

# Curriculum Vitae

## 1. PERSONAL INFORMATION

**Surname and Name:** Karakatsouli Nafsika  
**Date of birth:** 05/09/1970  
**Place of birth:** Athens  
**Work position:** Associate Professor of “Applied Hydrobiology”  
**Work address:** Department of Animal Science (DAS), School of Animal Biosciences, Agricultural University of Athens (AUA), Iera Odos 75, 118 55 Athens, Greece  
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## 2. EDUCATION/TRAINING

- 1994 B.Sc., Agricultural University of Athens, Department of Animal Science
- 1994 Post-graduate seminar (duration: six months) on “Management of agricultural and animal breeding wastes”, Department of Agricultural Constructions, Faculty of Natural Resources Management and Agricultural Engineering, Agricultural University of Athens
- 2000 Ph.D., Agricultural University of Athens, Department of Animal Science. Ph.D. Thesis title “Studies on the effect of water total suspended matter on physiology and growth performance of cultured fish”

## 3. SCIENTIFIC AND ACADEMIC CAREER

- 2017- Associate Professor of Applied Hydrobiology, Laboratory of Applied Hydrobiology, today Department of Animal Science, Agricultural University of Athens
- 2009- Assistant Professor of Applied Hydrobiology, Laboratory of Applied Hydrobiology, 2017 Department of Animal Science e, Agricultural University of Athens
- 2002- Lecturer of Applied Hydrobiology, Laboratory of Applied Hydrobiology, Department of 2009 Animal Science, Agricultural University of Athens

## 4. RESEARCH INTERESTS

Aquaculture, fish rearing, nutrition, physiology-endocrinology, stress, welfare, behaviour and cognition, larval stages, recirculating aquaculture systems, rearing conditions - productivity.

## 5. SCHOLARSHIPS

- 1. Scholar of the National Scholarship Foundation (IKY) during the 1st and 2nd years of undergraduate studies at the Agricultural University of Athens
- 2. Scholar of the National Scholarship Foundation (IKY) for doctoral research and dissertation (1994-1998)

## 6. LANGUAGES

- 1. English Certificate of Proficiency, University of Cambridge (1991)
- 2. French Diplôme d’ Etudes Supérieures (1994)

## 7. TEACHING EXPERIENCE – UNDERGRADUATE/POSTGRADUATE/PH.D. SUPERVISIONS

### A. Courses

#### A1. Undergraduate studies

- 2002 - 2009** Aquaculture, Production of Aquatic Organisms, Hydrobiology, Animal Breeding and Husbandry (Undergraduate program), Agricultural University of Athens, Greece
- 2009 - 2017** Aquaculture, Production of Aquatic Organisms, Hydrobiology, Animal Breeding and Husbandry (Undergraduate program), Agricultural University of Athens, Greece
- 2017 - today** Aquaculture, Production of Aquatic Organisms, Hydrobiology, Animal Breeding and Husbandry, Ichthyology-Benthology, Fish Nutrition (Undergraduate program), Agricultural University of Athens, Greece
- 2013 - 2016** Aquaculture (two lectures, Undergraduate program), National and Kapodistrian University of Athens (School of Science, Faculty of Biology, Department of Zoology-Marine Biology), Greece

## **A2. Postgraduate studies**

- 2003 - 2013** Farmed Fish Nutrition, Farmed Fish Endocrinology, Interaction Of Aquaculture Production Systems and Water Environment, Postgraduate program “Rearing of Aquatic Organisms”, Agricultural University of Athens, Greece
- 2014 - today** General Principles of Aquaculture, Production of Aquatic Organisms – Farm Management, Strategy for the Development of Aquaculture, Health and Welfare of Aquatic Organisms, Quality and Safety of Aquaculture Products, Postgraduate program “Farm Business Management and Advisory Services for Rural Development: Farm Business Management and sustainability in Aquaculture”, Agricultural University of Athens, Greece

## **B. Undergraduate/Postgraduate /Ph.D. supervisions**

**B1. Undergraduate Theses:** More than 60 theses (approximately 60% experimental and 40% reviews).

**B2. Undergraduate Theses for Socrates-Erasmus students:** 1) Bil C., 2005. Effects of red light intensity on growth performance of rainbow trout (*Oncorhynchus mykiss*), 17 pp. (experimental). 2) Martinsen T.S., 2005. The effects of stocking density and light colour on growth performance and food utilization in common carp (*Cyprinus carpio*), 17 pp. (experimental).

