International Symposium on Zika Virus Research
Marseille - France, 4-6th June 2018

Auditorium Toga
Faculty of Medicine - La Timone
27, Boulevard Jean Moulin
13005 Marseille
France

Scientific Programme

This event is organised by the EU funded Zika project

In collaboration with the three EU funded Zika projects

Event supported by the European Union's Horizon 2020 Research & Innovation Programme under ZIKAlliance Grant Agreement no. 734548 - ZikaPLAN Grant Agreement no. 734584 - ZIKAAction Grant Agreement no. 734857 - ZIKAVAX Grant Agreement no. 732432
**Monday June 4th, 2018**

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<td>08.15 – 09.00</td>
<td>Registration</td>
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<td>09.00 – 09.15</td>
<td>Welcome note</td>
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<tr>
<td></td>
<td>Xavier de Lamballerie, Inserm (ZIKAlliance coordinator)</td>
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<td></td>
<td>Marion Koopmans, European Society for Virology - Erasmus Medical Centre - ZIKAlliance</td>
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<td>Annelies Wilder-Smith, Umeå University (ZikaPLAN coordinator)</td>
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<td>Carlo Giaquinto, PENTA Foundation (ZIKAction coordinator)</td>
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<td>Frédéric Tangy, Pasteur Institute (ZIKAVAX member)</td>
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<td>09.15 – 11.00</td>
<td>Session 1: Surveillance, burden estimates, modelling</td>
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<td>Chair: Simon Cauchemez, Pasteur Institute - ZIKAlliance</td>
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<td>Co-chair: Oliver Brady, London School of Hygiene &amp; Tropical Medicine - ZIKAlliance</td>
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<td>1. Zika in the Americas</td>
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<td>Seroprevalence studies in Martinique/Guadeloupe (5’)</td>
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<td>Speaker: Pierre Gallian, Inserm - ZIKAlliance</td>
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<td>Seroprevalence studies in Bolivia (5’)</td>
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<td></td>
<td>Speaker: Mariela Saba Villaroel*, Inserm – ZIKAlliance</td>
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<td>High seroprevalence against Zika virus in Salvador, north-eastern Brazil limits the potential for further outbreaks (5’)</td>
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<td>Speaker: Andres Moreira-Soto*, Charité University Berlin - ZIKAlliance</td>
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<td>Seroprevalence studies in Surinam (5’)</td>
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<td>Speaker: Thomas Langerak*, Erasmus Medical Centre – ZIKAlliance</td>
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<td>Endemicity and emergence of arboviruses in Colombia: Insight from population based serological studies (5’)</td>
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<td>Speaker: Isabel Rodriguez-Barraquer*, University of California/ Industrial University of Santander – ZIKAlliance</td>
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<td>Q &amp; A (5’)</td>
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<td>2. Zika in Africa &amp; Asia</td>
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<td>Zika in Mali (5’)</td>
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<td>Speaker: Issa Diarra*, Unité des Virus Emergents – ZIKAlliance</td>
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<td>Zika in Cameroon/Congo (5’)</td>
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<td>Speaker: Elif Nurtop*, Unité des Virus Emergents - ZIKAlliance</td>
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<td>Zika in Burkina Faso (5’)</td>
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<td>Speaker: Nico Fischer*, University of Heidelberg – ZIKAlliance</td>
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<td>Low Zika virus seroprevalence in Vientiane, Laos, 2003-2015 (5’)</td>
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<td>Speaker: Audrey Dubot-Pérès, Unité des Virus Emergents- ZIKAlliance</td>
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<td>High baseline prevalence of microcephaly in Zika-epidemic and non-epidemic regions: data from sub-Saharan Africa, Asia, and the Antilles (10’)</td>
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<td>Speaker: Anna Louise Funk*, Pasteur Institute – ZIKAlliance</td>
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* Young researchers
3. Modelling approaches to predict Zika epidemics at a local & continental scale
   *Real-time assessment of healthcare requirements during the Zika virus epidemic in Martinique (10’)*
   Speaker: Alessio Andronico, Pasteur Institute - ZIKAlliance

   **Modelling & predicting Zika circulation in Latin America (10’)**
   Speaker: Oliver Brady, London School of Hygiene & Tropical Medicine – ZIKAlliance

