

## Subject | Minutes of the 14th Conference on Mitochondrial Physiology Mitochondrial function: changes during life cycle and in noncommunicable diseases - COST MitoEAGLE perspectives MIP2019 and MitoEAGLE WG and MC Meeting

Minutes prepared by Carolina Doerrier, Nina Krako Jakovljevic and Marija Beno

### I. MitoEAGLE welcoming: 2019 October 13

#### Conference venue

Rectorate Building of the University of Belgrade  
Studentski trg 1, Beograd, Serbia  
13:00 – 15:00 Registration and Opening ceremony

### II. MitoEAGLE conference: 2019 October 13

#### 1. Welcome to participants

13:00 – 15:00 Registration

15:00 – 15:30 Registration and Opening ceremony by the local organizer Prof. Lalic and Dr. Krako Jakovljevic (Local Organizer)

#### 2. Participants

see Annex 1 – Attendance list

- Total: 87 COST participants (day 1: 59 - day 2: 58 - day 3: 57 – day 4: 57)
- 96 total signed

#### 3. 15:30 – 17:00 Session A1: Mitochondria, lifestyle and life cycle

Chair: Nebojsa Lalic, Nina Krako Jakovljevic

**Erich Gnaiger:** [OXPHOS capacity in human muscle tissue and body mass index – the MitoEAGLE mission towards an integrative database](#)

**Patrick Schrauwen:** Circadian rhythmicity of skeletal muscle metabolism: role in metabolic health

**Steven Hand:** [Mitochondrial function and protection during life cycle arrests](#)

**Etienne Hebert-Chatelain:** [Mitochondria get stoned by cannabinoid receptors](#)

17:00 - 17:30 Coffee break

#### 4. 17:30 – 19:30 Session A2: Mitochondrial dynamics and OXPHOS

Chair: Helene Lemieux, Thierry Arnould

**Aleksandra Trifunovic:** [Keeping OXPHOS in shape](#)

**Nicoleta Moiso:** [The integrated stress response mediates mitochondria-nucleus communication in neurodegeneration](#)

**John Jones:** [Role of mitochondria in altered metabolic fluxes in non-alcoholic fatty liver disease](#)



**Niina Karro:** [Respiration of permeabilized cardiomyocytes from mice: no sex differences, but substrate-dependent changes in the apparent ADP-affinity](#)

**Maja Misirkic-Marjanovic:** [Dual role of mitochondrial damage in anticancer and antipsychotic treatment](#)

19:30 Think&Drink session (welcome reception)

### III. MitoEAGLE conference: 2019 October 14

#### 1. 09:00 – 11:00 Session B1: Mitochondria in noncommunicable diseases

*Chairs: Lisa Chakrabarti, Slawomir Michalak*

**Nebojsa Lalic:** Pathophysiology of type 2 diabetes and mitochondrial dysfunction: possible therapeutic implications

**Pablo Garcia-Roves:** Metabolic plasticity in obesity-related type 2 diabetes

**Dominik Pesta:** [Effects of physical activity and low calorie diet lifestyle interventions on insulin sensitivity in type 2 diabetes](#)

**Ivanka Markovic:** Targeting energy-sensing pathways as possible neuroprotective strategy in neurodegenerative disorders

**Sergej Pirkmajer:** Effect of antirheumatic drugs on AMPK and mitochondrial respiration in skeletal muscle

11:00 – 11:30 Coffee break

#### 2. 11:30 – 13:30 Session B2: Oxidative stress and mitochondria

*Chairs: Maria Luisa Genova, Sameh Ali*

**Zuzana Sumbalova:** [Platelet mitochondrial function, coenzyme Q10, and oxidative stress in patients with chronic kidney diseases](#)

**Helene Lemieux:** [Partial prevention of oxidative stress damage to mitochondria with photobiomodulation](#)  
**Natalja Timohhina:** [Metabolic effects of mitochondria-targeted antioxidant peptides in colorectal cancer cells](#)

**Ali Sameh:** [Differential Role of Mitochondria in rescuing glycolytically inhibited subpopulation of triple negative breast cancer cells](#)

**Andjelka Isakovic:** [The role of ROS in antileukemic action of ethyl ester compound and corresponding Pt\(II\) and Pt\(IV\) complexes](#)

