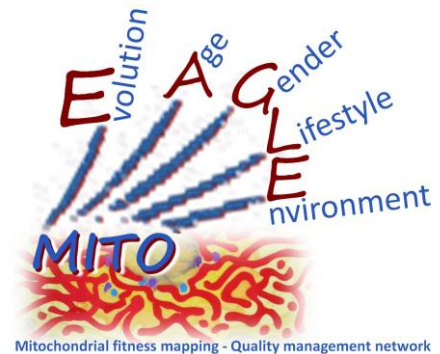


Subject | Minutes of the MITOEAGLE conference, Working Group meetings and Management Committee Meeting of COST Action CA15203 in Barcelona: “Mitochondrial fitness mapping: Evolution - Age - Gender - Lifestyle - Environment”



Website: http://www.mitoeagle.org/index.php/MITOEAGLE_Barcelona_2017

Minutes prepared by Zuzana Sumbalova and Verena Laner

I. MITOEAGLE conference: 2017 March 21

1. Welcome to participants

The participants were welcomed by Pablo Garcia-Roves (ES; local organiser) and Marc Claret (ES) representing the Catalan Society of Biology and host institution (Institut d'Estudis Catalans, Barcelona, ES).

2. Participants

see Annex 1 – Attendance list

- Total: 96 COST participants (day 1: 96 - day 2: 92 - day 3: 62)
- 121 total signed

Erich Gnaiger (Action Chair): Introduction of COST-MITOEAGLE and Barcelona meeting to all participants

3. Session 1: Connecting mitochondrial physiology – global perspectives and case studies

Chair: Kathrin Renner-Sattler (DE)

- Erich Gnaiger (AT): Quality first: a paradigm shift in mt-respiratory control towards global connection.
- Paul Coen (US): To bring MITOEAGLE and MoTrPAC together.

General discussion: SOPs for muscle preparation and respiration are available.
Discussion about skeletal muscle cryopreservation.

- Werner Koopman (NL): Standardized quantification of mitochondrial morphology and function in living patient fibroblasts using microscopy.
- Roberto Scatena (IT): Mitochondria and cancer stem cells in hepatocarcinoma. An illustrative example of a tangled methodological approach.
- Richard Porter (IE): Phenformin's inhibition of Complex I and ultimate death in glioblastoma cells and its circumvention by expression of humanized form of Ndi1.

4. Session 2: Connecting data on cardiac and skeletal muscle mitochondria

Chair: Terje Larsen (NO)

- Andrew Murray (UK): Metabolic adaptation to high altitude in Himalayan Sherpas.
- Hervé Dubouchaud (FR): Effects of different fatty acids on skeletal muscle mitochondrial function.
- Michal Nemeč (SK): Functional state of mitochondria in patients with preclinical and early stage neurodegenerative disease. Discussion Paul Coen: the way of patients monitoring is unique.
- Arild Rustan (NO): Metabolic studies in human skeletal muscle cells.
- Ellen Aasum (NO): Mitochondrial function in the diabetic heart – effect of an acute fat-load.

- Marko Vendelin (EE): Most of mitochondrial voltage-dependent anion channels are closed in rat cardiomyocytes.
- Rob Wüst (NL): Mitochondrial Complex I function in heart failure: different angles to analyze mitochondrial function.

5. Session 3: Connecting data on adipocyte mitochondria

Chair: Jan Nedergaard (SE)

- Irina Shabalina (SE): Control of UCP1 activity in brown fat mitochondria.
- Tobias Fromme (DE): Source depot and dietary status influence oxidative phosphorylation capacity in permeabilized mature adipocytes.
- Manuela Sanchez-Feutrie (ES): RAP250 deficiency protects from obesity, and enhances mitochondrial metabolism in adipose depots.
- Marc Claret (ES): Mitochondrial performance and central regulation of energy balance.
- Lisa Chakrabarti (UK): Mitochondrial lipid and proteomics comparative studies in mammalian ageing.

