

# SUBMARINER - SUSTAINABLE USES OF BALTIC MARINE RESOURCES

Beate Cuypers and Frank Neudörfer

BioCon Valley Mecklenburg-Vorpommern e.V., Rostock, Germany  
E-mail: [bc@bcv.org](mailto:bc@bcv.org) : [fn@bcv.org](mailto:fn@bcv.org)

The Baltic Sea is one of the world's largest brackish waters. To use its resources in an economical and environmental-friendly way, 19 institutions from 8 countries work on the 3-year-project 'SUBMARINER - Sustainable Uses of Baltic Marine Resources'. In an already published compendium, solutions for new innovative applications together with coordinated cross-border implementations are highlighted. This compendium is the guide and basis for politicians and stakeholders for a positive development of the Baltic Region. Additionally, a network is generated which should be expanded further after the finished project.

In Mecklenburg-Vorpommern (Germany), BioCon Valley MV e.V. is working on marine functional genomics as part of the chapter 'blue biotechnology' in the compendium.

With modern molecular biological methods the theoretical genomic potential as well as specific activities of microorganisms or their products can be estimated. New metabolic activities and adaptation strategies can be developed with model organisms, bioactive substances can be isolated from distinct organisms for use in the pharma-, cosmetic- and food industry and the environment can be monitored and protected.

With the Ernst-Moritz-Arndt-University and the Institute of Marine Biotechnology e.V. (IMaB), Greifswald is one of the main players in biotechnology research in Germany. Experience as well as prominent platform technology is excellent with marine proteomics as a unique selling point.

The poster gives more insights in the possibilities to transfer research in marine genomics in applicable techniques to better understand the microbial life in the Baltic Sea, improve the environment and use the bioresources to positively develop the whole Baltic Sea Region.

## References

[www.submariner-project.eu](http://www.submariner-project.eu)  
[www.bcv.org](http://www.bcv.org)