

News from CMSS

Welcome to new postdoc

On 1 September 2018 CMSS welcomed postdoc Fereshteh Baygi. She is originally from Iran where she completed her PhD in Health Promotion. During her PhD studies (2013-2017) she has been supervised by one of our senior researchers at CMSS.



After obtaining her PhD, Fereshteh continued her close cooperation with the senior researchers of CMSS by conducting a joint research project.

Scientifically, Fereshteh is interested in healthy workplaces and promotion of seafarers' health. Being the wife of a captain, she has spent several months on board of ocean-going tankers which has given her a valuable insight in seafarers' working conditions at sea. Her scientific background together with her knowledge gathered on board will be highly beneficial in her new position at CMSS. Fereshteh is eager to participate in new research projects and to help improve the health and work environment of seafarers.

Fereshteh along with her husband and two kids have already settled in Esbjerg, and they enjoy their new home in a peaceful area of the city within walking distance of the children's school and her workplace at SDU.

Establishing of the new CMSS register 'BLUE'

What and why?

Seafaring, fishery, working in off-shore and harbours are all very specific working environments with many challenges related to health and well-being. However, these challenges or risks related to health and other outcomes are not well documented, neither in Danish nor in other populations. Therefore, the overarching aims of establishing this database is to 1) describe and quantify health-related and other work-related indicators among Danish seamen, fishermen,

harbour and off-shore workers, and to 2) identify factors that are related to these indicators using Danish registers.

The data for this new database is obtained from the Danish Maritime Authority, the Statistics Denmark and the Danish Cancer Registry covering all seafarers, fishermen, working population in harbours and off-shore with a Danish identity number (civil registration number). In addition, data on the general population are used for comparison. The data from the Danish Maritime Authority includes all seafarers with a civil registration number, dates for signing on and signing off, and job position onboard. Other target populations are identified in databases from the Statistics Denmark. These data on target and general populations are linked with sociodemographic and work-related variables and many kinds of health-related information. The database covers varying periods depending on the register and variables used. This database may also be enriched with further datasets.

A question may arise: why this database? As one may conclude from above, the main objective for establishing this database is to improve the health and well-being of seamen, fishermen and other target populations. It is quite challenging to implement any preventive measures or interventions if there is no clear knowledge about what to prevent or what to intervene, or which subgroups to focus prevention or intervention on.

All in all, the new CMSS register 'BLUE' is unique, also on a global scale, and enables new approaches and projects which benefit both the industries and their employees and the academic science.

Two recently completed projects

BONUS SHEBA, Sustainable Shipping and Environment of the Baltic Sea

After 40 months of targeted research, the BONUS project SHEBA is now finalized. The project started on 1 April 2015 and was completed on 31 July 2018. It covers 7 Work Packages: Policies, scenarios and activity data (WP1), Air pollution (WP2), Water pollution (WP3), Noise (WP4), Assessment (WP 5), Interaction with stakeholders (WP6), Coordination (WP7).

The BONUS project SHEBA has brought together lead experts from the fields of ship emissions, atmospheric, acoustic and oceanic modelling, atmospheric and marine chemistry, marine ecology, environmental economics, social sciences, logistics and environmental law in order to

provide an integrated and in-depth analysis of the ecological, economic and social impacts of shipping in the Baltic Sea and to support development of the related policies on EU, regional, national and local levels.

The project results may be viewed on the website www.sheba-project.eu/deliverables/index.php.en in the form of deliverables from the associated WP's – which includes presentable, easy to access graphics, where one is shown as an example below:

