

# Curriculum Vitae

Konstadia Lika

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## Personal Information

Name: Konstadia Lika  
Marital status: Married, 1 child  
Citizenship: Greek

Department of Biology  
University of Crete  
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## Current Position

Associate Professor, Department of Biology, University of Crete, Greece (appointed November 2015)

## Education

### **December 1996**

#### **Doctor of Philosophy (Mathematics)**

Department of Mathematics, University of Tennessee, Knoxville, USA  
Dissertation Topic: *Interactions of Predator-Prey Ecological Processes and Advective Movement in a Spatially Heterogeneous Environment*  
Supervisor: Professor Thomas G. Hallam

### **December 1992**

#### **Master of Science (Mathematics)**

Department of Mathematics, University of Tennessee, Knoxville, USA  
Dissertation Topic: *Spectral analysis of chemically stressed population data*  
Supervisor: Professor Thomas G. Hallam

### **July 1987**

#### **Bachelor of Science (Mathematics)**

Department of Mathematics, University of Crete, Greece

## Fellowships

**1984-1987** State Fellowship Foundation of Greece (IKY)

**1991-1996** Science Alliance Fellowship Award, Univ. of Tennessee, Knoxville, USA

**1996** Senior Graduate Student Award University of Tennessee, Knoxville, USA

## **Research Interests**

Mathematical modeling of biological systems based on the underlying mechanisms. The overarching theme of all of my projects is the use of a unified biological theory: the Dynamic Energy Budget (DEB) theory.

- Mathematical modeling of biological systems with focus on fish bioenergetics, phytoplankton physiology, mixotrophy and ecophysiology
- Bio-energetics with emphasis on the impact of climate changes and stressors on fish bio-energetics
- Mixotrophy with emphasis on ecophysiology of mixotrophs and their impact on marine pelagic food webs
- Quantifying relationships between underlying processes of molecular/cellular mechanisms and bio-energetics at the individual level
- Aquaculture Applications: Developing modeling tools for designing experiments in aquaculture research facilities - Virtual laboratories
- [AmP](http://www.bio.vu.nl/thb/deb/deblab/add_my_pet/index.html) (Add-my-pet) project [http://www.bio.vu.nl/thb/deb/deblab/add\\_my\\_pet/index.html](http://www.bio.vu.nl/thb/deb/deblab/add_my_pet/index.html)

## **Professional Experience**

**2015 – present** Associate Professor, Department of Biology, University of Crete

- 2006-2015** Assistant Professor, Department of Biology, University of Crete  
**1999-2006** Lecturer, Univ. of Crete, Dept. of Biology  
**1998-1999** Visiting Professor, Univ. of Crete, Dept. of Biology  
**1996-1998** Postdoctoral Researcher and Lecturer, Dept. of Ecology Evolution and Marine Biology, Univ. of California, Santa Barbara,  
**1990-1996** Research and Teaching Associate, Univ. of Tennessee, Knoxville, Dept. of Mathematics  
**1985-1987** Research Assistant Institute of Applied Mathematics, Research Center of Crete, Heraklion, Crete, Greece  
**1989-1990** Research Assistant Institute of Applied Mathematics, Research Center of Crete, Heraklion, Crete, Greece

## **Teaching Experience**

### **Department of Biology, Univ. Crete**

Taught and developed material for the following undergraduate courses:

- **Biomathematics** (every spring semester since 1998 )
- **Biostatistics** (every fall semester since 1998)
- **Computer Applications in Biology** (Spring 2002 – Spring 2008)
- **Introduction to Programming** (Spring 2009 – Spring 2018). Programming and graphics with MatLab (30%)
- **Computational Biology** (Spring 2009) Mathematical modeling (25%)

Since Fall 1998, taught the following courses in the Graduate Program “Environmental Biology - Management of Terrestrial and Marine Biological Resources”:

- **Data Analysis** (25 credit hours) – Duties: Coordination and teaching.
- **Mathematical Ecology** (15 credit hours) – Duties: Coordination and teaching.
- **Research Methodology** (10 credit hours) – Duties: Coordination and 20% teaching.