6. Session 4: Connecting data on cultured cells and blood cells

Chair: Magdalena Labieniec-Watala (PL)

- Nicoleta Moisoi (UK): Models of Parkinson's with focus on cell lines.
- Claus Desler (DK): Mitochondrial mediated genomic instability in aging with focus on cell lines.
- Elisa Calabria (IT): Age and frailty related changes in PBMCs mitochondrial function and whole body physiology.
- Maria Monsalve (ES): Mitochondrial biogenesis in PMBC: potential biomarkers.
- Slawomir Michalak (PL): Mitochondrial respiration in intact peripheral blood mononuclear cells in patients with extrapyramidal syndromes.
- Clair Hartmann (DE): Mitochondrial respiration of peripheral blood mononuclear cells in an experimental porcine brain injury model.
- Karolina Siewiera (PL): The effect of metformin on blood platelet bioenergetics and platelet function.

II. MITOEAGLE Working Group meetings: 2017 March 22

Session 1: Joint WG meeting start at 9:05

Chair: Elisa Calabria (IT; Vice Chair of COST Action)

WG leaders presented topics for WGs:

WG1: SOPs and user requirement document (URD): Protocols - Terminology - Reporting

WG1 group leader Kathrin Renner-Sattler (DE) presented aims of WG1 and suggested to focus on first joint publication on respiratory states and one publication on fatty acid oxidation (proposed by Marina Makrecka-Kuka, LV)

- Presentation by Carolina Doerrier (AT): SUIT reference protocol for comparative mitochondrial physiology.
- Magdalena Labieniec-Watala (PL; STSM coordinator) reported STSM accomplished in Grant period 1 (4 STSM) and presented plan for STSM in grant period 2. Call for GP2 will be at the end of April and will last 1 month, budget is 35,000 €. The amount of money: 5-90 days up to 2,500 €/STSM, 91-180 days: up to 3,500 €/STSM. COST will rather support long-term stays of early career investigators (ECI).
- Tomaz Mars (SI; Early Career Investigators, Inclusiveness Target Countries and gender balance coordinator): ECI thinktank presentation. Presented list of mentors and suggested Skype mentors conferences in fixed dates which will be announced. All senior scientist are supposed to be listed in the mentors list.
- Marina Makrecka-Kuka (LV; Dissemination manager) presented progress in dissemination plan. MITOEAGLE announcement on Facebook has 81 followers. Suggestions: Facebook not available for everybody – no scientific advertisements are allowed there – switch to Research Gate – the discussion group in RG will be checked by Marina.

WG2: MITOEAGLE data repository on muscle tissues

TG2.1 Skeletal muscle:

TG2.1 leaders: Pablo Garcia-Roves (ES), Dominique Votion (BE) and Paul Coen (US) will take care about WG2 tasks on skeletal muscle fibres

- WG2 leader Pablo Garcia-Roves (ES) presented complexity of the tasks in TG2.1 Skeletal muscle dealing with various strains used in the research, additional variables as gender, age, specific muscle
- Goal: discussions on selection of data for collection in MITOEAGLE database.

34 participants interested to join this group in Barcelona, 120 COST action participants interested in total in this topic.

TG2.2 Cardiac muscle:

TG2.2 leaders: Terje Larsen (NO), Marina Makrecka-Kuka (LV) and Marko Vendelin will be responsible for WG2 task on heart muscle.

- WG2 Co-leader Terje Larsen (NO) presented task of TG2.2: Add exercise as a topic in addition to heart failure. Variability of heart muscle: from which part of the heart? Which mitochondria: subsarcolemal or interfibrillar? Mitochondria as treatment or environmental conditions? Preparation with collagenase/protease? Goal is to have a review paper.
- Jaap Keijer (NL) asked whether we aim on a standard protocol/ is there a standard protocol available? Erich Gnaiger (AT): Reference protocol is a tool to compare data, there is no best standard protocol.

WG3: MITOEAGLE data repository on fat, neuronal and liver tissues

TG3.1 Fat tissue:

TG3.1 Barbara Cannon (SE; substitute for J. Nedergaard)

- Discussion points for harmonization: different buffers, substrates, washing procedures, purity of preparations.
- Normalization: per mg protein (contamination protein fractions?)
- Compare with gene expression.
- How to deal with dead and damaged mitochondria?
- Is succinate a tool for evaluation of intactness of cell membrane?
- Add physiological context to our research.

