994), Department of Zoology, University of Trondheim, Norway. Subjects (Ethology of aquatic animals, Live feed for production of marine fish larvae και thesis. Supervisors: Prof. E. Kjørsvik (Elin.Kjorsvik@bio.ntnu.no) and Prof. Y. Olsen (yngvar.olsen@ntnu.no).
- 2000: Dr. Scient** (1996-2000), Department of Botany, University of Science and Technology, Trondheim, Norway. Subjects: Advanced topics of microbial ecology in epithelial tissues and causes of infections in fish, Developmental Fish Biology, Methods of quantification by use of radioactive isotopes, Microbial physiology, Environmental requirements of fishes, Statistical of experimental design and thesis. Supervisors: Prof. H. Reinertsen (helge.reinertsen@chembio.ntnu.no) and Prof. O. Vadstein (olav.vadstein@biotech.ntnu.no).

2. SCHOLARSHIPS

January 1996–December 1998: Scholarship for a doctoral thesis funded by the University of Science and Technology, Trondheim, Norway.

February 2001- May 2005: Post-doc scholarship funded by Fundação para a Ciência e Tecnologia, Portugal at the University of Algarve, Portugal, supervised by: M.T. Dinis.

3. SPECIAL TRAINING

1993: (3-12 of May). Special training seminar: "3rd International Course on Fish Larvae Nutrition", Erasmus ICP-92 / NL-1139/01, which was held at University of Wageningen, Netherlands. Organizer: Prof. J. Vereth.

1998: Three-day educational seminar on: "Laboratory Animal Science", Akvaforsk - Institute of Aquaculture Research, Sunndalsøra, Norway.

2001: (1/11 to 30/11). Research stay at SINTEF Center of Aquaculture, Trondheim, Norway. Purpose: Experiments in collaboration with Dr J. Skjermo (Jorunn.Skjermo@sintef.no) and I. Salvesen, where we investigated the accumulation of bacteria in rotifers and Artemia. Funding: European Union (EE), Trondheim Marine Systems Research Infrastructure.

2002: (March). A two-day visit to Instituto de Higiene e Medicina Tropical, Lisbon, Portugal, in collaboration with Dr Lénia Campino. Purpose: Production of mouse monoclonal antibodies for the detection and quantification of specific bacterial strains in fish tissues and detection of the active microflora.

2002. (November). Stay at the Institute of Marine Research, Bergen, Norway in collaboration with Dr Øivind Bergh (ovind.bergh@imr.no). Purpose: Experiments where we investigated changes in intestinal microbial flora of turbot larvae after addition of selected bacterial strains. Funding: EE, Bergen Marine Food Chain Research Infrastructure.

2003: Educational Seminar (July 14-18) for the analysis of biological and environmental data using the statistical program Brodgar, Organization Highland Statistics Ltd. (highstat@highstat.com).

2003: (June). Visit the Instituto Gulbenkian de Ciencia, Oeiras, Portugal, in collaboration with Dr JA Belo (jbelo@igc.gulbenkian.pt). Purpose of visit: Production of mouse polyclonal antibodies for detection and quantification of bacterial strains in fish tissues using the technique immunocolony blot.

2003: (January / February). Research stay at the Hellenic Centre for Marine Research in collaboration with Dr. P. Divanach (divanach@hcmr.gr), Dr N. Papandroulakis (npap@her.hcmr.gr) (Aquaculture department) and Dr. G. Kotoula (kotoulas@hcmr.gr) (Institute of Genetics and Biotechnology). Purpose of visit: Conducting experiments on the use of molecular methods for determining the nucleotide sequence of the genome strains of rDNA for the recognition and identification of bacterial strains.

2006: (22-26 May). Special training seminar: "Marine algae culture: techniques, uses and development perspectives", organized at Instituto Agronomico Mediterráneo de Zaragoza, Spain.