#### **Department of Ecology, Evolution and Marine Biology, University of California, Santa Barbara**

- Dynamics of Ecological Systems (Spring 1998) - Undergraduate course

#### **Department of Mathematics, University of Tennessee, Knoxville**

- Mathematics for life science students (Fall 1995, Spring 1996) - Undergraduate course

#### **Department of Mathematics, Univ. Aegean**

- **Age-structured models** - In the spring of 2003 I participated (upon invitation) with 10 hours teaching (30%) in the graduate course "Mathematical Models in Biological Sciences" in the Graduate program 'Mathematical Modeling in Natural Sciences and Modern Technologies'.

#### **International courses**

- DEB course 2011, April 4th to 12th, Lisbon, Portugal
- DEB course 2013, April 15th to 23th, Texel, the Netherlands
- DEB course 2015, April 20th to 27th, Marseille, France
- DEB course 2017, May 21st to June 2nd, Tromso, Norway
- DEB course 2019, April 1st to April 6th, Brest, France
- DEB course 2021, May 17th to May 22nd, online
- "Care and use of laboratory animals: Science, Philosophy and Society", Heraklion, Greece. An annual course since 2014. Contributing lecture on Experimental design, Statistical analysis and Interpretation of results.
- Biomathematics ESMTB Summer School 2019, Modelling in Marine Ecology, Isola delle Femmine (PA), Sicily, Italy, 8-21 September 2019

#### **Student Supervision**

- Current Ph.D Students: S. Batziakas, O. Stavrakidis-Zachou
- Graduated Ph.D Student: I.A. Papadakis, E. Livanou
- Graduated M.Sc. Students: I.A. Papadakis, M. Defigou, G. Lagonikakis, C. Barsakis, D. Petsa (Mathematics Dept.)
- M.Sc. Students: I have supervised 27 three-month projects
- Undergraduate Students: L. Lili (Mathematics Dept.), C. Trilirakis, P. Panagiotaki, A. Leivadiotoy (Appl. Math. Dept.), M. Pantourakis, E. Livanou

## Publications

**Konstadia Lika**, “Interactions of Predator-Prey Ecological Processes and Advective Movement in a Spatially Heterogeneous Environment”, Ph.D. Thesis, University of Tennessee, Knoxville, 1996

