



Newsletter No. 6

Dear reader,

This is the sixth and also last issue of the FucoSan newsletter. The project ends on 31th of August 2020. Based on the results so far, further activities of the partners will certainly follow!

The ABC Conference: algae bioactive compounds - from research to innovation on August 25 and 26, 2020

After three years of successful cooperation, the FucoSan project partners will present their scientific findings to a broad scientific audience at the project's final conference. Furthermore possible applications of bioactive extracts from algae will be discussed by experts in this fields and the first product developments presented. Due to the COVID-19 pandemic, the conference will be held online. www.fucosan.eu/conference

Keynote speakers from France and Norway

Two excellent keynote speakers will join the conference: Nathalie Bourgougnon, Director of Laboratory of Marine Biotechnology and Chemistry at the University of South Brittany and Trond Helgerud, Seaweed R&D Manager, Dupont Nutrition & Bioscience at DuPont, Norway. On 25 August, Nathalie Bourgougnon will open the conference with the presentation "Conventional and sustainable bioprocesses for the extraction of antiherpetic oligo- and polysaccharides from the red seaweeds". The French scientist is an expert in the extraction, purification and characterisation of marine resources. On the second day, Trond Helgerud starts off with "Fucoïdan in future applications – an industrial perspective". DuPont is one of the world's largest companies in the chemical industry. The section Nutrition & Biosciences focuses on innovative and sustainable solutions for the food, health, pharmaceutical and biotech industries.

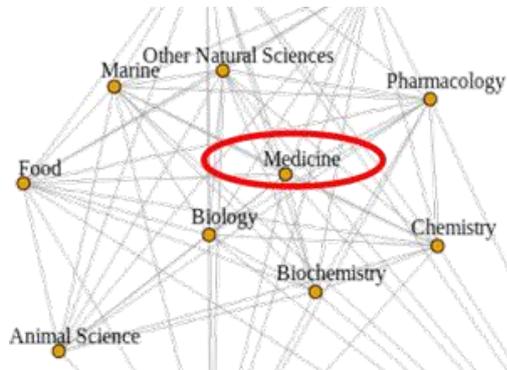
Abstracts from all over the world

A total of 20 abstracts were submitted. The geographical scope is enormous: authors come from Finland, France, Indonesia, Denmark and Germany. Scientists from Austria, Russia and Vietnam are involved as co-authors.

"We are very pleased with the extremely positive response to our Call for Papers showing that our German-Danish collaboration work is even recognised far beyond the cross-border region. This makes the conference even more interesting and enables us to network with even more international experts," project coordinator Alexa Klettner notes.



Study on multidisciplinary teams using the example of FucoSan



“How Knowledge Distance Determines the R&D Performance on the example of Fucoidans. The Moderating Effects of Network Ties and Absorptive Capacity” - This research paper of Daniel Laufs was accepted at the 27th Innovation and product development management conference (IPDMC). Together with Q-Aktiv, our project partner Daniel has conducted an exciting study on the optimal composition of multidisciplinary teams. Central impulses came from the interdisciplinary FucoSan project, where partners from science and industry work together.

Sharing knowledge: open fucoidan-database is online



The FucoSan partners have been producing fucoidans from brown algae of various origins for more than two years. In several teams, the extracts were characterised using different chemical and biological methods. All relevant properties were entered into a database. Thereby a reference was established for the first time that allows the selection of suitable fucoidans for different applications and commercial use. A part of this database has now

been published. It is freely accessible on the EU sponsored open science platform Zenodo. The simple structure is user-friendly and self-contained. For scientists also very important: The database can be cited as source, it has a digital object identifier (DOI) for use on digital networks.

"The Zenodo platform has been built and developed by researchers to ensure that everyone can participate in open science. We are very proud to make our contribution to this," says Ferran Giones, from SDU Technology Entrepreneurship and Innovation. Sandesh Neupane, from Kiel University adds: "The database is the basis for knowledge transfer: science and industry can use the results from the different extraction methods and characterisation as well as the documentation on the selection of the most suitable sources for fucoidans."

Click on the following link to access the Zenodo platform:

<http://doi.org/10.5281/zenodo.3876379>



Successful fucoidan candidates for cosmetics and ophthalmology identified



At the partner meeting in Sonderborg on February 13th Dr Levent Piker of OceanBASIS GmbH presented the latest findings from the pilot run "Cosmetics". The prototype for the cream is expected to be available by the end of the project. At the time of the meeting, it was already close to a marketable product, but needs more time for optimisation (e.g. regarding stability) and certification. The Kiel-based company for sustainable marine natural product extraction has developed an industrial process for the

extraction of the native brown alga *Fucus*, which leads to a nutritionally compatible and marketable extract. Further tests are required to specify the proven antibacterial activities. The research group dealing with the properties involved in the treatment of age-related macular degeneration was also able to report a success. After 90 extracts had been characterised, the most promising candidates capable of inhibiting the growth factor VEGF have now been found. This finding forms the basis for further research. However, there is still a long way to go before a corresponding drug can be launched.

Project facts

- 8 partner organisations
- 8 network partners
- Duration: Mar 2017 – Aug 2020
- Budget: 3.8 m Euro, thereof 2.2 m Euro funding
- Lead partner: University Medical Centre Schleswig-Holstein, Campus Kiel
- The project is funded by Interreg Deutschland-Danmark with means from the European Regional Development Fund. Read more: www.interreg5a.eu

Copyright © FucoSan, All rights reserved.

Pictures: The ABC Conference © FucoSan; Marine algae from the Kiel Fjord © NDR; Study on multidisciplinary teams © FucoSan; Sharing knowledge © Zenodo; Wyatt Technology Europe © Privat; Data Freeze © Pezibear/Pixabay; Successful Fucoidan candidates © LindaPrebreza/ Pexels

www.fucosan.eu