Action Objectives from MoU



Aim/primary Objective

Include Evolution, Age, Gender, Lifestyle and Environment (EAGLE) in studies of mitochondrial function. MITOEAGLE develops harmonisation protocols towards generating a data repository on mitochondrial respiratory function. A data management system will interrelate various study-results and set them into a multidimensional context, to better diagnose mitochondrial respiratory defects.

Secondary objectives

1. Intensify the dissemination of updated knowledge and know-how among the partners.

2. Build and improve collaborative relationships among the participating groups of the Action and interested end-users.

Action Objectives from MoU

3. Optimally harmonise protocols across research groups.

4. Foster **coordinated research activities** of scientific proposals in the European Research Area.

5. Increase the number of active participants in the course of the COST Action.

6. Form a unique well-coordinated network of senior researchers and young investigators.

7. Include well established stakeholders.

8. Establish a spirit of **mentorship and collaboration** in contrast to fierce competition which characterised early decades of bioenergetics.

9. Initiate **applications for funding** to support international collaborative research projects: *Marie-Curie fellowships to support ECI mobility?*

10. Present and **publish results** of collaborative research projects within the COST Action, particularly related to STSMs supported by the Action.

11. MitoEAGLE recommendations: The goal is to increase the value and reduce the noise in mitochondrial research. Prespecified and time-stamped protocols are needed in practice, and researchers need to be introduced into adhering to publicly deposited protocols in practice. MitoEAGLE recommendations will provide practical guidelines for students, scientists and stakeholders.

12. A monitored **database** – centres of excellence: The **MitoEAGLE** database will provide an invaluable tool for mitochondrial studies in the transition from exploratory preclinical research to clinical and pharmacological applications. Centres of excellence will emanate from the project's working groups providing training programms and diagnostic services: formal nomination of centres of excellence having capacity to train ECI and critical mass of projects in mito physiology? **13. Training:** Enhance the rigorous training activities particularly for

PhD students and young researchers (STSMs, Schools, Workshops, Conferences) in order to establish the practical guidelines introduced

by MitoEAGLE and to enhance research results in the long term.

Grant Agreement Period Goals: 01/05/2017 – 30/04/2018

- **GAPG 1** Development of a MitoEAGLE proficiency training module
- GAPG 2 Draft phase 2 of a manuscript on concepts and terminology of mitochondrial physiology
- GAPG 3 Present on project website a collection of procedures and experimental protocols for the evaluation of mitochondrial capacities and a library of protocols, for discussion and optimization
- GAPG 4 MitoEAGLE data management system (DMS) development:
 (1) Testing of developed software components regarding functionality and usability; (2) Upload of datasets generated through WG 2-4 in internal lab developments

Grant Agreement Period Goals: 01/05/2017 – 30/04/2018

- **GAPG 5** Develop recommendations for quality control, data reporting and data sharing beyond the published record
- **GAPG 6** Discuss strategic dissemination and an education programme for MITOEAGLE
- GAPG 7 Draft (phase 2) of a manuscript on procedures, protocols and general guidelines for mitochondrial respiratory studies in muscle tissue
- **GAPG 8** Extend consensus protocols and reporting schemes in a standardized format from adipose to neuronal and liver tissues (WG3)
- **GAPG 9** Summarize consensus protocols and reporting schemes for mitochondrial respiratory studies in blood and cultured cells
- **GAPG 10** Develop laboratory protocols for blood cell types (PBMC, platelets) for mitochondrial studies on intact and permeabilized cells

Meetings

- 1. 10th MiPschool 2017 MITOEAGLE Science Camp Obergurgl AT, 2017 Jul 23-30.
- 2. Working Group Meeting in Obergurgl AT, 28-29.7.2017
- 3. MC meeting, working group workshops, conference jointly with the MiPsociety Hradec Kralove, CZ 15-18.11.2017
- 4. Retreat: 07.02. 10.02.2018 Innsbruck
 - Discuss strategic dissemination and an education programme for MitoEAGLE
 - Summarize consensus protocols and reporting schemes for mitochondrial respiratory studies in blood and cultured cells
 - Workshop for blood cells?



MitoEAGLE-CA15203

10. Progress report of working groups

Working Groups

	WG Title	WG Leader	Number of WG members
WG1	Standard operating procedures and user requirement document: Protocols, terminology, documentation	Dr Kathrin Renner-Sattler	70
WG2	MITOEAGLE data repository in muscle and other tissues	Dr Pablo M. Garcia-Roves	55
WG3	MITOEAGLE data repository on fat tissues and other tissues	Prof Jan Nedergaard	30
WG4	MITOEAGLE data repository for blood cells and cultured cells	Dr Nicoleta Moisoi	70