PROTOCOL FOR STAGE EXCHANGE WITHIN THE NEWFORESTS PROJECT

Project summary

The NEWFORESTS exchange program brings together researchers from 5 research institutions: two from public research centres in Spain, Forest Sciences Centre of Catalonia (CTFC) and Centre for Ecological Research and Forestry Applications (CREAF), one French institution, Bio-Archaeology and Ecology Centre (CBAE), and two Canadian Universities (University du Québec à Montréal, UQAM, and in Abitibi-Témiscamingue, UQAT) hosting two of the main hubs of the Centre for Forest Research (CEF).

During three years, a total of 36 senior researchers will participate in the program with a total of 328 man-months including experienced and early stage researchers, technical and management staff from the different centres.

The aim of this proposal is to create a competitive platform at the international level to analyse the responses of forest ecosystems to global changes and integrate current knowledge in sound and innovative forest management and planning approaches. The general objective of the program is to determine how to effectively integrate woodland management (including non-management options) into strategies aimed to adjust and mitigate global change. The program is organized in 5 thematic work packages ranging from the basic understanding of forests dynamics, biodiversity and functioning (WP 1 and 2) to research on interactions between global change drivers determining disturbances regimes (WP 3) and the integration of the gathered knowledge into advanced modelling tools (WP 4) and sound management guidelines at different spatial scales (WP 5). Finally, a project management WP (6) depicts the practical organization and management of the project. A fundamental aspect of the program is that it stresses not only the responsibility of human society as a major driver of global change, but also recognizes that we have an opportunity to mitigate this change through informed, proper management decisions.

The exchange programme NEWFORESTS will be managed through a governing board having one representative per partner organization (WP 6) which will supervise that all scientific activities are carried out according to the planned exchange. To ensure adequate transfer of knowledge between partners through exchanged scientists and technicians, a subgroup of two senior researchers involved in each of the WP will be responsible to supervise and report on the activities carried out to the governing board. These coordinator teams of each of the WP which will be composed by two researchers, one from a Canadian institutions and another from an European institution and will be selected during the first kick-off meeting by the governing board.

Being NEWFORESTS a new exchange project with a total duration of three years, unexpected changes in priorities could arise in the forthcoming months after its starting date. The project governing board will be also responsible to adapt objectives and schedules to the new conditions. Decisions made by the governing board will have as a general principle to adjust to the DoW while introducing new constraints at the scientific and/or logistic levels. Changes will be accepted only if all members of the board representing the different partners agree by consensus.

The project is organized to ensure a close linkage between all team members. All students will be co-directed by different co-applicants, collaborators and partners from the project and we will also search to include other internationally well-known researchers to be part of their thesis committee. Consultation with governmental and private partners will be made on a regular basis. Student visits in the different laboratories in Canada, France and Spain will be strongly encouraged and research seminars will be planned to maximize the participation of these students. The thematic and research objectives of the project will be pursued by a number of activities and actions that have as a main objective the reinforcement of current transatlantic initiatives and the development of new joint projects and research approaches. The researchers in charge of management activities identified in this section can be replaced by other researchers, and in accordance with the definitions contained in Art. III.1. if they take part in the exchange activities.

These actions have been divided in two different categories according to their nature and the character of the specific objective to be achieved: mobility and promotion of innovation.

Mobility: Actions aimed at promoting the visit of researchers and students into each other's organizations. These actions focus on the implementation of specific research projects involving actors from the different lab's partner organization.

- **Experienced researcher stays:** Based in the described WP and tasks and in relation of the priorities agreed upon after general thematic discussions including the research plan outlined in the work packages. These stays range from 1 to 12 months in length.

- Early stage researchers: promoting the development of common projects supervised by experienced researchers from at least two of the project partner's organizations. These exchanges may range from 1 to 6 months in length.

-Technicians and management staff: promoting the exchange of specific knowledge at the technical or administrative level between the partners. These exchanges may range from 1 to 3 months in length.

Promotion of innovation exchange: Actions aimed at promoting the exchange of ideas and approaches between the partners and eventually between them and third parties.

Annual meetings aimed at refining common thematic lines of collaboration between the labs. The meetings should have specific expected outputs that will mainly revolve around the identification of priority areas where partner collaboration and integration of available knowledge will have a stronger impact. The first annual meeting should focus on groups of people already working together, but also favour the active involvement of new researchers into the lab activities. The entire research team (professors, students and research assistants) will meet at once per year to discuss ongoing progress and problems with the project. At these meetings, all researchers will present their findings and questions relative to the ongoing experiments. A field visit will also be organized during each on-site meeting. Ongoing communications will also be conducted via email and all pertinent information about the project will be put on a website. Skype meetings or other similar remote system communication systems will be also a common communication methodology to be regularly established to serve as complement to the exchanges between partners.

Actions aimed at favouring the involvement of researchers from partner organizations (as core researchers or observers) into active or planned projects to enhance effective transfer of knowledge and skills. Beyond the core group of NEWFORESTS partners, other collaborations are in place with specific added value to be gained through the participation of their researchers to the programme, on a voluntary basis.

Thematic cross cutting workshops of special interest will be organized to strengthen the longer-term vision of research teams within and beyond the partnership, and can serve as a basis for future activities, ensure that the ERA is a key element of frontier science, and reinforce the common identity of the partnership. These workshops will be key to ensuring that each partner institution brings its own specific expertise, knowledge and vision to the joint programme and that exchanges can occur and synergies be found, in a longer-term perspective.

These workshops will be outlined during annual meetings and partially supported by NEWFORESTS together with existing funding from projects on selected topics. We will use available new technologies to give access to some seminars directly on the web. Promotion the development of common, transcontinental research projects, based on the existing collaborations but also the outputs of the cross cutting

workshops. Partners will join forces though the establishment of a virtual projects team transversal to all institutions, which will be used to mobilize both local and international funding.

Actual protocol for mobility applications

- **Sending applications form:** 1 page.
- Person conducting stage, supervisors- coworkers. Timing (length of stay), Topic (WP), relevance to the NEWFORESTS priorities.
 - Assessment by partner coordinators and communication to governing board.
 - Final decision to applicant.
- **Conditions for the stay.** NEWFORESTS project will cover flight tickets to Quebec and back and provide a plain fee of 1000 euros per month (early stage) and 1400 Euros (Senior) to cover extra costs of the stay.
- Applicants should provide a report of the stay including topics included and results derived from the research activities conducted within 1 months of the end of the stay.