

COST Grant workplan

I. ACTION PROFILE

Domain: Biomedicine and Molecular Biosciences (BMBS)

Action no. and title: BM1206 - COOPERATION STUDIES ON INHERITED SUSCEPTIBILITY TO COLORECTAL CANCER

Chair: Dr. Sergi Castellví-Bel

START date: 30/04/2013

END date: 29/04/2017

Number of signatories: 17

Number of non-COST members: 0

Number of COST country entities (institutes, etc.) currently participating: 31

Number of non-COST entities (institutes, etc.) currently participating: 0

Number of MC Members: 24 (+6 MC Substitutes)

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

Working Group 1 (WG1): Genetic Association Studies, 21 members

Working Group 2 (WG2): Functional Genomics, 14 members

Working Group 3 (WG3): Next Generation Sequencing, 19 members

Working Group 4 (WG4): Statistical Modeling, 21 members

II. DETAILED BUDGET

(1) MEETINGS

Management Committee and Working Groups Joint Meeting

Location: EDINBURGH

Date: 21-23/10/2013

Number of participants to be reimbursed: 34 (4 local participants)

Travel costs: 22,400€

Organisational support: 4,000€ (room, technical equipment rental and coffee breaks for 2 days)

Management Committee and Working Groups Joint Meeting (see TRANSLATIONAL GENOMICS IN BIOMEDICINE workshop)

Location: BARCELONA

Date: Beginning of March/2014 (one day before workshop)

Number of participants to be reimbursed: 35 (2 local participants)

Travel costs: 24,000€

Organisational support: see Workshop below

Workshops and Conferences

Title: TRANSLATIONAL GENOMICS IN BIOMEDICINE

Location: BARCELONA

Date: Beginning of March/2014 (2 days)

Number of participants to be reimbursed:

Travel costs:

Organisational support: 10,000€

(2) SHORT TERM SCIENTIFIC MISSIONS (STSMs)

Number: 4 grants

Cost: 5,500€

(3) TRAINING SCHOOLS

(not in the first year)

Location:

Date:

Number of Trainees to be reimbursed:

Trainees Grants:

Number of Trainers to be reimbursed:
Travel costs:
Organisational support:

(4) PUBLICATIONS, DISSEMINATION, OUTREACH, WEBSITE

Title: Publication fees (open-access journal)
Cost: 2,000€

Title: Action-specific website
Cost: 3,980€

Title: Action's brochure
Cost: 2,000€

**(5) Other Expenses Related to Scientific Activities (OERSA)
(e.g. bank charges)**

Title: Bank charges
Cost: 1,000€

Financial/scientific administration and coordination manager in Host Institution (max. of 15% of total science expenditure)
Cost: 11,120€ (part-time contract)

III. WORK PLAN

(1) **OBJECTIVES**

Please describe the objectives to be achieved during the grant period and their relationship to the goals of the Action as laid down in the MoU or as modified by the Management Committee.

The main objective of this Action is to comprehensively understand the impact of inherited susceptibility in CRC for profiling individual disease risk and performing early screening and treatment monitoring. By doing so, new molecular biomarkers will be implemented and validated for personalized CRC medicine.

The following specific objectives will be pursued **during the first year** in order to achieve the previous general aim:

1. IDENTIFICATION OF NEW CRC SUSCEPTIBILITY VARIANTS: A polygenic model of inherited susceptibility to CRC implies the co-inheritance of multiple risk variants. So far, 30 common, low-penetrance genetic variants for CRC susceptibility have been identified by GWAS. This Action will permit to boost sample size and statistical power (participating cohorts sum up more than 50,000 cases and 50,000 controls) and, therefore, it is very likely that additional genetic variants linked to CRC will be identified. Large-scale meta-analyses of existing and newly generated GWAS data will be performed and replication of initial GWAS findings in additional cohorts will be used to robustly confirm those genetic variants that participate in CRC susceptibility.

3. GENETIC VARIANTS INVOLVED IN CRC SURVIVAL AND TREATMENT TOXICITY: CRC genetic susceptibility variants could also act as biomarkers for CRC survival and treatment response. For instance, inherited genetic variants can modulate the pharmacokinetics/pharmacodynamics of drugs used in CRC treatment by substantially affecting individual response and toxicity to chemotherapy. Therefore, GWAS data will be analyzed regarding CRC survival and treatment toxicity in order to identify genetic variants linked to differential prognosis and adverse drug reactions.

