4 Members of the consortium

4.1 Participants (applicants)

1, EAWAG

Dr. Carlos J. Melian will work for EAWAG in ROBHOOT.

Carlos J Melian takes the official coordinator lead of the ROBHOOT project and takes care of the management.

The Swiss Federal Institute for Aquatic Science and Technology (EAWAG) is an independent research institute within the Swiss Federal Institute of Technology (ETH) domain. As such it is an independent partner in a network of exceptionally strong research and education institutions (2 federal universities and 4 federal research institutes). EAWAG is a world-leading water research institute. EAWAG hosts over 300 research fellows, postdocs and PhD students, who are supported by technical and support staff.

Contributions to ROBHOOT

EAWAG is the coordinator of the project. EAWAG contributes to WP2 and WP5 for eco-evolutionary diversification modeling (EEDA) and management, respectively. EAWAG has a wide experience in theoretical ecology and computational biology with particular attention to diversification processes in ecosystems. In WP2, EAWAG will lead the development of a theoretical model linking diversifying traits and interactions for species, human groups and technologies to allow WP2 to implement this feature in causal knowledge discovery. On the other hand, in WP5, EAWAG will be responsible for the management and work process of the project.

Dr. Carlos Melián (male) is a tenured researcher in Theoretical Evolutionary Ecology at EAWAG and associate professor at the University of Bern. Dr. Melián is widely recognized as an expert in Eco-evolutionary networks where he has contributed with novel approaches combining stochastic modeling and empirical patterns to study the interaction between ecological and evolutionary dynamics in multispecies assemblages. Dr. Melian has made important contributions to the fields of Ecological Networks. Most of his contributions combine stochastic modeling, large empirical datasets, and Bayesian approximations, to quantify the impact of intra- and inter-specific trait variation on species interactions, divergence and the macroscopic properties of ecological networks. He has been Principal Investigator in 15 projects obtained in 5 different countries (Spain, USA, UK, Germany and Switzerland) with a total of approx. 1 Million Euro. He has successfully co-supervised 5 PhD students and supervised 7 postdocs. The feasibility of this proposal is firmly established by his track record further reinforced by his solid and active international network of collaborators. Among others, he works with Prof. S. Allesina (U Chicago, USA), Dr. A. Eklöf (Linköping U, Sweden), Prof. P. Guimares (U Sao Paulo, Brazil), Prof. M. O'Connor (U Vancouver, Canada), and Dr. F. De Laender (U Namur, Belgium). Currently he coordinates a project about coevolving traits in species-rich ecosystems to investigate how feedbacks between interacting traits control the functioning of aquatic ecosystems. This provides a direct link to the work planned in ROBHOOT.

Gender balance

Dr. Melián's Lab has currently three female scientists. Dr. Catalina Chaparro (Colombia), is a post-doctoral researcher working in theoretical ecology. She has been recently funded by the Marie Curie EU grants. Dr. Chaparro is currently working on modeling the eco-evolutionary interactions between over-fishing and trait evolution to explore coexistence mechanisms in complex ecological systems. Dr. Cecilia Andreazzi (Brazil) is a postdoctoral researcher working in theoretical ecology with a strong background in evolutionary processes. She is working in how trait coevolution between predators and preys control