4. KNOWLEDGE OF SOFTWARE

TEXT PROCESSORS (WORD)
DATA BASES-SPREADSHEET (EXCEL, ENDNOTE)
GRAPHICS (SIGMA PLOT, SKETCHUP)
STATISTICS (STATISTICA, SPSS, BRODGAR)
PRESENTATION (POWER POINT, PREZI)

5. LANGUAGES

English - excellent (reading, writing and speaking)
Norwegian - excellent (reading, writing and speaking)
Portuguese- well (reading and speaking)
Italian- well (reading and speaking)

6. EMPLOYMENT RELATED TO THE SUBJECT

6/1991-8/1991 και 7/1992-8/1992: Seasonal employment at "Galaxidi Marine Farms"

1993 (July/August): Research Assistant (research assistant) in experiments on cultures of rotifers (*Brachionus plicatilis*), where we studied the semi-continuous cultures (semi-continuous cultures) and the effect of dilution rate (dilution rate) for biomass on the content of carbon and nitrogen, and protein content, as a percentage of the total mass. Sintef Center of Aquaculture, Trondheim, Norway.

April 1994-December 1994 and March 1995-June 1995 Research Assistant full-time for two research projects (Quality of eggs and larvae and Mechanisms of digestion in fish fry quality controlled production). Funding: Norwegian Research Council. Contact: Dr E. Kjørsvik (Elin.Kjorsvik@bio.ntnu.no). Brattøra Research Center, University of Trondheim, Trondheim, Norway.

October/November 1995. Laboratory Assistant (laboratory assistant) courses in "Cell Biology" and "Cultivation of planktonic organisms for rearing larvae of marine fish species", University of Trondheim, Trondheim, Norway.

January 1996- January 2000: Junior member of the scientific staff of the Department of Botany, Norwegian University of Science and Technology, Trondheim, Norway, in elaborating the thesis.

February 2000- January 2001: Researcher at Nordland Reaserch Institute, Department of Aquaculture, Bodø, Norway.

February 2001- May 2005 Post-doc researcher, University of Algarve and Centro de Ciências do Mar do Algarve, Portugal, Contact. Prof. Dr Maria Teresa Dinis (mtdinis@ualg.pt).

May 2005 - Jan 2014. Research scientist at Hellenic Center for Marine Research, Institute for Marine Biology, Biotechnology and Aquaculture with main activity research on the cultivation of microalgae and microbiology of fish and microalgae.

January 2014 – today. Assistant Professor, University of Patras, Department of Biology

7. TEACHING ACTIVITY



Undergraduate level

1995: **Laboratory assistant** in the course "Cell Biology" (1 semester), Department of Botany, University of Trondheim, Norway. Contact: Prof. T. Beisvåg.

2004: **Lecture** (1 hour), "Microbial ecology in aquaculture systems" Lesson "Ichthyolopathologia". Contact Math. Prof. Dr RC Silva, (rsilva@ualg.pt), Faculdade de Ciencias do Mar e do Ambiente, University of Algarve, Portugal.

2004: **Lecture** (4 hours), "Microbial ecology in aquaculture systems" and "Use of probiotics in the cultivation of language Solea senegalensis", the lesson "Mikroviologia". Prof. LC Dionisio (ldionis@ualg.pt), Faculdade de Engenharia e Recursos Naturais, University of Algarve, Portugal.

2014. **Course responsible** for the course "Aquaculture" and lecturer for the course Zoology II, Department of Biology, University of Patras.



Postgraduate level

1995/1999: **Responsible for the laboratory course** "Growing planktonic organisms for rearing larval marine species" for graduate students. Intensive series of workshops lasting about 40 hours and rapporteur (2-4 hours), Department of Botany, Norwegian University of Science and Technology, Norway. Topic suggestion: Microbial ecology in farming systems. Contact Prof. H. Reinertsen (helge.reinertsen@chembio.ntnu.no).

2008. **Lecturer** (2 hours), "Microbial ecology in aquaculture systems," for the undergraduate subject "Aquaculture" .Responsible Ass. Prof. G. Koumoundouros, University of Patras, Department of Biology.

2010-2014. **Lecturer.** Postgraduate Marine Biotechnology, Department of Biology, University of Crete. Responsible person. Prof. M. Kentouri.

8. SUPERVISION OF POSTGRADUATE THESES AND PARTICIPATION IN EXAMINATION COMMITTEES

Participation in doctoral committees

1. Maria Pérez Lorenzo (2006). Aplicación de los probióticos a la mejora del cultivo larvario de peces marinos. Universidade do Vigo, Spain.
2. Maria Jesus Prol Garcia (2010). Immobilization of *Phaeobacter* 27-4 in biofilters as a strategy for the control of *Vibrionaceae* infections in marine fish larval rearing. Instituto de Acuicultura, Universidade de Santiago de Compostela, Spain.