TG3.2 Liver tissue:

- TG3.2 leader Zuzana Cervinkova (CZ) presented questionnaire which was sent to COST action participants before Barcelona meeting with listed models used in liver research and references of methods. This questionnaire has to lead to agreement on the focus of TG3.2.
- Currently 10 participants (6 countries).
- Tasks: develop SOPs on respiration media, protocols, data evaluation, mitochondrial preparation: are homogenates good substitutes for isolated mitochondria?
- Variability of experimental sample: hepatocytes – harvested, cultured, hepatocytes-derived cell lines
- Zuzana Cervinkova (CZ) announced next MC meeting which will be in connection to 12th Conference on Mitochondrial Physiology, November 15-17 2017, Hradec Kralove, Czech Republic.
- http://www.mitoeagle.org/index.php/MiP2017_Hradec_Kralove_CZ

TG3.3 Neuronal tissue

- Odeta Arandarcikaite (LT) presented different methods of mitochondrial preparation from brain tissue, different fractions of mitochondria.

WG4: MITOEAGLE data repository for blood cells and cultured cells

TG4.2 (Cultured cells) leader Nicoletta Moiso (UK) presented milestones / deliverables:

- SOP for cell preparation and lab protocols.
- Suggestion: divide cell lines to: primary and immortalized.
- MITOEAGLE database.

- Additional topic for blood cells: cryopreservation and further discussion on protocols for isolation and respiration.

TG4.1 (blood cells) leader Elisa Calabria (IT) mentioned the protocol for isolation of platelets and PBMCs that is available as a MiPNet on:

http://www.mitoeagle.org/index.php/WG4_MITOEAGLE_data_blood_and_cultured_cells

- The cell lines complexity: primary cell lines, passage, cross-contamination.
- The aim of the reference protocol is to have bioenergetic signature of cell lines.
- Standard protocol could be different in different studies with aim to compare effect of different conditions or treatments.

Session 2: Specific WG presentations start at 11:45

Chair: Pablo Garcia-Roves (ES)

WG1: SOPs and user requirement document (URD): Protocols - Terminology - Reporting

11:45 Erich Gnaiger (AT): Current proposal about 'New terminology' on SUIT protocols and coupling/pathway control states.

- Topics addressed: MITOEAGLE terminology, extend the team; Multi-author review, journal to aim for: to be discussed.
- bioRxiv preprint publication first to get feedback from community and invite more authors for participation on the review article.
- Terminology should be independent of platform – on MITOEAGLE meetings the terminology should be unified and we should agree on abbreviations used in our presentations and papers. We aim to harmonize our different terminologies.
- For the manuscript in preparation, see 'work in progress', and join the MITOEAGLE Terminology Committee with your contribution to secure a wide scope of the recommendations:
http://www.mitoeagle.org/index.php/Mitochondrial_respiratory_control_MITOEAGLE_recommendations_1

12:25 Marina Makrecka-Kuka (LV): Fatty acid oxidation evaluation in mitochondria.

WG2: MITOEAGLE data repository on muscle tissues

12:40 Paul Coen (US) and Pablo Garcia-Roves (ES): Technical perspective of high-resolution respirometry in permeabilized skinned muscle fibers: humans and animal models.

- Topics addressed in discussion: dry/wet weight ratio, blebbistatin, 3-4 h permeabilized fibres – the same O₂ flux as freshly permeabilized. Longer experience with fibre preparation is necessary for reproducibility of results. Suggestions from participants: add videos and photos for teaching and QC, compare respiration buffers. Normalization: W_w , W_d , CS, mtDNA?

WG3: MITOEAGLE data repository on fat, neuronal and liver tissues

13:00 Odeta Arandarcikaite (LT): Age-related responses of brain mitochondria to ischemic insult.

13:15 Ondrej Sobotka (CZ): The effect of 24 weeks of high-fat and high-cholesterol diet on rat liver mitochondria.

Lunch

WG4: MITOEAGLE data repository for blood cells and cultured cells

14:50 Mario Ost (DE): Multivariate biomarkers of age-dependent sarcopenia: A blood based bioenergetics & cytokine profiling approach. Q: EDTA or heparin for blood cells isolation? A: EDTA binds Ca²⁺ and reduce responses -> use heparin.

15:05 Natasha Kopitar-Jerala (SI): Mitochondrial ROS and inflammation.

