



## Agenda

**3rd Management Committee Meeting  
15th September, 2016, Norwich, UK**

**COST Action no. FA1403**

**Action Title: Interindividual variation in response to consumption of plant food bioactives and determinants involved (POSITIVE)**

### **1. Welcome to participants**

The Chair of the action, Dr. Christine Morand, who chairs the meeting, welcomed the participants.

### **2. Adoption of the agenda**

*The agenda proposed was adopted.*

### **3. Approval of the minutes and matters arising from the last meeting**

- The minutes of the last WG meeting held in Bucharest, March 2016 have been sent previously to MC, and they are available now on the private part of the website of POSITIVE.

#### ***The MC approved:***

- Minutes of Working Group 1 (WG1)
- Minutes of Working Group 2 (WG2)
- Minutes of Focus Group (FG)
- Minutes of Think Tank Group (TTG)
- Minutes of the Steering Committee (SC)

#### • **Recall about the Rule for funding Open Access publication in POSITIVE**

This rule has been approved by MC in June 2016 (*electronic vote*)



In order to help with the publication of papers resulting from the COST Action FA1403-POSITIVE in open-access journals and considering the annual budget of the Action, it has been agreed that « the COST Action POSITIVE will cover the costs of open access fees for publications involving institutions from at least 5 Participating countries and directly resulting from the discussions of the WGs ». This will be done within the limit of the budget available for Dissemination for the Grant Period. However, the MC could be asked by the SC to re-allocate underspent budget for the Open Access licenses later on in the Grant Period.

We hope that such a rule could help in funding 2 to 4 open access publications per grant period (GP), (2 for GP2 and 4 for GP 3 and GP4).

However, it is important to recall that the publication of articles in Open access journals of the work carried out in a COST action is **encouraged but not mandatory**.

#### 4. Update from the Action Chair

##### a. Status of Action network

The chair presented to the MC the network in few points:

- To date, the network includes:
  - 32 Cost Member countries, including 15 Inclusiveness cost countries, 1 cooperating state and 1 NNC.
  - 88 Research groups
  - 275 scientists
- Geographic distribution of the participants:
  - the number of participants per participating COST member country follows well that of the research groups involved

##### b. Action budget status

- The Chair reminds to the MC, that after the acceptance of POSITIVE, the status of the COST Association has changed. Indeed the COST Association has signed with the European Commission a seven-year' framework partnership agreement (FPA) "COST H2020". This change has required the alignment of the dates of the GP agreements of the Actions with that of the yearly specific grant agreement between « COST H2020» and the European Commission.

COST Action POSITIVE – FA 1403



That is why since the beginning of the action, we have already established 3 Work Plans and signed 3 Grant Period (GP) agreements, the first one from Dec 2014 to Dec 2015, the second one from January 2016 to April 2016 and the 3rd which is running from May 2016 to April 2017.

- The chair presents a brief overview of the use of the budget of the Action for the GP1 and 2 running from the beginning of the Action (Dec 2015) to Last April 2016. Over this period, the major part of the budget (88%) was used to organize 3 meetings, and one scientific workshop and the remaining 12% were used for STSMs funding

- More precisely:

- 9 grants for STSMs have been attributed after the 1<sup>st</sup> and 2<sup>nd</sup> calls.

- The 1st WG meeting in Belgrade (Serbia) has welcomed 69 participants (62 COST-Funded), the 2<sup>nd</sup> WG + MC meeting in Murcia (Spain) has welcomed 57 participants ( 45 COST-funded), the 3rd WG meeting in Bucharest (Romania) has welcomed 66 participants (50 COST funded).

- The 1st Workshop in Tours has gathered 90 attendees (41-COST funded, 16 non-COST funded POSITIVE partners and 35 external attendees )

In total, 245 POSITIVE partners participate to these events and 200 of them were refunded by the Action.

### **c. STSM status and new applications**

- During GP1 and GP2, the 9 grants for STSMs have been allocated to 9 young scientists. The mean amount of the Grant was 22 hundred euros and the man duration of the STSM was of 5 weeks.

44% of the STSMs performed were in direct link with the activities of the WGs 1 and 2.

The scientific reports of these STSMs are available on the website of the Action.