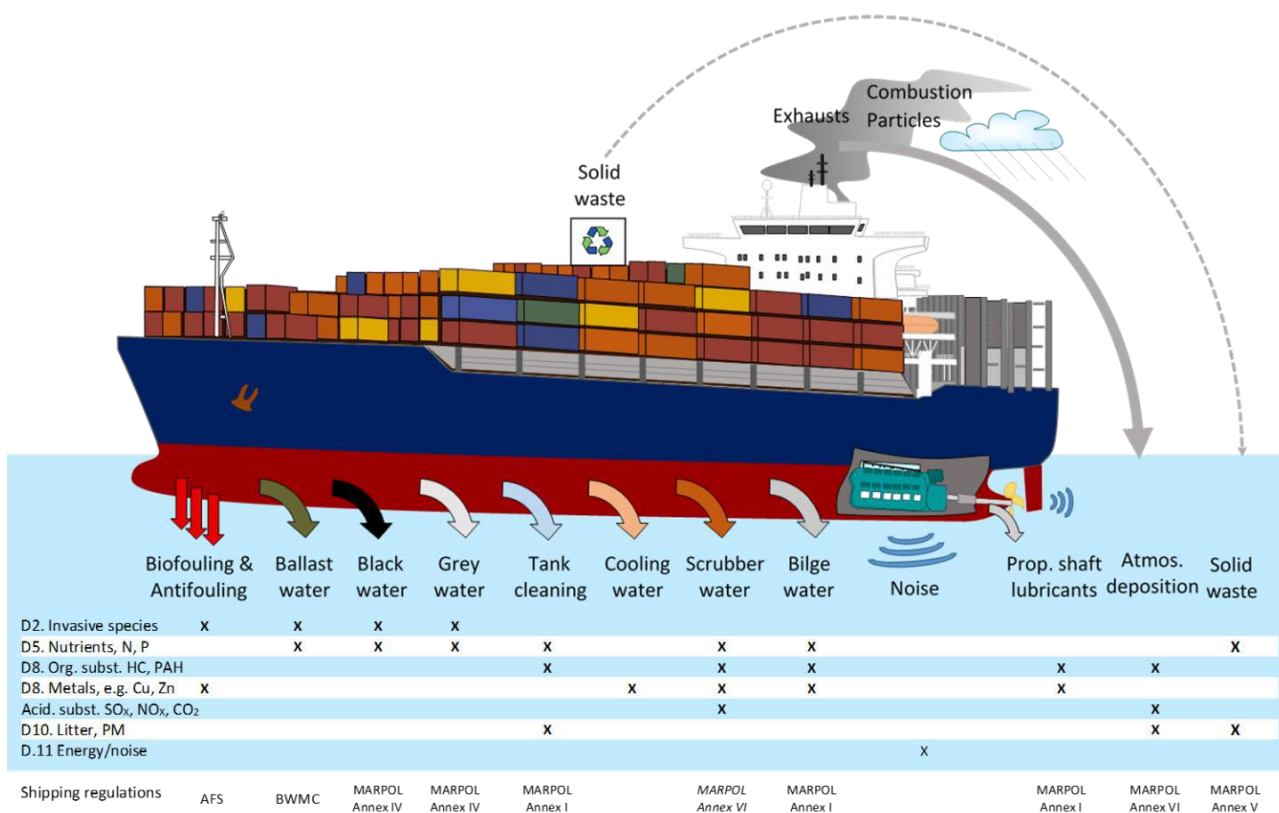


Figure 1. Different subsystems onboard ships, e.g. Antifouling, Ballast water or Bilge water give rise to waste streams from ships, regulated on individual ship's basis. The different waste streams may contain several pollutants, here categorized according to the descriptors in the MSFD, e.g. D2 Invasive species.

The overall ambition has been to aid the transformation process towards sustainable shipping. You can visit the homepage sheba-project.eu for more information.

A Gap analysis of the Maritime doctors' service profile compared to General practitioners

The survey which took place in 2017-2018 addressed all maritime doctors in the country (110) and a similar number of General Practitioners (GPs), with the aim of exploring the services offered to seagoing professionals, as well as their potential training needs on aspects of maritime medicine.

Some of the main findings showed that most of the seagoing professionals visit the maritime doctor, who is also their family physician, for their health concerns. Maritime doctors deal more with vaccinations, diagnosis, follow-up, and communication with authorities, while GPs deal more with general health promotion and patient education.