Session 3: Specific WG meetings

WG2 and WG4: joint start

15:20 Tomaz Mars (SI): *In vitro* model for studying skeletal muscle contraction and regeneration.

WG1 Notes (Verena Laner, AT)

Timea Komlodi (HU): Succinate dehydrogenase regulation via oxaloacetate in brain mitochondria.

Afterwards: discussion on first terminology manuscript

Working title: Towards a harmonization of terminology in mitochondrial respiratory physiology

Focus on topics which will help the other working groups (WG 2, 3 and 4)

Suggested chapters:

- From bioenergetics to mitochondrial physiology - historical view
- The mitochondrial respiratory system
- Rates and states
 - Units (for database is important) : consider *S*/ units (provide examples: flow $C.s^{-1}$; flux $C.s^{-1}.m^{-2}$; rate etc).
- Intact cells, mt preparations and normalization
- Coupling states: including intact cells
- Pathway states intact vs. permeabilized cells
- References
- Include cartoons on the ETS system

In order to prepare a first draft, it was suggested to have a 'Retreat' for selected participants.

When the first draft is available it should be open to a broader audience > circulate via MiG-List.

Include always mt for mitochondria, e.g. mtDNA etc. to be more clear.

Suggested journal: International Journal of Biochemistry and Cell Biology – Open Access – W. Koopman is the new editor.

WG2 Notes (Carolina Doerrier-Velasco, AT)

The discussion was about the way of collection of results obtained by HRR in permeabilized fibers and isolated mitochondria from different muscles. Due to difficulties to put together all the data (different protocols for sample preparation, different models, different SUIIT protocols - including different substrate concentrations) the WG2 members agreed to send the most common SUIIT protocol(s) used in their laboratories in selected models and preparations.

The most frequent SUIIT protocol(s) will be collected and the results will be compared between different labs (after the collection of the data). An email will be sent to the WG2 members until the end of March with a question for specific information and deadline for sending the information.

After the collection and analysis of the selected data the goal is to select the most common SUIIT protocols and agree on additional experiments if they will be needed.

The group has developed a strategy to get the similar results from respiration by selecting and circulating the best protocol for fibres preparation and STSM for doing experiments in different labs.

WG3 Notes (Ondrej Sobotka, CZ)

1. Marta Casado Pinna (ES) presented data from two studies:

1st study to evaluate the role of COX2 during the process of NAFLD progression. Compared to models immortalized hepatocyte cell line vs permeabilized primary hepatocytes.

Respiratory protocol: GMSOctD (note inadequate concentration of malate, 0.5 mM)

Question on optimal protocol for liver and chemical concentrations.

Question on data normalization (mtDNA, mg protein, etc.).

2nd study about ischemia/reperfusion

Frozen liver mitochondria – open question of validity of this experimental model.

Discussion: the frozen mitochondria model – needs further investigation using RP1 and RP2 and eventually optimization of the procedure for wider use; discussed correct malate

concentration (since there was a presentation before by Carolina Doerrier (AT), we didn't go further in this direction); discussed the importance of ADP+Mg²⁺ in liver mitochondria preparations – does not seem to be necessary – no difference observed by the group of Prof. Cervinkova (CZ), but better to collect more data?

2. Pavla Stankova (CZ) introduced experimental models of her group and the way of contribution of the group to database and the main experimental interests (Male wistar rats, NAFLD, Hepatectomy animals, Toxic liver injury). Open question: Could homogenate be the full substitute for respirometry measurements? Issue with steatotic liver!

Questions addressed in the presentation:

- Methodological questions: Sample handling, isolating procedure question, media composition, centrifugation speed and type of centrifuge rotor. Question of BSA in isolation media; the way of easily estimate the purity of isolated mitos.
- Question of normalization.
- Experimental diet, its composition and significant effect in metabolic studies. Presented the Ca²⁺ paradox for two types of control diet. Conclusion: Even micronutrients could have significant effect on Ca²⁺ retention capacity and maybe other mitochondrial characteristics

3. Laura Herrero (ES) presented the results of her study focused on brown and white adipose tissue. Cell lines used in her work: 353-L1 adipocyte cell line, RAW 264.7 murine macrophage cell line. Discussion: the question on data normalization and non mitochondrial discussion about her project

4. Joseph A Villena (ES) presented a study with PGC-1 α KO mice and how caloric restriction affected mitochondrial biogenesis. Mitochondrial dysfunction as a potential cause of insulin resistance?