Supervision of postgraduate theses (MSc)

Supervisor of MSc theses

- Anders Jon Fjellheim (1999). Rotifers (*Brachionus plicatilis*) as a vector for probiotics for turbot larvae (*Schophthalmus maximus* L.). Norwegian University for Science and Technology, Trondheim, Norway, co-supervision with Dr Jorunn Skjermo.
- Fotini Kokou (2006-2007). Antimicrobial activity against marine pathogens of the genus *Vibrio*, three species of marine microalgae: *Chlorella minutissima*, *Tetraselmis suecica* and *Arthrospira* sp., Department of Biology, University of Crete, co-supervised with Prof M. Kentouri and Dr P. Divanach.
- Michail Stefanakis (2010-12).

Participation in examination committees of MSc theses

1. Anders Jon Fjellheim (1999), Rotifers (*Brachionus plicatilis*) as a vector for probiotics for turbot larvae (*Schophthalmus maximus* L.). Norwegian University of Science and Technology, Trondheim, Norway.
2. Tania Fenandes (2002). Infection with *Trypanoplasma borreli* (Laveran and Mesnil, 1901) in *Clarias gariepinus* (Burchel, 1822) and parasite sensibility to fish in vitro. Relatório de Estágio do Curso de Licenciatura em Biologia Marinha e Pescas, Faculdade de Ciências do Mar e do Ambiente, Universidade do Algarve, Portugal.
3. Sílvia Maria Gonçalves Martins (2002) Isolamento, caracterização e identificação de bactérias isoladas de *Solea senegalensis* e *Tetraselmis chuii*. Faculdade de Engenharia de Recursos Naturais, Universidade do Algarve, Portugal.



Dissertations

Supervisor

1. Sílvia Maria Gonçalves Martins (2002). Isolamento, caracterização e identificação de bactérias isoladas de *Solea senegalensis* e *Tetraselmis chuii*. (co-supervision with Prof. Lídia Catalão Dionísio). Faculdade de Engenharia de Recursos Naturais, Universidade do Algarve, Portugal.
2. Manuela Cristina Coelho e Castro Cunha (2002) Efeito de dois imunostimulantes (β-glucano e FMI) na ontogenia do sistema imunitário de larvas e juvenis de *Solea senegalensis* (co-supervision with Prof. Maria Teresa Dinis), Faculdade de Ciências do Mar e do Ambiente, Universidade do Algarve, Portugal.












3. Rita Costa (2005). Microbiological and immunological effects of microalgae bioencapsulation in *Artemia franciscana* in relation to weaning of *Solea senegalensis*. (co-supervision with Prof. Maria Teresa Dinis–September 2005). Faculdade de Ciencias do Mar e do Ambiente, Universidade do Algarve, Portugal.
4. Tania Catarina Ferreira. (2005). Microbial condition in cultures of *Chlorella minutissima*. (co-supervision with Prof. Maria Teresa Dinis) Faculdade de Ciencias do Mar e do Ambiente, Universidade do Algarve, Portugal.

Examinator

Rotations







1. A. Papazi (May-July 2005). Influence of carbon dioxide on growth of microalgae *Chlorella minutissima*.
2. C. Neonaki. Use of filters on bioreactors for the culture of microalgae *Chlorella minutissima*. (February-April 2006).
3. O. Seitidou. Experimental approaches with use of microalgae cultures Πειραματικές προσεγγίσεις με χρήση μικροκαλλιεργειών μικροφυκών.(May-July 2006).


9. EXPERIENCE IN LABORATORY TECHNIQUES


-  HPLC for aminoacid quantification
-  Labelling with radioactive isotopes (C^{14} και H^3) of microalgae and bacteria
-  Culture of microalgae, rotifers and Artemia
-  Classical microbiology techniques
-  Measurement of total cell counts by use of epifluorescence microscope
-  Cell cultures
-  Histology
-  ELISA
-  Immunocolony blot
-  PCR, RNA extraction, cDNA preparation,
-  *in situ* hybridisation