Q & A (5’)

4. Genetic & epidemiological analysis of Yellow Fever in Latin America to better understand the transmission cycle (10’)
   Speaker: Nuno Faria, University of Oxford – ZIKAlliance

Q & A (5’)

Total: 105’ (1h45’)

11.00 – 11.30 Coffee Break

11.30 – 12.25 Session 2: ZIKA: Clinical biology (part 1)
   Chair: Marion Koopmans, Erasmus Medical Centre - ZIKAlliance  
   Co-chair: Rosanna Peeling, London School of Hygiene & Tropical Medicine - ZikaPLAN

1. **Key-note lecture: Zika virus diagnostics, the challenge! (15’)**
   Speaker: Marion Koopmans, Erasmus Medical Centre – ZIKAlliance

2. **The grim reality from a clinical researcher perspective (10’)**
   Speaker: Vivian Avelino-Silva, University of Sao Paolo - ZIKAlliance

3. **The diagnostic challenge of congenital Zika virus infection: lessons from TORCH pathogens (10’)**
   Speaker: Bettie Voordouw, Dutch National Institute for Public Health & the Environment - ZIKAlliance

4. **Glimpses of hope: towards more specific serology (10’)**
   Speaker: Isabelle Viana, Oswaldo Cruz Foundation - ZIKAlliance

Q & A (10’)

Total: 55’

12.25 – 14.00 Lunch break

14.00 – 15.10 Session 2: ZIKA: Clinical biology (part 2)
   Chair: Marion Koopmans, Erasmus Medical Centre - ZIKAlliance  
   Co-chair: Rosanna Peeling, London School of Hygiene & Tropical Medicine - ZikaPLAN

5. **Multiplex serology: new tools for complex problems (10’)**
   Speaker: Jessica van Homwegen, Pasteur Institute – ZIKAlliance

6. **Models for biobanking for rapid assessment of diagnostics in emerging disease outbreaks (10’)**
   Speaker: Rosanna Peeling, London School of Hygiene & Tropical Medicine – ZikaPLAN
7. Identification of a putative unique immunogenic Zika NS2b epitope for differential diagnosis and surveillance (10’)
   Speaker: Isabelle Viana*, Oswaldo Cruz Foundation – ZIKAlliance

Q & A (5’)

8. Studying hypotheses for antibody enhancement in a cohort context (10’)
   Speaker: Barry Rockx, Erasmus Medical Centre – ZIKAlliance

9. ZIKV cellular immune responses (10’)
   Speaker: Vincent Vieillard, INSERM – ZIKAlliance

10. CD8 T cell immunity to Zika virus in humans is shaped by prior DENV exposure and associated with an IFN gamma/cytotoxic signature (10’)
    Speaker: Daniela Weiskopf, La Jolla Institute- Zika PLAN

Q & A (5’)

Coffee Break

Session 3: Vectors & vector control
Chair: Anna-Bella Failloux, Pasteur Institute - ZIKAlliance
Co-chair: Louis Lambrechts, Pasteur Institute - ZikaPLAN

1. Domestic Culex species & Zika vector transmission (15’)
   Speaker: Ricardo Lourenço-de-Oliveira, Oswaldo Cruz Foundation – ZIKAlliance

Q & A (5’)

2. A new high-throughput tool to screen mosquito-borne viruses in Zika virus endemic/epidemic areas (10’)
   Speaker: Sara Moutailler, Anses – ZIKAlliance

Q & A (5’)

3. Global analysis of the virome in Aedes aegypti mosquitoes: arthropod borne-viruses & beyond (10’)
   Speaker: Roenick Olmo, Federal University of Minas Gerais – ZIKAlliance

Q & A (5’)

4. Has Zika burnt itself out of Brazil? Preparedness tools for the next outbreak (10’)
   Speaker: Eduardo Massad, University of Sao Paolo – ZikaPlan

Q & A (5’)

5. Potential of Aedes albopictus as a bridge vector at urban-forest interface in Brazil (7’)
   Speaker: Taissa Santos*, IRD – ZIKAlliance

6. Worldwide survey of Aedes aegypti susceptibility to multiple strains of Zika virus (7’)
   Speaker: Fabien Aubry*, Pasteur Institute – ZikaPLAN