4. GENETIC VARIANTS ENRICHED IN CRC SUBGROUPS: The impact of CRC susceptibility genetic variation will not be universally generic and some of the risk variants will impact preferentially on CRC subtypes, such as early-onset or microsatellite-unstable CRC (MSI+ CRC). If some of the CRC genetic susceptibility variants appear to be associated with some clinical and familial features, it could have potential important implications for screening and surveillance strategies for this disease.

5. NEW PREDISPOSITION GENES FOR CRC IN FAMILIES WITH UNKNOWN GENETIC BASIS: Next generation sequencing will be useful to identify new CRC predisposition genes in selected high-risk and early-onset families with unknown genetic basis from the participating cohorts.

(2) **ACTIVITIES**

Please describe the contents of the activities listed in the budget, their relationship to each other (if any) and to the objectives stated above.

MANAGEMENT COMMITTEE MEETINGS:

There will be 2 meetings during the first year of the Action. The first meeting will permit to lay the grounds for the Action's development, advise on the direction which research work should take, coordinate the contributions of participants and discuss collaboration with other related consortia. The second meeting will allow to monitor first results on objectives 1, 3, 4 and 5, determine how research work should be continued for those objectives and settle on the work plan for the second year, when research work for objectives 2, 6 and 7 is expected to start.

WORKING GROUP MEETINGS:

There will be also 2 meetings jointly with the MC meetings. Although WG1 and WG3 will be active during the first year, the first meeting will be attended by all participants since it would be very important for creating the conditions for this Action to develop successfully. Also, WG2 and WG4 are planned to start activities during the second year of this Action. Therefore, the second meeting will be attended again by all WGs in order to supervise WG1 and WG3 development and to plan activities for WG2 and WG4 for the second year.

TRANSLATIONAL GENOMICS IN BIOMEDICINE WORKSHOP:

This workshop will be the first of the 3 scientific meetings organized by the Action. It will be useful to increase visibility of this Action, disseminate knowledge and results, and promote interaction with non-participating specialists. It will take place jointly with the second MC/WG meetings (day 1 MC/WG meetings, days 2-3 workshop). A preliminary program is available at the end of this document. This workshop would preferentially seek participation of early-stage researchers, both as speakers and attendants. Reimbursement will be restricted to MC, WG members, early-stage researchers and DC rapporteur, and subject to available funds.

SHORT TERM SCIENTIFIC MISSIONS (STSMs):

Exchange visits will strengthen the existing collaborations among the institutions participating in this Action: They will permit especially early-stage researchers to learn a new methodology not available at their host institution in a different institution from another participating COST country. Their duration can be from 1 week to up to 3 months and grants will cover travel and subsistence. A call will open at the beginning of the first year and it will be circulated to participants. Candidates will be assessed by the MC and a panel of 3 participants led by an STSM coordinator in the MC and WGs first Joint Meeting in Edinburgh. 4 STSMs will be awarded to take place in 2014 according to scientific criteria and budget availability.

WEBSITE, BROCHURE AND PUBLICATIONS

These tools will permit to disseminate and transfer knowledge and results of the present Action to its target audience (scientific and medical community, regulatory bodies and policy makers, patients, general public and industry).

An Action-specific website will be built and dedicated to communication and promotion of information on on-going research, seminars, publications and other activities. Part of the website will be accessible to the general public, whereas a section will be password-protected for the exchange of specific information and unpublished data between partners. The website will also contain information on the Action's activities (meetings, workshops), proceedings of meetings, links to publications of participants, links to related institutions and organizations, job announcements as well as material and presentations from the didactic activities.

A brochure will be generated at the beginning of Action describing its objectives and planned activities. This will be distributed to scientists, representatives from the industry, policy and society in major international conferences and meetings.

Scientific publications may be produced in the first year in specialized and high-level peer-reviewed journals. Publication fees for open-access will permit to broaden its availability.

FINANCIAL/SCIENTIFIC ADMINISTRATION AND COORDINATION MANAGER IN HOST INSTITUTION

Subject to the COST Office approval of the annual Workplan and Budget plan as proposed by the MC, the Grant Holder can be entitled to receive a fee of up to 15% of the actual science expenditure in order to cover financial and scientific administration and coordination. This will permit to have a manager with a part-time contract dedicated to administrative and coordination tasks in the host institution.