10. ADMINISTRATIVE EXPERIENCE


Responsible for planning and execution of competitive research projects


-  **2002-05** “Probiotics and immunomodulation in marine fish larvae and juveniles”, POCTI/2001/BSE/38781. Funding: Fundação para a ciência e tecnologia, Portugal. Total sum for the partner (total project): (71.500 euros). Duration: 3 years. Start: March 2002.
-  **2003-04** “The use of RMBC’s for bacterial management in marine fish larvae”, CRAFT- Q5CR-2002-72221, Portugal. Funding: European Union. Sum for the partner: 50.000 euros. Duration: 2 years. Start: January 2003.
-  **2006** “Trials with probiotic bacteria in rearing of gilthead sea bream larvae and postlarvae”, Invetech (reference 6070501). Funding: Inve Technologies, Belgium. Sum for the partner: 15.600 euros. Start: January 2006.
-  **2006-07.** “Methods for production of biodiesel from microalgae” (reference 6070603/ALGODIESEL). Funding: General Secretariat for Research and Technology. Sum for the partner: 73.100 ευρώ. Start: July 2006. Duration: 18 months.
-  **2007-10.** “Sustainable extensive and semi-intensive coastal aquaculture in Southern Europe (SEACASE)”. Funding: European Union (FP6/STREP). Sum for the partner: 319.540 euros. Start: January 2007. Duration: 3 years.
-  **2010-13.** “Enabling European SMEs to remediate wastes, reduce GHG emissions and produce biofuels via microalgae cultivation FP7-SME-2008-2-AG-243752- (BioAlgaeSorb)”. Funding: European Union, Research for SME associations. Sum for the partner: 327.700 euros. Start: August 2010. Duration: 3 years.


 **2012-13.** «Development of an efficient environmentally-friendly Algae Control System, based on ultrasound technology, designed for use in bigger ponds and lakes (**Clearwater PMPC**)». Funding: European Union, Research for SMEs. Sum for the partner: 147.942 euros. Start: January 2012. Duration: 2 years.


 **2012-2014.** «Oxygenation by efficient air diffusion system for aquaculture farms (cages and earthen ponds)-**AirX**». Funding: European Union, Research for SMEs. Sum for the partner: 143.520 euros. Start: September 2012. Duration: 27 months.


11. PARTICIPATION IN RESEARCH PROJECTS


 "Immune competence and immune resistance in *Solea senegalensis* (Pisces, Soleidae) larvae and post-larvae POCTI/34155/99". Funding: Fundação para a ciência e tecnologia, Portugal. Sum: 15.000 euros. Duration: 1 year. Start: March 2001.

 "The role of olfaction in the feeding behaviour of *Solea senegalensis* (Pisces)", Funding: Fundação para a ciência e tecnologia, Portugal, (POCTI/CVT/38831/2001). Sum: 100.000 euros. Duration: 3 years, Start: Jan 2003.

 "The underlying mechanisms of the effect of microalgae on the early life stages of fishes". Funding: Fundação para a ciência e tecnologia, Portugal, POCTI/BSE/37378/2001. Sum: 67.000 euros. Duration: 3 years, Start: October 2003.

 "From capture based to SELF-sustained aquaculture and Domestication Of bluefin tuna, *Thunnus thynnus* (**SELFDOTT**)". Funding: European Union (FP7). Sum: 3 M euros. Duration: 3 years, Start: October 2008.

 "Alternative methods for prevention and therapy in Greek aquaculture". Funding: General Secretariat for Research and Technology. Sum for the partner: 316.410 euros. Duration: 36 months. Start: Jan 2010.

 "Study on the incorporation of essential oils extracted from oregano plants in the diet of fish in order to reduce the microbial load of their food (zooplankton). Funding: Archimedes III. Duration: 3 years. Start: Jun 2013.

12. MEMBER OF SCIENTIFIC ASSOCIATIONS

EUROPEAN AQUACULTURE SOCIETY
WORLD AQUACULTURE SOCIETY

13. INVITED SPEECHES



Microbial ecology in larval rearing systems, “Biology in Fish Larvae Production”, supported by the European Commission, AQUALABS, Advanced Laboratory Courses in Aquaculture, Faro, Universidade do Algarve, Portugal, September 2002.



Concepts and applications of probiotics and immunostimulants in aquaculture. Course of vaccination in fish, Centro de Investigação Interdisciplinar e Ambiental, Porto, 2-3 Φεβρουάριος 2005, Portugal.

14. PARTICIPATION IN CONFERENCES



Participation with no presentation

Fish Farming Technology, Trondheim, Norway, August 1993. (technical support)

Quality in Aquaculture, Aquaculture Europe '95, Trondheim, Norway, August 1995 (technical support)

Workshop on new species for aquaculture, Faro, Portugal, 20-22 November 2000

Larvi 2001, Ghent, Βέλγιο, 3-6 September 2001.