- In GP3 (from May 2016 to April 2017), the budget available will allow funding at least 6 STSMs of 2500€ each.

Up to now, (after the 3<sup>rd</sup> call), 2 STSMs have been completed, and 2 will start soon.

The chair recalls the deadline of the 4<sup>th</sup> call for STSMs applications: Deadline October 31, 2016.

For missions starting after 1<sup>st</sup> January and ending before 31 March 2017.



The chair draws the attention of the MC members on the importance to encourage young scientists in their group to apply to STSMs in the next calls because this COST instrument is very accurate to foster collaborations between COST partner groups.

- Future STSMs Applications: 2 types of Calls:

In addition to « Regular Calls » (submitted to deadlines), the SC agreed to create a « Special call » for STSMs aiming to react fast to urgent matters in the WGs. The characteristics of this « **Special call** » are as follows:

- **target matter urgent to achieve the goals defined in the work plan of the GP**
- **Managed in direct interaction with the WG leaders and STSM coordinator**
- **Topic announced via the website and the mailing list of WGs**
- **Open all the time to increase flexibility and convenience**

Everyone can apply to both types of calls, the process to apply and the selection criteria are similar.

To both favor the optimal use of the Action budget (avoid underspending of the budget at the end of the GP) and help in the achievements of the scientific objectives of the Action, the Chair propose to the MC to **allocate 50% of yearly STSM budget for this « Special calls », dedicated to STSMs aiming to react fast to urgent matter in the WGs.**

**The MC approves this proposition.**

#### **d. COST Action Website**

The POSITIVE website has been put in place on last year by the GH and now it is running and regularly updated by Laurent-Emmanuel Monfoulet (INRA) who is the website manager. For any request regarding the website, partners may contact the website manager.

On the website, links have been established with other International Networks and with some European initiatives of interest for the field of POSITIVE. Similarly, from the website, there are also direct access to the page of the Action on social medias, including Facebook and Twitter.

On the public part of the website, together with detailed information about the Action and the events organized (Meetings, Workshop, STSMs application, Training Schools), an updated list of partner groups involved in POSITIVE can be downloaded. This booklet of participants constitutes a useful tool to identify interesting groups to host STSMs.



## 5. Promotion of COST Policies (Inclusiveness Target Countries, Gender Balance, ECIs) during GP1 & 2

- **Promotion of inclusiveness**

- Regarding invitations and attendance to meetings, over the period (Dec 2014 to April 2016), a total of 315 invitations have been sent by the GH (31% for ITC), 247 partners attend these meetings (33% from ITC), including 200 who were refunded by the Action (31% from ITC).

There is a good balance between these rates for ITC (31-33%) and the level of representation of partners from ITC countries in the network (32%).

- Regarding the organization of meetings, on the 3 WG meetings organized over the period, 2 were organized an ITC country: Serbia and Romania.

- Regarding the allocation of STSMs, on the 9 STSMs funded 5 were from ITC.

- In term of the budget, 35% and 53% of the Action budget spent for meetings and STSMs respectively benefited to ITC countries. Thus, in total, ITC countries benefited from 37% of the total budget of the Action over GP1 and GP2. This rate is still well balanced with the representation of partners from ITC countries in the network (32%).

- **Promotion of ECIs**

In POSITIVE a special attention is paid to the promotion of Early Career Investigators and several measures have been taken:

- The creation of the Think-Tank group of ECIs. The Action plans each year a face to face meeting of the TT (joint to WG meetings) and the TT organizes monthly online meetings. The TT is coordinated by 2 young researchers who are nominated by its members and renewed each year. These coordinators represent the Think-Tank at the SC meeting

- Priority given to ECIs for STSMs (in GP1 ad 2 all grantees were ECIs).

There is a good balance between the participation of ECIs to meetings (30%) and their representation in the whole POSITIVE network (27%).

- **Promotion of Gender Balance**

The Gender balance for the invitations fits with that in the network (40% males, 60% females in both cases).

Regarding STSMs, the ratio between male and female is not so good: 22% males and 78% females, however, it reflects the high level of application of women compared to that of men. It is difficult



for the SC to act on this point. The chair asks MC members to encourage male scientists of their groups to apply more in the future.