5. Belen Peral (ES) presented the results of her proteomic study on adipocyte mitochondrial proteome. No methodological questions.

6. Trine Lund (NO) presented the results of study on the effect of Calanus oil on insulin resistance. Discussed her respiratory results and correct evaluation and normalization.

Conclusion:

During the WG3 section different groups were introduced and few methodological questions were addressed. These questions need to be further investigated in the near future. The working group (16 people present in the meeting) is still too small to make any significant progress in three different Task groups (fat tissue, liver tissue, neural system) so the main goal is still to get more participants in the working group involved for sharing methodology, experience and results.

The first crucial issue through all task groups is the way of data normalization. In liver group the next questions are focused on isolation procedure and correct experimental model (and newly used frozen liver mitochondria).

WG4 Notes (Zuzana Sumbalova, AT)

WG4: 15:50-17:15

1. Magda Labienec-Watala (PL) presented the lab interest and collaborators
2. Maarit Lehti (FI) presented the interest of her research group on work on blood cells and myocytes, myoblasts, myotubes
3. Eleonor Asander-Frostner (SE) presented the lab interest: www.neurovive.com, work on cyclophilin D.
4. Beata Velika (SK): Optimization of cryopreservation of human peripheral blood mononuclear cells and platelets for high-resolution respirometry. Question about normalization per citrate synthase activity. Degree of contamination of PBMCs by PLT is different in freshly isolated cells vs cells after cryopreservation. The contribution of contaminating PLT to respiration and CS activity should be considered.

5. Zuzana Sumbalova (AT): Differences between freshly isolated and cryopreserved PBMCs and PLT: respiration of permeabilized cells. PBMCs change their bioenergetic profile with cryopreservation.

Discussion:

Elisa Calabria (IT) suggested testing the effect of incubation of PBMCs with DMSO, Slawomir Michalak (PL) discussed the method of freezing used in his lab

6. Olga Tura Ceide (ES): Endothelial cells as a model for metabolic shift in chronic thromboembolic pulmonary hypertension.

Conclusions WG4:

Cell lines:

- WG leader will circulate a table for filling up the cell lines used in laboratory.
- For joint publication proposed to focus on mitochondrial function in one model of disease and one cell line – should be defined after circulating specific interests of groups.

Blood cells:

- E. Calabria (IT) proposed to finalize publication about isolation of blood cells for respirometry.
- Focus on experiments that should be done to complete publication.
- Participants will send their suggestions for methodological issues to for completion the paper by Email.

Session 4: Joint WG meeting - conclusions and future WG actions.

Summary of the WG meetings presented by WG leaders:

WG1 (presented by Kathrin Renner-Sattler, DE)

Data evaluation

- Comparison of your own control samples over time and between studies.
- Define control sample – train people to reach this standard before the actual project starts.
- Normalisation.
- Calculation dry weight to wet weight – done in more laboratories.
- Calculate protein content per million cells, include it in publications.
- Platform comparison: dedicate some Short-Term Scientific Missions.
- MoTrPAC: suggested to use the same spread sheet for data reporting.
- Short-Term Scientific Missions in collaboration.

Terminology review

- Aimed journal: International Journal of Biochemistry and Cell Biology (W. Koopman new editor)
- Ms with working title: Towards a harmonization of terminology in mitochondrial respiratory physiology
 - From bioenergetics to mitochondrial physiology - historical view
 - The mitochondrial respiratory system
 - Rates and states
 - Intact cells, mt preparations and normalization (per mill. cells and protein)
 - Coupling states: including intact cells
 - Pathway states intact vs. permeabilized cells
 - References
- Cartoons (ETS) will be included.

Necessary: Retreat for selected participants

Further progress: involve broad audience, suggestion: MoTrPAC network should be involved

Work in progress towards a Preprint:

http://www.mitoeagle.org/index.php/Mitochondrial_respiratory_control: MITOEAGLE_recommendations_1

WG2 (presented by Dominique Marie Votion, BE)

MITOEGLE data repository in muscle (skeletal & cardiac muscles)

Task 1: Call for participating labs to deliver relevant experimental data on already published studies and to report them in a standardized format.

