

Aquaculture Europe 2021 – A truly memorable event

Organised by the European Aquaculture Society, Aquaculture Europe 2021 was held on the beautiful island of Madeira in Portugal. Aquaculture has a clear place in securing food production in Europe and the theme of the event, **“Oceans of Opportunities”** underlined the significant potential for development and investment if given the political and social licence to expand and develop, accompanied by public awareness and acceptance of its role. Aquaculture Europe 2021 explored those oceans from the unique island that is Madeira.



AE2021 was attended by more than 1400 participants from 57 countries. Of these, 248 students were registered and had a dedicated workshop and special events and excursions during the week. 943 abstracts were submitted for conference presentations and 560 of these were presented orally in the 39 conference sessions. A further 383 Eposters were presented online and on several viewing stations in the conference area. The trade show allowed 80 companies to present their products and services to the sector and included a special pavilion of Portuguese companies presented by the Ministry of the Sea.

Special sessions and workshops were also organised during AE2021, including “Mediterranean aquaculture integrated development” – the final workshop of the EU Horizon 2020 MedAID Project, with the collaboration of PerformFish, the EU Blue Invest Day – a forum for innovation and investment for aquaculture within the EU Green Deal - and workshops organised by the EAS Thematic Group on Percid Fish Culture, the Mediterranean Aquaculture Product Environmental Footprint Stakeholders event and the HiSea demonstration of high-resolution water quality data services. At the end of the scientific session on Marine Spatial Planning & Conservation, the International Union for the Conservation of Nature (IUCN) organised a special round table discussion with invited contributors on Aquaculture and Marine Conservation, dedicated to novel approaches reconciling aquaculture development projects with the conservation objectives of Marine Protected Areas.

We are extremely grateful to our AE2021 Gold Sponsors BIOMAR, our Student Group Sponsors, SPAROS, session sponsor EU Blue Invest and to the Portuguese Ministry of the Sea, the Regional Government of Madeira, the Madeira Promotion Bureau and the Regional Research and Innovation Agency ARDITI for their generous contribution to the event.

AE2021 kicked off with the official Opening Ceremony, where welcome addresses were provided by EAS President 2020-2022 Herve Migaud, AE2021 Steering Committee chair Carlos Andrade, Head of Marine Aquaculture Division of the Regional Government of Madeira, the President of the Regional Government of Madeira Miguel Albuquerque and finally, Rui Vieira, MI Account Manager of the Madeira Promotion Bureau.



The AE2021 Opening Ceremony. From l to r, Herve Migaud, Carlos Andrade, Miguel Albuquerque and Rui Vieira. Photos courtesy of Helder Santos.

The EAS Award for Distinguished Service was presented to Gavin Burnell for his exceptional commitment to EAS, spanning over two decades as Board Member, Editor-in-chief of our journal *Aquaculture International* and as President of EAS from 2018-2020. See EAS web site.

The morning plenary sessions showed three very different examples of the Oceans of Opportunity that aquaculture can provide.

The opening plenary was delivered (by video) by Shakuntala Thilsted, Value Chains & Nutrition Research Leader, WorldFish, Malaysia. Her wide ranging overview of the “Diversification of aquatic food systems: Oceans of Opportunity for nourishing nations” perfectly framed the importance of



Full house for the Opening Plenary from Shakuntala Thilsted

aquaculture for nutrition, health and livelihoods throughout the world, with key messages for stakeholders in general and especially policy makers and legislators.

Shakuntala was awarded the 2021 World Food Prize for her ground-breaking research, critical insights, and landmark innovations in developing holistic, nutrition-sensitive approaches to aquatic food systems, including aquaculture and capture fisheries and more recently the 2021 Arrell Global Food Innovation Award from the University of Guelph’s Arrell Food Institute (AFI) award program.

The plenary on day 2 was equally fascinating, with Pedro Encarnação, Aquaculture Director of the Jerónimo Martins Agri-business – Portugal’s leading supermarket and food business – presenting their strategy of vertical integration in the supply chain, going from farm to the grocery store and developing projects of circular economy, using the food waste from supermarkets to produce insect meal that can be used to feed our fish production. He gave several case studies of aquaculture production and projects that will allow JMA to place production close to markets so as to increase the freshness of



Day 2 Plenary Speaker Pedro Encarnação

the fish and reduce the carbon footprint, thus satisfying consumer demand for fish in Portugal and raising the profile of farmed fish to consumers.