**Johnny Stiban:** Antitumor effects of microwave intratumor therapy using magnetic ferucarbotran nanoparticles on breast cancer xenografts

**Ksenija Vujacic-Mirski:** ROS formation involving mitochondrial and NADPH oxidase in various tissues and mitochondria

**Nathan Earl Rainey:** [Mitochondria are not the primary target of curcumin-induced autophagy and apoptosis](#)

13:30 – 14:30 Lunch and Walk&Talk

#### 3. 14:30 – 15:30 Session P: Posters

*Chairs: Ivanka Markovic, Pierre Blier*

**Carlos Palmeira:** [Prevention of ischemia/reperfusion injury: effects of a soluble adenylyl cyclase inhibitor LRE1](#)

**Silvana Andric:** [Markers of mitochondrial biogenesis, fusion and architecture are disturbed in PBMC from war veterans with posttraumatic stress disorder \(PTSD\)](#)

**Silvana Andric:** [Mitochondrial morphology and mitochondrial biogenesis are altered in Leydig cells from stressed adult rats](#)

**Sava Radovic:** [Conditional deletion of insulin and IGF1 receptors in steroidogenic cells changes profile of molecular markers of mitochondrial dynamics in myocard of prepubertal male, but not female mice](#)

**Sava Radovic:** [Conditional deletion of insulin and IGF1 receptors disturbs transcription of the main markers of mitochondrial biogenesis and architecture/fusion in mouse prepubertal steroidogenic cells of testes but not ovaries](#)

**Isidora Starovlah:** [Mitochondrial dynamic markers and acrosomal reaction are disturbed in spermatozoa from stressed adult rats](#)

**Isidora Starovlah:** [Psychophysiological stress changes transcriptional profile of molecular markers of mitochondrial dynamics in myocardium of adult male rats](#)

**Marija Medar:** [Long-term sildenafil treatment improves expression of the main mitochondrial dynamics markers in aged myocardium](#)

**Dijana Marinkovic:** [Aging-related increase of cGMP disrupts mitochondrial homeostasis in Leydig cells](#)

**Marija Jeremic:** [Neurotoxic effect of extracellular alpha-synuclein can be alleviated by AMPK and autophagy](#)

**Mirko Djordjevic:** [Sex-specific effects of candidate Trojan Female Technique haplotype on viability in pest species \*Acanthoscelides obtectus\*](#)

**Gaia Tioli:** [Involvement of mitochondrial respiratory supercomplexes in anti-bacterial innate immunity](#)

#### 4. 15:45 – 17:30 Session B3: Mitochondrial signaling

*Chair: Eleonor Aasander Frostner, Steven Hand*

**Etienne Hebert-Chatelain:** [Src kinase slows down mitochondrial fission and OXPHOS via phosphorylation of ATP5B](#)

**Carles Canto:** [Mitochondrial dynamics and cellular metabolism: lessons from mouse models](#)

**Pierre Blier:** [The secrets of extreme longevity from bivalves](#)

**Milica Popovic:** Role of cytochrome c oxidase in biogenesis and maintenance of oxidative phosphorylation machinery

**Omar Alberto Dominguez-Amorocho:** Role of Sirtuin 1/3 in CD4+ T cells activation and differentiation in obese and transplanted animals

**Caroline Kruse:** [Peripheral blood mononuclear cells to detect mitochondrial dysfunction in horses: a preliminary study](#)

**Emmanuelle Vandermeeren:** [Thermal tolerance, ROS production and heart fatty acids content in salmonids](#)

17:30 – 18:00 Coffee break

#### 5. 18:00 – 20:00 Session B4: - Mitochondrial function and noncommunicable diseases

*Chair: Dominique-Marie Votion, John Jones*

**Mercedes Fernandez-Moreno:** [Role of mitochondrial DNA from OA patients in cellular apoptosis, senescence and autophagy](#)

**Claudia Holody:** [Sex-specific changes in neonatal cardiac mitochondrial function in response to perinatal iron deficiency](#)

**Nina Krako Jakovljevic:** [Lower insulin sensitivity differently affects mitochondrial coupling in liver and muscle cells](#)