7. Vector competence to Zika virus of mosquitoes from the Pacific region (7’)
   Speaker: Elodie Calvez*, Pasteur Institute New Caledonia – ZIKAlliance

* Young researchers
8. Optimization of odour-baited trapping systems for the surveillance & control of *Aedes aegypti* in Paramaribo, Surinam (7’)
   *Speaker: Tessa Visser*, Wageningen University – ZIKAlliance

9. Identifying genomic changes associated with insecticide resistance in the dengue mosquito *Aedes aegypti* by next-generation sequencing (7’)
   *Speaker: Julien Cattel*, CNRS – ZIKAlliance

Q & A (15’)

10. The Infravec2 Infrastructure Project: Providing Vector Researchers with No-cost Resources, Services and Facility Access (5’)
    *Speaker: Eva Veronesi, University of Zurich – ZIKAlliance*

Total: 120’ (2h’)

20.30 Dinner at Fort Ganteaume (upon registration)
Tuesday June 5th, 2018

08.35 – 10.30  Session 4: Cohort Studies
Chair: Thomas Jaenisch, University of Heidelberg - ZIKAlliance
Co-chair: Patricia Brasil, Oswaldo Cruz Foundation – ZIKAlliance

1. Key-note lecture: Clinical outcome of congenital infections: lessons from a congenital CMV cohort (15’)
Speaker: Ann Vossen, Leiden University Medical Center - ZIKAlliance

Q & A (5’)

2. Do we still need the cohorts? (15’)
Speaker: Thomas Jaenisch, University of Heidelberg – ZIKAlliance

Q & A (5’)

3. Conflicting evidence on the risk estimate of complications after ZIKV infection in pregnancy – why is the Rio estimate so high? (15’)
Speaker: Patricia Brasil, Oswaldo Cruz Foundation – ZIKAlliance

Q & A (5’)

4. Updated data from the pregnant women cohort in the French Territories in the Americas (15’)
Speaker: Bruno Hoen, Inserm – ZIKAlliance

Q & A (5’)

5. Limitations of case and exposure definition in epidemiological studies of ZIKV infection (10’)
Speaker: Ricardo Ximenes, University of Pernambuco – ZikaPLAN

Q & A (5’)

6. First results from ZIKAlliance – Ultrasound monitoring of at risk pregnancies – how many Ultrasounds & when were they carried out (5’)
Speaker: Julius Schretzmann*, Heidelberg University Hospital – ZIKAlliance

Q & A (5’)

7. Zika and other arbovirosis in times of humanitarian crisis: The case of Venezuela
Speaker: Adriana Tami, University Medical Centre Groningen – ZIKAlliance

Q & A (5’)

Total: 115’ (1h55)

10.30 – 11.00  Coffee Break

11.00 – 12.30  Session 5: Lessons from imported cases
Chair: Denis Malvy, Central Hospital of the University of Bordeaux - ZIKAlliance
Co-chair: Antoni Soriano-Arandes, Barcelona University Hospital Vall d’Hebron – ZIKAction

1. Key-note lecture: ZIKA imported cases (15’)
Speaker: Denis Malvy, Central Hospital of the University of Bordeaux – ZIKAlliance

Q & A (5’)

2. Zika & pregnant women (10’)
Speakers: Carlota Rodó, Barcelona University Hospital Vall d’Hebron - ZIKAction

* Young researchers
3. Zika & microbiologic diagnostic challenges (10’)
Speakers: Elena Sulleiro Igual & Ariadna Rando*, Barcelona University Hospital Vall d’Hebron - ZIKAction

4. Serological response and clinical outcomes of children exposed to Zika virus during gestation: preliminary results of a prospective paediatric cohort study in a non-endemic country (10’)
Speakers: Antoni Soriano-Arandes, Barcelona University Hospital Vall d’Hebron – ZIKAction, Ana Alarcón-Allen, Sant Joan de Déu University Hospital - ZIKAction

5. Zika & adult travellers: Travel-associated risk for local transmission (10’)
Speakers: Diana Pou, Barcelona University Hospital Vall d’Hebron - ZIKAction

Q & A (5’)