### **B3. Postgraduate Theses**

**B3.1. Supervisor:** Fourteen (14) theses of which 9 experimental and 5 reviews.

**B3.2. Member of the advisory committee:** Twenty (20) theses of which 13 experimental and 7 reviews.

**B3.3. Member of the examining committee:** Five (5) theses of which 1 experimental and 4 reviews.

### **B4. Ph.D. Theses**

#### **B4.1. Supervisor**

- Batzina A. (2009-2013). “The use of substrate as a means of environmental enrichment to improve gilthead sea bream *Sparus aurata* rearing”. Faculty of Animal Science and Aquaculture, Agricultural University of Athens, 148 pp.
- Kapakos I. (2018-today). “Growth, reproduction and ethology of endemic *Valencia* spp.”

#### **B4.2. Member of the examining committee**

- Fleris G. (2004). “Combined effect of tank colour and dietary fatty acids in common carp, European sea bass and gilthead sea bream juveniles”. Department of Animal Science, Agricultural University of Athens, 328 pp.
- Bellos G. (2016). “Epizootiological survey and preventive medicine of the most severe bacterial and viral diseases in cultured Mediterranean fish of Greece”. Department of Animal Science, Agricultural University of Athens, 260 pp.
- Milatou N. (2019). “Biological and population characteristics of the Atlantic bluefin tuna, *Thunnus thynnus* (Linnaeus 1758), in the eastern Mediterranean”, National and Kapodistrian University of Athens, 321 pp.

## **C. Practical Training**

Supervisor of the 4-month mandatory practical training of undergraduate students specialized in Aquaculture (fields of specialization: recirculating water systems, water sampling and quality control, fish handling, fish feeding, fish anaesthetization, maintenance of experimental fish populations, sampling of biological tissues and analytical techniques).

#### **D. “REFORMING OF UNDERGRADUATE PROGRAM OF THE FACULTY OF ANIMAL SCIENCE AND AQUACULTURE (DAS)”**

Participant in DAS’s “Operational Programme for Education and Initial Vocational Training” (Third Community Support Framework’s 24 Operational Programmes 2000-2006 in Greece, co-financed by the European Social Fund, the European Regional Development Fund and national resources), responsible for the preparation of presentations and uploading of taught courses on DAS’s webpage (Program Supervisor: Prof. S. Deligeorgis).

#### **8. RESEARCH PROJECTS**

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| 05/2010-<br>05/2011                             | Member of the research team of a research project entitled “Effect of dietary inclusion of sanguinarine on growth, physiological status and quality of juvenile gilthead sea bream <i>Sparus aurata</i> ”. Source of funding: Phytobiotics, Futterzusatzstoffe GmbH (Germany). Project Supervisor: S.E. Papoutsoglou (Emeritus Professor, DAS, Agricultural University of Athens) |
| 08/2014-<br>10/2014<br>&<br>03/2015-<br>05/2015 | Member of the research team of a research project entitled “Fish oil replacement in aquafeeds for seabream and seabass with alternative lipid sources”. Source of funding: Co-financed by the European Union and Greece (Cooperation 2011). Project Supervisor: H. Miliou (Professor, DAS, Agricultural University of Athens)   |
| 09/2014-<br>10/2015                             | Member of the research team of a research project entitled “Utilization of fisheries discards to produce fish oil and its use in experimental rearing of gilthead seabream and European seabass”. Source of funding: Greek Operational Programme for Fisheries. Project Supervisor: H. Miliou (Professor, DAS, Agricultural University of Athens)                                 |
| 07/2016-<br>04/2017                             | Principal Investigator of a research project entitled “Evaluation of European sea bass larvae nutritional state”. Source of funding: Private sector.  |
| 12/2017-<br>today                               | Principal Investigator of a research project entitled “The use of emulsifiers in gilthead seabream ( <i>Sparus aurata</i> ) diets”. Source of funding: Private sector.  |
| 03/2019-<br>11/2020                             | Principal Investigator of a research project entitled “Evaluation of feeding dry diets to gilthead seabream larvae”. Source of funding: Private sector.   |
| 07/2019-<br>04/2022                             | Principal Investigator of a research project entitled “Structured Light-Based fish BiOmass estimator – SaLTBOx”. Source of funding: European Maritime and Fisheries Fund  |
| 11/2019-<br>11/2020                             | Principal Investigator of a research project entitled “The use of antioxidants in gilthead seabream nutrition”. Source of funding: Private sector.  |
| 07/2020-<br>07/2021                             | Principal Investigator of a research project entitled “Evaluation of feeding dry diets to red seabream larvae”. Source of funding: Private sector.  |

