

## Subject | Minutes of the Core Group and Working Group Meeting of COST Action CA15203 in Verona: “Mitochondrial mapping: Evolution - Age - Gender - Lifestyle - Environment”

Minutes prepared by Cristina Plattner

### I. Core Group Meeting: 2016 November 15

#### 1. Welcome to participants

The participants were welcomed by Elisa Calabria (Local Organiser and Vice Chair) and Erich Gnaiger (Chair of the Action).

#### 2. Participants

see Annex 1 – Attendance list

- Number of Core Group members: 10
- Number of other members: 13
- Total: 23 participants

#### 3. A roadmap for MITOEAGLE

- A summary of the objectives and deliverables of Grant Period 1 was presented by the Action Chair.

#### 4. Roadmap and first steps of Working Groups

- Presentation of the Working Groups with a roadmap for Grant Period 1:
  - WG2 MITOEAGLE data repository in muscle tissues, presented by Pablo M. Garcia-Roves (WG2 Leader)
  - WG3 MITOEAGLE data repository on liver tissues, presented by Zuzana Cervinkova (WG3 Co-Leader)
  - WG4 MITOEAGLE data: blood and cultured cells, presented by Elisa Calabria (WG4 Member and Vice Chair)
  - WG1 Standard operating procedures and user requirement document: Protocols, terminology, documentation, presented by Kathrin Renner-Sattler (WG1 Leader)
- Discussion of the presentations and topics/questions for the next meeting:
  - Data repository: which data to collect/store?
  - Standardization depending on used models
  - Normalization of data → Session needed in the next meeting to discuss.
  - Published data vs. future data → How to proceed in the future to achieve standardised data?
- Short-Term Scientific Missions (STSMs) Grant Periods 1 and 2, presented by Magdalena Labieniec-Watala (STSM Coordinator)
  - Summary of the first Call for Grant Period 1:
    - Total number of applicants: 7
    - Presentation of the evaluation criteria
    - Presentation of the final decision: Four STSMs with a Grant amount of EUR 750.00 and two more STSMs financed by the FSAC
  - Strategy for Grant Period 2:
    - Support longer STSMs
    - A list of host institutions will be prepared for interested researchers ([http://www.mitoglobal.org/index.php/Short-Term\\_Scientific\\_Missions\\_MITOEAGLE#MITOEAGLE\\_host\\_institutions](http://www.mitoglobal.org/index.php/Short-Term_Scientific_Missions_MITOEAGLE#MITOEAGLE_host_institutions))

- More communication and coordination between Working Group Leaders, ECI-Coordinator and STSM Coordinator
- The Action Chair recommended a budget of EUR 35.000 for Short-Term Scientific Missions in Grant Period 2

## 5. Dissemination plan

Marina Makrecka-Kuka presented the dissemination plan with the dissemination objectives according to the Memorandum of Understanding (MoU).

Dissemination steps in Grant Period 1:

- Website: Decision of the Core Group to choose **.org** as the domain ending of the COST MITOEAGLE website ("[www.mitoeagle.org](http://www.mitoeagle.org)"). Furthermore an overview page of MITOEAGLE should be added to the existing website.
- Flyer: The MC has decided (2016-10-20 e-VOTE 02) to accept the offer of Impact Ltd to produce a 4-page flyer/leaflet, to be completed by March 2017 within the limits of our budget (without poster). Details and comments from the Core Group - and from another COST Action - concerning this offer are summarised here: » [http://www.mitoglobal.org/index.php/Talk:MITOEAGLE\\_flyer](http://www.mitoglobal.org/index.php/Talk:MITOEAGLE_flyer)  
Erich Gnaiger continued with presenting the next steps regarding the flyer: 14 questions will be prepared by Impact Ltd. and should be answered by the Chair, Vice-Chair and the WG-Leaders.
- Discussion of the dissemination plan:
  - MITOEAGLE information should be published on university websites or in university newsletters of participating universities (Kathrin Renner-Sattler and Marina Makrecka-Kuka will prepare a template)
  - For the general public, social media should be used to communicate the most important facts (Facebook, Twitter, etc.). The dissemination coordinator will take care of regular updates and contact WG leaders for input.