6. Zika virus incidence and diagnostic tools accuracy in French international travelers visiting Latin America and the Caribbean during the summer 2016 - The ZIKAMERICA cohort study (10’)
Speaker: Thierry Pistone, Bordeaux University Hospital – Inserm - ZIKAlliance

7. What did we learn from European diagnostic labs (10’)
Speakers: Marion Koopmans, Erasmus Medical Centre - ZIKAlliance

Q & A (5’)

Total: 90’ (1h30)

12.30 – 14.00 Lunch break/poster session
14.00 – 15.45 Session 6: Social & ethical implications of Zika
Chairs: Nisia Verônica Trindade Lima, Oswaldo Cruz Foundation & Jocelyn Raude, Inserm - ZIKAlliance
Co-chair: George Haringuizen, Dutch National Institute for Public Health & the Environment - COMPARE

1. Key-note lecture: Zika Outbreak in Brazil: Challenges for Science, Public Health & Society (10’)
Speaker: Nisia Verônica Trindade Lima, Oswaldo Cruz Foundation - ZIKAlliance

The sharing of pathogen genetic resources under the Nagoya Protocol: What are the ethical implications for international research on the ZIKAV? (10’)
Speaker: George Haringuizen, Dutch National Institute for Public Health & the Environment - COMPARE

3. Narratives on Zika epidemic in Brazil: Challenges to science, politics & society (10’)
Speaker: Gustavo Matta, Oswaldo Cruz Foundation - ZIKAlliance

4. The construction of the social representation of a health threat: Zika virus in the French press (10’)
Speaker: Sylvain Délouvée, Rennes University - ZIKAlliance

5. Repercussions of Zika Virus Epidemic on the National Health System in Brazil and households (10’)
Speaker: Claudia Pereira, Oswaldo Cruz Foundation - ZIKAlliance

* Young researchers
6. Zika and the state’s policy trail: a document review on the Ministry of Health’s responses (10’)
Speaker: Carolina de Oliveira Nogueira et al., Oswaldo Cruz Foundation – ZIKAlliance

7. Health promotion in the context of Zika epidemic: actors & scenarios in decision-making processes (10’)
Speaker: Paulo Peiter, Oswaldo Cruz Foundation - ZIKAlliance

8. Production & circulation of knowledge about Zika: from scientists to social media users (10’)
Speaker: Elaine Rabello, Oswaldo Cruz Foundation - ZIKAlliance

9. The cognitive & emotional representations of Zika & other mosquito-borne diseases in French Guiana (10’)
Speaker: Jocelyn Raude et al., Inserm – ZIKAlliance

Q & A (15’)

Total: 105’ (1h45)

15.45 –16.15 Coffee Break
16.15 – 18.05 Session 7: Other important questions + “late birds” presentations
Chair: Patricia Sequeira, Oswaldo Cruz Foundation- ZIKAlliance
Co-chair: Ilana Lowy, Oswaldo Cruz Foundation – ZIKAlliance

1. Sexual transmission- interdisciplinary sub-session
Key-note lecture: Sexual transmission of Zika virus: the current state of affairs (15’)
Speaker: Ralph Huits, Antwerp Institute of Tropical Medicine - ZikaPLAN

The gender gap in the ZIKV infection: A social & behavioral perspective (10’)
Speaker: Anna Friedler*, Inserm – ZIKAlliance

Zika virus infects the human testis and germline (10’)
Speaker: Nathalie Dejucq-Rainsford, Inserm – ZIKAlliance

Origin of Zika virus in semen (10’)
Speaker: Laurent Houzet*, Inserm - ZIKAlliance

Potential effect of Zika virus infection on human male fertility (5’)
Speaker: Vivian Avelino Silva, University of Sao Paolo - ZIKAlliance

Q & A (5’)

2. Other questions
Zika control in an ethical & legal context: the importance of fast data-sharing and the barriers hampering it (10’)
Speaker: Carolina dos Santos Ribeiro, Dutch National Institute for Public Health & the Environment – COMPARE

A Zika virus research toolbox for ZIKAlliance & beyond (10’)
Speaker: Martijn Van Hemert, Leiden University Medical Center – ZIKAlliance