(3) **OUTPUTS PLANNED FOR YEAR**

(Including final reports, technical documents, publications and other forms of output.)

The outputs of Action BM1206 for the first year are delineated below:

- Action's brochure
- Action-specific website
- MC and WGs first Joint Meeting in Edinburgh (October 2013)
- MC and WGs second Joint Meeting in Barcelona (March 2014)
- *Translational Genomics in Biomedicine* workshop in Barcelona (March 2014)
- Financial report on 15 January 2014
- Scientific report (6 weeks before the Annual Progress Conference in mid 2014)
- Scientific publications

COST Grant budget plan

Action no. and title: BM1206 - COOPERATION STUDIES ON INHERITED SUSCEPTIBILITY TO COLORECTAL CANCER

Grant period: 01/06/2013 – 31/05/2014

Allocated budget: 86,000€

A. SUMMARY BUDGET

(1) MEETINGS	€ 60,400
(2) SHORT-TERM SCIENTIFIC MISSIONS	€ 5,500
(3) TRAINING SCHOOLS	€
(4) PUBLICATIONS, DISSEMINATION, OUTREACH	€ 7,980
(5) OERSA	€ 1,000

B. TOTAL SCIENCE EXPENDITURE (sum of (1) to (5)) **€ 74,880**

C. Financial & Scientific Administration and Coordination
(max. of 15% of B.) **€ 11,120**

D. TOTAL EXPENDITURE (B+C) **€ 86,000**

ADDITIONAL DOCUMENTS

- Potential participants in COST Action BM1206
- Management Committee and Working Groups committees
- Potential participants in MC and WGs first Joint Meeting in Edinburgh
- Translational Genomics in Biomedicine tentative program in Barcelona
- Quote for Action-specific website

PARTICIPANTS - COST BM1206 (18/06/2013)

Germany Dr. Ursula GUNDERT-REMY (**DC Action Rapporteur**)

COST country participants

Austria
 Cyprus
 Cyprus
 Czech Republic
 France
 Finland
 Germany
 Germany
 Israel
 Italy
 Malta
 Malta
 Netherlands
 Netherlands
 Portugal
 Spain
 Spain
 Sweden
 Sweden
 The Former Yugoslav
 Republic of Macedonia
 Romania
 Romania
 Turkey
 United Kingdom
 United Kingdom

MC Member

Prof Andrea GSUR
 Dr Andreas HADJISAVVAS
 Dr. Maria LOIZIDOU
 Dr. Pavel VODICKA
 Dr Alex DUVAL
 Dr Lauri AALTONEN
 Prof Jochen HAMPE
 Prof Kari HEMMINKI
 Prof Eitan FRIEDMAN
 Dr Paolo PETERLONGO
 Ms Vanessa PETRONI
 Dr Pierre ELLUL
 Prof Rolf SIJMONS
 Dr Tom VAN WEZEL
 Prof Manuel TEIXEIRA
 Dr Sergi CASTELLVI-BEL
 Dr Clara RUIZ-PONTE
 Dr Annika LINDBLOM
 Dr Tao LIU

 Prof Aleksandar DIMOVSKI
 Prof. Anca TRIFAN
 Dr. Cristian LUPASCU
 Prof Hilal OZDAG
 Dr Albert TENESA
 Prof Ian TOMLINSON

MC Substitute

Austria Mr Philipp HOFER
 Cyprus Ms Christiana DEMETRIOU
 Finland Dr Sari TUUPANEN
 Spain Dr Trinidad CALDES
 Spain Dr Victor MORENO
 Spain Dr Jose Luis GOMEZ-SKARMETA

Non-COST country participants

USA Dr. Luis CARVAJAL-CARMONA

Additional participants from COGENT

Spain Dr Angel CARRACEDO
 United Kingdom Dr. Richard HOULSTON
 United Kingdom Dr. Malcolm DUNLOP
 United Kingdom Dr. Harry CAMPBELL
 United Kingdom Dr. Tim BISHOP
 Italy Dr. Paolo RADICE

(31 institutions)

ACTION'S MANAGEMENT COMMITTEE

Grant Holder: IDIBAPS, ES

Chair of the Action: Sergi Castellví-Bel, ES

Vice-chair of the Action: Annika Lindblom, SE

Working Group chairs

Genetic Association Studies (WG1): Ian Tomlinson, UK (chair), Dina Ruano, NL (vice-chair)