Both GPs, with and without designation as maritime doctors, are in favour of continuous professional development. Maritime doctors highlighted the need for the establishment of an accredited and flexible training course in Denmark - informative in maritime, offshore and diving medicine and provided by experienced instructors in the field. The three training areas reported as important were: 'Fitness Evaluation and Medical Examination Guidelines' followed by 'Rules and regulations within Maritime Medicine' and 'Working conditions and health risks on board'. Highly relevant topics included legal aspects, rejected case studies, and drug testing.

Additional suggestions highlighted the establishment of a website as a 'One stop-shop' with relevant guidelines and information, as well as the establishment of an Advisory Board for consultation in grey area cases.

The survey results of the GPs showed that maritime workers were not regarded as an especially risky occupational group. Most of them have very few maritime professionals on their lists. However, GPs were interested in learning more about occupational risks, diseases and follow-up practices targeting high-risk professions.

It is the first time that research has looked into this field with suggestions on quality improvements for services provided to the seagoing employees. You can read more about the project or gain access to the final report [here](#).

Esbjerg hosts 'MSSM on Tour 2019'

The Maritime Development Center (MDC) has chosen Esbjerg to host the MSSM conference in 2019. The conference will take place from 5 - 6 September at the premises of Fredericia College of Marine and Technical Engineering and SDU, Niels Bohrs Vej, Esbjerg. This year's theme is 'A shared responsibility', and the planning of an exciting and inspiring program is well under way. Read more about 'MSSM on Tour 2019' in the [press release from MDC](#).

A selection of other CMSS activities

Nordic/Arctic Network for research and development of health and safety in the fisheries

[IFISH 5](#) (The Fifth International Fishing Industry Safety & Health Conference) took place from 10 – 13 June at the Memorial University Campus in St. John's, Newfoundland and Labrador, Canada. CMSS had proposed to have a session entitled 'The needs for a Public Health program in Fishing' with the aim to create a Nordic/Arctic Network for research and development of health and safety in the Arctic fisheries. Despena Andrioti, CMSS and Ilona Denisenko, IMHA proposed to form an arctic group around health promotion in the fisheries. A Blue Jeans video conference was held afterwards where all interested participants could join the arctic research network and express their expectations to the network. The minutes from the meeting are available in the newly created website:

https://en.wikiversity.org/wiki/OHS_International_Networking

Symposium in Brussels

Assessing the EU Common Fisheries Policy: Stepping Up Efforts Towards Sustainability

The symposium, which took place on 12 September, was organised by 'The Public Policy Exchange', an independent European organisation working in close cooperation with the International Centre for Parliamentary Studies. They run a series of symposiums to initiate and develop platforms for policy development and networking.



From the left: Ilona Denisenko, Luisa Canals og Olaf C. Jensen

Olaf Jensen, CMSS, Luisa Canals, the former president of the International Maritime Health Association (IMHA) and Ilona Denisenko, the current president of IMHA, gave presentations in the session 'The Needs for a Public Health Program in an EU Sustainable Fishing Program'. Each of them presented different aspects of the relationship between health and safety and the administrative and economic conditions in the fisheries.

The experience from the meeting is that the fishermen's health and safety has been neglected in these sustainability programs. Further, it will be a challenging mission to survey the needs and to teach the institutions about the need to include health and safety in the sustainable programs in the fisheries.

From the feedback the organisers received, the symposium was a success. You can find the program and further information here <https://www.publicpolicyexchange.co.uk/events/II12-PPE2>.

Visby Maritime Symposium

The Visby Maritime Symposium with the theme 'International Merchant Shipping in the 21st Century: Social Science Perspectives on Opportunities and Challenges' was held in the beautiful island of Gotland, Sweden on 10 – 12 October.

The purpose of the Visby Maritime Symposium was threefold: 1) to take stock of insights from current research on the sociological, socio-technical, psychological and health-related aspects of living and working in maritime organisations and on-board merchant vessels, 2) to discuss directions for future research to meet the challenges facing merchant shipping in a socially responsible way, and 3) to establish and strengthen connections among a network of researchers that facilitate the exchange of experiences, provide constructive feedback and inspire new research collaborations.

The scientific programme was divided into three themes: social interaction and life onboard, safety, and wellbeing. The keynote addresses discussed 'Key developments and challenges for shipping in the next 50 years'. The scientific presentations were an engrossing mixture of different approaches.