* Young researchers
Improving serological diagnosis of Zika virus to understand NeuroZika in Brazil (10’)
Speaker: Raquel Medialdea Carrera, University of Liverpool - ZikaPLAN

Zika virus infection perturbs osteoblast function (10’)
Speaker: Noreen Mumtaz*, Erasmus Medical Centre – ZIKAlliance

Latest Zika virus outbreak: improve preparedness of disease control from the perspective of the "European Virus Archive goes Global (EVAg)" EU funded consortium (10’)
Speaker: Jean-Louis Romette, Aix-Marseille University – EVAg

Q & A (5’)

Total: 110’ (1h50)
**Wednesday June 6th, 2018**

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<tr>
<th>Time</th>
<th>Session 8: Basic research &amp; antivirals</th>
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| 08.45 – 10.30 | **Chair:** Marc Lecuit, Inserm/Institut Pasteur - ZIKAlliance  
**Co-chair:** Johan Neyts, University of Leuven – ZIKAlliance & ZikaPLAN |
| 1. | **ZIKA virus replication in human placenta (10’)**  
**Speaker:** Therese Couderc, Inserm – ZIKAlliance  
*Q & A (5’)* |
| 2. | **Stress-induced unfolded protein response contributes to Zika virus-associated microcephaly (10’)**  
**Speaker:** Laurent Nguyen, University of Liège – ZIKAlliance  
*Q & A (5’)* |
| 3. | **Therapeutics for microcephaly (10’)**  
**Speaker:** Ivan Gladwynng*, University of Liège – ZIKAlliance  
*Q & A (5’)* |
| 4. | **ZIKV infection disregulates neurogenesis through the Notch pathway in human neural progenitor cells (10’)**  
**Speaker:** Pauline Ferraris*, IRD – ZIKAlliance  
*Q & A (5’)* |
| 5. | **Development of highly potent Zika/flavivirus inhibitors; lessons from HCV drug development (10’)**  
**Speaker:** Johan Neyts, University of Leuven – ZIKAlliance & ZikaPLAN  
*Q & A (5’)* |
| 6. | **Tomatidine, a novel antiviral compound against dengue & chikungunya virus**" (10’)**  
**Speaker:** Jolanda Smit, UMCG – ZIKAlliance  
*Q & A (5’)* |
| 7. | **“ZIKV NS5: target-based drug development” (10’)**  
**Speaker:** Bruno Canard, Aix-Marseille University – ZIKAlliance  
*Q & A (5’)* |
| **Total:** | **105’ (1h45)** |

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<tr>
<th>Time</th>
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| 10.30 – 11.00 | **Session 9: Zika vaccine**  
**Chair:** Frédéric Tangy, Pasteur Institute - ZIKAVAX & Nicola Viebig, European Vaccine Initiative - ZIKAVAX |
| 1. | **Key-note lecture:** Introduction to Zika vaccines & to the ZIKAVAX project (10’)  
**Speaker:** Frédéric Tangy, Pasteur Institute – ZIKAVAX  
*Q & A (5’)* |
| 2. | **NHP Zika infection model (10’)**  
**Speaker:** Romain Marlin*, CEA – ZIKAVAX  
*Q & A (5’)* |
| **Total:** | **105’ (1h45)** |

* Young researchers
3. Talk 1: First generation MV-Zika vaccine – fast track clinical development (10’)
   Speaker: Sabrina Schrauf, Themis – ZIKAVAX

Q & A (5’)

4. A YFV-17D based chimeric live-attenuated Zika virus vaccine is highly effective against lethal Zika disease in a mouse model (10’)
   Speaker: Kai Dallmeier, University of Leuven – ZIKAlliance & ZikaPLAN

Q & A (5’)

5. Zika vaccine roadmap: obstacles & opportunities (10’)
   Speaker: Annelies Wilder-Smith, Umeå University – ZikaPLAN

Q & A (5’)

6. Phase II/III clinical trials: endpoints, clinical trial sites/(target) study population & ethical considerations (10’)
   Speaker: Thomas Jaenisch, University of Heidelberg – ZIKAlliance

Q & A (5’)

Total: 90’ (1h30)

END OF THE SYMPOSIUM

12.30 – 14.00 Lunch break