

WALTER AND ANDRÉE DE NOTTBECK FOUNDATION

Annual Report 2018

The Walter and Andrée de Nottbeck Foundation was established in 1970, and 2018 was thus the Foundation's 49th year of activity.

The Foundation's Board of Directors consisted of D.Sc. (Tech.) h.c. **Ole Johansson** as the chairman, partner **Henrik Mattson** as the vice chairman, and Group CEO **Alexander Bargum**, prof. **Jorma Kuparinen**, rector at the University of Helsinki, prof. **Jari Niemelä**, and Ph.D. h.c. **Carola Teir-Lehtinen** as other members.

The Foundation's scientific committee consisted of prof. **Jari Niemelä** as the chairman, followed by Ph.D. h.c. **Carola Teir-Lehtinen** in May, when Jari Niemelä resigned from his duties in the scientific committee. The other scientific experts were prof. **Jorma Kuparinen**, environmental counsellor **Maria Laamanen** and two members from the Stockholm University, Sweden, prof. **Ragnar Elmgren** and prof. **Christoph Humborg**. The expert group's main task is to evaluate the grant applications and together with the board of directors coordinate the foundations scientific policy.

The Foundation's Board of Directors held three meetings together with the Scientific Committee: on February 26 in Helsinki, on May 21 at Tvärminne and on November 7 in Helsinki. The Foundation's annual meeting was held at Tvärminne on May 26. The Scientific Committee had a strategic meeting in Helsinki in connection of the February Board meeting and a grant meeting on October 25, 2018.

RESEARCH IN 2018

The principal aim of the research supported by the Foundation is to investigate the function and the changes in the Baltic Sea ecosystem. The Foundation is jointly with the University of Helsinki funding the professor in Baltic Sea Research **Alf Norkko**, and from the beginning of 2018 the Foundations is also funding a tenure track professor, PhD **Aleksandra Lewandowska**, both of whom work at the Tvärminne Zoological Station.

In 2018 scholarships were granted to two senior research fellows, two postdoctoral researchers, four research projects, eleven Ph.D. students and two specific research tasks, as well as and three M.Sc. students. Besides personal grants, the Foundation also financed research related tasks, e.g. the Foundation supported several researchers' participation in international congresses and workshops abroad, as well as foreign researchers' visits at Tvärminne. The Foundation also paid for research related costs at the Tvärminne Zoological Station like laboratory costs, boating as well as travel to and lodging at the research station. These costs were mostly incorporated in the other costs of the projects. The grants are listed below.

1. Senior research fellow grants, total sum **8 007 €**, including 3 900 € for grants and 4 107 € for other expences

1.1 Ronnie Glud– *The breathing seabed: Linking benthic community structure to biogeochemical function* (one month's grant 1 400€, other expenses 1 059 €)

1.2 Kay van Damme– *The Baltic Sea Cladocera (Crustacea: Branchiopoda)* (one month's grant 2 500 € and other costs 3 049 €).

2. Postdoctoral grants, total sum **35 400 €**, including 34 500 € for grants and 900 € for other costs.

2.1 Anna-Karin Almén – *Effect of plankton phenology on POC export* (12 months grant 27 600 € and other costs 900 €).

2.2 Maria Koivisto – *Faunal diversity in two rocky shore habitats of the northern Baltic Sea – a comparison between *Fucus* and *Mytilus** (3 months grant 6 900 €).

3. Research projects, total sum **30 253 €**

3.1 Camilla Gustafsson – *Relationships between plant traits and ecosystem processes along environmental gradients in temperate plant communities* (research costs 9 408 €)

3.2 Alexandra Lewandowska – *Resource competitive ability of marine phytoplankton along a salinity gradient and the consequences for stoichiometric variation in the sea* (research costs 4 625 €).

3.3 Iván Rodil – *Baltic Sea eutrophication: the effects of increasing accumulations of drifting algal detritus on the functioning of shallow coastal habitats* (research costs 13 948 €)

3.4 Tobias Tamelander – *Phytoplankton mortality in marine ecosystems: Feedbacks to the pelagic detritus pool and biogeochemical cycling in a changing environment* (research costs 2 273 €)

4. Work on Doctoral theses, total sum **256 449 €**, including 216 450 € for the grants and 39 999 € for other expenses.

4.1 Charlotte Angove – *Relationships between aquatic plant traits and ecosystem processes along environmental gradients in diverse plant communities* (12 months' grant, 23 400 €, other expenses 281 €).