Participation with presentation

1. **Live food organisms and marine larviculture Sumposium**. Nagasaki, Japan, September 1996. “Protein depletion of the rotifer *Brachionus plicatilis* during starvation”, P. Makridis and Y. Olsen (poster).
2. **Research for Aquaculture: Fundamental and Applied Aspects**. Barcelona, Spain, September 1997. “Uptake of probiotic bacteria by *Artemia franciscana*”. P. Makridis, J. Skjermo, and O. Vadstein (poster).
3. **Recent Advances in Finfish & Crustacean Nutrition**. Las Palmas de Gran Canaria, Spain, June 1998. “Development of methods for the manipulation of the gut microflora in turbot larvae”. P. Makridis, A. Fjellheim, J. Skjermo and O. Vadstein (poster).
4. **Fish culture, shellfish culture and water usage, Aquaculture and water**. Bordeaux, France, October 1998. “Microbial control of live food cultures”. P. Makridis, Ø. Bergh, A.J. Fjellheim, J. Skjermo and O. Vadstein (poster).
5. **The annual international conference and exposition of the World Aquaculture Society**, Sydney, Australia, 1999. “Development of methods for the transfer of probiotic bacteria to marine fish larvae through the live feed organisms”. P. Makridis, J. Skjermo, and O. Vadstein (oral presentation).
6. **Towards predictable quality**, Trondheim, Norway, 1999. “Microbial control of live food cultures”. P. Makridis, Ø. Bergh, A.J. Fjellheim, J. Skjermo and O. Vadstein (oral presentation).
7. **Fish and animal health meeting**, Tromsø, Norway, 1999. Uptake of probiotic bacteria in halibut larvae (*Hippoglossus hippoglossus* L.) via *Artemia franciscana* metanauplii. P. Makridis, Ø. Bergh, A.J. Fjellheim, J. Skjermo and O. Vadstein (poster).