## 6. Prepare agenda for MC Meeting Barcelona

The local organiser of the MC Meeting in Barcelona, Pablo M. Garcia-Roves chaired this session.

- Venue for the first two days: Sala Prat de la Riba
- Core Group suggestions for the MC:
  - MC Meeting should take place on the third day (morning) of the event.
  - Revised flat rate of EUR 70.00 per night to support more people.

## 7. Other networking activities

### a. Training School in Obergurgl, in July 2017 – concept presentation by the Action Chair

- Co-funding by the Medical University of Innsbruck
- Concept: Four days MiP*school* and 2 days MITOEAGLE workshop for all Working Groups
- More information: [http://www.mitoglobal.org/index.php/MiPschool\\_Obergurgl\\_2017](http://www.mitoglobal.org/index.php/MiPschool_Obergurgl_2017)

### b. Implementation strategy: plan towards inclusiveness

The Coordinator of Early Career Investigators (ECIs), Inclusiveness Target Countries (ITCs) and gender balance, Nina Krako, presented the implementation strategy of geographical coverage, early career investigator involvement and gender balance which is revised and updated at every MC Meeting, and a strategy to attract researchers and stakeholders.

- Presentation of numbers of ECIs, gender and ITCs in the management committee
- Presentation of the Action Plan including the results of e-VOTE 01 (Topic 2):
  - Get six remaining ITCs involved in the MC
  - Organise COST events in ITCs (suggestion: next MC Meeting in Czech Republic – November 2017, MC Meeting 2018 in Serbia)
  - Promote ECI participation in WG meetings (ECI Travel Grant, dedicated sessions for ECIs)
  - Fixed budget for ITCs for every meeting (suggestion: 50% of the overall budget, 40% of a Training School, 40% of Short-Term Scientific Missions and 30% of the total budget of WG meetings)
  - Action Think Tank should be implemented on the website

**c. Aiming to support the involvement of researchers from Near Neighbour (NNC) and International Partner Countries (IPC) in MITOEAGLE – networking with the Mitochondrial Physiology Society – on the basis of mutual benefit**

The MitoGlobal Network Coordinator, Verena Laner, presented the connection between the MiP *society* (=world wide society) and MITOEAGLE – advantages in a longer perspective.

- More industrial partners should be involved to support MITOEAGLE. A template for invitations is available on the MITOEAGLE website:

[http://www.mitoglobal.org/index.php/Talk:MITOEAGLE\\_2016\\_Verona\\_IT#Template\\_for\\_invitation\\_of\\_industrial\\_partners](http://www.mitoglobal.org/index.php/Talk:MITOEAGLE_2016_Verona_IT#Template_for_invitation_of_industrial_partners)

## 8. Closing

This meeting was closed by the Local Organiser and Vice Chair, Elisa Calabria, at 6:10 pm.

## II. Working Group 1 Meeting: 2016 November 16

### 1. Welcome to participants and summary of the Core Group Meeting

The participants were welcomed by Elisa Calabria (Local Organiser and Vice Chair) and by Federico Schena. Elisa Calabria continued with a summary of the Core Group Meeting and Zuzana Cervinkova gave an overview of the planned meetings in Grant Period 2.

- MiP *school* with MITOEAGLE WG Meetings in Obergurgl (AT), in July 2017
- MC Meeting and WG Meetings in Hradec Králové (CZ), in November 2017 (suggested date: 15<sup>th</sup>-17<sup>th</sup>) in combination with a MiP *conference*

### 2. Discussion of concepts and terminology of mitochondrial physiology

#### TG1.1 Coupling states and coupling control ratios: consensus statements

- Erich Gnaiger: Towards a database: why terminology is important
- Rob Wüst: On terminology for mitochondrial respiration using different substrates
- Discussion of the presentations and further steps – suggestion of a special issue on Mitochondrion

### 3. TG1.2 SUIT Protocols: concept and nomenclature suitable for a database

- Carolina Doerrier: Approaches for finding a SUIT reference protocol
- Sameh Ali: Oxygen consumption and ROS production – challenges for evaluation of experimental protocols
- Roberto Scatena: Mitochondrial respiratory complexes as targets of drugs – critical importance of protocols: intact vs permeabilized cells, incubation time

### 4. General discussion about terminology

The discussion was chaired by Erich Gnaiger.