**Jekaterina Aid-Vanakova:** [Adaptation of muscle OXPHOS in developing glucose intolerance - Wfs1 mice model](#)

**Kasja Pavlovic:** [Effect of metformin on mitochondria in C2C12 muscle cell line](#)

**Natasa Kopitar-Jerala:** Anti inflammatory role of cystatins and mitochondrial function

**Alina Maria Betiu:** [Cell-permeable succinate improves amiodarone-induced mitochondrial complex I and II inhibition in human platelets](#)

**Luis Crisostomo:** ["Mitogheist" – Is testicular mitochondrial dysfunction a ghost pattern of paternal high-fat diet in mice?](#)

20:30 Dinner

## IV. MITOEAGLE WG sessions: 2019 October 15

### MitoEAGLE Working Group Meetings (selected topics)

#### 1. 09:00 – 10:30 WG2: Muscle tissue

*Chairs: Nicoleta Moiso, Sergej Pirkmajer*

1. **Pablo Garcia-Roves:** Overview of WG2 progress

2. **Carolina Doerrier Velasco:** [Inter-laboratory harmonization of respiratory protocols in permeabilized human muscle fibers](#)

3. **Beatrice Chabi:** [Permeabilized muscle fibers reference values- mouse soleus study](#)

4. **Helene Lemieux:** [Altered mitochondrial metabolism in the diabetic heart](#)

5. **Arild Rustan:** Does donor sex, age, body mass index, exercise status, or muscle type influence energy metabolism in cultured skeletal muscle cells?

6. **General discussion:** There are some variables which could be taken in consideration for the mouse study, for example the animal facility conditions (temperature, number of mice per cage), time when the experiments were performed (morning/evening). Could be that people did not wait enough for study state and this is a reason of the variability? Regarding to the human study, there are some new compounds (similar to blebbistatin) which could be try in the future to avoid the oxygen dependence in normoxia.

10:30 – 11:00 Coffee break

#### 2. 11:00 – 12:50 WG4: Blood cells and cultured cells

*Chairs: Natasa Kopitar-Jerala, Marko Vendelin*

1. **Nicoleta Moiso:** Overview of WG4 progress

2. **Engy A. Abdel-Rahman:** Mitochondrial respiration in platelets of children with autism spectrum disorder

3. **Theia Lelcu:** [Assessment of platelet respiration in blood malignancies: a pilot study in children and adults](#)

4. **Vlad Avram:** [Cell-permeable succinate bypasses statin-induced decrease in mitochondrial ATP-generating respiration in human platelets](#)

5. **Zuzana Sumbalova:** The decline of mitochondrial respiration in isolated platelets after short-term storage

6. **Tijana Zujovic:** [Cell membrane permeabilization: digitonine optimization pitfalls](#)

6. **Luiza Cardoso:** [Glucose concentration in culture media does not affect Huh7 cell viability measured by respirometry or digitonin concentration required for plasma membrane permeabilization](#)

#### 7. **General discussion:**

- Discussion about statins effects (Vlad Avram's work), digitonin optimization and protocols recommendation

- Question about fetal bovine serum used in cell culture, insulin concentration and how this might affect cultured cells; suggestion about use of mannitol to avoid osmotic differences.
- During and after the lunch break next day there were more discussions about possible outcomes of the WG itself. For the WG4, the group that works with blood cells was discussing about the publication in preparation, from the ones that work with cultured cells, it was discussed a possible review on cell lines or primary cell cultures and mitochondrial physiology.

12:50 – 14:00 Lunch

### 3. 14:00 – 15:20 WG3: Fat, neuronal and liver tissues

*Chairs: Pablo Garcia-Roves, Zuzana Sumbalova*

1. **Barbara Cannon:** [Summary to WG3](#)

2. **Norma Dahdah:** [Approaches to assess mitochondrial respiration in white adipose tissue](#)

3. **Thierry Arnould:** [Role of Sirtuin 3 in the differentiation of 3T3-L1 preadipocytes](#)

4. **Lisa Chakrabarti:** Levels of eicosanoids and cytokines reveal sex differences in cerebellar mitochondria in Parkinson's disease and controls

#### 5. **General discussion:**

- Discussion about possible ways of isolating mitochondria from white adipose tissue (from Norma Dahdah's work presented by Pablo)

15:20 – 15:50 Coffee break

### 4. 15:50 – 16:30 WG2-4 - Discussion and future perspectives

*Chairs: Carolina Doerrier, Erich Gnaiger*

- The Working Group summaries and future perspectives were discussed in afternoon session on Tuesday instead of on Wednesday.