Kimmo Herttua, CMSS contributed to the scientific programme by presenting 'Socio-demographic Differences in Evacuations at Sea: A Register-Based Study on Danish-Flagged Merchant Ships' which aroused lively discussion among the public. All in all, Visby Maritime Symposium was a conference characterized by a high scientific quality and a stimulating atmosphere.

Publications

Recently published scientific articles from CMSS (names of CMSS employees marked in bold)

- **Dohrmann SB**, Leppin A. Determinants of seafarers' fatigue: a systematic review and quality assessment. *International Archives of Occupational and Environmental Health* 2017; 90(1): 13-37. Doi: [10.1007/s00420-016-1174-y](https://doi.org/10.1007/s00420-016-1174-y).
 - Huici O, Skovgaard M, Condarco G, Jørs E, **Jensen OC**. Management of Empty Pesticide Containers: A Study of Practices in Santa Cruz, Bolivia. *Environmental Health Insights* 2017; 11. Doi: [10.1007/1178630217716917](https://doi.org/10.1007/1178630217716917).
 - **Baygi F**, **Jensen OC**, Shidfar F, Farshad A, Mohammadi F. A qualitative study on physical health threatening factors of Iranian seafarers working on ocean-going Tankers. *International Maritime Health* 2018; 69(3): 192-200.
 - Shah B, **Andrioti D**, **Jensen OC**. Training needs among maritime professionals: a cross sectional study. *International Maritime Health* 2018; 69(2): 129-136.
 - Thorvaldsen T, Kaustell KO, Mattila TEA, Høvdanum A, **Christiansen JM**, Hovmand S, Snorrason H, Tomasson K, Holmen IM. What works? Results of a Nordic survey on fishers' perceptions of safety measures. *Marine Policy* 2018, 95: 95-101. Doi: [10.1016/j.marpol.2018.06.022](https://doi.org/10.1016/j.marpol.2018.06.022).
 - Mouchtouri, VA, Van Reusel D, Bitsolas N, Katsioulis A, Van den Bogaert R, Helewaut B, Steenhout I, Damman D, Cornejo MD, Hadjichristodoulou C, **Andrioti D**, Barbouni A, Broekhuijsen J, Dirksen-Fischer M, Ferrelli R, Kairienè B, Kantonis A, Kokosharova G; Kostara E, Kunchev A, Otorepec P, Petraitis R, Pilipavicius R, Martinez CV, Vozelevskaja N, Wagner D. European web-based platform for recording international health regulations ship sanitation certificates: Results and perspectives. *International Journal of Environmental Research and Public Health* 2018, 15(9): 1833. Doi: [10.3390/ijerph15091833](https://doi.org/10.3390/ijerph15091833).
 - Zhang S, Shi G, Liu Z, **Zhao Z**, Wu Z. Data-Driven Based Automatic Maritime Routing From Massive AIS Trajectories In The Face Of Disparity. *Ocean Engineering* 2018, 155: 240-250. Doi: [10.1016/j.oceaneng.2018.02.060](https://doi.org/10.1016/j.oceaneng.2018.02.060)
 - **Kourantidou M**, **Kaiser B**. Research agendas for profitable invasive species. *Journal of Environmental Economics and Policy* 2018. Doi: [10.1080/21606544.2018.1548980](https://doi.org/10.1080/21606544.2018.1548980).
- Vestergaard N**, (ed.), **Kaiser B**, (ed.), Fernandez L, (ed.), Larsen JN, (ed.). *Arctic Marine Resource Governance and Development*. Springer, 2018. (Springer Polar Sciences). <https://doi.org/10.1007/978-3-319-67365-3>.



- Nguyen TT, Solgaard HS, Haider W, **Roth E**, Ravn-Jonsen L. Using Labeled Choice Experiments to Analyze Demand Structure and Market Position among Seafood Products. *Agribusiness* 2018;34(2):163-189. Doi: [10.1002/agr.21504](https://doi.org/10.1002/agr.21504).

You can find more CMSS publications and bibliographic details by clicking [here](#).