

Making Science Count for Sustainable Aquaculture

Press Release: November 2017

The first **AQUAEXCEL**²⁰²⁰ industry brokerage event "FROM RESEARCH INNOVATION TO INDUSTRY APPLICATION" brought together researchers and aquaculture industry representatives during the Aquaculture Europe 2017 conference in Dubrovnik, Croatia, on 19 October 2017. This forum for engagement and exchange was hosted by the European Aquaculture Technology and Innovation Platform (EATiP) and AquaTT, both partners in **AQUAEXCEL**²⁰²⁰, an EU-funded Research Infrastructure project focusing on excellence in European fish research.

AQUAEXCEL²⁰²⁰ project coordinator, Dr Marc Vandeputte (Institut National de la Recherche Agronomique INRA, France), reflected on the event which was "a fantastic opportunity to discuss some of the important research achievements of the project as well as its precursor, the EU FP7-funded AQUAEXCEL project, and share those knowledge outputs with their end-users, the aquaculture industry stakeholders. Assuring effective and constructive contact between research and industry is a key component of **AQUAEXCEL**²⁰²⁰, to facilitate real uptake of the research innovations by the aquaculture industry".

Central to the brokerage event were pitches of three knowledge outputs of high potential for the European aquaculture industry. The outputs were previously selected by the **AQUAEXCEL**²⁰²⁰ Industry and Research Advisory Panel (IRAP) which comprises high-level professionals from the aquaculture industry and research sectors. These outputs resulted from projects conducted within the **AQUAEXCEL**²⁰²⁰ Transnational Access (TNA) programme so far. The TNA programme funds access to 39 aquaculture research facilities across Europe, offering researchers the possibility to undertake experimental trials on commercially important aquaculture fish species and system types.

Dr Laura Gasco (University of Turin, Italy) presented her research findings and industry solutions for substituting juvenile sea bass diets with insect mealworms to reduce the need for costly, volatile and unsustainable fish meal and oil. Dr Jaume Pérez-Sánchez (Institute of Aquaculture Torre de la Sal (IATS-CSIC), Spain) introduced a novel, comprehensive toolset that helps with the understanding and assessment of potential benefits of adding feed additives to plant-based diets for aquaculture fish. Both innovations could eventually support a more sustainable and competitive aquaculture sector.

Dr Petr Císař (University of South Bohemia, Czech Republic) showcased "3DFISH", an innovative infrared reflection system for use as a suitable real-time 3D fish monitoring and measuring technique. 3DFISH enables non-invasive monitoring of fish behaviour and welfare indicators in real-time which allows for an efficient and cost-effective detection of behavioural abnormalities. Its users can, for example, detect potential problems in aquaculture facilities such as poor water quality and early disease signs earlier than in conventional systems, which will help reduce financial losses.

In addition to these high potential knowledge outputs, research and innovation leaders within **AQUAEXCEL**²⁰²⁰ presented their newest findings together with some tasters of further expected outputs. In the next three years research will continue on, amongst others, fishlines, virtual laboratories, and experimental fish management. The project also offers services such as new training courses based on the latest results and the online European aquaculture facility directory.

It is imperative that aquaculture research considers the actual and future needs of the industry and Mr Kjell Maroni of the Norwegian Seafood Research Fund (Norway) presented some perspectives from

the industry. Mr Maroni, an **AQUAEXCEL**²⁰²⁰ IRAP industry expert and previous President of the European Aquaculture Society (EAS) said that "this is a very participative concept and it is the place where not only researchers can pitch their ideas to industry, but industry people can in return present their knowledge and technology needs".

The closing industry panel, moderated by Mr Courtney Hough (EATiP) and chaired by Mr Kjell Maroni and Dr Marc Vandeputte, discussed some of those needs, including the need for technological improvements, vaccines and genetics for better biological production, societal acceptance of aquaculture to allow for sustainable growth, better communication of research based results, and the promotion of "aquaculture open days" throughout Europe.

Supporting research innovation to industry application is key to **AQUAEXCEL**²⁰²⁰, and involves maintaining active communication, engagement and exchange of ideas between researchers and aquaculture industry stakeholders. A number of similar industry brokerage events will be held in the next three years, presenting more high-potential industry-relevant outputs. To find out more about the recent research findings from **AQUAEXCEL**²⁰²⁰ and their applicability to industry, please visit the project's website: www.aquaexcel2020.eu

Notes for editors

AQUAEXCEL²⁰²⁰ is a research and innovation action funded under the European Union's Framework Programme for Research and Innovation, Horizon 2020. The project will run for five years from 2015 to 2020, with a total budget of €9.7 million funded by the EU.

The **AQUAEXCEL**²⁰²⁰ consortium includes 22 partner organisations offering access to 39 top level aquaculture facilities in 12 European countries. The project is coordinated by the Institut National de la Recherche Agronomique (INRA) in France. AquaTT is the project dissemination partner.

The annual Aquaculture Europe event was held this year in Dubrovnik, Croatia, 17-20 October 2017. With a motto of 'Cooperation for Growth', it promoted increased cooperation between operators to ultimately foster positive growth in the European aquaculture sector. For more information regarding the event, please visit: https://bit.ly/2upsvPG

The brokerage event was opened by Ms Catherine Pons (EATIP, Belgium), followed by an introduction to the **AQUAEXCEL**²⁰²⁰ project by its coordinator Dr Marc Vandeputte (INRA, France). Then, the TNA programme was introduced to the participants by Dr Claudia Junge (AquaTT, Ireland) on behalf of Mr John Bostock (University of Stirling, UK). Two presentations on "Fostering Innovation from Research Infrastructures" introduced participants to the knowledge output selection process (Dr Claudia Junge) as well as the IRAP and its role in **AQUAEXCEL**²⁰²⁰ (Ms Catherine Pons).

The three industry pitches were followed by four presentations from **AQUAEXCEL**²⁰²⁰ work package leaders or partners on their behalf: Standardisation and maintenance of fishlines (Dr Marc Vandeputte on behalf of Dr Edwige Quillet, INRA, France); Virtual laboratories and modelling tools for designing experiments in aquaculture research facilities (Dr Hans Bjelland on behalf of Dr Gunnar Senneset, both SINTEF Ocean AS, Norway); Experimental fish management (Dr Åsa Espmark, Nofima, Norway); and New aquaculture training courses and an overview of the online European aquaculture facility directory (Ms Marieke Reuver, AquaTT, Ireland).

The final part of the brokerage event was dedicated to the industry perspective.

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AQUAEXCEL²⁰²⁰ partners, IRAP industry experts, TNA knowledge OUTPUTS presenters and two of the participants at the AQUAEXCEL²⁰²⁰ brokerage event at Aquaculture Europe 2017 in Dubrovnik (Croatia), from left: Mr Erturul Gündoğdu (Nesne Elektronik), Mr Courtney Hough (EATiP), Dr Jaume Pérez-Sánchez (CSIC), Hilal T. Gündoğdu (Nesne Elektronik), Dr Åsa Espmark (Nofima), Dr Petr Císař (University of South Bohemia), Dr Marc Vandeputte (INRA), Ms Catherine Pons (EATiP), Mr Arnault Chaperon (Caviar Pirinea), Mr Kjell Maroni (FHF), Dr László Varadi (Hungarian Aquaculture Association), Dr Laura Gasco (University of Turin), Dr Fernando Torrent (Universidad Politécnica de Madrid), Ms Pavlina Pavlidou (Selonda SA), Ms Marieke Reuver (AquaTT). ©AquaTT