

A SHORT JOURNEY THROUGH THE MASSIVE OPEN ONLINE COURSE (MOOC) ENTITLED: “IN THE FOOTSTEPS OF ZIKA... APPROACHING THE UNKNOWN”

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While until recently the small and isolated Zika outbreaks in Eastern Asia and Pacific islands have been overlooked, the large scale outbreak that started in Brazil in 2015 and the increase of microcephaly cases in the same place and time hit the headlines in the Medias. Considered until now as harmless, Zika has created a worldwide crisis through the possible international spread of the virus. The current Zika phenomenon affects every single facet of our society worldwide. We are all directly or indirectly exposed and concerned by this phenomenon at different scales. Based on an existing MOOC addressing the current Zika phenomenon, the proposed session will attempt to combine each little single piece of the puzzle in a period of 90 mn. In active collaboration with the participants to the session, a total of 4 experts will enable to shed light on the current knowledge and the numerous uncertainties the world face with Zika. This session will bring all of us beyond our comfort zone to unexplored territories; that is the challenge to reach the unknown of the Zika phenomenon.

Keywords (5): MOOC, Zika virus, interdisciplinary, innovative learning, capacity building

Theme: Innovations in teaching, learning, and research

Introduction: Massive open online courses (MOOCs) has been one of the Virchow-Villermé for Public Health Paris-Berlin Centre’s main activities, which was founded in 2013 on the occasion of the 50th anniversary of the Elysée Treaty by the University of Sorbonne in Paris Cité (USPC) and the Charité – Universitätsmedizin in Berlin. Today, the Centre Virchow-Villermé (CVV) plays a leading role in innovative education by opening up access to excellence in teaching, learning, and research and developing leaders in many disciplines in Public Health. In less than 3 years CVV has already achieved the production of 22 MOOCs (15 broadcasted MOOCs and 7 ones in progress), ranking the centre in first position in Europe and in second in the world for the production of MOOCs in Public Health.

Always ready to quickly address and respond to any new phenomenon in Public Health, early this year Professor Antoine Flahault of the University of Geneva (UNIGE), Ass. Prof. Aline Philibert of the University of Quebec in Montreal (UQAM), Prof. Arnaud Fontanet of the Institut Pasteur, and Prof. Henri-Jean Philippe of the Cochin Hospital decided to explore via a MOOC the Zika virus, which turned unexpectedly into the limelight when on the 1st of February it was declared by the WHO as a public health emergency of international concern.

Grace of the intervention of 35 faculty members and international experts who contributed to this MOOC and the subscription of 1007 participants since August 2016, the MOOC has been an outstanding success. Formatted in 8 interdisciplinary modules this MOOC has given the opportunity to teach, transmit, share and bridge the knowledge gap in the Zika phenomenon and reflect upon themes and issues that

are of global health relevance and beyond. Information has been constantly and carefully updated along the continuum of knowledge advancement.

Objective: We will propose a special panel that will provide the “live version” of the existing MOOC “In the footsteps of Zika... approaching the unknown”. The 4 modules that will be addressed are the pathologies associated with the current Zika outbreak, gender issues that has been raised out particularly in South America, diagnosis of the virus and advancements in technologies to fight the virus, and finally ecology and forecast of global distribution of vectors and virus worldwide.

Here, the essential knowledge and knowledge gaps are reviewed and discussed. This panel will give the accessibility together to teach, transmit, share and bridge the knowledge gap in the Zika phenomenon.

Format:

The panel will last 75 minutes and will be presented as follow:

5 minutes for introducing the subject and presenting the organization of the panel (including 2 minutes of the teaser of the MOOC “In the footsteps of Zika... approaching the unknown”)

17 minutes for each 4 sub-sessions of the panel as cited above (pathologies (i), gender issues (ii), microbiology technological advancements to fight the virus (iii), and global dissemination of the virus worldwide (iv)).

Each session of 17 minutes will include

- 5 minutes of video extracts being part of the MOOC “In the footsteps of Zika... approaching the unknown”
- 4 minutes of quiz test concerning the video above (system of color-coded cards issued by the organizer and circulating among the participants for answering the quiz)
- 8 minutes of open dialogue between the guest speakers and participants will end up each session. They will also discuss the challenges they encountered in practice and the opportunities the tool brought to the study. A list of references for each tool will be provided.

2 minutes of conclusion

Methods (details of the format)

Session 1: Pathologies associated with the current Zika outbreak

Videos: those of Laura Rodrigues and Arnaud Fontanet in the module 5 (Zika and neurological adverse effects) in the MOOC

Session 2: Zika a gender perspective, particularly in South America

Videos: those of Prof. Aluisio Cotrim Segurado in the module 5 (Zika and neurological adverse effects) and Dr. Ester Sabino in the module 6 (Abortion and contraception challenges for women in Brazil) in the MOOC.

Session 3: Diagnosis of the virus and advancements in technologies to fight the virus

Videos: those of Prof. John Vontas & Scott O'Neill in the module 3 (Prevention and control) and Dr. Maria van Kerkhove in the module 4 (Symptoms, diagnosis and treatment) in the MOOC.

Session 4: Ecology and forecast of global distribution of vectors and virus, with a focus in urban areas

Videos: those of Duane Gubler in the module 1 (Introducing Zika virus, its vectors and its hosts) and Dr. Helena Ribeiro in the module 6 (Inequity in front of Zika exposure and outcomes) in the MOOC

Language: English/portuguese (subtitles will be in Portuguese/ English)

Conclusion: As described above, the format of the actual panel discussion will be a perfect exchange of knowledge and expertise to experience a MOOC on Zika. We believe the panel will encourage solutions-oriented dialogue, exchange of good practice and the identification of solutions to this phenomenon.