- We have learned from the WG that data of several species are available: Human/ rat/ mice / horse/ dog/ turtle....

Preliminary tasks to be performed:

- Collection of protocols commonly used by labs;
- Conference call for follow-up;
- Focus on the most frequently used protocols - then collect raw data (according to species)

Additional expectations of the participants:

- Review about comparison among species/ if we do not use these data, they may be useful for others.
- Pinpoint mitochondrial defect as therapeutic target.
- To go further or start scientific collaboration among participants.
- Have the chance by meeting people of the WG to improve our current research.
- Collaborative grant.
- Circular XLS file with the topics of interest, technologies available etc.

WG3 (presented by Barbara Cannon, SE)

- Difficulty harmonizing different tissues, different protocols, isolation methods...
- Communication should proceed by Email.

WG4: (presented by Nicoleta Moiso, UK and Elisa Calabria, IT)

1. Talks – lab/interest introductions 3x; + 1 talk on endothelial cells
2. Cryopreservation of blood cells 2x
+ Discussion

Future Tasks:

- Review on studies on mitochondrial function in primary vs immortalised cell lines and how to use them to study diseases and pharmacological targeting of mitochondrial function?
- Future work on blood cells (Elisa Calabria et al)
- Keep considering the collection of data and protocols

TG 4.1 - Blood cells

- PBMCs: the indications for sample collection and purification of the cells have been set. During the meeting it emerged that the tubes used for blood sample collection depending on the purpose of the experiment (EDTA-treated or heparin-treated vacuette).

Next steps:

- Publications: for PBMCs we can start finalizing the preparation of a methodological article.
- PLTs: Protocols for cell preparation have been collected and a “harmonized” version will soon be shared with the MITOEGLE community.
- Cryopreservation is felt as an important implementation that we need to standardize and optimize (both for PBMCs and PLTs). The groups actually active on this topic will focus on the quality control of cell purification, on the effects of DMSO treatment on mitochondrial function, and on the extension of the time of cryopreservation. However it appears that the goal is not that far.

Discussion:

- Media for preservation (Cryosure; BSA – Dextran – DMSO; serum versus plasma; permeabilized vs non-permeabilized).
- Purity of the prep.
- Updated protocols will be circulated (Slawomir Michalak, PL; Zuzana Sumbalova, AT).
- More work in cryopreservation: Controls with DMSO, enhance purity, enhance time of cryopreservation.

TG 4.2: Cell lines

- Brainstorming on how to integrate the diverse experience within the group.
- Disease or end-point related (e.g. metabolic disease, Complex I mutation...).
- Protocols for purification of primary cells (ex: muscle cells/ species differences).

- How to address mitochondrial function using cell lines in different culture conditions and with challenge protocols (substrate switches).

WG4:

Task 1

Please provide details of experience, current work/interest, data that can be made available to the group (published/unpublished)

Name	cell type experience preparation protocols/ mitochondrial function	current interest	Own published data & protocols (ref)	un-published data & protocols that can be made available(attach as pdf)

This list will be circulated – open access on the website (www.mitoeagle.org)

III. Management Committee Meeting, Mar 23

Start: 09:15

1. Welcome to participants and to COST administrative officer Mr. C. Peeters
2. Verification of the presence of two-thirds of the Participating COST Countries or, if applicable, a quorum

On the meeting (summary by Tomaz Mars, SI): 121 participants, 26 countries 38% ITC, 62% non-ITC (particularly due to local participants from ES);
IPC and NNC: 4 (Egypt 2, Qatar 1, USA 1)

MC:37 attending/56, MC-Substitutes: 9 attending/37

3. Adoption of agenda – no adoption of the agenda required.
4. Approval of minutes and matters arising of last meeting
» http://www.bioblast.at/index.php/MITOEAGLE_Verona_2016#Minutes

Meeting minutes were approved.