## 9. ADMINISTRATIVE RESPONSIBILITIES

- Member of the General Assembly and the Special General Assembly of Animal Science and Aquaculture Department (2002-present).
- Member of several Committees (Com.) of the Faculty of Animal Science and Aquaculture (DAS) (e.g. Com. of Internal Evaluation, Com. of Study Guide, Com. of the organization of educational excursions etc.).
- DAS's representative in The Senate of Agricultural University of Athens (2005-2006).
- Member of the electoral body of several academic positions of DAS.
- Alternate member of CITES (the Convention on International Trade in Endangered Species of Wild Fauna and Flora) Scientific Authority in Greece (2011-2013).
- Member of the Audit Committee of Scientists Association of Epirus (2014-present).
- Member of The Olympia and Bequests Committee (Board of Directors) of the Zappeion Exhibition Halls (April 2013-2016).

## 10. MEMBERSHIPS

European Aquaculture Society (EAS), Hellenic and European Association for Animal Production (HSAP and EAAP), Geotechnical Chamber of Greece, Scientists Association of Epirus.

## 11. INVITED REVIEWER/PROJECT EVALUATOR

- Invited reviewer in the following scientific journals (alphabetical order): *Acta Ethologica*, *Animal Feed Science and Technology*, *Aquaculture*, *Aquaculture Reports*, *Aquacultural Engineering*, *Aquaculture International*, *Archives of Polish Fisheries*, *Aquaculture Research*, *Cahiers de Biologie Marine*, *Comparative Biochemistry and Physiology Part B*, *Ecotoxicology and Environmental Safety*, *Fisheries Science*, *Revista Colombiana de Ciencias Pecuarias*, *Science of the Total Environment*, *SpringerPlus*, *Turkish Journal of Fisheries and Aquatic Sciences*.
- Member of the Scientific Committee for the evaluation of a research proposal submitted in "Sustainable Development" of the Research Promotion Foundation of Cyprus (July 2008).
- Member of the Scientific Committee for the final verification and certification of a research project implemented within the action "Cooperation 2009" (2013).
- Assigned as Expert for the final evaluations of research projects of the Action AgroETAK (Research and Technological Developmental Innovation projects) of the Hellenic Agricultural Organization "DEMETER" (2015).

## 12. PRESENTATIONS IN PEER-REVIEW INTERNATIONAL CONFERENCES (10 more recent)

1. Karakatsouli N., Domalis K., Panopoulos S., Coli A., Geropanagioti E., Anastasiadou C., Rati M., Bantounas S., Batzina A., 2019. Investigation of early introduction of dry feed on gilthead seabream *Sparus aurata* larval development and growth performance after metamorphosis. Aquaculture Europe 2019, Our Future: Growing from Water, Berlin, Germany, October 7-10, 2019. *Aquaculture Europe 2019 – Abstracts*: 661-662.
2. Bazou O., Megalofonou P., Karakatsouli N., 2017. Investigating the learning ability of gilthead sea bream *Sparus aurata*. Aquaculture Europe 2017, Cooperation for Growth, Dubrovnik, Croatia. October 17-20, 2017. *Aquaculture Europe 2017 – Abstracts*: 76-77.
3. Karakatsouli N., 2016. Fish Emotional States: Can Genes Help to Resolve the Fish Welfare Debate?. 4th International Symposium on Genomics in Aquaculture, GIA 2016, Athens (Greece). 20-22 April 2016. *GIA 2016, Book of Abstracts*: 24.
4. Diakos E., Batzina A., Theodorou G., Kritikos I., Karakatsouli N., 2016. Learning ability of European seabass and expression of related genes in the brain. 4th International Symposium on Genomics in Aquaculture, GIA 2016, Athens (Greece). 20-22 April 2016. *GIA 2016, Book of Abstracts*: 52.
5. Karamitros G., Papoutsoglou S.E., Tsimpoukas K., Karakatsouli N., 2014. Investigation of the possibility of establishing and operating, intensive, semi-intensive and semi-extensive land-based system of production of marine fishes in suitable location of Pagasitikos gulf. HydroMedit 2014.