## **Journal Publications**

1. D.L. DeAngelis, K.A. Rose, L.B. Crowder, E.A. Marschall, and **D. Lika**. 1993. Fish Cohort Dynamics: Application of Complementary Modeling Approaches. *The American Naturalist*, 142 (4): 604-622
2. T.G. Hallam, G.A. Canziani, and **K. Lika**. 1996. On the Relationships Between Bioassays and Dynamics in Chemically Stressed, Aquatic Population Models. *Ecologia Austral*, 6: 45-54
3. T.G. Hallam, E.T. Funasaki, **K. Lika**, and H.L. Lee. 1997. Utilities and Indicators of Stress Dynamics in Physiologically Structured Population Models. *Environmental Modeling and Assessment*, 2: 1-6
4. T.G. Hallam and **K. Lika**. 1997. Modeling the Effects of Toxicants on a Fish Population in a Spatially Heterogeneous Environment: I. Behavior of the Unstressed, Spatial Model. *Nonlinear Analysis, Theory, Methods & Applications*, 30(3): 1699-1707
5. **K. Lika** and T.G. Hallam. 1997. Modeling the Effects of Toxicants on a Fish Population in a Spatially Heterogeneous Environment: II. Lethal Effects. *Nonlinear Analysis, Theory, Methods & Applications*, 30(3): 1709-1719
6. **K. Lika** and T.G. Hallam. 1999. Traveling Wave Solutions of a Nonlinear Reaction-Advection Equation. *Journal of Mathematical Biology*, 38: 346-358
7. **K. Lika** and R.M. Nisbet. 2000. A Dynamic Energy Budget Model based on Partitioning of Net Production. *Journal of Mathematical Biology*, 41:361-386
8. R.M. Nisbet, E.B. Muller, **K. Lika** and S.A.L.M. Kooijman. 2000. From molecules to ecosystem through dynamic energy budget models. *Journal of Animal Ecology*, 69: 913-926
9. K.A. Triantis, M. Mylonas, **K. Lika** and K. Vardinogiannis. 2003. A model for species area-habitat relationship. *Journal of Biogeography*, 30: 19-27
10. **K. Lika** and S.A.L.M. Kooijman. 2003. Life history implications of allocation to growth versus reproduction in Dynamic Energy Budgets. *Bulletin of Mathematical Biology*, 65: 809-834
11. **K. Lika** and N. Papandroulakis. 2005. Modeling feeding processes: a test of a new model for sea bream (*Sparus aurata* L.) larvae. *Canadian Journal of Fisheries and Aquatic Sciences*, 62: 425-435
12. I.A. Papadakis, K. Kotzabasis and **K. Lika**. 2005. A cell-based model for the photo- and CO<sub>2</sub> – acclimation of the photosynthetic apparatus. *Biochimica et Biophysica Acta-Bioenergetics*, 1708: 250-261
13. K.A. Triantis, M. Mylonas, **K. Lika** and K. Vardinogiannis. 2005. Species richness, habitat diversity and area: A case study based on land snails in Skyros archipelago (Aegean Sea, Greece). *Journal of Biogeography*, 32: 1727-1735
14. K.A. Triantis, K. Vardinogiannis, E. Tsolaki, I. Botsaris, **K. Lika** and M. Mylonas. 2006. Re-approaching small island effect., *Journal of Biogeography*. 33 (5): 914–923
15. **K. Lika** and I. A. Papadakis. 2009. Modeling the biodegradation of phenolic compounds by microalgae. *Journal of Sea Research* 62: 135–146
16. V. Freitas, J.F.M.F. Cardoso, **K. Lika**, M. A. Peck, J. Campos, S.A.L.M. Kooijman, H.W. van der Veer. 2010. Temperature tolerance and energetics: a Dynamic Energy