5. Update from the Action Chair

a) Status of Action: start 2016-09-12, end of Action: 2020-09-11, participating COST countries, participating NNC/IPC institutions and Specific Organisations:

COST Members (countries) having accepted the MoU:
ITCs: Number 14 non-ITCs: Number 16 Total: 30
% of all: ITCs 46.67% non-ITCs 53.33%

Number of Action MC members:
ITCs: 23 non-ITCs: 33 Total:56

Grant periods (GP):
GP1: 2016-11-01 to 2017-04-30
GP2: 2017-05-01 to 2018-04-30

b) Short-Term Scientific Missions (STSM): review of completed reports (1st Grant Period; GP1) and new applications (2nd Grant Period; GP2) by Magdalena Labieniec-Watala (PL):

- Explanation of selection procedure and information on granted STSM (GP1).
 - 35,000 EUR for 2nd Grant Period.
 - Suggestion by Patrice Petit (FR): Report from student if she/he was happy with the host institution etc.
 - Suggestion by Rob Wüst (NL): STSM for platform comparison.
 - Guideline for applications: MITOEAGLE website:
http://www.mitoeagle.org/index.php/Short-Term_Scientific_Missions_MITOEAGLE
 The MITOEAGLE STSM website was presented as a guideline for the application process
 Should a template for a motivation letter be uploaded?
 Discussion about what supports the positive answer – the result of this discussion will be published on the STSM website = “Evaluation process”
 - Two calls for the 2nd Grant Period (B. Cannon, SE), 1 month application deadline, Z Cervinkova (CZ): failure does not preclude from application at the next call.
- *Summary vote: GP2 will have two calls for STSM*
6. Update from the Grant Holder: Action budget status – open budget to be used for STSM in GP1 or shifted towards Barcelona meeting to provide support to more participants, who will be contacted by Email.
- *Summary vote: the remaining budget for GP1 can be used for dissemination, OERSA and support of participants at the Barcelona meeting.*

Results of e-VOTES 01, 02 and 03 can be found in the link below:

http://www.mitoeagle.org/index.php/Management_Committee_MITOEAGLE#MC_e-VOTES

7. Update from the COST Association, Mr. Peeters, Administrative officer of MITOEAGLE:
- Change of Vademecum 2017-05-01
 - eVOTE: several points can be included for voting in one circular to reduce Emails.
 - New logo of COST should be used.
 - A COST representative will participate at MC meetings (new).
8. Monitoring of the Action: Action is monitored in detail on the website:
 » www.mitoeagle.org
 Meeting minutes will be available for each meeting.
 All speakers were asked to send their presentation at the meeting for open access and discussion.
9. Implementation of COST policies on:
- a) Promotion of gender balance and Early Career Investigators (ECI) by Tomaz Mars (SI)
 - b) Inclusiveness and Excellence (see below list of Inclusiveness Target Countries) reported by Tomaz Mars (SI) – presentation available :
http://wiki.oroboros.at/index.php/MITOEAGLE_Inclusiveness_Target_Countries
- Inclusiveness Target Countries (ITC, members in bold): Bosnia-Herzegovina, Bulgaria, Cyprus, **Czech Republic, Estonia, Croatia, Hungary, Lithuania, Latvia**, Luxembourg, **Malta**, Montenegro, **Poland, Portugal, Romania, Slovenia, Slovakia**, the former Yugoslav Republic of Macedonia, **Republic of Serbia, Turkey**.
10. Follow-up of MoU objectives:
 At the MITOEAGLE conference on day 2 (2017-03-22) a progress report of the working groups was reported by the WG leaders:
- Kathrin Renner-Sattler, DE (WG1)
 - Pablo Miguel Garcia-Roves, ES (WG2)
 - Jan Nedergaard, SE (WG3)
 - Nicoleta Moiso, UK (WG4)

11. Scientific planning:

a) Scientific strategy (MoU objectives, GP2 goals, WG tasks and deliverables)

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.

Focus on publications in:

WG1: Terminology, respiratory states.

WG2: Skeletal muscle respiration.

WG4: Blood cell isolation and respiration protocol.

How to communicate progress between working groups?