[Summary to WG2](#)

[Summary to WG3](#)

[Summary to WG4](#)

### 5. 16:30 – 17:00 WG1: SOPs and user requirement document (URD): protocols - terminology - reporting

*Chairs: Dominik Pesta, Tuuli Kaambre*

1. **Erich Gnaiger:** [Introduction to WG1 & Mitochondrial respiratory states and rates](#)

Discussion: The manuscript "mitochondrial respiratory states and rates" was presented. It was discussed which one could be the next MitoEAGLE publication for the WG1.

20:00 Dinner

## V. MC Meeting, 2019 October 16

Start: 09:00 – 15:00 **Management Committee Meeting**

*Chairs: Carolina Doerrier, Nina Krako*

### 1. Welcome to participants

- E. Gnaiger – Chair of the Action welcomed participants and thanked the local organizers for the organization of the successful meeting.

### 2. Verification of the presence of two-thirds of the Participating COST Countries or, if applicable, a quorum

- 18 COST countries from 31 countries were present at the MC meeting, and additionally 4 more MC Members were added by Skype (Gloria Keppner – representing Germany and Beata Cizmarova – representing Slovakia, Christos Chinopoulos – representing Hungary and Joanna Vella – representing Malta) to the MC Meeting in order to vote according to the rules.
- 31 MC/MC-Sub in total: 20/55 MC, 11/40 MC-Sub  
67% ITC, 33% non ITC  
51% Male, 49% Female
- Present: AT, BE, DE, DK, EE, ES, FR, GR, HU, IE, IT, LV, MT, NO, PL, PT, RO, RS, SE, SI, SK, UK
- Not present: BA, HR, CZ, FI, IL, LT, NL, CH, TR
- Therefore two-thirds were present and all votings can and will be accepted.

### 3. Adoption of agenda

- The Working Group summaries/sessions (Point 8) were discussed in afternoon session on Tuesday all the other points according to the agenda. See programme:  
[https://www.mitoeagle.org/index.php/MiP2019/MitoEAGLE\\_Belgrade\\_RS#Programme](https://www.mitoeagle.org/index.php/MiP2019/MitoEAGLE_Belgrade_RS#Programme)

### 4. Approval of minutes and matters arising of last meeting

- Minutes from the WG and MC Meeting in Jurmala were shown by E. Gnaiger and approved by the MC members.

» [https://wiki.oroboros.at/images/a/ad/JurmalaMeeting\\_Minutes\\_CA15203.pdf](https://wiki.oroboros.at/images/a/ad/JurmalaMeeting_Minutes_CA15203.pdf)

### 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:

- Start and end [dates](#) of Action: 2016-11-01 – 2020-09-11
- [Participating Countries](#) registered on e-COST:
- **31 COST countries:** AT, BE, BA, CH, CZ, DE, DK, EL, EE, ES, FI, FR, GR, HR, HU, IE, IL, IT, LT, LV, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, TR, UK
- **3 NNC:** EG, PS, SA
- **7 IPC/Specific Organisation:** AM, BR, US, UA, IN, IR JP, KR, QA, AU, CA, CU, MX, RU

**Additional Countries** in our e-mail list but did not register on e-COST: CN, GH, MY, NZ, SG, TU, TW, UG, UY, ZA

### b) [Short Term Scientific Missions \(STSM\)](#):

- Review of completed reports by Magdalena Labieniec-Watala presented by Erich Gnaiger:

Planning of next STSMs: an E-Mail will be sent to all members that there is budget left and that they can apply for STSMs

- We will suggest the same structure of the budget for STSM in GP5.  
MC members approved this decision