The final plenary was a co-production from Laurie Hofmann (live) and Gesche Kause (video), both of the Alfred Wegener Institute Helmholtz Center for Polar and Marine Research (AWI) in Germany. Their innovative presentation focused on how the required transformative change to address problems such as climate change or global biodiversity loss for sustainable food security can be achieved in aquaculture by shifting from ocean illiteracy to societal literacy.

Creating narratives around the social dimensions and the contextual societal priorities of sustainable food security is the way in which this can be achieved and an interdisciplinary exploration of creating narratives for sustainable marine food systems using the growing industry of seaweed aquaculture was presented and explained by Laurie as a case study.



Day 3 Plenary Speaker Laurie Hofmann

After the opening plenary, the final of the AE2021 Student Spotlight Award took place. The three finalists, Dean Porter of the University of Aberdeen, UK, Sandra Ramos-Júdez of IRTA in Spain and Rafaela Santos of CIIMAR / CIITAB in Portugal had been previously selected from all the abstracts submitted by students through appraisals by the EAS Board of Directors. Each had three minutes to present their work and the winner was voted by the plenary audience of more than 700. The winner was declared as Rafaela Santos for her excellent presentation of Quorum-quenching *Bacillus spp.*, which can protect fish from *Edwardsiella tarda* infection and modulate the immune system of gilthead seabream (*Sparus aurata*). EAS President Herve Migaud presented Rafaela with a cash prize of €300 to complement the €300 already given to each of the finalists for their achievement in being selected.



The finalists of the AE2021 Student Spotlight Award – from left to right – Dean Porter, Rafaela Santos (the winner), Sandra Ramos-Júdez and EAS President Herve Migaud.

During the plenary session on the last day, AE2021 was fortunate to have the presence of the Portugal's Minister of the Sea, Ricardo Serrão Santos, who gave a passionate speech about the importance of aquaculture as an alternative to traditional forms of fish supply, with its large market and long tradition of production of molluscs and fish in fresh and salt water.



*Portugal's Minister of the Sea, Ricardo Serrão Santos.
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He explained how the sector has made use of technological developments, including offshore engineering technologies, recirculation systems and multitrophic models to develop sustainably. A long-term friend and supporter of EAS and a key figure, not only nationally, but also as an MEP and Member of the Committee on Fisheries of the European Parliament, it was indeed a pleasure and an honour to welcome the Minister to AE2021.

Apart from its Pavilion in the trade show and its special food tasting event at the conference Happy Hour serving gilthead seabream, European seabass and meagre, in order to present Madeira's excellent aquaculture production, the Ministry of the Sea also had a special session within the conference on "Towards 2030 – The future of the Sea Economy in Portugal".

The final plenary session ended with the presentation of the AE2021 Poster Awards. The chairs of each of the conference sessions made an evaluation of the Best Student Poster and Best Poster of their sessions. These were then reviewed by the AE2021 Programme co-chairs Maria Teresa Dinis and Sachi Kaushik, who made their overall selection for each.

The AE2021 Best Student Poster Award went to Laura Ballesteros Redondo (University of Rostock), with co-authors Harry W. Palm, Lukas Reiche and Adrian A. Bischoff for their poster entitled "*Apocyclops panamensis* as live feed for Sander *lucioperca* larviculture."



*AE2021 Best Student Poster Award winner
Laura Ballesteros Redondo. Photo courtesy
of misPeces.com.*



*AE2021 Best Poster Award winner
Paulo Gavaia. Photo from Paulo.*

The AE2021 Best Poster Award was presented to Paulo Gavaia (University of Algarve), Marisa

Barata, Catarina Oliveira, Ana C. Mendes, Florbela Soares, Pedro Pousão-Ferreira and Elsa Cabrita for their poster entitled "Skeletal Deformities in aquaculture-produced Greater Amberjack *Seriola dumerili*."

The awardees were presented a cash prize of €300 and a voucher kindly given by Springer (publishers of the EAS journal, Aquaculture International) to select a publication from their collection.

In his closing comments, EAS President Herve Migaud expressed his thanks to all those that had helped to make this such an enjoyable, high quality and safe event. It was especially important to be able to see each other again in person and Herve thanked the Hospital de la Luz, Funchal for having administered the Covid antigen testing for all participants.



So nice to see you again! At the AE2021 Welcome Drink and at the President's Reception

He welcomed all to the AE2022 event that will be held in Rimini, Italy from September 27-30 next year.

All photos courtesy of Ana Viskovic, EAS Communication Coordinator, except where mentioned.



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