- Budget-based comparison of North Atlantic marine species. *Philosophical Transactions of the Royal Society B*. 365: 3553–3565
17. A. Palialexis, S. Georgakarakos, I. Karakassis, **K. Lika**, V. D. Valavanis. 2011. Prediction of marine species distribution from presence-absence acoustic data: comparing the fitting efficiency and the predictive capacity of conventional and novel distribution models. *Hydrobiologia*. 670:241–266
  18. A. Palialexis, S. Georgakarakos, I. Karakassis, **K. Lika**, V. D. Valavanis. 2011. Fish distribution predictions from different points of view: comparing associative neural networks, geostatistics and regression models. *Hydrobiologia*, 670:165–188
  19. **K. Lika**, M. R. Kearney, V. Freitas, H. W. v. d. Veer, J. v. d. Meer, J. W. M. Wijsman, L. Pecquerie and S. A. L. M. Kooijman. 2011. The 'covariation method' for estimating the parameters of the standard Dynamic Energy Budget model I: philosophy and approach. *Journal of Sea Research*. 66:270–277
  20. **K. Lika**, M. R. Kearney and S. A. L. M. Kooijman. 2011. The 'covariation method' for estimating the parameters of the standard Dynamic Energy Budget model II: properties and preliminary patterns. *Journal of Sea Research*, 66:278–288
  21. V. Freitas, **K. Lika**, J. IJ. Witte, H.W. van der Veer. 2011. Food conditions of the sand goby *Pomatoschistus minutus* in shallow waters: an analysis in the context of Dynamic Energy Budget theory. *Journal of Sea Research*. 66:440–446
  22. **K. Lika** and S.A.L.M. Kooijman. 2011. The comparative topology of energy allocation in budget models. *Journal of Sea Research*, 66:281–291
  23. I.A. Papadakis, K. Kotzabasis and **K. Lika**. 2012. Modeling the dynamic modulation of light energy in photosynthetic algae. *Journal of Theoretical Biology*, 300:254–26
  24. N. Papandroulakis, **K. Lika**, T.S. Kristiansen, F. Oppedal, P. Divanach and M. Pavlidis. 2012. Behaviour of European sea bass, *Dicentrarchus labrax* L., in cages - impact of early life rearing conditions and management. *Aquaculture Research*, 45: 1545-1558
  25. S.A.L.M. Kooijman and **K. Lika**. 2014. Resource allocation to reproduction in animals. *Biological Reviews*, 89: 849-859
  26. **K. Lika**, S.A.L.M. Kooijman and N. Papandroulakis. 2014. Metabolic acceleration in mediterranean perciformes. *Journal of Sea Research*, 94:37-46.
  27. **K. Lika**, S. Augustine, L. Pecquerie and S.A.L.M. Kooijman. 2014. The bijection from data to parameter space with the standard deb model quantifies the supply-demand spectrum. *Journal of Theoretical Biology*. 354:35-47
  28. S. A. L. M. Kooijman and **K. Lika**. 2014. Comparative energetics of the 5 fish classes on the basis of dynamic energy budgets. *Journal of Sea Research*, 94: 19-28
  29. A. Rinaldi, V. Montalto, **K. Lika**, K. Sanfilippo, M. Manganaro and G. Sarà. 2014. Estimation of dynamic energy budget parameters for the mediterranean tootcarp (*Aphanius fasciatus*). *Journal of Sea Research*, 94: 65-70
  30. **K. Lika**, M. Pavlidis, N. Mitrizakis, A. Samaras and N. Papandroulakis. 2015. Do experimental units of different scale affect the biological performance of European sea bass larvae (*Dicentrarchus labrax*)? *Journal of Fish Biology*, 86:1271-1285
  31. A. Samaras, M. Pavlidis, **K. Lika**, A. Theodoridi and N. Papandroulakis. 2015. Scale matters: performance of European sea bass, *Dicentrarchus labrax*, L. (1758), reared in cages of different volumes. *Aquaculture Research*, 1-16, doi:10.1111/are.12942
  32. S. Augustine, **K. Lika**, and S.A.L.M. Kooijman. 2017. Comment on the ecophysiology of the Greenland shark, *Somniosus microcephalus*. *Polar Biology*, DOI 10.1007/s00300-017-2154-8
  33. L. Pecquerie and **K. Lika**. 2017. Is reproduction limiting growth? Comment on "Physics of metabolic organization" by Marko Jusup et al. *Phys Life Rev.*, 20:75-77. doi: 10.1016/j.plev.2017.01.026