## 6. Update from the Cost association

2 points mentioned:

- Since February 2016, Me F. Orтели has replaced Me L. Mizera as the scientific officer of the Action.

- As announced last year; the COST Association suffers from budget cuts effective from 2016 and impacting running actions annual budget. As a result, between GP1 and GP3 POSITIVE has suffered a 9 thousand euros cut whereas over this period the number of the cost participating countries has increased (+5 countries).

## 7. Follow-up of MoU objectives

### a. Progress report of Working Groups

The Work Plan of POSITIVE for the GP1 & GP2 (Dec 2014-April 2016) of the Action included 14 goals contributing to achieving the objectives settled in the MOU. Among these goals some are general goals and the other ones are specifically linked to the different WGs.

The chair present briefly the status of the activities in progress or already achieved within this 16-month period:

- **General Goals :** *(related MoU objectives: primary, secondary 9,10,11)*
  1. Initiate and consolidate collaborations and exchanges between partners
  2. Initiate and foster exchange among the community of ECIs involved in the Action
  3. Provide visibility of the Action to the whole scientific community

### **Achievements**

=> *Three WG meetings have been organized and 9 grants attributed for STSMs;*

=> *Creation of the Think-Tank group of ECIs, 2 face to face meetings organized, monthly online meetings organized on topics related to WG 1 and 2; a subgroup of ECIs develops a specific project of high interest for the Action: "Establish a quality index to evaluate inter-individual variability reporting in papers and propose recommendations for how to report data on inter-individual variability";*

COST Action POSITIVE – FA 1403



=> Several initiatives have been undertaken to provide visibility of the action, including: the organisation of the 1st scientific COST workshop in Tours in satellite to the 7th International Conference on Polyphenols and Health, 2015, establishment of links with other European Networks (NuGO (project for co-organisation of a nextTraining School), ISEKI Food Association (round table organized)), submission of a position paper addressing the topic of the Action in a scientific journal of high impact.

- **WG1 Goals:** (related MoU objectives: primary, secondary 1,4,7)

4. Data extraction on Interpersonal Variation (IVA) in bioavailability (ADME) of selected bioactives

5. Analyze the available information on specific determinants of IVA in ADME for selected bioactive compounds

6. Compile existing knowledge to Identify key genes and enzymes related to human and gut microbial biotransformation with major importance for IVA in ADME of selected bioactive compounds

7. Develop a framework for how metabolomics can be applied to analyze and assess IVA in ADME of selected bioactive compound classes

**Achievements**

=> Data entry template and data extraction finalized for 8 subgroups of plant bioactives

=> Decision on 1 compound per plant bioactive subgroup for drafting metabolic pathway

=> Consensus on a framework for incorporating metabolic pathways in online databases. Goal is to probe database for microbial and human biotransformation enzymes

=> Program for metabolomics webinar training school finalized. Framework for chemical library assembly for laboratory ring trial

- **WG2 Goals:** (related MoU objectives: primary, secondary 2)

8. Define physiological processes and associated clinically relevant biomarkers related to cardiometabolic health to be covered

9. Identify cellular and molecular targets related to cardiometabolic health to be covered as well as tools and methods for their analysis

10. Initiate and progress in the assessment of inter-individual variation in selected clinical and molecular biomarkers of cardiometabolic risk in response to consumption of the selected plant bioactives: (i) flavanols; (ii) anthocyanins and ellagitannins; (iii) flavonols



### **Achievements**

- => *Bioactives to be covered, disorders related to cardio-metabolic health/disease, physiological processes and relevant biomarkers identified.*
- => *Guidelines for literature search have been developed, literature search to identify cellular and molecular target from in-vitro, animal and human studies completed for flavanols. Data extraction is undergoing for bioinformatic analysis of the data. The work on anthocyanin & ellagitannins and phytosterols will start soon.*
- => *Review on already known interindividual variability in biomarkers of cardiometabolic health in response to plant food bioactives consumption under review in Adv Nutr*
- => *Guidelines developed, literature searches, screening of manuscripts and meta-analysis of data have been conducted, protocol under review in the peer-review journal, manuscript draft of flavonol meta-analysis written, flavanol analysis ongoing; anthocyanin & ellagitannins and phytosterols currently in the process of screening.*