6. Update from the Grant Holder: Action budget status

- Action budget status presented by Erich Gnaiger

COST Networking Tool	WBP	Used	Difference	ITC
<b>Meetings</b>	€ 47,630.00	€ 3,792.03	€ 43,837.97	€ 1,046.17
<b>Training School</b>	€ 40,064.00	€ 29,890.52	€ 10,173.48	€ 6,450.00
<b>STSM</b>	€ 34,000.00	€ 20,480.00	€ 13,520.00	€ 19,380.00
<b>ITC Conference Grant</b>	€ 10,000.00	€ 7,083.45	€ 2,916.55	€ 7,083.45
<b>Dissemination</b>	€ 6,650.00	€ 4,650.00	€ 2,000.00	€ 4,650.00
<b>OERSA</b>	€ 250.00	€ 0.00	€ 250.00	€ 0.00
<b>Total Science Expenditure</b>	€ 138,594.00	62,103.97	76,490.03	38,609.62
<b>FSAC (15%)</b>	€ 20,789.10			
<b>Total Grant</b>	€ 159,383.10			

- The column “Difference” shows the available budget and is therefore the current status of what can still be used.
- Additional budget in the COST Action – the ITC conference grant:  
There is still 2,916.55€ that can be used for ITC Grants. Suggestions for conferences which are supported is online.
- The Work and Budget plan for GP5 was discussed. The Budget will be made on the basis of the GP4 WBP.

7. Update from the COST:

- Erich Gnaiger informed about the new vademecum and the submission of the MitoEAGLE manuscript.

8. Monitoring of the Action:

- The Action is monitored in detail on the website (<http://www.mitoeagle.org/index.php/MitoEAGLE>)
- Meeting minutes are available on the website for each meeting on the page of the meeting.
- Summary of WG progress for each WG could be found in minutes from each meeting and also on each Working Group webpage.

9. Implementation of COST policies on:

a) Promotion of gender balance and Early Career Investigators (ECI)

- Gender:** balanced and will be furthermore maintained in all MitoEAGLE events
- ECI:** ECIs in leadership positions has increased. 3 horizontal leadership positions are ECIs
  - ECIs, ITCs and gender balance Coordinator: Nina Krako (RS);
  - ECIs, ITCs and gender balance Substitute: Tomaz Mars (SI)
  - Dissemination coordinator: Marina Makrecka-Kuka is ECI from ITC (LV)
- A list for ECI can be found on the website:  
([http://www.mitoeagle.org/index.php/MitoEAGLE\\_network](http://www.mitoeagle.org/index.php/MitoEAGLE_network))
- Plans to increase the involvement of ECIs and to maintain and monitor gender balance:

1. Encourage: Consider ECIs and gender balance in their nominations as new MC Members.
2. Support MC members to rotate in exchange of ECIs and to consider gender balance in replacement nominations.

b) Inclusiveness and Excellence (see below list of Inclusiveness Target Countries)

- Leadership roles in CA15203 = 38% ITC
  - 3 ITC in WGs (Marko Vendelin, Vilma Borutaite, Zuzana Cervinkova)
  - 5 ITC in other horizontal roles like STSM (Magda Labieniec-Watala), ECIs, ITCs and gender balance (Nina and Tomaz), Training schools (Ayse Basak Engin) and Disseminations (Marina Makrecka-Kuka)
- 5 possible ITC countries not yet involved in the MitoEAGLE project: Bulgaria, Cyprus, Luxembourg, Montenegro and North Macedonia. (Bosnia and Herzegovina joined MitoEAGLE in GP4)
- Increase networking in order to involve the 5 remaining ITCs.

[ECI and Gender balance](#) presented by Tomaz Mars:

Discussion:

