

Newsletter

February 2023



TECHNICAL FILE

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01

EDITORIAL

As remarked by Paula Ruivo, Coordinator of the LQRC-CIEQV's Scientific area of Food production and technology / Food behavior, February 2023 is inevitably marked by the holding of the 2nd LQRC-CIEQV International Congress. Research Trends in Quality of Life was the thematic challenge that was embraced by researchers. Five plenary conferences, 2 roundtables and 92 presentations (60 oral and 32 under poster format) were available to the 175 registered persons for two days. It was an outstanding opportunity for the establishment of informal research nets and a determinant event for public recognition of the relevance of the centre, which received an overall (very) positive appreciation by participants. Plenary conferences and roundtables were also delivered through streaming on several platforms, which allowed for a wider dissemination.

This 28th Newsletter is mainly dedicated to LQRC-CIEQV's Scientific area of Food production and technology / Food behavior. An excellent overview of this scientific area participation on the 2nd LQRC-CIEQV International Congress is presented. We are presenting interviews to Maria Gabriela Lima and Albertina Ferreira, respectively integrated and collaborator members of this area. Several Projects undertaken by this area are described, with a representative testimony of Nair Cunha, who is finishing her experience as a Master Research Scholarship holder.

As usual, publications, activities, and other important information are presented through the newsletter.

Good readings!



Rui Matos ^{1,2}

¹ School of Education and Social Sciences – Polytechnic Institute of Leiria

² Sub coordinator of the Life Quality Research Centre

February was, once again, the month in which members of the Life Quality Research Centre (LQRC) participated in the International Congress, preparing future strategies, and reinforcing the interdisciplinarity that characterizes and differentiates its research activities. The scientific area of Production (Agrarian) and Food Technology/Food Behavior (PTACA), whose members, collaborators and integrated, are affiliated with the Agrarian School of Santarém (ESAS), have been developing collaborative dynamics to consolidate teams that embrace different projects and thematics. This small, multidisciplinary group pursues its goal of creating and sharing knowledge with potential stakeholders, contributing to a better quality of life for the entire community. In this way, and with a close connection with partner entities, they have been participating and promoting various technical-scientific dissemination events as reported in this edition of the Newsletter. Of note, is the recent participation of members in the 2nd International Congress of Life Quality Research Centre, under the motto Research of Trends in Quality of Life. In this context, results presented reflect the work developed with insects as a protein alternative, the potential of using 3D printing of food, new methods of promoting biodiversity, soil conservation, efficiency in water use, crop protection, and other insights that contribute to the development and evaluation of new practices and products to improve crop productivity and environmental performance. These research activities of the scientific area of PTACA are included in various research projects promoted and participated by integrated and collaborators members of the LQRC-CIEQV, with increasing involvement of students and research fellows. In this edition of the Newsletter, you will be able to recognize PTACA contribution to the creation and promotion of knowledge and technological innovation along the agrifood value chains, contributing to the resilience of food systems and the promotion of better food choices and socially fair access to healthy and sustainable food with the inherent improvement in quality of life.



Paula Ruivo ^{1,2}

¹ School of Agriculture – Polytechnic Institute of Santarém

² Life Quality Research Centre

02

INFORMATION #1

— **2nd National Colloquium on Social and Therapeutic Horticulture (2CNHST)**

Professor Maria do Céu Godinho (IPSantarém/ESAS) was appointed to the Scientific Committee of the 2nd National Colloquium on Social and Therapeutic Horticulture (2CNHST), organised by the Portuguese Horticultural Association (APH), which will take place on 30 and 31 March 2023, in the LIPOR auditorium, in Baguim do Monte, under the slogan “Horticulture Changes Lives”.

The 2CNHST comes after the success of the first edition, held by APH in October 2016, in Estoril.

For registration and other information, see the 2CNHST website at this link:

<https://aphorticultura.pt/eventos/2CNHST/>



03

INFORMATION #2

— **FINAL WORKSHOP of the HORTICOVER project with a visit to the pilot fields**

The final meeting will take place on March 22, 2023, in Auditorium 2 of the School of Agriculture of Santarém, at 9:30 am. The project team will present the main results and the implementation of these solutions will be discussed with the production.

The program will be available soon.

Horti **cover**

04

INFORMATION #3

— SAVE THE DATE: June 19, 2023 | IPSANTARÉM

The Conference will promote the exchange of knowledge and cooperation between 4 scientific domains: Health and Life Sciences, Natural and Environmental Sciences, Social and Human Sciences, and Exact and Engineering Sciences. The main goals are to emphasize the potential applications of research results in society and industry and foster capacity building of university students for the presentation of research results.

Submission of abstracts will be open on the 7th of March. Abstracts may be submitted in Portuguese or English, at the platform of [Revista UI IPSantarém](#).



05

INFORMATION #4

The scientific area of Production and Food Technology/Food Behaviour (PTACA) participated in the LQRC-CIEQV with the presentation of 6 oral communications and 11 poster communications.

On the second day of Congress, Prof. Fernando González-Andrés, from the University of Lion, integrated into Research Group Ingeniería Química, Ambiental y Bioprocesos (IQUIMAB) was the plenary speaker. Fernando Andrés presented our several case studies, namely those resulting from the numerous projects he has integrated and/or managed. Most relevant were the results related to the development and evaluation of new technologies and products to improve crop yield and environmental performance through Plant Microbial Biostimulants.

On both days we had the presence and interaction of the external evaluator of the LQRC-CIEQV, from the scientific area of PTACA, Prof. Beatriz Urbano, from the University of Valladolid.



06

INFORMATION #5

The SOILIFE1ST project was invited to participate in a round table on 13.02 at the Lisbon Food Affair, integrated with the presentation of PRR projects approved under the Flagship Indicatives of the Agenda “Terra Futura” of the Ministry of Agriculture.

IE_Adaptation to climate change

SoiLife1st – Maria do Céu Godinho (IPSantarém/ESA)

SoilC+ – António Ferreira (IPC/ESA)

Agro+Efficient – Alcina Neves (UALG)



LISBON FOOD AFFAIR

13 FEB 2023
15:00 FIL Lisboa

Apresentação dos projetos PRR aprovados, em que o COTHN-CC se encontra envolvido no âmbito das Indicativas Emblemáticas da Agenda da Terra Futura do Ministério da Agricultura

15h00 – Sessão de Abertura
15h10 – Comunicação a convite DGADR_PRR
Rogério Ferreira (DGADR) *

15h20 – Mesa Redonda
Inovação e sustentabilidade para chegar à “Terra Futura”
Moderação: Custódio Correia (IRN/DGADR)

IE_Mitigação das alterações climáticas
MOPus – Maria do Carmo Martins (COTHN-CC)
Car25air – António Ferreira (IPC/ESA)

