

Currivulim Vitae

Enrico Daniso

University of Udine Italy from 11/2017 to 10/2020 (Ph.D defence 01/04/2021)

PhD cum lauda department of Agriculture, Food, Environmental and Animal science (DI4A)

Research: Development of Biosensors for the detection of Novel Food with innovative biosensors

Gene expression of Chitinase and Chitobiase in Rainbow trout

Extra Activities: Bachelor Tutor "Scienze per l'ambiente e la natura" 2018/2020

Laboratory assistant "Produzione di biomolecole in piante" 2018/2020

University of Udine Italy 2013- 12/04/2016

Master's degree in: Plant and Animal Biotechnology (in English)

108/110 Thesis title: Expression of the vacuolar NA /H antiporter gene (NHX1) in three Plantago species differing in salt tolerance

Main topics: Biotechnology, Molecular biology, Bioinformatics and Food safety

University of Udine Italy 2010-2013

Bachelor's degree in: Animal science – Allevamento e salute animale

110/110 Thesis title: Sex determination in sea turtles

Main topics: Anatomy, Physiology, Nutrition, Animal breeding and Animal Husbandry

University of Udine Italy (01/05/2024-30/04/2025)

Post Doc department of Agriculture, Food, Environmental and Animal science (DI4A)

Research: "Allestimento di un fermentatore ruminale continuo con misura della produzione del metano"

University of Udine Italy (01/05/2022-30/04/2024)

Post Doc department of Agriculture, Food, Environmental and Animal science (DI4A)

Research: Use of Tenebrio molitor for Aflatoxin feed detoxification

University of Udine Italy (01/11/2020 – 30/04/2022)

Post Doc department of Agriculture, Food, Environmental and Animal science (DI4A)

Research: Development of Biosensors for the detection of toxins from algae origins

Teaching collaboration

support for the laboratory lesson for the course "Produzione di biomolecole in pianta", 25hr,s for the academic years 2018/19 and 2019/20.

support for the class lesson for the course "Avicoltura e conigliicoltura", 15hrs for the academic year 2021/22, 2023/24, 2024/25.

support for the class lesson for the course "Patologia generale", 10hrs for the academic year 2023/24

support for the class lesson for the course "Gestione e tutela delle piccole specie ornamentali", 10hrs for the academic year 2024/25.

Training

Hellenic Centre of Marine Resources laboratory in Crete (Greece)

Autonomous work in the laboratory, RNA extraction, RT-PCR for gene expression evaluation and RNAseq.

University of Udine, Italy

Autonomous work in the laboratory to evaluate the gene expression of certain target genes for the evaluation of the different diets given to the fishes.

Or-El-Doo, Volariceva Ulica 6, 5222 Kobarid, Slovenia and University of Ljubljana - Virology Department, Slovenia

Execution of immunofluorescence analysis independently in BSL3+ laboratory and evaluation of the analysis with O-Led Technology for Diagnostic research intent. Acquired competence in virus manipulation, indirect immunofluorescence Dengue, West Nile and ASF virus detection with an innovative biosensor.

Univerdidad Politécnica de Valencia – Biotechnology Department, Spain

Extraction of DNA from plant samples with high lignin content. evaluation by RT-PCR of gene expression. cloning and target gene sequencing.

Progenus S.R.L., Rue Des Praules 2, 5030 Gembloux, Belgium

Autonomous work in the laboratory to evaluate the contamination of Horse meat in Cow meat, doing the complete overflow of the analysis from the meat sample to the RT-PCR evaluation.