- **WG3 Goals:** (related MoU objectives: primary, secondary 11)

11. Identify and prioritize deliverables that are most important for each of the different stakeholders and end-user groups

### **Achievements**

- => *A survey has been created in English, French, Spanish and Portuguese and sent out to stakeholders and end-users across Europe. The first results will be presented in Norwich, and the final results will be presented on the COST POSITIVE website.*
- => *Identification of POSITIVE partners who know and have personal contacts in each of the stakeholder and end-user groups. Establishment of a list of stakeholders and end-users to approach*

- **FG Goals:** (related MoU objectives: primary, secondary 10, 11, 14)

12. Launch and keep updated the website of the Action
13. Prepare communication documents including leaflets and a newsletter
14. Initiate and prepare dissemination means to communicate the main objectives and activities of the Action to (i) Food Industry; (ii) General audience

### **Achievements**

- => *The website regularly updated, website linked with other relevant Networks and European Initiatives, direct access from the website to the page of the Action which has been created in social medias, including Facebook and Twitter.*





=> Three editions of the POSITIVE newsletter now completed and released (up to June 2016) and one special issue in September 2015. 1<sup>st</sup> Tryptic announcing POSITIVE completed and ready to be distributed after the meeting in Murcia. Other documents (summaries, reports slides to present POSITIVE).

=> Translation (into Spanish/Polish/French) of a questionnaire for stakeholders and end-users. Uploaded into SurveyMonkey (collaboration with WG3).

## 8. Action planning

### a. Scientific strategy

- **Work Plan for the GP3** (May 2016-April 2017)

The chair presents the main lines of this WP that has been approved by the MC in April 2016. The goals identified for this period are as follows:

**General Goals** (related MoU objectives: primary, secondary 9,10,11,14)

1. Favor exchanges/interactions between partners (including ECIs)
2. Reinforce the visibility of the Action among the whole scientific community

**Goals WG1** (related MoU objectives: primary, secondary 1,4,7, 9, 10)

3. Establish a detailed database on determinant specific information for selected bioactive compounds
4. Identify key genes and enzymes related to human and gut microbial biotransformation with major importance for IVA in ADME of selected bioactive compounds
5. Develop a framework that focuses on targeted metabolomics that can be applied to assessing IVA in ADME of selected bioactive compound classes, including an assessment of the analytical coverage of key bioactive metabolites and improvement of existing online resources
6. Extend the use of metabolomics in the community of plant bioactive compounds compound classes

**Goals WG2** (related MoU objectives: primary, secondary 2)

7. Continue the assessment of the inter-individual variability in selected clinical biomarkers of cardiometabolic risk in response to selected bioactives consumption, and identify potential factors contributing to variability: (i) flavanols, (ii) anthocyanins and ellagitannins, (iii) flavonols



8. Initiate the assessment of inter-individual variation in selected clinical and molecular biomarkers of cardiometabolic risk in response to consumption of plant sterols
9. Identify cellular and molecular targets related to cardiometabolic health to be covered as well as tools and methods for their analysis

**Goals WG3** (related MoU objectives: primary, secondary 10, 11)

10. Identify and prioritize deliverables that are most important for each of the different stakeholders and end-user groups
11. Formation of subgroups including trans-WG subgroups to develop specific activities in line with the objective of WG3, and initiation of their activities
12. Preparation of communication materials for stakeholders and end-users interested in the field of the Action (**collab with FG**)

**Goals FG** (related MoU objectives: primary,, secondary 10, 11, 14)

13. Keep updated the website on all issues relevant to the Action
14. Continue the production of the newsletter
15. Initiate and prepare dissemination means to communicate the main objectives and activities of the Action to (i) Food Industry; (ii) General audience (**collab with WG3**)

- **Planning of POSITIVE events during GP3**

To help in reaching the goals, 2 meetings and 1 scientific workshops and a training school have been scheduled in the WP3.

- 15-16 September 2016: A joint meetings (MC and WG meetings) and the 2<sup>nd</sup> positive scientific workshop in Norwich as a satellite to the 1st International Conference on Food Bioactives & Health. The LOS is Dr. Paul Kroon from the IFR, Norwich, UK.