- Pablo M Garcia-Roves: ECIs in WG: include students/ECI members in the next events (including working groups, retreats). The students and ECI can learn and interact with mentors/experts.
- Pieder Jansen-Duerr: Include one day or one session (ECIs/young investigator forum) organized by ECI (it could be done in the next MitoEAGLE event, and it could be placed between the MiP Conference and the MiP/MitoEAGLE Training School). Arnould Thierry: During an ECI meeting/session it is good that the mentors are also involved. It is good for learning and for discussing the problems. Pieder Jansen-Duerr: ECI should behave as PI, then they learn, and they see the problems and what is needed. Erich Gnaiger: it fits. It can motivate ECI. Nina Krako: If ECIs identify problems that regards ECI they can share it with PIs and experienced investigators at one ECI dedicated session during a conference and try to find solutions
- There is a necessity to identify/monitorize the ECI members, therefore we should send a circular to follow who is ECI. Maybe there is not enough information about the ECI (PhD + up to 8 years).
- Analysis from other MitoEAGLE related events (e.g. Mitochondrial Physiology - from Organelle to Organism 2019 Copenhagen DK): guided poster presentation for PhD.
- Suggestion for future events: it would be ideal to identify clearly in the programme what is specifically for ECI members.
- Erich Gnaiger: ECI day to be held at MitoEAGLE Summit 2020 in Obergurgl between the conference and summer school.
- Erich Gnaiger: Maybe we should consider rotation in MC (mainly from male to female) in order to reach gender balance.
- Students/ECI should be more involved in future events.
- Example of good practice Gordon Research Seminar (GRS): taken from the website: More than 80% of Gordon Research Conferences now have a corresponding Gordon Research Seminar (GRS), a two-day meeting designed specifically for graduate students, post-doctoral students, and other scientists with comparable levels of experience. At these seminars, which take place immediately prior to the associated GRC, young investigators present and discuss cutting-edge, unpublished research and build collaborative relationships with colleagues and peers in a non-intimidating environment. GRSs are particularly important, however, because they allow the next generation of scientists to network and discuss their research at a critical time in their careers. Ninety-five percent of GRS participants continue on and attend the associated Gordon Research Conference.
- Erich Gnaiger: The MiP Society to form a subgroup – ECI, both as a society and as a programme committee – Nina
- Ali Sameh: To create ECI forum at the website. - DONE
- Nina: We can try to realize this idea together with Marina (LV) – dissemination coordinator who organizes the website



- Suggestions for mentorship opportunities for ECI members:
  - Via STSM, Skype, emails.
  - Meet the expert
  - List of mentors.
- Gender balance statistics were presented:
  - In the MC are 43% female and 57% male.

In the MiP/MitoEAGLE meeting in Belgrade, the participation very good gender balanced: 49% female and 51% male.

10:20 – 11:00 Coffee break

#### 10. Follow-up of MoU objectives:

- [MoU objectives](https://www.mitoeagle.org/images/d/d6/312_CA15203_SecondProgressReportPublic_2019-05-28.pdf) and grant period goals were presented and the progress report is online: [https://www.mitoeagle.org/images/d/d6/312\\_CA15203\\_SecondProgressReportPublic\\_2019-05-28.pdf](https://www.mitoeagle.org/images/d/d6/312_CA15203_SecondProgressReportPublic_2019-05-28.pdf)

#### The progress report of the working groups was reported by the WG leaders:

Erich Gnaiger (WG1)  
Pablo Miguel Garcia-Roves (WG2)  
Barbara Cannon (WG3)  
Nicoleta Moiso (WG4 cell lines)

#### - Discussion available in section IV.4

- Discussion about the future after the MitoEAGLE COST Action. General agree to continue after the MitoEAGLE COST Action. Piedder Jansen-Duerr: for a next action/project, we could have a project very much focused on mitochondria but incorporating other ideas. Nicoleta Moiso: Continuation with the WG. There is still a lot of work to do in the specific topics of the WG. A new COST Action focuses/links on clinical/functional aspects. Suggestions: keeping mitochondria, but focusing on different topics (e.g. cancer, diabetes). The format could be kept, but not the topic. For example, the topic could be related to the distribution of some of the diseases.
- Erich Gnaiger: should be hands-on during the next MitoEAGLE event? Pablo M Garcia-Roves: we should try it. If other platforms are interested, if not it may be different, for example hands-on on data analysis. Barbara Canon: maybe an extension? Maybe in Innsbruck where are more platforms available than in Obergurgl? Sameh Ali: demonstrations with demos for students and PI.

#### 11. Scientific planning:

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

- Next WG tasks are listed in WG summaries (see above)
- Piedder Jansen-Duerr: special issue (FEBS) which could be used to have a MitoEAGLE publication (work based on MitoEAGLE, for example aging, degeneration, cancer). To anticipate with one paper: what can be learned from MitoEAGLE, to prepare us for the future.
  - Special Issue....Deadline March 31st, 2020
  - Applications of this technology in different disciplines/diseases (cancer)

- Trougakos Ioannis: People are interested in how physiology changes and not the real values 0.1,0.5...
- Danina Muntean: to have a position paper towards translational approach to show that basic science can be applied...
- Dominique: fitness-aging-obesity
- Erich: convergent approach rather than divergent and to keep it to Q junction.
- Pidder said that it was very complicated to bring such topics (Q-junction, other topics in the preprint) in classes (Bachelor's degree classes), he was more in favor of keeping a "simplified" view. Erich disagreed, because some simplifications are misleading (e.g. Complex I > II > III > IV view versus Q junction).

