

## VIRTUAL MOBILITY (VM) GRANT REPORT

This report is submitted by the VM grantee to VNS Manager, who will coordinate the approval on behalf of the Action MC.

**Action number:** CA18211

**VM grant title:** MOOC on Epigenetics as a lifelong record of the early-life environment (based on the 2nd training School of CA18211)

**VM grant start and end date:** 10/08/2022 to 9/09/2022

**Grantee name:** Olga Gouni

**Description of the outcomes and achieved outputs (including any specific Action objective and deliverables, or publications resulting from the Virtual Mobility).**

*(max. 500 words)*

The outcomes and achieved outputs of the VM grant were the following:

1. A MOOC was created and linked to the website of the action CA18211.

The MOOC aims to support health professionals that come from other disciplines, esp Midwifery, Obstetrics, Social Work, Nursing, Psychology to familiarize themselves with the findings of Epigenetics, so that they can provide better quality of care in their environments. At the same time, it takes the attendees to a higher level of understanding, especially interesting for those who are also engaged in research and (academic) education.

The course provides very interesting lessons as concerns the natural and the psychosocial environment influence and analyses significant aspects as concerns the embryonic/ fetal/ birth trauma and its lifelong impact.

There are three main axons of the structured MOOC:

1. Understanding the language, principles and ways of the dialogue between the Early Life Environment and the changes that may be the person's reality years after birth.
2. Designing an epigenetic study.
3. Getting into the statistics in the field of epigenetics research and explore parameters.

Finally, there are 2 lessons which speak about the epigenetic impact of Natural disaster or

pesticides on future generations and they work as examples to better understand such realities.

The deliverable consists of 11 lessons each of which has a videolecture and study material.

1. It was based on the training school of the Action CA18211 which took place earlier this year (February 28<sup>th</sup>, 2022 and March 2<sup>nd</sup>, 2022) around the same topic in Zagreb.
2. The existing material was studied and evaluated in detail.
3. Following the detailed analysis of each part, the material was re-organized and arranged in a way that will help participants gain the knowledge and expand their understanding.
4. Study material was created and added
5. Emails asking for consent were sent to trainers and mentors
6. All files were edited technically so that they can become part of the online MOOC
7. An intro video was created using free video/ music source. It was used to start and finish each videolecture.
8. The videolectures were uploaded to youtube and then embedded in the MOOC.
9. The actual MOOC was created on the website platform and linked to the other outputs of the action.
10. The work was tested, finalized, and delivered.
11. The MOOC can be seen here: <https://www.ca18211.eu/courses/epigenetics-as-a-lifelong-record-of-the-early-life-environment/>

### **Description of the benefits to the COST Action Strategy (what and how).**

*(max. 500 words)*

**The MOOC Epigenetics as a Lifelong Record of the Early-Life Environment is an intermediate course for those already professionals in the fields of Maternity Care or students from the disciplines of Psychology, Medicine, Midwifery, Nursing, Social Work and/or Pedagogy. It benefits the COST ACTION Strategy as it**

- A. Strengthens the network, promotes sharing and fosters collaboration among expert scientists in the field of interest in a virtual setting, to exchange knowledge, learn new things, disseminate the Action results and allow professional advancement to the new entries in the field of Health.
- B. Consolidates and disseminate current evidence on Epigenetics as a Life-long record of the early-life environment.
- C. maximizes the obtained knowledge within the Action members and their joint effort to seek ways to minimize and resolve birth-related trauma, and to optimize emotional and psychological outcomes for parents and families
- D. Facilitates capacity building on a topic relevant to the theme of the Action CA18211, especially significant as this is a new, emerging subject not fully integrated yet by Health Professionals, and
- E. Provides translation of that knowledge into an educational module (educational service)

that can be shared globally to reduce the familial, personal, societal and economic burden arising from birth-related negative/traumatic experiences.

- F. Enables the science communication activities multiplying the valuable benefits of the specific training school and its successful delivery to anyone interested, especially Early Stage Researchers, Researchers from Inclusiveness Target Countries, Interested Parties from non-COST countries, including Near Neighbour Countries & International Partner Countries, Interested stakeholders/ policy makers or young professionals who wish to learn from the experts in the field offering a valuable learning tool free from the limitations of space/ time (invaluable during the COVID-19 restrictions) or fees, expanding the cross-border networking of researchers and making the action more visible globally. It is added value to the dissemination of the scientific knowledge on epigenetics which can be translated to the best practice for optimising the birth experience for the benefit of all involved.

Finally, it can be expanded in the future adding more lessons as the 3<sup>rd</sup> Training School to take place in the year 2023 or to the end of the action.

**Description of the virtual collaboration (including constructive reflection on activities undertaken, identified successful practices and lessons learned).**

*(max.500 words)*

The following experts were contacted:

1. Professor Sylvia Murphy & Professor Jonathan Turner were contacted. Prof Sylvia Murphy shared all educational material links collected during the training school. Of course Prof Sandra Nakic Rados was of great support as she very promptly shared the google repository link.

The following people who were the mentors who supported the initial group of trainees were contacted and asked for adding their experience to this MOOC

1. Prof Neville Calleja, WHO ( chair of the European Health Information Initiative within WHO (Europe), University of Malta.
2. Prof Carlo Schuengel is a Full Professor, Faculty of Behavioural and Movement Sciences, Clinical Child and Family Studies, at Vrije University in Amsterdam, Netherlands.
3. Prof Kerstin Uvnäs Moberg, physician and professor of physiology

All of them offered their support to clarify whatever unclear points. I thank them all.

1. Prof Wim Vanden Berghe works at the Dept of Biomedical Sciences, University of Antwerp, Belgium and
2. Dr. Mechthild M. Gross, research fellow and a consultant midwife, Hanover Medical School, Hanover Germany were also contacted.

The link to the course was emailed to all interested parties. Whatever feedback received will be taken into account and integrated to the course.

I would also like to emphasize the support of Kevin, the CA18211 website master who has very quickly resolved all technical problems concerning the successful setting up of this MOOC and our COST Action secretary Elaine for her wonderful and excellent communication during the process.

Finally, I would like to thank the action's leader Prof Joan Lalor and the leader of the VM grants Prof Sandra Nakic Rados for the opportunity offered to me and through me to all interested colleagues.