- 21-23 February 2017, the 5th WGs meeting in Olsztyn (Poland). The LOS will be the Institute of Animal Reproduction and Food Research of the Polish Academy of Science (Iwona Kieda)

- The 1st Training School proposed by the WG1 and focused on « Metabolomics in Nutrition Research » This TS has been coordinated by the Biomarkers & Nutrimetabolomic Research Group of THE University of Barcelona (Dr. R. Llorach).

## **b. Action budget planning (GP3)**

- **Foreseen distribution of the budget available for Science expenditure in GP3,**



The budget (122 608 €) has been distributed between the different COST instruments as follows:

- 3/4 to organize 2 WG meetings and 1 scientific workshop. In total about 95 partners are expected to benefit from COST funds to attend these events.
- The cost of the TS combining free webinars and practical session in Barcelona has been estimated at almost 10.9 Kilo€
- The budget allocated for STSMs (15 k€) allows the funding of at least 6 STSMs of twenty-five hundred € each
- The remaining budget (4 K€) was provided to fund Open access publication

**The chair asks the MC for giving a delegation to the SC to re-allocate freely the remaining budget of Norwich meeting (if appropriate) between the others networking tools over the GP**

**The MC agrees on the proposition**

- **Review of the 1<sup>st</sup> Training School (GP3)**

To save budget and to optimize the benefit of the training for interested partners according to their expectations, this training has been organized in 2 parts: a webinar training for a large number of partners interested to have a general course on metabolomics and a practical training for a limited number of partners (<15) on place (Univ of Barcelona).

**Webinars Session** (May, 24, 26, 30, 2016)

Session 1 : Introduction to Metabolomics

*Trainers: LO Dragsted (DK), R. Llorach (SP)*

Session 2 : Data analysis and metabolites identification

*Trainers: C Brunius (S), E Pujos (F), C Manach (F)*

Session 3: Nutrimetabolomics in discovery markers studies

*Trainers: K Hanhineva (FL), AM Aura (FL), S Moco (S), R Llorach (SP)*

These webinar sessions have been coordinated by R. Llorach from Univ of Barcelona, with the technical support of the Dr. Liliana Tudoreanu from the USAMV of Bucharest. 8 members of the WG1 have worked as trainers in these sessions.

The videos of the webinars are available on the private part of the website of POSITIVE, at: <https://www6.inra.fr/cost-positive/Restricted-Access/Videos-1st-Training-School>

These webinar sessions were very successful with 54, 42 and 44 POSITIVE attendees respectively for the different sessions. Participants were from 22 COST countries.



**Practical Training School (5-7 July 2016, Barcelona)**

- Module 1: Biomarkers characterization and annotation.
- Module 2: Strategy for Metabolite identification.
- Module 3: Nutrimetabolomics and Phytochemicals intake. New strategies to improve the predictive capacity to evaluate food intake.

12 POSITIVE partners, already familiar with metabolomics or interested to develop rapidly this approach in their lab, have received a Grant from the Action to participate in the practical part of the TS. These trainees were from 10 COST partner countries.

This TS has been coordinated by Rafael Llorach and involved as trainers several members of the Biomarkers & Nutrimetabolomic Research Group of the Univ of Barcelona. The University of Barcelona has put his own equipments at the disposal of the training.

- **Financial cost of the TS**

The real expenses of this TS were lower than the budget initially allocated for the Training School (10 900 euros). Ultimately 2200 € have been saved.

The chair proposes to use this remaining amount to fund an additional STSM.

**The MC approved this proposal**

**c. Dissemination planning (GP3)**

The chair gives an overview of the major dissemination products produced or expected in GP3

- **Regarding scientific publications**

the work is now well underway within the POSITIVE Network:

- First a collaborative position paper addressing the topic of the Action and the issues, has been co-signed by those who have proposed the Action and WG leaders and co-leaders. This n paper is *accepted for publication in Molecular Nutrition and Food Research*

- The first collaborative reviews resulting from the WG activities are submitted (1 for WG1, 2 for WG2) or in preparation (1 for WG1, 1 for WG2)

- Half a dozen of other papers are foreseen in WG1 and 2 before the end of GP3.

