

COST Grant work plan

I. ACTION PROFILE

Domain: FA

Action no. and title: FAO804 Molecular farming: plants as a production

platform for high value proteins

Chair: Dr Kirsi-Marja Oksman-Caldentey

START date: 27.11.2008 **END date:** 26.11.2012

Number of signatories: 23

Number of non-COST members: 3

Number of COST country entities (institutes, etc.) currently participating:

23 countries; 68 institutes

Number of non-COST entities (institutes, etc.) currently participating: 3

Number of MC Members: 66 (including substitute members)

Working Groups with numbers, titles and approximate number of members:

WG1 Strategic development of Molecular Farming; 53 WG2 Production systems and process development; 60 WG3 Target molecules assessment of (clinical) need and production feasibility; 34



II. DETAILED BUDGET

(1) MEETINGS

Management Committee Meetings

Location: Warsaw, Poland

Date: 7.9.2012

Number of participants to be reimbursed: 20

Travel costs: 14 500 €

Working Group Meetings

Annual meeting with all the working groups:

WG1 Strategic development of Molecular Farming; WG2 Production systems and process development WG3 Target molecules assessment of (clinical) need and production feasibility

Location: *Warsaw, Poland* Date: 5.9. – 7.9.2012

Number of participants to be reimbursed: 30

Travel costs: 22 000 €

Organisational support: 1 500 € (for 30 participants plus 20 MC members)

WG1 meeting (Optional if additional funding from COST office could be raised)

Location: *Rostock, Germany* Date: January/February 2013

Number of participants to be reimbursed: 20

Travel costs: 14 500 €

Organisational support: 600 €

Final conference

Location: Valencia, Spain

Date: May 2013 (if the extension of the Action is granted)

Number of participants to be reimbursed: 60

Travel costs: 46 200 €

Organisational support: 1 800 €



(2) SHORT TERM SCIENTIFIC MISSIONS (STSMs)

Number: 3 Costs: 7 500 €

(3) TRAINING SCHOOLS

Not planned for the last period.

(4) PUBLICATIONS, DISSEMINATION, OUTREACH

Final publication

Cost: 10 000 € (separate budget to be applied by November 2012)

(5) SECRETARIAL COSTS

Up to 15 % of (1 to 4): 17 190 €



III. WORK PLAN

(1) OBJECTIVES

This Action has been extremely active and during the past grant period the objectives were focused to better meet developments of plant molecular farming in Europe and globally, both in academia and also in the industrial sector.

The main objective of the Action is to co-ordinate European efforts in molecular farming (MF) explicitly focusing on the key barriers that hinder the rapid development and commercialization of products and the efficient establishment of a pipeline of second and third generation products that will sustain the industry for the next two decades.

WG1 Strategic development of Molecular Farming

In order to implement activities and apportion tasks related to the activities of the four Focus Groups (FGs) we propose an additional WG1 meeting to be organized before the final conference (if the extension of the Action is granted).

WG1 Objectives during the final period of the Action:

- to implement the action plan which was made during the last grant period in order to enhance broad awareness of the impact of the present EU regulatory burden on transgenic crops in general and molecular farming applications in particular (FG1)
- to complete the implementation of the plan made for communication and engagement with stakeholders and the media (FG2)
- to complete the active dialogue with the media, schools, decision makers and the public at large (FG2)
- having established links with a number of key developing country groups active in molecular farming (China, India and Brazil), to continue and expand such activities and deliver outputs as indicated in the subsequent section to address the global dimension and impact of MF, specifically in the developing world (FG3)
- to implement the developed strategy on how to leverage Public sector IP to maximize MF commercial outputs (FG4)
- to complete developing "Socially responsible licensing" related to our Action (FG4)



 to continue educating high school students on PMP. PMP as a case example of plant biotechnology (GMO's) in the context of socioeconomics and regulatory framework

WG2 Production systems and process development

WG2 Objectives during the final period of the Action:

- to complete the implementation of the activities and data from ongoing MF projects into the evaluation of the different plant production platforms
- to summarize together with WG3 the plant expression platforms that are beneficial for the production of specific protein and vice versa
- to coordinate the series of the articles on plant molecular farming future perspectives to be published in Transgenic Research together with WG1

WG3 Target molecules assessment of (clinical) need and production feasibility

WG3 Objectives during the final period of the Action:

- to develop the host and target protein Database in such a way as to allow potential users to develop their own product pipelines
- to identify promising candidates of industrial, clinical and academic relevance/importance
- to identify where industry, clinic and academia are congruent in their views on producing target molecules
- to finalize the white paper "Opportunities and challenges in the production of valuable proteins using plant molecular farming" together with WG2



(2) **ACTIVITIES**

The major activities are to compile a comprehensive output (final publication) and to organize a conference which would be open for a broad audience.

Annual meeting to be organized in Warsaw, Poland in September 2012 (all WGs and MC meeting)

Coordinate the publication of a series of perspective articles on different molecular farming aspects in the journal Transgenic Research.

Optional: WG1 meeting related especially to the activities of Focus Groups 1 and 3.

(3) OUTPUTS PLANNED FOR YEAR

- Series of the articles submitted and published in *Transgenic Research*
- Special issue on the use of plants for the production of molecules of pharmaceutical importance to be published in *Current Pharmaceutical Design*
- Position and White papers
- Final publication
- Successful final conference



COST Grant budget plan

Action no. and title: FAO804 Molecular farming: plants as a production platform for high value proteins

Grant period: 1.4.2012 – 31.5.2013 (if the extension is granted)
Allocated budget: 110 000 € (131 790 € including the optional WG1 meeting)

A. SUMMARY BUDGET

(1) MEETINGS € 101 100

(2) SHORT-TERM SCIENTIFIC MISSIONS € 7 500

(3) TRAINING SCHOOLS

(4) PUBLICATIONS, DISSEMINATION, OUTREACH

B. TOTAL SCIENCE EXPENDITURE sum of (1) to (4) € 108 600

C. SECRETARIAL SUPPORT (max. of 15% of B.) € 16 290

D. TOTAL EXPENDITURE (B+C) € 124 890