8. **10th International Symposium on Nutrition and Feeding in Fish**, Rhodes, Greece, 2002. "Feeding Senegalese Sole Juveniles with natural diet resulted in proliferation of a gut microflora that inhibited pathogenic bacteria". S. Martins, P. Makridis, L.P.C. Dionisio, and M.T. Dinis (poster).
9. **26th Annual Larval Fish Conference, The Big Fish Bang**, Bergen, Norway, 2002. Development of the immune system and the use of immunostimulants in Senegalese sole (*Solea senegalensis*). M. Castro Cunha, P. Rodrigues, F. Soares, P. Makridis, and M.T. Dinis (poster).
10. **ICES Annual Science Conference and Centenary, Copenhagen, Denmark, 1-5 Οκτωβρίου 2002**. Use of probiotic bacteria in the rearing of larvae of Senegalese sole (*Solea senegalensis*). P. Makridis (oral presentation).
11. **Realizing the potential: Responsible aquaculture for a secure future", World Aquaculture**, Salvador, Brazil, 19-23 May 2003. Use of probiotics in the rearing of marine fish larvae. P. Makridis, L.C. Dionisio, and M.T. Dinis (oral presentation).
12. **The Sixth International Symposium on Fish Immunology**, Turku, Finland, 25-29 May 2004. Two species of microalgae bioencapsulated in frozen Artemia reduced mortalities during the weaning of Senegalese sole (*Solea senegalensis*) Pavlos Makridis, Pedro Rodrigues, and M.T. Dinis (poster).
13. **Aquamedit 2004, 2nd International Congress on Aquaculture, Fisheries Technology and Environmental Management**, Athens, Greece, 18-19 June 2004. Use of probiotics in the rearing of sole (*Solea senegalensis*) and sea bream (*Sparus aurata*). P. Makridis Pavlos, S. Martins, L. Catalão Dionisio, and M.T. Dinis (oral presentation).
14. **Aquaculture Europe 2004, Biotechnologies for quality**, Barcelona, Spain, 20-23 October 2004. Use of probiotic bacteria in the rearing of seabream and sole. Makridis P., S. Martins, L. Catalao Dionisio, M. Tsalavouta, G. Kotoulas, and M.T. Dinis (oral presentation).
15. **8th International Marine Biotechnology Conference**, Eilat, Israel, 11-16 Μαρτίου, 2007. Identification of bacteria growing in association with batch cultures of the microalga *Chlorella minutissima*. Kokou, F., Ferreira, T., Tsigenopoulos, C.S., Makridis, P., Kotoulas, G., Magoulas, A., and P. Divanach (poster).
16. **7th European Workshop of European Society of Microalgal Biotechnology**, Nuthetal, Germany, 10-13 June 2007. High CO₂ concentrations adjust microalgal photosynthesis and lead to high biomass production. Papazi E., Makridis, P., Kotzabasis, K., and P. Divanach (poster).
17. **Competing claims, European Aquaculture Society**, Istanbul, Turkey, 24-27 October 2007. Fish health management: The role of *Bacillus* probiotics. Carnevali, O., Decamp, O., Avella, M.A., Gioacchini, G. and P. Makridis (oral presentation).
18. **Competing claims, European Aquaculture Society**, Istanbul, Turkey, 24-27 Οκτωβρίου 2007. Influence of microalgae supernatant and bacteria isolated from microalgae on the biological performance and digestive capacity of sea bream (*Sparus aurata*) and Senegalese sole (*Solea senegalensis*) larvae. Makridis, P., Ribeiro, L., Rocha, R., and M.T. Dinis (poster).
19. **Larvi 2009**, Ghent, Βέλγιο, 7-10 September 2009. Interactions of microalgae and bacterial communities present in the microalgae cultures and larval rearing systems. Makridis, P., Pintado, J., Kokou, F., Ferreira, T., and P. Divanach (oral presentation).
20. **Seafarming tomorrow**, Porto, Portugal, 5-8 October 2010. Algae-bacteria interactions in mixed cultures of microalgae and Roseobacter clade bacteria with antagonism towards fish pathogens. Pintado, J. and P. Makridis (poster).
21. **Seafarming tomorrow**, Porto, Portugal, 5-8 October 2010. Description of gut microbiota in seabream larvae reared in intensive and in mesocosmos systems. Makridis, P., Sarropoulou, E., and P. Divanach (poster).
22. **World Aquaculture 2011**, Natal, Brazil, 6-10 June 2011. Microbiota in bonito (*Sarda sarda*) and blue fin tuna (*Thunnus thynnus*) larvae. Makridis, P., Papandroulakis, N., Sarropoulou, E., and P. Divanach (oral presentation).
23. 17th European Symposium on Organic Chemistry, Crete, 10th-15th July 2011. An alternative method for disinfection of rotifers using essential oils from plants of the genus *Origanum*. Stefanakis M., Anastasopoulos E., Katerinopoulos H.E., and P. Makridis (poster).
24. **Mediterranean Aquaculture 2020**, Rhodes, Greece, 2011. Microbiota in bonito (*Sarda sarda*) and blue fin tuna (*Thunnus thynnus*) larvae. Makridis, P., Papandroulakis, N., Sarropoulou, E., and P. Divanach (poster).
25. **Global Aquaculture, securing our future**, Prague, Czech Republic, 1-5 September 2012. Effects of rearing conditions on skeletal anomalies typology in gilthead seabream (*Sparus auratus* L.) juveniles. Boglione, C., Prestinicola, L., Makridis, P., Spano, A., Rimatori, V., Palamara, E., Scardi, M., Cataudella, S. (oral presentation)
26. **Global Aquaculture, securing our future**, Prague, Czech Republic, 1-5 September 2012. An alternative method for disinfection of rotifers *Brachionus plicatilis* and gilthead seabream eggs *Sparus aurata* using essential

oils from plants of the genus *Origanum*. Makridis, P., Stefanakis, M., Anastasopoulos, E., and H. Katerinopoulos (oral presentation).

27. **Larvi 2013**. Ghent, 2-5 Septembe 2013. Use of *Phaeobacter* sp. probiotic bacteria for the rearing of seabass larvae (*Dicentrarchus labrax*). P. Makridis, N. Papandroulakis, and P. Divanach. (poster)

15. PARTICIPATION IN INTERNATIONAL MEETINGS

2003 **ICES Working Group on Marine Fish Culture meeting**, IPIMAR, Olhao, Portugal, 11-14 Μαρτίου.

16. NUMBER OF PUBLICATION (OVERVIEW)

Total publications: 2 dissertations, 27 articles in journals of Science Citation Index, 2 chapters in books published by intenational publishers, 27 publications in proceedings of international conferences and symposia, and 10 publications in the international press.