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

We will keep the same structure for the budget plan as for the GP5.  
MC members approved this decision

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

- MiP2020/MitoEAGLE Meeting in July 2020 in Obergurgl will be organized by Erich Gnaiger, the dates and place will be announced soon  
Discussion: Erich: Volunteers for Programme Committee for Obergurgl 2020: Sameh Ali, Pablo M Garcia-Roves, Piedder Jansen-Duerr, Maria Luisa Genova, Danina Muntean, Carlos Palmeira, Nebojsa Lalic, Tomaz Mars / Sergej Pirkmajer, Barbara Canon.  
Erich Gnaiger: Whether to have a hands on aspect in Obergurgl 2020 or only walk & talk? An extension (hands on) could be moved to Innsbruck, finances?possibilities could be explored. Demo format at the conference, to attract other companies for demonstrations.  
Erich Gnaiger: ECI day to be held at MitoEAGLE Summit 2020 in Obergurgl between the conference and summer school
- MiPschool 2020– will take place after the MC and WG Meeting in Obergurgl Austria
- Erich Gnaiger: How to continue after MitoEAGLE, the future of the MiP Society; The MiP Society next year has to decide about continuation
  - Nebojsa Lalic: to continue with the same format, methodology oriented, an example is the EGIR group (where he participates together with John Jones, who is MitoEAGLE participant) European Group for the Study of Insulin Resistance <http://www.egir.org/>
  - Tomaz Mars and Sergej Pirkmajer: 16th MiP Conference in 2021 in Ljubljana, Slovenia. Faculty of Medicine-local organizing institution. June or late August 2021; to include Clinicians/physiologist.

d) Dissemination plan (Publications and outreach activities):

- COST Action should be acknowledged in our publications. The example how to acknowledge is in the preprint terminology publication.
- We need to list and document all outreach activities presenting our COST Action MitoEAGLE: seminars, meetings. Participants were asked to send the documentation about their outreach activities, photos are welcome for documentation. Everything is listed on the MitoEAGLE website.

12. New members of the COST Action MITOEAGLE:

a) COST countries

b) Institutions in Near Neighbouring Countries, International Partner Countries, and/or Specific Organisations:

- 4 COST countries are not yet members of our COST Action MitoEAGLE

There was no request to join our Action

- The participants were asked to contact (with E.Gnaiger in CC) the collaborators from the COST countries, will reach Contacts which are not members of our Action yet, to join MitoEAGLE

13. Any Other Business (AOB)

No

14. Location and date of next MC meeting

- MC Meeting in Obergurgl, Austria in summer 2020 – date to be announced
- Training School in Obergurgl, Austria in July 2020 – date to be announced, directly after MC Meeting

15. Summary of MC decisions:

MC members and Substitutes voted for these points:

1. The remaining money from the Training School in Coimbra will be used for the other Categories ( Meeting, Dissemination)  
Agreed: 22, disagreed: 0
2. The same structure for the budget plan as for the GP5 will be proposed.  
MC members approved this decision.  
Agreed 22, disagreed: 0.
3. The WG Leader role will be rotated for WG1 and WG3:  
MC members approved this decision.  
Agreed 22, disagreed: 1

16. Closing: The meeting was closed by the Chair Erich Gnaiger and local organizers Nina Krako and Nebojsa Lalic

## LIST OF ANNEXES AND LINKS

### Annex 1 – [Attendance List](#)

#### Links:

Abstracts, presentations and agenda:

[https://www.mitoeagle.org/index.php/MiP2019/MitoEAGLE\\_Belgrade\\_RS#Participants\\_-\\_alphabetical\\_order](https://www.mitoeagle.org/index.php/MiP2019/MitoEAGLE_Belgrade_RS#Participants_-_alphabetical_order)