IE_Adaptação às alterações climáticas
SoiLife1st – Maria do Céu Godinho (IPSantarém/ESA)
SoilC+ – António Ferreira (IPC/ESA)
Agro+Efficient – Alcina Neves (UALG)

INSCRIÇÕES ATRAVÉS DESTES FORMULÁRIO

IE_Agricultura 4.0
PhenoBot – Rui Martins (NESTEC)
Wine4cast – Maria Cunha (IPF)

IE_Territórios sustentáveis
RedeSusterra – Ana Paula Nunes (COTHN-CC)
Resilite – Paula Simões (IPC/ESA)
BFREE – Susana Carvalho (FCUP)

16h30 – Encerramento

PRR REPÚBLICA PORTUGUESA

07

ARTICLE | POSTER PRESENTATION | EXTENDED ABSTRACT

New Research Project at LQRC: Insects-based food

A new line of research, supported by the LQRC, is being developed in three different fields. Preliminary results and the statement of some considerations of the work in progress were published in the Book of abstracts of the 2nd International Congress of the LQRC-CIEQV concerning oral communication and two poster communications.

— Extracting protein methods from crickets (*Acheta domesticus*) for food purposes

Nair Cunha ^{1,2}, Vanda Andrade ^{1,2}, Paula Ruivo ^{1,2}, Maria Gabriela Lima ^{1,2}

¹ Life Quality Research Centre* (LQRC-CIEQV), IPSantarém / IPLeiria

² Instituto Politécnico de Santarém, Escola Superior Agrária

Abstract

There is a growing interest in the West for edible insects as a potential alternative source of protein which can present several advantages over current protein sources. Edible insects may offer a solution for obtaining a more sustainable and high nutritional protein source, with a balanced amino acid content, essential fatty acids, minerals, vitamins, and other bioactive compounds. Western consumers are open to the incorporation of insects in their diet if they are used as ingredients in food formulation and if they remain invisible. Such resulted in the development of insect flours, mainly from cricket species and larvae. However, limitations exist regarding their functional properties, such as solubility, emulsification,

foaming, or gelling characteristics; this has prompted interest in the development of protein extract powders as an effective way to enhance the functionality of insect flours. Protein extraction methods can be classified into conventional methods (e.g., extraction in alkaline medium) and advanced methods (e.g., enzymatic extraction, ultrasonic, microwave, and pulsed electric field). Conventional methods are the most widely used but can present unsatisfactory yields as a result of protein degradation due to extraction time, type of solvents, pH, and temperature. Therefore, there is currently more focus on the investigation of advanced methods, using “greener” technologies, which may improve the protein extraction results and reduce the degradation. This work aims to develop a method that can allow a satisfactory yield of protein extraction. For this, we intend to evaluate protein extraction methods using the insect *Acheta domesticus*. The methods will be compared and analysed about the literature already published on this subject. This project may contribute to food technologies to produce protein sources and bring benefits to the current context of food demand for a growing world population.

Keywords: Protein extraction; Crickets (*Acheta domesticus*); Edible insects Food source.

POSTER COMMUNICATIONS presented at the 2nd International Congress of the LQRC-CIEQV

— Insect consumption and health – a systematic review of human RCTs

Nair Cunha ^{1,2}, Paula Ruivo ^{1,2}, Paula Pinto ^{1,2}

¹ Life Quality Research Centre* (LQRC-CIEQV), IPSantarém / IPLeiria

² Instituto Politécnico de Santarém, Escola Superior Agrária

Poster link: www.cieqv.pt/congress-docs/Insect_consumption_and_health-a_systematic_review_of_human_RCTs.mp4

— “Insect-based foods” literacy – contributions to healthier food choices

Nair Cunha ^{1,2}, Paula Pinto ^{1,2}, Paula Ruivo ^{1,2}

¹ Life Quality Research Centre* (LQRC-CIEQV), IPSantarém / IPLeiria

² Instituto Politécnico de Santarém, Escola Superior Agrária

Poster link: www.cieqv.pt/congress-docs/Insect-based_foods_literacy-contributions_to_healthier_food_choices.mp4

The research projects developed in the scientific area of Production and Food Technology/Food Behaviour have sought to involve students from the master’s degree courses of the Agrarian School of Santarém. Nair Cunha is finishing her experience as a Master Research Scholarship holder and presenting her testimony.

— LQRC-CIEQV an opportunity



Nair Cunha ^{1,2,3}

¹ School of Agriculture – Polytechnic Institute of Santarém

² Life Quality Research Centre

³ Food Technology Master Student – ESAS/IPSantarém

The opportunity to obtain a research scholarship at Life Quality Research Center (LQRC) came into my life during the first year of my Master's course in Food Technology at Escola Superior Agrária de Santarém. I applied, and exposed my abilities and skills, with the goal in mind that if I got the scholarship, this would be a great asset in my academic and professional career, which started in Animal Production Engineering. Research came into my life, and I fell in love with this professional area, which despite being "tough", pushes us to go beyond our capabilities. It helped me in several ways, in addition to being able to reconcile another passion that I ended up acquiring, which is edible insects, a growing sector, due to their potential to be an alternative source of animal protein rich in nutrients and "environmentally friendly". The research areas that aroused my greatest interest (and that I intend to pursue) are food innovation and nutrition, although associated with edible insects. One of the scientific areas of the LQRC is Production and Food Technology / Food behavior, which from my perspective is super interesting and can contribute a lot to food literacy in general consumers, in the sense of providing knowledge so that people can make food choices that benefit their health and well-being, regardless of age or academic degree. In addition, the team I worked with, essentially my course teachers, taught me a lot with their knowledge and experience of life and work, without them I would not have been able to improve my research skills (investigation, writing, communications). Here you also learn the importance of teamwork, and the multidisciplinary component, as I got involved in several scientific areas of food technology, which only brought me advantages. Another valuable aspect that this research scholarship provided me was the construction of "bridges", generated by sharing knowledge and experiences with other international researchers, at the recent event of the II International Congress LQRC.

Last but not least, I want to leave a message for all the students to give it a try next time there is an opportunity to work on a research scholarship at LQRC, as it may give to you a purpose in your life or just to have the experience to contribute with your skills for the creation of knowledge that can improve the quality of life of all human beings.

08

INTERVIEW #1

— Interview with Maria Gabriela Basto de Lima



Maria Gabriela Lima ^{1,2}

¹ School of Agriculture – Polytechnic Institute of Santarém

² Life Quality Research Centre

Brief curricular presentation

Maria Gabriela de Oliveira Lima Basto de Lima

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Ciência Vitae ID: [A117-6A3B-3265](https://ciencia.vitae.pt/A117-6A3B-3265)

Adjunct Professor since May 12, 1994, in Polytechnic Institute of Santarem, Higher School of Agriculture, Department of Food Technology, Biotechnology, and Nutrition. A faculty member since March 2, 1987.