- **Other dissemination and outreach activities**



- Development of free new tools: *Extend the free online database Phytohub with a tool to draft metabolic pathways to indicate bio-transformation enzymes and (if possible) transport proteins involved in ADME of plant food bioactives* (WG1)
- Production of short movies illustrating successful collaboration between an academic partner and a stakeholder (i.e. food industry, policy body) (WG3)
- Approach relevant stakeholders and end-users groups with the questionnaire using a Survey Monkey (WG3)
- POSITIVE newsletter: edition June 2016 produced, edition December 2016 in preparation
- Organisation of the 2<sup>nd</sup> POSITIVE Scientific Workshop as a part of the International Conference on Food Bioactives and Health, Norwich, 13-15 September 2016.
- 1st POSITIVE Training School on Metabolomics Including Open Metabolomics webinars available online on the website of the Action.

#### **d. Long-term planning**

The visibility on the long-term of the location of the future activities of the Action is good, particularly regarding meetings.

Indeed partners from Greece, Ireland and Portugal and Croatia have manifested their interest to welcome a future meeting. These proposals are still under discussion.

If other partner countries could be interested in organizing a cost event, the chair will be happy to have alternative options.

### **9. Miscellaneous**

- **Progress report at 24-month**

The chair reminds that this mid-term report must be ready for submission to the COST Office on December 9, 2016.

For each Action, COST nominates an external expert to evaluate the progress of the activities within POSITIVE. Based on his conclusion, COST can ask for some adjustments.

COST provides a specific report template in which all the activities and outcomes since the beginning of the Action must be indicated.

The SC has established a calendar to provide the Report in due time. The SC will prepare the progress report in October to be able to provide a full progress report finalized for sending to



MC for approval no later than November 25, 2016. With this schedule, we will be able to submit on time the report to the COST Association

**The chair seeks the contribution of MC members to establish an inventory of some outcomes that have to be included in the mid-term report of the Action.**

This include:

- applications (successful or not) to some national calls for a research project, in which the COST Action has been associated
- consortiums involving POSITIVE partners from different research groups that have applied to some national, bi-national or European calls
- works resulting from networking activities that have been presented by POSITIVE partners in conference or meetings (posters, talks..)
- all other dissemination activities about POSITIVE made by partners (at the national level, institution/universities, industry...)

The chair kindly asks MC members to let her know ASAP any of this information.

- **Tools made available by the GH for the network**

The chair informs the MC that the GH (INRA) has funded some tools not eligible for COST Funds, especially some licenses to help in the progress of the activities within the Action:

- The subscription to Goto meeting and Gotowebinar offers possibility to the Steering Committee to organize management meetings, to WG leaders to organize working meetings with subgroup leaders, to the whole Action to organize free webinars in Training Schools
- A 2-years license for a Computer program for meta-analysis. This license has been installed on a laptop made available by INRA. The laptop + license is available for WG members upon request of the WG leaders to the chair. However, now the laptop is out, and it probably cannot be repaired. To overcome this difficulty, the chair asks if someone in the audience could lend one laptop temporary.

Dr. Evert van Schothorst suggests using a remaining budget of the Action to finance the purchase of a new laptop. The chair responds that this expense is not eligible for COST funds.

## **10. Location and date of next meeting**

- 5<sup>th</sup> WG meeting – February, 21 – 23<sup>rd</sup> Olsztyn – Poland

## **11. Summary of MC decisions**

COST Action POSITIVE – FA 1403



- Adoption of the agenda of 3rd MC meeting – FA 1403
- Approval of the Minutes of the 3<sup>rd</sup> WG meeting in Bucharest, March 2016:
  - WG1 minutes
  - WG2 minutes
  - FG minutes
  - TTG minutes
  - SC minutes
- Approval of the allocation of 50% of yearly STSM budget for STSMs aiming to react fast to urgent matter in the WGs
- Approval of a delegation to the SC to re-allocate freely over the GP the remaining budget of Norwich meeting between the other networking tools
- Approval of re-allocating the remaining budget of the TS to fund STSMs

## 12. Closing