Functional Genomics (WG2): José Luis Gómez-Skarmeta, ES (chair), Richard Houlston, UK (vice-chair)

Next Generation Sequencing (WG3): Tom van Wezel, NL (chair), Claire Palles (vice-chair)

Statistical Modeling (WG4): Albert Tenesa, UK (chair), Ceres Fernández-Rozadilla, UK (vice-chair)

Financial rapporteurs: Clara Ruiz-Ponte, ES and Jochen Hampe, DE

STSMs committee: Kari Hemminki, DE (chair), Andrea Gsur, AT, Lauri Aaltonen, FI

Publications committee: Ian Tomlinson, UK, Vanessa Petroni, MT,

Web site committee: Sergi Castellví-Bel, ES and Pavel Vodicka, CZ

POTENTIAL PARTICIPANTS EDINBURGH MEETING, OCTOBER 2013

COST country participants (18/06/2013)

	MC Member
Austria	Prof Andrea GSUR
Cyprus	Dr Andreas HADJISAVVAS
Cyprus	Dr. Maria LOIZIDOU
Czech Republic	Dr. Pavel VODICKA
France	Dr Alex DUVAL
Finland	Dr Lauri AALTONEN
Germany	Prof Jochen HAMPE
Germany	Prof Kari HEMMINKI
Israel	Prof Eitan FRIEDMAN
Italy	Dr Paolo PETERLONGO
Malta	Ms Vanessa PETRONI
Malta	Dr Pierre ELLUL
Netherlands	Prof Rolf SIJMONS
Netherlands	Dr Tom VAN WEZEL
Portugal	Prof Manuel TEIXEIRA
Spain	Dr Sergi CASTELLVI-BEL
Spain	Dr Clara RUIZ-PONTE
Sweden	Dr Annika LINDBLUM
Sweden	Dr Tao LIU
The Former Yugoslav Republic of Macedonia	Prof Aleksandar DIMOVSKI
Romania	Prof. Anca TRIFAN
Romania	Dr. Cristian LUPASCU
Turkey	Prof Hilal OZDAG
United Kingdom	Dr Albert TENESA
United Kingdom	Prof Ian TOMLINSON

MC Substitute

Austria	Mr Philipp HOFER
Cyprus	Ms Christiana DEMETRIOU
Finland	Dr Sari TUUPANEN
Spain	Dr Trinidad CALDES
Spain	Dr Victor MORENO
Spain	Dr Jose Luis GOMEZ-SKARMETA

Germany Dr. Ursula GUNDERT-REMY (**DC Action Rapporteur**)

Non-COST country participants

USA Dr. Luis CARVAJAL-CARMONA

Additional participants from COGENT

Spain Dr Angel CARRACEDO
United Kingdom Dr. Richard HOULSTON

United Kingdom
United Kingdom
United Kingdom
Finland
Germany
Germany
Spain
United Kingdom
United Kingdom
United Kingdom
Italy
Czech Republic

Dr. Malcolm DUNLOP
Dr. Harry CAMPBELL
Dr. Tim BISHOP
AALTONEN's lab
HAMPE's lab
HEMMINKI's lab
CASTELLVI-BEL's lab
TOMLINSON's lab
HOULSTON's lab
DUNLOP's lab
Dr. Paolo RADICE
VODICKA's lab

WORKSHOP TITLE:
TRANSLATIONAL GENOMICS IN BIOMEDICINE

BARCELONA, MARCH 2014

Organizers

Sergi Castellví-Bel (Spain)
Cristina Fillat (Spain)
Meritxell Gironella (Spain)
Markus Heim (Switzerland)
Lluís Hernández (Spain)
Silvia Beà (Spain)

Session themes

Somatic mutation profiling
Genomics in rare diseases
Transcriptomics
Epigenomics
Metagenomics
Translation to diagnosis and treatment

TENTATIVE PROGRAM

DAY 1

9:00-9:15. Welcome address: Ramon Gomis / Elias Campo (institutional hosts)

Somatic mutation profiling session

Chairs: Thomas Hudson / Lluís Hernández

9:15-10:00. Inaugural Session: (invited speaker) Thomas Hudson (Canada). The International Cancer Genome Consortium (ICGC)

10:00-10:35. (invited speaker) Silvia Beà (Spain). The complex landscape of genetic alterations in Mantle cell lymphoma