Academic Education and Qualifications:

2014 – PhD in Chemistry (Specialization: Food Rheology) at Évora University.

1993 – Master Mechanical Engineering (Specialization: applied thermodynamics) at Instituto Superior Técnico, Lisboa University (IST/UL).

1985 – Graduate in Chemical Engineering Specialization: Technology & Industry) at Instituto Superior Técnico, Lisboa University (IST/UL).

Area of expertise:

Food Rheology Development of new products / physical and rheological analysis of food products. Food inverse emulsions (water-in-oil).

What are your objectives as a member of the LQRC-CIEQV?

I intend to work on the innovation and development of new food products or new technologies, without ever forgetting sustainability and circular economy through the use of by-products of the food chain; through projects in the area of food technology, exploring the possibility of working in a multidisciplinary team and projects that need interconnection of different areas, to achieve their scientific objectives within the overall scientific framework and objectives of the LQRC-CIEQV.

Which are your main research projects?

Current Research fields:

- A researcher involved in the project BIOMA – Integrated Bioeconomy Solutions for the mobilization of the agro-food chain, under the Incentive System for Research and Technological Development (SI I&DT), Mobilizer Programmes, Notice No. 14/SI/2019. Started on March 1, 2020, expected to end on February 28, 2023. Total Funding: 8,338,017.00€.
- Coordinator Researcher of the Project *Agrio et Emulsio* – New Products Development, Application 023583 notice 02/SAICT/2016 submitted to FCT on 30-09-2016, in the multiregional consortium. Project code: POCI-01-0145-FEDER-023583. Approved on 13 July 2017. Started on 19 September 2017 and concluded on 18 March 2020. Total eligible budget: 141,174.31€.
- A researcher involved in the Project MOBFOOD – Mobilization of Scientific and Technological Knowledge in Response to Agro-Food Market Challenges. Project code: POCI-01-0247-FEDER-024524, Lisboa-01-0247-FEDER-024524. Approved on 24 July 2017. Started on December 1, 2017, and concluded on November 30, 2020. Total eligible budget: 7,021,739.21€.
- A researcher involved in Project MISAGE – Mitigation strategies of acrylamide and advanced glycation end-products in bread, notice 02/SAICT/2016 submitted to FCT on 30-09-2016, in the multiregional consortium. Project code: LISBOA-01-0145-FEDER-024172. Approved on 22 September 2017. Started on 1 December 2017 and concluded on 1 June 2020. Overall eligible budget: 143,838.72€.

- Researcher in the LQRC-CIEQV – Life Quality Research Centre project, reference UIDB/04748/2020. Started on 1 January 2020, with completion scheduled for 31 December 2023. Total Funding: 439,000.00€.
- Coordinated the team that ensures the rheological (texture) and color analysis in tomato varieties cultivated in the ESAS. PRODER project (2011-2015) “Conservation and improvement of cucurbits” (watermelon and cucumber) and Solanaceae (PRODER 2011-2015).
- Investigator participant in the project AGRO measure 8 action 8.1, n.º 58: Genetic resources of cucurbitaceous – pumpkins and melons. Started on 1st January 2002 and ended on 31st December 2005 Entity responsible for the project: ESAS. Total financing: 60 000€.

Knowing that knowledge should be transferred to society, how can the area of scientific research and professional intervention in which you are involved contribute to the union of theory and practice?

All research developed was always aimed at technology transfer, as is the philosophy of polytechnic institutes. For example, within the scope of the Bioma project, the development of osmotically dehydrated products through the valorization of by-products from a company's fruit and vegetable production chain. Another example was the *Emulsio* line of the *Agrio et Emulsio* Project – new product development, where innovative spreads with additions were developed.

Considering that the LQRC-CIEQV promotes research on quality of life, what are the practical implications of the research it carries out?

The implications of the research developed are towards obtaining appealing and healthier food products, very important for the quality of life.

09

INTERVIEW #2

— Interview with Albertina Ferreira



Albertina Ferreira ^{1,2}

¹ School of Agriculture – Polytechnic Institute of Santarém

² Life Quality Research Centre

Brief curricular presentation

Albertina Ferreira. PhD in Computer Science (2016) from the Escola de Ciências e Tecnologia of the Universidade de Évora, Degree in Computer Science (2010) from the Escola Superior de Gestão e Tecnologia of the Instituto Politécnico de Santarém (IPSantarém), Master's Degree in Geographical Information Systems from the Instituto Superior Técnico of the University of Lisbon (2003), Degree in Agricultural Cooperative Management (1995) from the Escola Superior de Gestão e Tecnologia of the IPSantarém, Bachelor's Degree in Agricultural Production (1990) from the Escola Superior Agrária (ESAS) of the IPSantarém. She is an Adjunct Professor in ESAS of the IPSantarém, Erasmus Department Documentation Coordinator (ESAS), Chairman of the Committee for Evaluation and Quality (ESAS), and responsible for Curricular Units in the areas of information technologies in first and second cycle courses (ESAS).

ORCID ID: <http://orcid.org/0000-0002-3908-8535>

Ciência Vitae ID: [251A-9EAD-6A57](#)

What are your objectives as a member of the LQRC-CIEQV?

My main objectives as a collaborating member of the LQRC-CIEQV are: to share knowledge and skills, intensify and disseminate the research carried out, contribute to the construction of multidisciplinary networks, and create synergies with other colleagues and institutions.

Which are your main research projects?

I develop my research in the areas of databases, geographic information systems, and precision agriculture. It is in these areas that I usually participate in different projects. At the moment I am part of two projects: Bioma – integrated bioeconomy solutions for mobilizing the agrifood chain; SoilLife1st – an adaptation of production systems in the context of climate change. The Bioma project intends to develop integrated solutions that allow companies in the Agrifood sector value chain to be positioned at more competitive and sustainable levels. The Soilife1st project aims to identify critical points and introduce essential elements to return productive capacity to soils, ensuring more and better water is available, thus increasing the resilience of ecosystems.

Knowing that knowledge should be transferred to society, how can the area of scientific research and professional intervention in which you are involved contribute to the union of theory and practice?

Today agriculture is a constant challenge and the technology involved is increasingly complex. It is essential to make it possible to share, in good time, the technological advances that happen. Our role, as researchers, is also to actively intervene in society and to make it possible that what we “research” can be applied in the day-to-day life of the community to which we belong. Thus, the construction of networks, involving research units and organizations/companies in the community, allows the development of work in partnership where theory is connected with the practice.

Considering that the LQRC-CIEQV promotes research on quality of life, what are the practical implications of the research it carries out?

Much of the research work we have done is related, directly or indirectly, to food production. The results we get are often associated with soil conservation, the type of culture, and the cultural practices used. Thus, by sharing our research with the community we can contribute to safer and more sustainable food production, improving the quality of life of consumers.