Communications
to
scientific meeting

1. Chaura, J., Al Hassan, M., Daniso, E., Vicente, O., Boscaiu, M. (2015) Comparative analysis of the antioxidant response to salt stress in *Inula crithmoides* and *Diuriscia viscosa*. The 14th International Symposium prospects for 3rd millennium agriculture 24 - 26 September, 2015 Cluj-Napoca, Romania.
2. Al Hassan, M., Daniso, E., Boscaiu, M., Vicente, O. (2015) Expression of the vacuolar Na⁺/H⁺ antiporter gene (NHX1) in three *Plantago* species differing in salt tolerance. The 14th International Symposium prospects for 3rd millennium agriculture 24 - 26 September, 2015 Cluj-Napoca, Romania.
3. P. Melpignano, E. Daniso, C. Galardo, M. Arias, I. Toplak and J. Grom, "Detection of antibodies against African Swine Fever Virus (ASFV) by Organic light Emitting Diodes (OLED) immunofluorescence test", Workshop on laboratory diagnosis and control of CSF and ASF, Hannover, June 7-8, 2016
4. E. Daniso, M. Messina, F. Tulli, "Molecular based identification of insect ingredients in animal feeds" International Congress of the Animal Science and Production Association (ASPA) (proceedings of 23rd National Congress of the Animal Science and Production Association "New challenges in Animal Science" Sorrento (Naples), 11-14 June 2019
5. Daniso, E., Tulli, F., Cardinaletti, G., Cerri, R., Tibaldi, E. "Molecular tools for insect detection in animal feed" European Federation of Animal Science (EAAP) Ghent, 26-30 August 2019
6. Daniso, E., Susmel, S., Melpignano, P., Tulli, F. "Perspectives of an immunobiosensor for the tetrodotoxin detection in mussels" European Aquaculture Society (EAS) Vienna, 18-21 September 2023

Publications

1. Al Hassan, M., Daniso, E., Vicente, O., Boscaiu, M. (2015). Comparative Analysis of the Antioxidant Response to Salt Stress in *Inula crithmoides* and *Diuriscia viscosa*. *Not. Bot. Horti. Agrobo.*, Vol 72, No 2 (2015).
2. Chaura, J., Al Hassan, M., Daniso, E., Vicente, O., Boscaiu, M. (2015). Expression of the Vacuolar Na⁺/H⁺ Antiporter Gene (NHX1) in Three *Plantago* Species Differing in Salt Tolerance. *Not. Bot. Horti. Agrobo.*, Vol 72, No 2 (2015).
3. Al Hassan, M., Chaura, J., López-Gresa, M., Borsari, O., Daniso, E., Donat-Torres MP, Mayoral O, Vicente O and Boscaiu M (2016). Native-invasive plants vs. halophytes in Mediterranean salt marshes: Stress tolerance mechanisms in two related species. *Front. Plant Sci.* 7:473. doi: 10.3389/fpls.2016.00473.
4. P. Melpignano, E. Daniso and N. Videgar, "Multiparametric OLED-BASED biosensor for rapid Dengue serotype recognition with a new point-of-care serological test", proceedings of the International Conference MIDEM 2016, accepted for publication on Informacije MIDEM- Journal of Microelectronics, Electronic Components and Materials – ISSN 0352-9045 (2016)
5. Daniso, E., Melpignano, P., & Tulli, F. (2020). An OLED-based genosensor for the detection of *Hermetia illucens* in feeds. *Food Control*, 113. <https://doi.org/10.1016/j.foodcont.2020.107179>
6. Daniso, E., Tulli, F., Cardinaletti, G., Cerri, R., Tibaldi, E., 2020. Molecular approach for insect detection in feed and food : the case of *Gryllodes sigillatus*. *Eur. Food Res. Technol.* <https://doi.org/10.1007/s00217-020-03573-1>
7. Daniso, E., Maroh, B., Feldbacher, S., Mühlbacher I., Schlögl, S., Melpignano, P. Tailoring the chemical functionalization of a transparent polyethylene foil for its application in an OLED-based DNA biosensor. *Applied Surface Science* 552,149408 10.1016/j.apsusc.2021.149408
8. Cerri, R., Niccolai, A., Cardinaletti, G., Tulli, F., Mina F., Daniso, E., Bongiorno, T., Chini Zittelli, G., Biondi N.b Tredici, M.R., Tibaldi, E. (2021) Chemical composition and apparent digestibility of a panel of dried microalgae and cyanobacteria biomasses in rainbow trout (*Oncorhynchus mykiss*). *Aquaculture* 544,737075 . 10.1016/j.aquaculture.2021.737075
9. Cardinaletti, G., Di Marco, P., Daniso, E., Messina, M., Donadelli, V., Finoia, M.G., Petoichi, T., Fava, F., Faccenda, F., Contò, M., Cerri, R., Volpatti, D., Bulfon, C., Mandich, A., Longobardi, A., Marino, G., Pulido-Rodríguez, L.F., Parisi, G., Tibaldi, E. (2022). Growth and Welfare of Rainbow Trout (*Oncorhynchus mykiss*) in Response to Graded Levels of Insect and Poultry By-Product Meals in Fishmeal-Free Diets. *Animals*, 12 (13), art. no. 1698. . 10.3390/ani12131698
10. Zarantoniello, M., Chemello, G., Ratti, S., Pulido-Rodríguez, L., Daniso, E., Freddi, L., Salinetti, P., Nartea, A., Bruni, L., Parisi, G., Riolo, P., Olivotto, I. (2023) a Growth and Welfare Status of Giant Freshwater Prawn (*Macrobrachium rosenbergii*) Post-Larvae Reared in Aquaponic Systems and Fed Diets including Enriched Black Soldier Fly (*Hermetia illucens*) Prepupae Meal, *Animals*, 13, Issue 4 February 2023 Article number 715. 10.3390/ani13040715
11. Randazzo, B., Di Marco, P., Zarantoniello, M., Daniso, E., Cerri, R., Finoia, M. G., Capoccioni, F., Tibaldi, E., Olivotto, I., Cardinaletti, G. . (2023). Effects of supplementing a plant protein-rich diet with insect, crayfish or microalgae meals on gilthead sea bream (*Sparus aurata*)