Suggestion: WG have to be connected, circulate Emails independent of WG to all members and beyond (7,000 contacts), U. Schlattner (FR): protected server available? – Erich Gnaiger (AT): we follow an Open Access strategy. Email communication will be summarized on the individual Working Group websites (www.mitoeagle.org) in the discussion part:

WG1: http://www.mitoeagle.org/index.php/Talk:WG1_MITOEAGLE_protocols_terminology_documentation

WG2: http://www.mitoeagle.org/index.php/Talk:WG2_MITOEAGLE_data_muscle

WG3: http://www.mitoeagle.org/index.php/Talk:WG3_MITOEAGLE_data_adipose_liver_neuronal

WG4: http://www.mitoeagle.org/index.php/Talk:WG4_MITOEAGLE_data_blood_and_cultured_cells

GP Goals: http://www.mitoeagle.org/index.php/COST_Action_MITOEAGLE#Grant_periods pdf-File - WBP1

b) Action Budget Planning: Work and Budget Plan Summary:

A. COST Networking Tools EUR

(1) Meetings 64,193.00

(2) Training Schools 28,819.00

(3) Short Term Scientific Missions (STSM) 35,000.00

(4) COST Action Dissemination 2,800.00

(5) Other Expenses Related to Scientific Activities (OERSA) 500.00

B. Total Science Expenditure, sum of (1) to (5): 131,305.01

C. Financial and Scientific Administration

Coordination (FSAC) (max. of 15% of B) 19,696.80

Total Grant (B+C) 151,008.80

Work and Budget Plan was sent out by e-COST automatically, and should be considered as a basis for discussion. Discussed: Moving the training school in Cambridge possibly to another grant period and focus on priorities, such as the manuscript of the terminology review (WG 1). Reallocate 15 000 € from the previously planned second training school in GP2.

New developments within the MITOEAGLE conference:

- Focus on basics and organize retreat for WG1 to write the first draft for the Manuscript on Terminology.
- New suggestions for the WBP will be circulated

c) Long-term planning (including anticipated locations and dates of future activities)

- Obergurgl AT, 2017 Jul 23-30. 10th MiPschool 2017 MITOEAGLE Science Camp
- Hradec Kralove CZ, 15-17 Nov 2017. 12th Conference on Mitochondrial Physiology: MITOEAGLE perspectives.
- MITOEAGLE meeting in 2018 Serbia: Oktober – November according local organizer possibilities

d) Dissemination plan (Publications and outreach activities): was presented by Marina Makrecka-Kuka (LV) on conference day 2 and not outlined further at the MC meeting on day 3.

12. New members of the COST Action MITOEAGLE:

- a) COST countries: many from Spain - about 100 participants joined on e-COST since the last meeting. Mostly COST countries.
- b) Institutions in Near Neighbouring Countries, International Partner Countries, and/or Specific Organisations: EU agencies, European RTD Organisation, International Organisations; one request from Ghana / US

13. Any Other Business (AOB)

Discussion points:

- IMPACT flyer: joint input to flyer to be prepared for next meeting in Hradec Kralove.
- Open positions will be circulated through COST network by Email.

14. Location and date of next MC meeting

- Hradec Kralove CZ, 15-17 Nov 2017. 12th Conference on Mitochondrial Physiology: MITOEAGLE perspectives.

15. Summary of MC decisions:

- 2 calls for STMS for a grant period
- Support STSM input to participate in publications
- STMS – 50 % for ECI from ITC (to be considered in the evaluation process)
- Moving Training School Cambridge (March 2018) possibly to another grant period and reallocate 15,000 € to 'Manuscript retreat' and training school July 2017 to support a larger number of students and ECIs.
- Summary vote: **Outcome**
 - Votes YES - 46
 - Votes NO - 0
 - Country ('Party') votes APPROVED: 23
 - Country ('Party') votes REJECTED: 0
 - Country ('Party') votes: VOID: 0

- Updated budget proposal for GP2 will be prepared by GH for e-VOTE.

16. Closing: This meeting was closed by the Local Organiser (Pablo Garcia-Roves, ES), the Vice Chair (Elisa Calabria, ITZ) and by the Chair (Erich Gnaiger, AT) at 12:18 pm.

LIST OF ANNEXES AND LINKS

Annex 1 – Attendance List



Attendance_List.pdf

Links: <http://www.mitoglobal.org>

Abstracts, presentations and agenda: http://www.mitoeagle.org/index.php/MITOEAGLE_Barcelona_2017

Next training school: http://www.mitoglobal.org/index.php/MiPschool_Obergurgl_2017

Next conference and MC meeting: http://www.mitoeagle.org/index.php/MiP2017_Hradec_Kralove_CZ