10:35-11:10. (invited speaker) Matthew Meyerson (USA). Approaches to identify mutations, copy number alterations and translocations in human cancer (unconfirmed; backup: Rameen Beroukhim (USA). Landscape of somatic copy number changes in cancer)

11:10-11:30. Coffee break and poster session

11:30-12:05. (invited speaker) Thomas Ried (USA). Genomic instability and associated gene expression changes during cancer development

12:05-12:20. (short talk by participant)

12:20-12:35. (short talk by participant)

12:35-13:50. Lunch and poster session

Metagenomics session

Chairs: Patricia Lepage / Joan Marc Servitja

13:50-14:25. (invited speaker) Patrice Cani (Belgium). Gut microbiota and metabolism

14:25-15:00. (invited speaker) Patricia Lepage (France). Next generation sequencing of the gut microbiome

15:00-15:15. (short talk by participant)

Transcriptomics session

Chairs: Muneesh Tewari / Meritxell Gironella

15:15-15:50. (invited speaker) Snorri S. Thorgeirsson (USA). Molecular profiling of human hepatocarcinogenesis

15:50-16:10. Coffee break and poster session

16:10-16:45. (invited speaker) Muneesh Tewari (USA). miRNAs profiling in human cancers

16:45-17:00. (short talk by participant)

17:00-17:15. (short talk by participant)

17:15. Group photo

18:30-20:00. Social event: Guided-walking tour in Barcelona (Gotic quarter, Modernism route, or Maritime quarter)

DAY 2

Translation to diagnosis and treatment session

Chairs: Markus Heim / Sofia Pérez del Pulgar

9:00-9:35. (invited speaker). Anne-Lise Børresen-Dale (Norway). Translating research in breast and ovarian cancer into patient care [unconfirmed; backup: Luigi Naldini (Italy). Gene therapy strategies for human disease treatment]

9:35-10:10. (invited speaker). Markus Heim (Switzerland). Genomic analysis of liver biopsies: impact on patient management.

10:10-10:45. (invited speaker). Alexandra Martins (France). Ex vivo screening techniques for functional evaluation of human germline mutations

10:45-11:05. Coffee break and poster session

11:05-11:20. (short talk by participant)

11:20-11:35. (short talk by participant)

Epigenomics session

Chairs: Peter Jones / Iñaki Martín

11:35-12:10. (invited speaker) Marika Charalambous (UK). The epigenomics of imprinting [unconfirmed; backup: Stephan Beck (Germany)]. Epigenome-wide association studies for common human diseases

12:10-12:45. (invited speaker) Peter Jones (USA). Improving our understanding of the functions of DNA methylation observed in human diseases

12:45-13:00. (short talk by participant)

13:00-13:15. (short talk by participant)

13:15-14:30. Lunch and poster session

Genomics in rare diseases

Chairs: Cristina Fillat / Sergi Castellví-Bel

14:30-15:05. (invited speaker) Anne-Christine Syvänen (Sweden). From genes to function in systemic lupus erythematosus (SLE) and other autoimmune diseases

15:05-15:40. (invited speaker) Antònia Ribes (Spain). Genomics in hereditary metabolic diseases

15:40-16:15. (invited speaker) Richard Houlston (UK). Next generation sequencing in germline colorectal cancer samples

16:15-16:35. Coffee break and poster session

16:35-16:50. (short talk by participant)

16:50-17:05. (short talk by participant)

17:05-17:50. Closing session: Han Brunner (Netherlands). Human phenomics: Biologically relevant classification and comparison of human phenotypes

17:50-18:00. Closing remarks: Ramon Gomis / Elias Campo (institutional hosts)

QUOTE FOR ACTION-SPECIFIC WEBSITE

2. Proposta econòmica (140/2013)

Gestió del projecte

- Coordinació, interlocució, trobades i desplaçaments

Fase de disseny

- Wireframing (elaboració de prototips funcionals)
- Disseny de les plantilles i la resta d'elements gràfics.

Fase de maquetació

- Maquetació de les pàgines en XHTML, CSS, javascript, etc.

Fase de programació i control de qualitat

- Integració de les plantilles en un gestor de continguts a mida.
- Programació de les eines i bases de dades.
- Programació de la interfície d'administració del web.
- Introducció de continguts.
- Tests de funcionament i control de qualitat.
- Implementació en servidor.

Formació

Import: 3.980,00 €

IVA 21%: 835,80 €

Total proposta: 4.815,80 €