and European seabass (*Dicentrarchus labrax*) growth, physiological status and gut health. *Aquaculture* 575. <https://doi.org/10.1016/j.aquaculture.2023.739811>

12. Pascon G., Daniso E.; Cardinaletti G.; Messina M.; Campagnolo F.; Zuccaccia D.; Tulli F. (2024). Postprandial kinetics of digestive function in rainbow trout (*Oncorhynchus mykiss*): genes expression, enzymatic activity and blood biochemistry as a practical tool for nutritional studies. *Comparative Biochemistry and Physiology, Part A* 288. <https://doi.org/10.1016/j.cbpa.2023.111559>

13. Daniso, E., Melpignano, P., Susmela, S., Tulli, F. (2024) Optimization of an OLED-based immunosensor for the detection of tetrodotoxin in mussels. *Food Control* 160. <https://doi.org/10.1016/j.foodcont.2024.110352>

14. Pascon, G., Cardinaletti, G., Daniso, E., Bruni, L., Messina, M., Parisi, G., Tulli, F. (2024). Effect of dietary chitin on growth performance, nutrient utilization, and metabolic response in rainbow trout (*Oncorhynchus mykiss*). *Aquaculture Reports* 37. <https://doi.org/10.1016/j.aqrep.2024.102244>

15. Daniso, E., Sarropoulou, E., Kaitetzidou, E., Beraldo, P., Tibaldi, E., Cerri, R., Cardinaletti, G. (2024). Effect of increasing levels of *Hermetia illucens* in a fishmeal-free diet at sea bream (*Sparus aurata*, L.) gastrointestinal level. *Aquaculture Reports* 39 (2024) 102410 <https://doi.org/10.1016/j.aqrep.2024.102410>

16. Daniso, E., Pascon, G., Uboni, C., Tulli, F. (2024). A preliminary study on the degradation of AFB1 by *Tenebrio molitor*, *Rhizopus oryzae* and *Trichoderma reesei*. *Journal of Insects as Food and Feed*. <https://doi.org/10.1163/23524588-00001286>

17. Daniso, E., Melpignano, P., Cocchic, M., Susmela, S., Tulli, F. (2024) Development of an immunobiosensor for okadaic acid detection in mussels. *Food Control* Under Submission.

Poster 1. P. Melpignano, E. Daniso and N. Videgar, "Multiparametric OLED-BASED biosensor for rapid Dengue serotype recognition with a new point-of-care serological test", BIOMEDICA 2016, 30-31 May 2016, Aachen (Germany)

Udine 09/01/2025