34. C.M. Marques, S. Augustine, **K. Lika**, L. Pecquerie and S.A.L.M. Kooijman. 2018. The AmP project: Comparing Species on the Basis of Dynamic Energy Budget Parameters. *PloS Computational Biology*, [doi.org/10.1371/journal.pcbi.1006100](https://doi.org/10.1371/journal.pcbi.1006100)
35. C.A. Murphy, R.M. Nisbet, P. Antczak, N. Garcia-Reyero, A. Gergs, **K. Lika**, T. Mathews, E.B. Muller, D. Nacci, A. Peace, C.H. Remien, I.R. Schultz, L.M. Stevenson, K.H. Watanabe. 2018. Incorporating sub-organismal processes into dynamic energy budget models for ecological risk assessment. *Integrated Environmental Assessment and Management (IEAM)*, [doi.org/10.1002/ieam.4063](https://doi.org/10.1002/ieam.4063)
36. A. Samaras, N. Papandroulakis, **K. Lika**, M. Pavlidis. 2018. Water temperature modifies the acute stress response of European sea bass, *Dicentrarchus labrax* L. (1758). *Journal of Thermal Biology*, 78 (2018) 84–91
37. S. Augustine, **K. Lika**, and S.A.L.M. Kooijman. 2019. Why big-bodied animal species cannot evolve a waste-to-hurry strategy. *Journal of Sea Research*, 143, 18-26. <https://doi.org/10.1016/j.seares.2018.06.002>
38. **K. Lika**, S. Augustine, and S.A.L.M. Kooijman. 2019. Body size as emergent property of metabolism. *Journal of Sea Research*, 143, 8-17. [doi.org/10.1016/j.seares.2018.04.005](https://doi.org/10.1016/j.seares.2018.04.005)
39. S. Augustine, **K. Lika**, and S.A.L.M. Kooijman. 2019. Altricial-precocial spectra in animal kingdom. *Journal of Sea Research*, 143, 27-34. [doi.org/10.1016/j.seares.2018.03.006](https://doi.org/10.1016/j.seares.2018.03.006)
40. O. Stavrakidis-Zachou, N. Papandroulakis, **K. Lika**. 2019. A DEB model for European sea bass (*Dicentrarchus labrax*): parameterisation and application in aquaculture. *Journal of Sea Research*, 143, 262-271. [doi.org/10.1016/j.seares.2018.05.008](https://doi.org/10.1016/j.seares.2018.05.008)
41. C.M. Marques, **K. Lika**, S. Augustine, L. Pecquerie and S.A.L.M. Kooijman. 2019. Fitting multiple models to multiple data sets. *Journal of Sea Research*, 143, 48-56. <https://doi.org/10.1016/j.seares.2018.07.004>
42. E. Livanou, A. Lagaria, S. Psarra, K. Lika. 2019. A DEB-based approach of modeling dissolved organic matter release by phytoplankton. *Journal of Sea Research*, 143, 140-151,. [doi.org/10.1016/j.seares.2018.07.016](https://doi.org/10.1016/j.seares.2018.07.016)
43. O. Stavrakidis-Zachou, N. Papandroulakis, A. Sturm, P. Anastasiadis, F. Wätzold, **K. Lika**. 2019. Towards a computer-based Decision Support System for aquaculture stakeholders in Greece in the context of climate change. *International Journal of Sustainable Agricultural Management and Informatics*, 3/4, 219-234. [10.1504/IJSAMI.2018.099235](https://doi.org/10.1504/IJSAMI.2018.099235).
44. E. Muller, **K. Lika**, R. Nisbet, I. Schultz, J. Casas, A. Gergs, C. Murphy, D. Nacci, K. Watanabe. 2019. *Regulation of Reproductive Processes with Dynamic Energy Budgets Functional Ecology*, 33:819-832, [doi: 10.1111/1365-2435.13298](https://doi.org/10.1111/1365-2435.13298)
45. E. Livanou , A. Lagaria, I. Santi, M. Mandalakis, A. Pavlidou, **K. Lika**, S. Psarra. 2019. Pigmented and heterotrophic nanoflagellates: Abundance and grazing on prokaryotic picoplankton in the ultra-oligotrophic Eastern Mediterranean Sea. *Deep-Sea Research Part II*, 164, 100-111. <https://doi.org/10.1016/j.dsr2.2019.04.007>

## Book chapter

1. J. Val, F. Villa, **K. Lika**, and C. Boe. 1997. Nonlinear Models of Structured Populations: Dynamic Consequences of Stage Structure and Discrete Sampling Compared. In *Structured Population Models in Marine, Freshwater, and Terrestrial Systems* by S. Tuljapurkar and H. Caswell (eds). Chapman & Hall, pp. 587-613.

2. C.A. Murphy, R.M. Nisbet, P. Antczak, N. Garcia-Reyero, A. Gergs, K. Lika, T. Mathews, E.B. Muller, D. Nacci, A. Peace, C.H. Remien, I.R. Schultz, K.H. Watanabe. 2017. Linking Adverse Outcome Pathways to Dynamic Energy Budgets: A conceptual model, In N. Garcia-Reyero and C.A. Murphy (eds) A Systems Biology Approach to Advancing Adverse Outcome Pathways for Risk Assessment. Springer, 401 pp.