- 1st International Congress of Applied Ichthyology & Aquatic Environment, Volos (Greece), November 13-15, 2014. *Hydromedit 2014, Book of Abstracts*: 373-377.
6. Karakatsouli N., Batzina A., 2012. A Substrate preference test for gilthead seabream *Sparus aurata* of two age classes tested individually or in groups. AQUA 2012: Global Aquaculture – Securing Our Future, Prague (Czech Republic), June 1-5, 2012. *AQUA 2012 - Abstracts*: 542.
  7. Karakatsouli N., Batzina A., Tsopelakos A., Dalla C., Papadopoulou-Daifoti Z., 2011. The presence of substrate promotes growth, reduces aggression and modifies brain neurotransmitters in juvenile gilthead sea bream *Sparus aurata*. Aquaculture Europe 2011, Mediterranean Aquaculture 2020, Rhodes (Greece), October 18-21, 2011. *Aquaculture Europe 2011 – Abstracts*: 528-529.
  8. Batzina A., Karakatsouli N., Tsoumpri A., Papoutsoglou S.E., 2011. Effects of substrate on growth performance and behaviour of juvenile gilthead sea bream *Sparus aurata*. 4th International Symposium on Hydrobiology and Fisheries, Volos (Greece), June 9-11, 2011. *Book of Abstracts of the 4<sup>th</sup> International Symposium on Hydrobiology and Fisheries*: 163-166.
  9. Karakatsouli N., Katsakoulis P., Leondaritis G., Sakellaridis N., Kalogiannis D., Chadio S., Papoutsoglou S.E., 2011. Effects of blue light on European sea bass *Dicentrarchus labrax* acute stress response: cortisol and brain neurotransmitters. 4th International Symposium on Hydrobiology and Fisheries, Volos (Greece), June 9-11, 2011. *Book of Abstracts of the 4<sup>th</sup> International Symposium on Hydrobiology and Fisheries*: 128-131.
  10. Karakatsouli N., Kassianos N., Papoutsoglou S.E., 2011. Effects of rearing density and tank colour on growth performance of juvenile sharpsnout sea bream *Diplodus puntazzo*. 4th International Symposium on Hydrobiology and Fisheries, Volos (Greece), June 9-11, 2011. *Book of Abstracts of the 4<sup>th</sup> International Symposium on Hydrobiology and Fisheries*: 167-170.

### 13. PRESENTATIONS IN PEER-REVIEW LOCAL CONFERENCES

Thirty-two (33) oral presentations in 20 local (Greek) scientific conferences (Scientific Conferences of the Hellenic Society of Animal Production, HSAP; 15th Scientific Conference of the National Association of Ichthyologists; 11th Panhellenic Symposium of Oceanography & Fisheries).