10

NEWS – PROJECTS UNDER DEVELOPMENT

— Project 1:

BIOMA – Soluções integradas de BIOeconomia para a Mobilização da cadeia Agroalimentar



Margarida Correia de Oliveira ^{1,2}

¹ School of Agriculture – Polytechnic Institute of Santarém

² Life Quality Research Centre

POCI-01-0247-FEDER-046112



The R&TD mobilizing project “BIOMA – Integrated BIOeconomy Solutions for the Mobilisation of the Agro-Food Chain”, coordinated by CAMPOTEC, brings together a consortium of 24 national entities inserted in the agro-food sector, such as horticulture, viticulture, and olive oil, to reposition the companies in the agro-food value chain in more competitive and sustainable levels, promoting the adoption of integrated Bioeconomy solutions. This project is organized into 6 PPS (process, product, service), addressing issues of sustainability, food waste, valorization of by-products and waste, traceability, and digital ecosystem. The Polytechnic Institute of Santarém, through its School of Agriculture, is involved in the development of a methodology for sustainability assessment for the agro-food value chain; in the valorization of by-products and agro-food waste from the horticulture and fruit and vegetable sector and the creation of a network of open fields for the demonstration of solutions in a real environment: Test Before Invest, to boost the adoption of Bioeconomy solutions.

ESAS Team: Margarida Oliveira, Adelaide Oliveira, Albertina Ferreira, Ana Neves, Anabela Grifo, Artur Amaral, Gabriela Lima, Helena Mira, Igor Dias.

— Project 2:

CRIKIT – Indicadores de Resiliência Climática para Inovação Tecnológica na Agricultura



Margarida Correia de Oliveira ^{1,2}

¹ School of Agriculture – Polytechnic Institute of Santarém

² Life Quality Research Centre

2022.01729.PTDC



The CRIKIT project, funded by the Foundation for Science and Technology, involves idMEC (Institute of Mechanical Engineering) of the Instituto Superior Técnico (coordinator) and the Escola Superior Agrária do Instituto Politécnico de Santarém (ESAS) and addresses an urgent challenge of the 21st century: “how to shape transformative actions in agriculture to ensure climate resilience and food security for all while protecting scarce biological resources within the limits of planetary boundaries?”. This can only be done by moving towards a new generation of dynamic modeling tools and scenarios that ensure a systematic assessment of technological innovations and disruptive practices in agriculture for agricultural entrepreneurs’ decision-making and policy-making. The goal of CRIKIT is to present new knowledge beyond the state of the art to support transformative changes in farms in line with commitments for climate (SDG13) and terrestrial ecosystems (SDG15) while ensuring safe and resilient food (SDG2). This project is organized into five tasks, with ESAS involved in the on-farm assessment of the greenhouse gas mitigation potential of farms and their interactions with other local ecosystem services, following a life cycle assessment approach. The team is also involved in the development of a dynamic multi-criteria tool, which incorporates global and local techno-economic, social, and environmental indicators based on Multi-Criteria Decision Analysis.

— Project 3:

EQUIMAIS Project: better equine production



António Vicente ^{1,2}

¹ School of Agriculture – Polytechnic Institute of Santarém

² Life Quality Research Centre

ALT20-46-2018-39



This project intends to transfer knowledge that will improve the breeding of horses in the Alentejo region. It encompasses aspects related to horse health, reproduction, genetic selection, newborn foal management, and nutrition. This integrated and comprehensive approach allows an increased overall result. The Equimais Project was developed through workshops, seminars, practical sessions, pilot projects, technical manuals, and dissemination leaflets.

— Project 4:

HortiCover – Melhoria dos sistemas agrícolas de monocultura com recurso a culturas de cobertura



Maria Céu Godinho ^{1,2}

¹ School of Agriculture – Polytechnic Institute of Santarém

² Life Quality Research Centre

POCI-01-0247-FEDER-072223



The HORTICover project, which ends on 31 March, was funded by the COMPETE 2020 program.
<https://horticover.webnode.pt/>

The agricultural systems of monoculture with production for industrial purposes present high productivity and have a great expression in the national economy. They also exert strong pressure on water, soil, and biodiversity resources.

The HORTICOVER project aimed to test biodiverse species and mixtures from the selection of ecotypes that demonstrated adaptability to the productive system, allowing their use as a cover crop during the winter period and evaluating their contribution to the improvement of production, the reuse of nutrients, biodiversity in the soil and carbon sequestration.

FINAL workshop of the HORTICOVER project with a visit to the pilot fields.

The closing meeting will take place on March 22, 2023, in Auditorium 2 of the School of Agriculture of Santarém, at 9:30 am. The project team will present the main results and the implementation of these solutions will be discussed with the production.

The program will be available soon.

ESAS Team: M^a Céu Godinho, Rosa Coelho, Artur Amaral, Ana Ferreira, Anabela Grifo, Albertina Ferreira.

— Project 5: MEGAPREDATOR project



João Gago ^{1,2}

¹ School of Agriculture – Polytechnic Institute of Santarém

² Life Quality Research Centre



The Polytechnic Institute of Santarém, through the Agrarian School, it's the Partner Institution of the MEGAPREDATOR project, led by FCiências.ID and financed by the Portuguese Foundation of Science and Technology (ref. PTDC/ASP-PES/4181/2021). This project started on January 2022 and intends to study the overall impact of the invasive European catfish (*Silurus glanis*) on the river Tagus basin ecosystems. The high number of non-native fishes in southern Europe increases the risk of extinction of endemic species, particularly serious in the Iberian Peninsula. Large predatory fishes can cause a significant impact on freshwater communities, reducing native fish abundance, and ultimately driving local extinctions. Despite its wide damaging potential, the impacts of large predatory fish introduced to the Iberian Peninsula remain understudied. The European catfish is one of the largest freshwater fish in the world, being invulnerable to any native predator due to its size which broadens its impact on aquatic communities. This species has recently invaded the Tagus River (Portugal) and it can be particularly damaging to Endangered, Threatened, and Protected (ETP) native species such as the diadromous fishes which are highly valuable fisheries resources. This recent invasion creates a unique opportunity to evaluate the impact on ETP species since the predatory pressure on native fish can only be observed during the early stages of invasion. Additionally, recent studies focusing on catfish movement patterns identified specific behaviors that may constitute an opportunity to control the impact of this fish. For instance, in specific locations, adult catfish are known to create massive aggregations, but the reasons for this behavior are not fully understood. In this context, the MEGAPREDATOR project will try to answer the following questions: a) what is the predatory pressure of European catfish on

native fauna, particularly on economically important ETP species such as diadromous fish?; b) what are the foraging movements and predatory behavior of the European catfish in a recently invaded system? c) what kind of habitats do European catfish prefer in lentic systems?; d) and in lotic habitats?; e) which is the timing of European catfish aggregations and which environmental factors can explain this behaviour; f) what kind of habitats are used during the aggregation?; g) can we identify and predict new aggregation sites?; h) how can we use all this information to develop control strategies that will mitigate the impact of the European catfish on native aquatic communities?