4.2 María Teresa Camarena Gómez – *Changes in spring bloom community composition and its effects on nutrients flux in the Baltic Sea* (10 months' grant, 19 500 € other expenses 2 100 €).

4.3 Samu Elovaara – *Cycling of dissolved and particulate organic matter in the pelagic marine environment: Impact of phytoplankton community mortality and microbial degradation* (12 months' grant, 23 400 €, other expenses 8 921 €).

4.4 Johanna Gamma I – *Benthic macrofaunal communities and ecosystem function relationships in the heterogeneous coastal zone* (8 months' grant, 15 600 €, other expenses 609 €).

4.5 Jacqueline Jerney – *Ecological and evolutionary significance of seed banks for the expansion of phytoplankton blooms in the Baltic Sea* (12 months' grant, 23 400 €, other expenses 4018 €).

4.6 Mari Joensuu – *Sediment resuspension and nutrient fluxes across habitat gradients of the Baltic Sea* (4 months' grant, 7 800 €, other expenses 2 999 €).

4.7 Ilmari Kahma – *The effects of increasing accumulations of algal detritus on the fate of organic carbon in shallow coastal habitats from the Baltic Sea* (12 months' grant, 23 400 €).

4.8 Pinja Näkki – *The fate and impacts of microplastics in seafloor habitats* (12 months' grant, 23 400 €, other expenses 1 476 €).

4.9 Iris Orizar – *Resource competitive ability of marine phytoplankton along a salinity gradient and the consequences for stoichiometric variation in the sea* (8 months' grant, 9750€).

4.10 Roxana Preston – *The origin and regeneration of free-living populations of *Fucus vesiculosus* in the northern Baltic Sea* (12 months' grant, 23 400 €, other expenses 8 996 €).

4.11 Leena Virta – *A trait-based approach for diatom functional biogeography in the Baltic Sea* (12 months' grant, 23 400 €, other expenses 10 601 €).

5. Pro gradu theses (MSc theses) were supported with **7 796 €**, of which 6 000 € were grants and 1 796 € were used for other expenses.

5.1 Anna Lyssenko – Biodiversity and oxygen dynamics within seagrass and macroalgal canopies (grant 2 000 €, other expenses 596 €)

5.2 Elin Lönnberg – How is habituation in the common eider (*Somateria mollissima*) affected by cognitive abilities, experience, the dangerousness of the environment and their possible interactive effects? (grant 2 000 €, other expenses 600 €)

5.3 Jyri Tirroniemi – Anthropogenic pressures affect microplastic abundance in the Finnish coastal bottom sediments (grant 2 000 €, other expenses 600 €)

6. Other research support, total sum **16 170 €** for expenses.

6.1 Eeva Eronen-Rasimus – *Polar microbes symposium – from single cells to metagenomes with emphasis on sea ice* (expenses 12 070€).

6.2 Simon Thrush – *Ecology of Marine Sediments* (expenses 4 100 €).

7. Other research costs

Prof. **Alf Norkko** used **5 059 €** and the quest professor **Christoph Humborg** **10 018 €** for research expenses, their own travel costs and the costs of guest researchers' visits at Tvärminne. Support for the Tvärminne Zoological Station, including purchasing, updating and servicing equipment was **10 600 €**. The experts' remunerations and secretary's salary costs was totally **15 412 €**. Costs of meetings including the two Swedish experts' travel costs amounted to **3 194 €**. The cost for purchasing and maintenance of an electronic program for administration of the grants **8 173 €**, and the cost for home page maintenance **372 €**.

TOTAL BUDGET for 2018

The total sum of personal grants was **260 850 €**. The Foundation's share of the cost for the two professorships was **112 456 €**. The Foundation supported research work by subsidising research visits, participating meetings and congresses, laboratory chemicals, equipment and analyses, research vessel costs, etc. with the total sum of **123 200 €**. Administrative costs covering also the expert group meetings and the experts' and the secretary's remuneration was **18 606 €** in total. Electronic grant administration and home page costs amounted to **8 545 €**. Other costs, including bank costs, accountancy, auditing, etc. was **11 597 €**. The bank cost for the stock portfolio was **32 555 €**. The payments of all costs were handled through SEB, Skandinaviska Enskilda Banken AB.

January 6, 2019

Elina Leskinen
Secretary