### 14. SCIENTIFIC PUBLICATIONS

#### A. SCIENTIFIC PUBLICATIONS IN PEER-REVIEWED SCIENTIFIC JOURNALS (10 more recent)

1. Batzina, A., Drossos, I. P., Giannoudaki, K., Karakatsouli, N., 2020. Effects of size variability on individual growth and feeding behavior of European seabass. *Applied Animal Behaviour Science*, 225, (<https://doi.org/10.1016/j.applanim.2020.104963>).
2. Oikonomidou, E., Batzina, A., Karakatsouli, N., 2019. Effects of food quantity and distribution on aggressive behaviour of gilthead seabream and European seabass, *Applied Animal Behaviour Science*, 213: 124-130.
3. Batzina, A., Drossos, I.P., Karakatsouli, N., 2019. Effects of familiarity on individual growth and feeding behaviour of European seabass *Dicentrarchus labrax*. *Applied Animal Behaviour Science* 211: 112-117.
4. Batzina, A., Drossos, I. P., Karakatsouli, N., 2018. Effects of grading on individual growth and feeding behaviour of European seabass *Dicentrarchus labrax*. *Aquaculture Research*, 49: 3759-3768.
5. Karakatsouli, N., Kassianos, N., Papoutsoglou, S.E., 2015. Effects of rearing density and tank colour on juvenile sharpsnout seabream (*Diplodus puntazzo*) growth performance. *Aquacultural International* 23: 943-953.
6. Papoutsoglou, S.E., Karakatsouli, N., Psarrou, A., Apostolidou, S., Papoutsoglou, E.S., Batzina, A., Leondaritis, G., Sakellaridis, N., 2015. Gilthead seabream (*Sparus aurata*) response to three music stimuli (Mozart—“Eine Kleine Nachtmusik,” Anonymous—“Romanza,” Bach—“Violin Concerto No. 1”) and white noise under recirculating water conditions. *Fish Physiology and Biochemistry* 41: 219-232.
7. Batzina, A., Sotirakoglou, K., Karakatsouli, N., 2014d. The preference of 0+ and 2+ gilthead

seabream *Sparus aurata* for coloured substrates or no-substrate. *Applied Animal Behaviour Science* 151: 110-116.

8. Batzina, A., Kalogiannis, D., Dalla, C., Papadopoulou-Daifoti, Z., Chadio, S., Karakatsouli, N., 2014c. Blue substrate modifies the time course of stress response in gilthead seabream *Sparus aurata*. *Aquaculture* 420-421: 247-253.
9. Batzina, A., Dalla, C., Tsopelakos, A., Papadopoulou-Daifoti, Z., Karakatsouli, N., 2014b. Environmental enrichment induces changes in brain monoamine levels in gilthead seabream *Sparus aurata*. *Physiology and Behavior* 130: 85-90.
10. Batzina, A., Dalla, C., Papadopoulou-Daifoti, Z., Karakatsouli, N., 2014a. Effects of environmental enrichment on growth, aggressive behaviour and brain monoamines of gilthead seabream *Sparus aurata* reared under different social conditions. *Comparative Biochemistry and Physiology Part A: Molecular & Integrative Physiology* 169: 25-32.

#### **B. FULL PAPERS PUBLISHED IN CONFERENCE BOOK OF ABSTRACTS**

Karakatsouli N., 2013. Fish welfare: from the ethical concerns to practice. *Animal Science Reviews, Special Issue* 39: 121-131 (in Greek).

#### **C. BOOKS**

- Scientific Editor of the translation in the Greek language of “Fish Nutrition, 3rd Edition”, 2002, (eds. Halver, J.E., Hardy, R.W.), Academic Press (Elsevier, USA), 824 pp. Published by Pedio Publications, 2015, 794 pp.
- Scientific Editor of the translation in the Greek language of “Biology of Fishes, 3rd Edition”, 2008, (eds. Bone, Q., Moore, R.H.), Taylor & Francis Group, 478 pp. Published by Pedio Publications, 2017.

#### **15. INVITED PRESENTATIONS**

2016: “Aquaculture: Farmed species-Production-Perspectives”. Scientists Association of Epirus.

2016: “Aquaculture: Farmed species-Production-Perspectives”. Rotary Club of Athens.

2018-2019: “Production of Meditarrenean Marine Fish Species”. Educational seminars “Fish MasterClass” organized by Nireus SA for its clients. Five seminars in total (three in Evia, one in Chania, one in Thessaloniki).

#### **16. INVITED STUDIES**

Barkas D., Karakatsouli N., Papaharisis L. (2020). “Production of Fish Feeds in Greece”. Published by Hellenic Aquaculture Producers Organization (HAPO), 68 pp. (in Greek).