- Agreement that terminology should be platform independent
- Next steps:
  - Consensus paper on terminology – Terms should be collected for the publication.
  - Review paper on normalization (use STSM for collecting information)

### 5. TG1.5 Knowledge management system

- Michael Drinnan: Data management: direction of travel with a first approach of automatic data analysis presented by Christina Plattner
- Pablo M Garcia-Roves: Design and implementation of systems biology approaches to integrate heterogenic data in biomedical research
- Marko Vendelin: A mitochondrial physiology database for the laboratory

## 6. Summary Roadmap Working Group 1

The Working Group 1 Meeting was summarized by the WG1 Leader Kathrin Renner Sattler

- Nomenclature – consensus agreement:  
The “MitoPedia: respiratory states” list of terms will be printed until the following day as a basis for selected terms. Participants will tick the terms they want to include in the publication and add missing terms to this list.  
([http://www.bioblast.at/index.php/MitoPedia: Respiratory states](http://www.bioblast.at/index.php/MitoPedia:Respiratory_states))
- Summary and presentation of WG1 specific topics from the Core Group Meeting (MITOEAGLE website and flyer, University press release with a template)

## III. Working Group 4 Meeting: 2016 November 16/17

### 1. MITOEAGLE data: blood and cultured cells

**TG4.1 Blood – Develop a working plan for the establishment of consensus protocols, reporting schemes, and the assignment of specific study tasks for mitochondrial respiratory studies in blood cells**

Elisa Calabria gave an introduction and presented topics discussed in the Core Group Meeting.

### 2. PBMCs

- Elisa Calabria: Blood cells mitochondrial activity in aging and frailty
- Zuzana Sumbalova: Isolation of blood cells for high-resolution respirometry: PBMCs and platelets
- Chiara Volani: Human and rat PBMCs: what can we do better?
- Gloria Keppner: Isolation of PBMCs for high-resolution respirometry and association to basal metabolic rate

### 3. Platelets

- Eleonor Åsander Frostner: Mitochondrial respiration in human viable platelets
- Luiz F Garcia e Souza: Mitochondrial respiratory control in platelets
- Emil Westerlund: The role of platelet respirometry in diagnosing mitochondrial disease

### 4. MITOEAGLE Agenda

#### a. A road map to publications: MITOEAGLE terminology; respiratory protocols

- Introduction by the Action Chair
- Presentation of the MitoFit Proficiency Test by the Action Chair as a connection to the MITOEAGLE proficiency test ([http://www.mitofit.org/index.php/MitoFit\\_proficiency\\_test](http://www.mitofit.org/index.php/MitoFit_proficiency_test)): Reference sample, reference protocols, chemicals
- The MitoPedia: respiratory states list was printed and participants selected terms for publication. List of terms will be available on the MITOEAGLE website.
- Publication on blood cell separation protocols:
  - Step1: Collect protocols with explanations and working steps from different groups. Elisa Calabria will prepare a template and send it to WG4 participants.
  - Step 2: Compare protocols at the Barcelona meeting in March
  - Step 3: Formulate recommendations
- Cryopreservation was decided to be a topic for WG4

#### b. Summary for programme of Barcelona MC and WG meeting – MITOEAGLE next steps – on the wing

- The Local Organiser, Pablo M. Garcia-Roves gave a summary presentation of the topics from the Core Group Meeting. A revised flat rate of EUR 70.00 per night was suggested by the Core Group for the upcoming meeting in Barcelona.
- Suggestion of the participants: Reimbursement should be available for only **one MC Member per country** and expenses should be entered in e-COST by every participant in advance, to get a better overview of the costs before the meeting.

## 5. Closing

This meeting was closed by the Local Organiser and Vice Chair, Elisa Calabria and by the Chair, Erich Gnaiger at 13:00 pm.

## LIST OF ANNEXES AND LINKS

### Annex 1 – Attendance List



CA15203\_Verona  
Attendance list

### Links:

Presentations and agenda: [http://www.mitoglobal.org/index.php/MITOEAGLE\\_2016\\_Verona\\_IT](http://www.mitoglobal.org/index.php/MITOEAGLE_2016_Verona_IT)