The MEGAPREDATOR team has the expertise and skills to implement the different tasks. The PI (PhD Filipe Ribeiro – MARE, ARNET) has been continuously working and coordinating scientific projects on the Tagus system in the last 5 years, including projects targeting the European catfish. The Co-PI (PhD João Gago – MARE, ARNET and collaborator member of LQRC-CIEQV) has an extensive experience working with European catfish and has strong connection with local stakeholders. This coupled with the know-how of other researchers about fish tracking, biologging, metabarcoding analysis, statistical modelling, and communication, will guarantee results applicable to the management of this megapredator. The success of this project will rely on building solid scientific knowledge on the trophic and spatial ecology of this species, allowing the development of new approaches for population control.

— Project 6:

The Mindfulness-based program for emotional regulation and focus for university students



Paula Pinto ^{1,2}

¹ School of Agriculture – Polytechnic Institute of Santarém

² Life Quality Research Centre



The Mindfulness-based program for emotional regulation and focus for university students, consisted of an 8-week program, from the 19th of October to the 14th of December 2022. The main topics were: i) concept and attitudes of Mindfulness, scientific evidence of mindfulness effects; ii) formal and non-formal practices of Mindfulness; iii) dealing with stress and anxiety, flipping limiting thoughts to empowering thoughts; iv) goal setting and personal impact statement.

24 participants started the program, and more than half of the participants attended from 5 to 8 sessions out of 8. Paired samples t-test analysis of Subjective Well-Being (9-item SWB questionnaire) and sleep quality data (Pittsburg Sleep Quality Index, PSQI), showed a significant improvement in global SWB, a significant decrease in feelings of depression and a significant increase in life meaning and global life satisfaction. Regarding sleep quality, a significant improvement was observed.

The preliminary report is available [here](#).

The team: Paula Pinto, Susana Franco, Susana Alves, Isabel Barroso, Patrícia Januário.

— Project 7:

Pegada 4.0 – Sustentabilidade da atividade agrícola suportada por processos e tecnologia inteligentes



Margarida Correia de Oliveira ^{1,2}

¹ School of Agriculture – Polytechnic Institute of Santarém

² Life Quality Research Centre

The project “Footprint 4.0 – Sustainability of agricultural activity supported by smart processes and technology”, coordinated by the University of Évora, is part of the Recovery and Resilience Plan projects, NextGeneration EU, involving 15 national entities to respond to existing societal challenges and policies launched by the European Union, Farm to Fork and Green Deal. Specifically, this project will assess different footprints, from water footprint, to carbon footprint, addressing landscape and biodiversity footprint. The methodologies to be implemented will be at different scales: the satellite scale, the drone scale, the sensor scale, and the algorithm scale, allowing to strengthen digitalization in a comprehensive, egalitarian, and inclusive way, but also to increase profitability, resilience, and sustainability of production systems. The Polytechnic Institute of Santarém through its School of Agriculture is involved in water footprint assessment, but also in the definition and implementation of an intelligent methodology for assessing diffuse pollution.

— Project 8:

SOILIFE1ST – Adaptation of production systems in the context of climate change



Maria Céu Godinho ^{1,2}

¹ School of Agriculture – Polytechnic Institute of Santarém

² Life Quality Research Centre



The project SOILIFE1ST – Adaptation of production systems in the context of climate change, is an initiative approved under the Plano de Recuperação e Resiliência) (PRR) and the Innovation Agenda for Agriculture 2030. The Consortium is coordinated by IPSantarém and involves as partners, INIAV, COTHN, the production represented by AIHO and CAMPOTEC, and 8 SME, including FERTIPRADO. The project has a regional scope with a focus on the Ribatejo, Oeste, and Alentejo Litoral.

The project aims to promote the adoption of soil conservation and fertility improvement techniques, adjusted to agricultural systems, promote the water retention capacity in the soil, after the implementation of conservation practices, and share knowledge in the co-creation of improving solutions. The goals designed are to guarantee more agricultural area with cover crops, in about 5,000 ha, more crop diversity, more health and biodiversity improvement in the soil, with more “natural” functions, where it is proposed to reach more than 20% of species, better water management with a 10% increase in efficiency, more farm managers prepared and involved in the adoption of recommended techniques and more solutions to be integrated into organic production models and low-carbon agriculture.

ESAS Team: Céu Godinho, António Azevedo, Artur Amaral, Ana Mafalda Ferreira, Ana Paulo, Albertina Ferreira, Anabela Grifo, Fátima Matos, Rosa Coelho.

— Project 9:

RedeSusTERRA – Network for the promotion of sustainable practices in agricultural systems with an impact on territories



Rosa Santos Coelho ^{1,2}

¹ School of Agriculture – Polytechnic Institute of Santarém

² Life Quality Research Centre

The RedeSusTERRA project (Network for the promotion of sustainable practices in agricultural systems with an impact on territories) is a project within the scope of the Plano de Recuperação e Resiliência (PRR), The Iniciativa Emblemática 6, and the Agenda de Inovação para a Agricultura 2030. COTHN-CC (National Horticultural Operative and Technological Center-Skills Center) is the project coordinator and the partners are institutions from the National Scientific and Technological System (ESAS, INIAV), FNOP (Organisation of Producers) and 14 SME in the fruit and vegetable sector in the target regions: Beira Interior, Ribatejo-Oeste and Litoral Alentejano.

The project focuses on promoting the growth of the agri-food sector in a sustainable and resilient way, based on knowledge, technology, and innovation. Social concerns, namely, attracting more young people to rural territories and agricultural activity and the participation of women in agriculture, are also central issues in the RedeSusTERRA project. It is structured in four lines of action (LA):

- LA 6.1. More sustainable production systems, with a focus on increasing the area in integrated production mode, organic production mode, conservation agriculture, agroecology, and other sustainable regimes;
- LA 6.2. Agricultural practices, intending to develop and adopt practices of integrated and agroecological protection that allow the reduction of the use and risk of synthesis inputs;
- LA 6.3. Ecosystem services, to develop and value ecological services, promote biodiversity, apiculture, and forestry;

- LA 6.5. Endogenous resources to promote the use of endogenous animal and plant genetic resources.

By the end of the project (2025) it is expected that, in the territories covered by RedeSusTERRA, the increase of the area in sustainable production mode, the increase of sustainable agricultural practices, the increase of functional agricultural ecosystems, and the promotion of resources endogenous genetics reach 33%.

ESAS Team: Céu Godinho, Mafalda Ferreira, Paula Ruivo.