### Conference publications

1. **K. Lika** and R.M. Nisbet A Dynamic Energy Budget Model based on Partitioning of Net Production. 4<sup>th</sup> ESMB meeting and SMB annual meeting in Theory and Mathematics in Biology and Medicine, Amsterdam, the Netherlands, June 29-July 3 1999.
2. D. Chatziplis and **K. Lika**. Method for sibling pair analysis using multiple regression for detecting multiple Quantitative Trait Loci. 18th Annual Scientific Conference of the Greek Society of Animal Production, Ioannina, 5-7 June 2002.
3. **K. Lika** and S.A.L.M. Kooijman. 2003. Life history implications of allocation to growth versus reproduction in Dynamic Energy Budgets. 2<sup>nd</sup> International conference on Mathematical Ecology, Alcala, Madrid, Spain, 5-9 September 2003
4. K. A. Triantis K. Vardinoyannis, E. Tsolaki, I. Botsaris, **K. Lika**, M. Mylonas. Re-approaching the small island effect. Annual Conference of Greek Zoological Society, Mytilini 18-21 November 2004.
5. **K. Lika** and I. A. Papadakis. Modeling the biodegradation of phenolic compounds by microalgae. 7<sup>th</sup> European Conference on Mathematical and Theoretical Biology (ESMTB08), Edinburgh, UK 29<sup>th</sup> June - 4<sup>th</sup> July, 2008.
6. A. Palialexis, S. Georgakarakos, I. Karakassis, **K. Lika** and V. D. Valavanis. Use of GIS, remote sensing and regression models for the identification and forecast of small pelagic fish distribution. 2nd International Conference on Environmental Management, Engineering, Planning and Economics (CEMEPE) and SECOTOX Conference Mykonos, June 21-26, 2009
7. A. Palialexis, S. Georgakarakos, I. Karakassis, **K. Lika** and V. D. Valavanis. Comparing novel approaches used for prediction of species distribution from presence/absence acoustic data 2nd International Conference on Environmental Management, Engineering, Planning and Economics (CEMEPE) and SECOTOX Conference Mykonos, June 21-26, 2009
8. I. Tsigiotakis, G. Fragkiadakis, N. Panopoulos, **K. Lika**. Escherichia coli defined as a continuous hazard for food safety and for Public Health. Characteristics, genome and metabolism plasticity, virulence ability and preventive measures. MEAT DAYS 19-21 October, 2012
9. Livanou E, Lagaria A, Santi I, **Lika K**, Psarra S. Pigmented and heterotrophic nanoflagellates: abundance and bacterivory in the eastern Mediterranean Sea. 12 th Panhellenic Symposium on Oceanography & Fisheries “Blue Growth for the Adriatic-Ionian Macroregion and the Eastern Mediterranean”. 30 May - 3 June 2018. Corfu, Corfu Island, Greece.
10. **Lika, K.**, Muller, E.B., Murphy, C.A., Nisbet, R.M., Nacci, D., Remien, C.H., Schultz, I.R. and Watanabe K.H.. Linking Adverse Outcome Pathways to Dynamic Energy Budgets: the case of hormone-driven energy allocation for egg loading. 6<sup>th</sup> International Symposium on Dynamic Energy Budget Theory for metabolic organization, 8-12 April, 2019 Brest, France
11. **Lika, K.**, Stavrakidis-Zachou, O., Papandroulakis N., Impacts of climate-related drivers on finfish aquaculture. 6<sup>th</sup> International Symposium on Dynamic Energy Budget Theory for metabolic organization, 8-12 April, 2019 Brest, France

12. Stavrakidis-Zachou, O., **Lika, K.**, Papandroulakis N., Forecasting climate change impacts on greek aquaculture production: a CLIMEFISH case study. Aquaculture Europe, 8- 10 October 2019, Berlin.
13. Stavrakidis-Zachou, O., **Lika, K.**, Alarcon, J., Al-Suwailem, A.M., Papandroulakis N., Biological performance of meagre *Argyrosomus regius* under high temperature. Aquaculture Europe, 8- 10 October 2019, Berlin.
14. Livanou, E., Lagaria, A., Oikonomou, A., Psarra, S., **Lika, K.**, Modelling nanoflagellates – bacteria interactions in the oligotrophic Eastern Mediterranean Sea. 7<sup>th</sup> International Symposium on Dynamic Energy Budget Theory for metabolic organization-Forecasting in a changing world, 24-28 May 2021, online