17. RESEARCH ACTIVITY



Areas of research activity

Microbiology and nutrition of fish during the first developmental stages (fish eggs, larvae, metamorphosed larvae and juveniles). Microbial ecology on epithelial tissues of aquatic organisms. Quality of cultures of phytoplanktic and zooplanktonic organisms. Developmental biology of immune system.



Consistency of published work - Prospects

Nutritional requirements of live feed used as prey organisms for marine fish larvae have been the central themes of my early research activity. Later this interest shifted towards the influence of microbial communities present in the environment of the larvae and the interactions between microbial populations. Microalgae production has also been in focus of my research activity during the last decade.

18. RECOGNITION OF SCIENTIFIC WORK



Reviewer activity

Reviewer in international scientific journal of SCI

- *Aquaculture*
- *British Journal of Nutrition*
- *ICES Journal of Marine Science*
- *Journal of Experimental Marine Biology and Ecology*
- *Journal of World Aquaculture Society*
- *Veterinary Immunology and Immunopathology*
- *Diseases of Aquatic Organisms*
- *Veterinary Microbiology*
- *Aquaculture Research*
- *Applied Microbiology*
- *Microbial Cell Factories*
- *Journal of Aquaculture Research & Development*



Citations

Total of non-self citations (citation by authors were excluded): 393. H-factor: 14

19. PUBLICATIONS



A. Theses

- A.1. **MAKRIDIS, P.** 1994. The protein depletion of the live feed organism *Brachionus plicatilis* during starvation, and its implications for the start-feeding of turbot larvae (*Scophthalmus maximus* L.). Cand. Scient. (MSc) Thesis, Department of Zoology, University of Trondheim, Norway.
- A.2. **MAKRIDIS, P.** 2000. Methods for the microbial control of live food used for the rearing of marine fish larvae. Dr Scient. Thesis, Department of Botany, Faculty of Chemistry and Biology, Norwegian University of Science and Technology, Trondheim, Norway.



B. Publications in international scientific journal of Science Citation Index

- B.1. OIE, G., **MAKRIDIS, P.**, REITAN, K.I., OLSEN, Y., 1997. Protein and carbon utilisation of rotifers (*Brachionus plicatilis*) in first feeding of turbot larvae (*Scophthalmus maximus* L.). *Aquaculture* 153, 103-122.
- B.2. **MAKRIDIS, P.**, OLSEN, Y., 1999. Protein depletion of the rotifer *Brachionus plicatilis* during starvation. *Aquaculture* 174, 343-353.
- B.3. **MAKRIDIS, P.**, VADSTEIN, O., 1999. Food size selectivity of *Artemia franciscana* at three developmental stages. *Journal of Plankton Research* 21, 2191-2201.

- B.4. **MAKRIDIS, P.**, FJELLHEIM, A.J., SKJERMO, J., VADSTEIN, O., 2000. Control of the bacterial flora of *Brachionus plicatilis* and *Artemia franciscana* by incubation in bacterial suspensions. .
- B.5. **MAKRIDIS, P.**, FJELLHEIM, A.J., SKJERMO, J., VADSTEIN, O., 2000. Colonization of the gut in first feeding turbot by bacterial strains added to the water or bioencapsulated in rotifers. *Aquaculture International* 8, 367-380.
- B.6. **MAKRIDIS, P.**, BERGH, Ø., SKJERMO, J., O. VADSTEIN, 2001. Addition of bacteria bioencapsulated in *Artemia metanauplii* to a rearing system for halibut larvae. *Aquaculture International* 9, 225-235.
- B.7. BERGH, O., VIKANES, L., **MAKRIDIS, P.**, SKJERMO, J., KNAPPSKOG, D., RØDSETH, O.M., 2001. Uptake and processing of a *Vibrio anguillarum* bacterin in *Artemia franciscana* measured by ELISA and immunohistochemistry. *Fish and Shellfish Immunology* 11(1), 15-22.
- B.8. RUANE, N.M., **MAKRIDIS, P.**, BALM., P.H.M., AND DINIS, M.T., 2005. Skin darkness is related to cortisol, but not MSH, content in post-larval *Solea senegalensis* (Kaup, 1858). *Journal of Fish Biology* 67, 577-581.
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