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PUBLICATIONS

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- Amaral, A. & Silva, A. (2023). Development and growth of broccoli (Brassica Oleracea L. Var. Italica Plenck) for industry application to "Parthenon" and "titanium" varieties. *Book of abstracts "II International Congress – CIEQV 23rd and 24th February 2023"*, p. 137. Life Quality Research Centre (Centro de Investigação em Qualidade de Vida).
- Amaral, A., Ferreira, M. & Reis, T. (2023). Economic and energy assessment of cover crops in the production system of Tagus River region. *Book of abstracts "II International Congress – CIEQV 23rd and 24th February 2023"*, p. 138. Life Quality Research Centre (Centro de Investigação em Qualidade de Vida).
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- Carvalho, J., Gomes, P. & Almeida, J. (2023). Indicators for quality assessment of municipal solid waste management services: a critical analysis of the theory proposed to the reality lived. *Book of abstracts "II International Congress – CIEQV 23rd and 24th February 2023"*, p. 76. Life Quality Research Centre (Centro de Investigação em Qualidade de Vida).
- Carvalho, J., Gomes, P. & Almeida, J. (2023). Principles of legal basis applied to municipal solid wastes: a holistic and multiple view for non-legal people. *Book of abstracts "II International Congress – CIEQV 23rd and 24th February 2023"*, p. 75. Life Quality Research Centre (Centro de Investigação em Qualidade de Vida).
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<https://doi.org/10.1186/s12887-023-03869-7>
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- Rodrigues, J., Matos, R., Jacinto, M. & Rodrigues, F. (2023). *Book of abstracts II International Congress – CIEQV*. Centro de Investigação em Qualidade de Vida – LQRC-CIEQV. <https://doi.org/10.25766/aks2-6363>
- Valério, E., Godinho, M. & Figueiredo, E. (2023). Morphological characteristics for the recognition of *drosophila suzukii* (matsumura). *Book of abstracts "II International Congress – CIEQV 23rd and 24th February 2023"*, p. 73. Life Quality Research Centre (Centro de Investigação em Qualidade de Vida).

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R&D ACTIVITIES

- **Invitation for publication in International Journal of Environmental Research and Public Health (IJERPH)**

The researcher Prof. Dr. Nuno Loureiro, Prof. Dr. Rafael Oliveira and Prof. Dr. Fernando Santos are the guest editors of a special issue with the topic: *Football Related Injury and Health Problems*. Deadline for manuscript submissions: 20 April 2023. More information [SEE MORE](#).

- **Invitation for publication in International Journal of Environmental Research and Public Health (IJERPH)**

The researcher Prof. Dr. João Brito with researcher Prof. Dr. Rafael Oliveira are the guest editors of a special issue with the topic: *Wellness, Fitness, Body Composition, Training and Performance Monitoring to Improve Athletes Life Quality*. Deadline for manuscript submissions: 23 April 2023. More information [SEE MORE](#).

- **Invitation for publication in International Journal of Environmental Research and Public Health (IJERPH)**

The researcher Prof. Dr. João Brito with researcher Prof. Dr. Rafael Oliveira are the guest editors of a special issue with the topic: *Exercise Monitoring, Testing and Prescription Strategies to Improve Quality of Life in Athletes and Non-athletes*. Deadline for manuscript submissions: 31 May 2023. More information [SEE MORE](#).

- **Invitation for publication in Behavioral Sciences journal**

The researcher Prof. Dr. Filipe Rodrigues, Prof. Dr. Diogo Monteiro and Prof. Dr. Raul Antunes are the guest editors of a special issue with the topic: *Current Opinion in Sport Psychology*. Deadline for manuscript submissions: 30 September 2023. For more information [SEE MORE](#).

- **Invitation for publication in Healthcare journal**

The researcher Prof. Dr. João Brito with researcher Prof. Dr. Rafael Oliveira are the guest editors of a special issue with the topic: *Exercise Testing and Prescription Strategies to Improve Quality of Life*. Deadline for manuscript submissions: 23 October 2023. More information [**SEE MORE**](#).

- **Invitation for publication in Healthcare journal**

The researcher Prof. Dr. Rafael Oliveira is the guest editor of a special issue with the topic: *Supporting Athlete Development: The Role of Supporting Structures*. Deadline for manuscript submissions: 31 December 2023. More information [**SEE MORE**](#).

- **I&D Projects in the scientific areas of LQRC-CIEQV**

More information [**SEE MORE**](#).

CALLS AND FUNDING

- Calls for support to *Turismo*, START-PME. Status: open. More information [SEE MORE](#).
- Calls for support to *Programa de Desenvolvimento Rural*, START-PME. Status: in preparation. More information [SEE MORE](#).
- Calls for support to *Plano de Recuperação e Resiliência*, START-PME. Status: open. More information [SEE MORE](#).
- Calls for support to *Programa ATIVAR.PT*, START-PME. Status: open. More information [SEE MORE](#).
- Calls for support to *Apoio à Produção Nacional*, START-PME. Status: open. Deadline: to be defined. More information [SEE MORE](#).
- Calls for support to *Programa de Incentivo para os Açores*, START-PME. Status: in preparation. More information [SEE MORE](#).
- Calls for support to *Apoios à contratação – IEFP*, START-PME. Status: open. More information [SEE MORE](#).
- FCT contest schedule 2021-2023. FCT provides the calendar of competitions scheduled for the years 2021 to 2023. More information [SEE MORE](#).
- Founders Program Indico, Powered by Google for Startups (5 000 000€). Call continuously open. More information [SEE MORE](#).
- Calls for innovative projects in various areas of social and exact sciences, funded by EEA Grants Portugal. Deadline: 4 December 2020 to 30 June 2023. More information [SEE MORE](#).
- Future of Food, Bioeconomy Ventures. Deadline: December 2022 and March 2023. More information [SEE MORE](#).
- Grand prize of the European Commission honoring Innovation in Technology, Industry and Society stimulated by the Arts. Deadline: 3 March 2023. More information [SEE MORE](#).
- Calls for Scholarship. The Polytechnic of Leiria is opening a contest for the allocation of 2 Research Grants (BI) under the project CI&DEI – *Centro de Estudos em Educação e Inovação* UIDB/05507/2020. Deadline: 10 March 2023. More information [SEE MORE](#).
- ERA4Health Call for transnational research proposals “Increasing health equity through promoting healthy diets and physical activity (HealthEquity)”. Deadline: 14 March 2023. More information [SEE MORE](#).