## **Participation in conferences and workshops**

- 4th Autumn Course on Mathematical Ecology, International Centre of Theoretical Physics, Trieste, Italy (1994) (Invited Speaker)
- The Second World Congress of Nonlinear Analysts, Athens, Greece (1996)
- NSF-CBMS Conference on Dynamical Systems in Structured Population Dynamics, North Carolina State University, Raleigh, NC, USA (1997) (Invited Speaker)
- 928<sup>th</sup> AMS meeting, Albuquerque, New Mexico, USA (1997)
- 4<sup>th</sup> ERCIM Environmental Modeling Working Group Workshop on Environmental Models and Computational Methods, Heraklion, Crete, Greece (1998) (Invited Speaker)
- Theory and Mathematics in Biology and Medicine, Amsterdam, the Netherlands (1999)
- The Third World Congress of Nonlinear Analysts, Catania, Sicily, Italy (2000) (Invited Speaker)
- Scientific meeting entitled" Mathematical Modeling in Science and New Technologies: Developments and Prospects." Department of Mathematics, University of Aegean. Karlovasi, Samos, June 6-8 2002. (Invited Speaker)
- 2<sup>nd</sup> International conference on Mathematical Ecology, Alcala, Madrid, Spain (5-9 Sep., 2003)
- 1st Summer School in "Mathematical Modeling in Marine Science", Department of Marine Sciences, Aegean University, Mytilene 4-15 July 2005. (Invited Speaker)
- 7<sup>th</sup> European Conference on Mathematical and Theoretical Biology (ESMTB08), Edinburgh, UK (29<sup>th</sup> -4<sup>th</sup> July, 2008)
- 2nd International Symposium on Dynamic Energy Budget Theory, 13-5 April, 2011 Lisboa, Portugal (keynote speaker)
- 3rd International Symposium on Dynamic Energy Budget Theory, 24-26 April, 2013 Texel, the Netherlands
- 4<sup>rd</sup> International Symposium on Dynamic Energy Budget Theory, 28-30 May, 2015 Marseille, France
- MEMS Brest Summer school - Combining Modeling and Experimental Approaches for Marine Organisms under Stress. August 29th to September 2nd, 2016 (Invited Speaker)
- Add-my-pet curator workshops (25/6/2016-2/7/2016 & 23-27/1/2017) - Developments in add-my-pet/ DEB course 2017.
- NIMBioS Working Group: Modeling Molecules-to-Organisms (4 workshops in 2015, 2016, 2017).
- 5<sup>th</sup> International Symposium on Dynamic Energy Budget Theory, 31 May to 2 June, 2017 Tromso, Norway



- 6<sup>th</sup> International Symposium on Dynamic Energy Budget Theory for metabolic organization, 8-12 April, 2019 Brest, France

## **Research Projects**

Participation as researcher or scientific leader for part of the research project in the following research programs:

**AQUAEXCEL3.0: AQUAculture infrastructures for EXCELlence in European fish research 3.0** (EU 2020 - 4/2025, administered by HCMR) - leading the research group for expanding fish growth models as tools for designing experiments in aquaculture research facilities

**Developing reproductive modules for mammals and birds in the Dynamic Energy Budget modelling framework** (ibacon GmbH 2019-2020)

**Co-creating a decision support framework to ensure sustainable fish production in Europe under climate change-CLIMEFISH )** (EU 5/2016 - 4/2019, administered by HCMR) - leading the research group for investigating the impact of climate changes on Mediterranean finfish aquaculture

**AQUAculture infrastructures for EXCELlence in European fish research towards 2020** (EU 5/2016-4/2019, administered by HCMR) - leading the research group for developing fish growth models as tools for designing experiments in aquaculture research facilities

**Increase competitiveness of greek aquaculture through innovative programs in European sea bass (*Dicentrarchus labrax*) genetic selection** Operational Programme “Fisheries 2007-2013” (3 /2014-10/2015)

**Benthic pelagic coupling: hypoxia and regime shifts (HYPOXIA):** (EU/GSRT, “EXCELLENCE II”, 3/2014-7/2015)

**A new integrative framework for the study of fish welfare based on the concepts of allostasis, appraisal and coping styles (COPEWELL)** (EU-FP7, 01/2012 – 12/2015)