- UEFA Research Grant Programme 2023 edition. Deadline: 15 March 2023. More information [SEE MORE](#).
- Water4All 2022 Joint Transnational Call. Deadline 20 March 2023. More information [SEE MORE](#).
- BioeconomyVentures – Open calls – Future of Food. Deadline: March 2023. More information [SEE MORE](#).
- Horizon Europe – Industry 2023 Brokerage Event. Deadline: March 2023. More information [SEE MORE](#).
- NCP4Industry Proposal Idea Check Service. Deadline: 13 March 2023. More information [SEE MORE](#).
- HealthEquity – Concurso da Parceria Europeia Era4Health. Deadline: 14 March 2023. More information [SEE MORE](#).
- European Clean Energy Transition Partnership (CET) 2022 Competition. Deadline: 20 March 2023. More information [SEE MORE](#).
- Water4All: Joint Transnational Competition 2022. Deadline: 20 March 2023. More information [SEE MORE](#).
- BPI Foundation Award "la Caixa" Solidarity. Deadline: 20 March 2023. More information [SEE MORE](#).
- PRIMA Section 1 – 2023. Deadline: 22 March 2023. More information [SEE MORE](#).
- FCT informs that MIT Portugal Program is accepting applications until 22 March 2023 for MPP2030-FCT Research Grants in the MPP strategic area of Climate Science & Climate Change. MIT Portugal Program, sponsored by FCT, will offer up to 10 Scholarships. Deadline: 22 March 2023. More information [SEE MORE](#).
- 2nd call – Project Green Offshore Tech. Deadline: 24 March 2023. More information [SEE MORE](#).
- PRIMA Section 2 – 2023. Deadline: 29 March 2023. More information [SEE MORE](#).
- LIFE Calls for proposals 2022. Deadline (full proposals): 30 March 2023. More information [SEE MORE](#).
- Call for RESTART program (FCT). Deadline: 30 March 2023. More information [SEE MORE](#).
- ERA-MIN Joint Transnational Competition 2023. Deadline: 30 March 2023. More information [SEE MORE](#).
- FCT informs that CMU Portugal Program will accept applications, until 31 March 2023, for the initiative “Affiliated Ph.D. Programs” funded by Fundação para a Ciência e Tecnologia (FCT). CMU Portugal, sponsored by FCT, will offer up to 12 Scholarships for the 2023/2024 academic year. Deadline: 31 March 2023. More information [SEE MORE](#).

- FCT published the Opening Notice of the Annual Competition for Doctoral Scholarships. Deadline: 31 March 2023. More information [**SEE MORE**](#).
- Interreg Atlantic Area 2021-2027 – First Call for Projects 2022. Deadline: 31 March 2023. More information [**SEE MORE**](#).
- CommuniCity Open Call. Deadline: 31 March 2023. More information [**SEE MORE**](#).
- Children 2022 Best PhD Thesis Award. Deadline: 31 March 2023. More information [**SEE MORE**](#).
- Award PNED “*Investigação sobre a Ética no Desporto*” 2022. Deadline: 31 March 2023. More information [**SEE MORE**](#).
- PhD Scholarships in non-academic environment. Deadline: 31 March 2023. More information [**SEE MORE**](#).
- PhD Scholarships under FCT protocols and partnerships. More information [**SEE MORE**](#).
- Become an EFSA expert. Deadline: 3 April 2023. More information [**SEE MORE**](#).
- Advanced Computing Projects Contest (3rd ed.): A0 Experimental Access (lot C). Deadline: 4 April 2023. More information [**SEE MORE**](#).
- Advanced Computing Projects Contest (3rd ed.): A1 Preparatory Access or Development (lot C). Deadline: 4 April 2023. More information [**SEE MORE**](#).
- BiodivMon – 2nd European Biodiverse Partnership Competition+. Deadline: 5 April 2023. More information [**SEE MORE**](#).
- European Digital Skills Awards. Deadline: 8 April 2023. More information [**SEE MORE**](#).
- Eureka – Innovation beyond borders. Deadline: 13 April 2023. More information [**SEE MORE**](#).
- Sustainable Blue Economy Partnership (SBEP): 1st Joint Transnational Competition. Deadline: 14 April 2023. More information [**SEE MORE**](#).
- Calls for proposals – Promotion of agricultural products. Deadline: 20 April 2023. More information [**SEE MORE**](#).
- Biodiversa+ Transnational Calls. Deadline: 5 April 2023. More information [**SEE MORE**](#).
- SNS Call for Proposals 2023 – Information Day. Deadline: 25 April 2023. More information [**SEE MORE**](#).
- Seedbed Incubator. Deadline: 26 April 2023. More information [**SEE MORE**](#).
- ACADEMIA GRACE – *Concurso sobre Sustentabilidade e Responsabilidade Social*. Deadline: 28 April 2023. More information [**SEE MORE**](#).
- The European Media and Information Fund (EMIF) opened three calls for proposals for projects in Europe aiming to fight disinformation. Deadline: 28 April 2023. More information [**SEE MORE**](#).
- Call: European green leaf award. Deadline: 30 April 2023. More information [**SEE MORE**](#).

- Training and Capacity Building at JRC Laboratories. Deadline: 30 April 2023. More information [**SEE MORE.**](#)
- KDT JU opens 3 concurrent Calls in 2023. Deadline: 3 May 2023. More information [**SEE MORE.**](#)
- European Driving Urban Transitions Partnership (DUT) 2022 Competition. Deadline: 3 May 2023. More information [**SEE MORE.**](#)
- 6th edition of the Arquivo.pt. Deadline: 4 May 2023. More information [**SEE MORE.**](#)
- PRIMA WEFÉ Nexus Award 2023. Deadline: 22 May 2023. More information [**SEE MORE.**](#)
- *Programa Cidadãos Ativ@s* – Bilateral Cooperation Initiatives of the *Fundação Bissaya Barreto* and *Fundação Calouste Gulbenkian*. Deadline 30 June 2023. More information [**SEE MORE.**](#)
- European Commission – Competitive calls and calls for third parties. Areas of interest: Food; Energy Transition; Climate; Mobility; Digitization. Deadline: 22 July 2023. More information [**SEE MORE.**](#)
- EIC Accelerator – Challenges 2023. Deadline: 4 October 2023. More information [**SEE MORE.**](#)
- Call Hop On 2023. Deadline: 4 October 2023. More information [**SEE MORE.**](#)
- Funding networking activities – Open call. Deadline: 25 October 2023. More information [**SEE MORE.**](#)
- Diseases 2023 Best PhD Thesis Award. Deadline: 31 October 2023. More information [**SEE MORE.**](#)

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AGENDA

- ***“Deficiência Auditiva e Língua Gestual Portuguesa no Exercício e Desporto”***, 15 and 22 February and 1 March 2023, presencial. More information [SEE MORE](#).
- **Horizon Europe Cluster 6 Online Brokerage Event**, 2-3 March 2023, online. More information [SEE MORE](#).
- **Congresso ASSP 2023**, 4 March 2023, Santarém. More information [SEE MORE](#).
- **IPEC 2023 – International Production Environmental Community**, 8-9 March online, hybrid. More information [SEE MORE](#).
- **Industry 4.0 – International Business Meetings – Global Industrie 2023**, 12 March 2023, hybrid. More information [SEE MORE](#).
- **A Cloud for all**, 15 March 2023, online. More information [SEE MORE](#).
- **Horizon Europe Open Science requirements in practice**, 16 March 2023, online. More information [SEE MORE](#).
- **Horizon Europe Cluster 1: Health Brokerage Event**, 16-17 March 2023, online. More information [SEE MORE](#).
- **VII Conferência Internacional para a Inclusão – Conferência de Tecnologias de Apoio e Acessibilidade**, 18 March 2023, Escola Superior de Educação e Ciências Sociais & Mercado de Santana, Leiria. More information [SEE MORE](#).
- **Congresso Internacional de Gerontologia**, Porto, 23 March 2023. More information [SEE MORE](#).
- **Encontro Nacional de Estudantes de Gerontologia e Gerontólogos**, Porto, 23-24 March 2023. More information [SEE MORE](#).
- **Sessão de esclarecimento sobre a 3ª edição do concurso – Projetos de Computação Avançada**, 28 March, online. More information [SEE MORE](#).
- **webQDA Day**, 28 March 2023, University of Aveiro and online. More information [SEE MORE](#).
- **The ECCCH Information and Matchmaking event**, 28 March 2023, online. More information [SEE MORE](#).
- **Young L2 learners and Games Conference**, 31 March – 1 April 2023, online. More information [SEE MORE](#).

- **XII Congresso Português de Sociologia – Sociedades polarizadas? Desafios para a sociologia.** 4-6 April 2023, Convento de São Francisco, Faculty of Economics, University of Coimbra. More information [SEE MORE](#).
- **10º Congresso da Sociedade Científica de Pedagogia do Desporto,** 27-28 April 2023, Polytechnic of Porto, Portugal. More information [SEE MORE](#).
- **3rd International Conference on Water, Energy, Food and Sustainability – ICoWEFS 2023,** 13-12 May 2023, Leiria, Portugal. More information [SEE MORE](#).
- **Workshop the Future of Energy Materials,** 13-14 March 2023, online. More information [SEE MORE](#).
- **CBE JU Info Day 2023,** 20 April 2023, online. More information [SEE MORE](#).
- **SALP | Seminário Aconselhamento no Luto em Portugal,** 5 May 2023, University of Aveiro, Portugal. More information [SEE MORE](#).
- **Congresso Internacional “Desporto para Crianças e Jovens” – PortugalFootball School,** 5-6 May 2023, presencial. More information [SEE MORE](#).
- **Chapter 4 – Conference on Food Science, Nutrition & Public Health (FNPH-2023),** 8-9 May 2023, online. More information [SEE MORE](#).
- **IV Simpósio de Economia e Gestão da Lusofonia,** 16-18 May 2023, Kimpa Vita University, Angola. More information [SEE MORE](#).
- **V Congresso Nacional de Educação para a Saúde,** 31 May 2023 and 1-2 June 2023, Évora University. More information [SEE MORE](#).
- **European Conference on Networks and Communications & 6G Summit 2023,** 6-9 June 2023, Barcelona, Spain. More information [SEE MORE](#).
- **EuroNanoForum Save the date,** 11-13 June 2023, Sweden. More information [SEE MORE](#).
- **Data meets Infrastructure at the Edge,** 13-15 June 2023, Sweden. More information [SEE MORE](#).
- **6th International Conference on Natural Fibers,** 19-21 June 2023, Funchal, Portugal. More information [SEE MORE](#).
- **9th International Conference of the Immersive Learning Research Network,** 18-20 May 2023, online (iLRN Virtual Campus & Across the Metaverse), 26-29 June 2023, San Luis Obispo, California, EUA. More information [SEE MORE](#).
- **EYE (European Youth Event),** 9-11 June 2023, Starsbourg. More information [SEE MORE](#).
- **9th International Conference on Higher Education Advances,** 19-22 June 2023, Valencia, Spain. More information [SEE MORE](#).

- **WEed5.0 2023 – 1st Workshop on Education 5.0**, 20-23 June 2023, University of Aveiro, Portugal. More information [SEE MORE](#).
- **ESREA Life History and Biography Network meeting 2023 | Exploring belonging and meaning: Lifescapes – Landscapes – Timescapes**, 22-25 June 2023, Trondheim. More information [SEE MORE](#).
- **International Conference “The Lusophone World and its Diasporas”**, 28 June – 1 July 2023. York University Toronto, Canada. More information [SEE MORE](#).
- **EERA Summer School 2023 – Participatory approaches in educational research**, 26-30 June 2023, Faculty of Psychology and Education Sciences of the University of Porto. More information [SEE MORE](#).
- **6º Colóquio Internacional de L’ARCD**, 27-30 June 2023, Switzerland. More information [SEE MORE](#).
- **10th International Conference of EDiLiC – From Early Childhood to Adulthood: Transitions, Continuity and Disruptions in Plurilingual Education**, 28-30 June 2023 University of Copenhagen, Denmark. More information [SEE MORE](#).
- **ISATT Conference 2023 – Living and Leading in the Next Era: Connecting Teaching, Research, Citizenship and Equity**, 3-7 July 2023, Bari, Italy. More information [SEE MORE](#).
- **AIESEP International Conference**. 4-7 July 2023, Santiago, Chile. More information [SEE MORE](#).
- **CIAIQ2023 | 12º Congresso Ibero-Americano em Investigação Qualitativa**, 11-13 July 2023, hybrid. More information [SEE MORE](#).
- **44th International Conference of the Stress, Trauma, Anxiety, and Resilience Society (STAR)**, 19-21 July 2023, hybrid. More information [SEE MORE](#).
- **SMBE2023 – Science for everybody: education and outreach in molecular biology and evolution**, 23-27 July 2023, Ferrara, Italy. More information [SEE MORE](#).
- **II Encontro Nacional de História da Química | Múltiplas facetas na história da ciência química**, 8-9 September 2023, online. More information [SEE MORE](#).
- **14ª Conferência Lusófona de Ciência Aberta (ConfOA)**, 18-21 September 2023, Federal University of Rio Grande do Norte, in Natal, Brazil. More information [SEE MORE](#).
- **11th ICESD International Congress of Educational Sciences and Development**, 18-20 October 2023. More information [SEE MORE](#).
- **VI Simpósio Europeu de Português como Língua de Herança (VI SEPOLH) | Português como Língua de Herança: da Gestão à Formação**, 23-25 October 2023, University of Aveiro, Portugal. More information [SEE MORE](#).

- **IUFRO ForestEnvironment DIV8 Conference 2023**, 24-27 October 2023, Évora, Portugal.
More information [**SEE MORE**](#).
- **13th International Conference on Health and Social Care ICT (HCist 2023)**, 8-10 November, Porto, Portugal. More information [**SEE MORE**](#).
- **ICCE Global Coach Conference**, 29 November – 3 December 2023, Singapore, Singapore.
More information [**SEE MORE**](#).