

## Workshop on

### *Forms of innate immune memory: comparing immune priming and trained immunity*

#### SCHEDULE

#### Day 1: 18<sup>th</sup> October 2023

**Venue: Seminar room, Kavaliershäuschens, Schlossplatz 6**

08:55-09:00	Introduction by Jorge Contreras Garduño
09:00-10:00	<i>Joachim Kurtz</i> : 20 years of immune priming studies in invertebrates
10:00-11:00	<i>Diana Boraschi</i> : Macrophages, innate immunity and innate memory
11:00-12:00	<i>Mihai Netea</i> : Trained immunity: a memory for innate host defense
12:00-13:00	Discussions
13:00-14:30	Lunch
14:30-15:30	<i>Raúl Andino</i> : Immunity in insects: dance for three
15:30-16:30	<i>Imroez Khan</i> : Variation and evolution of immune priming in insects
16:30-17:30	Discussions

#### Day 2: 19<sup>th</sup> October 2023

**Venue: 09:00-13:00 IEB social room, 14:30-18:00 – IEB lecture hall (HHÜ), Hüfferstraße 1**

11:00-12:00	<i>Krishnendu Mukherjee</i> : Epigenetic regulation of innate immune memory in insects
12:00-13:00	Discussions
13:00-14:30	Lunch break
14:30-15:30	<i>Humberto Lanz</i> : Immune memory in mosquitoes
15:30-16:30	Discussions + workshop summary
17:00-18:15	<i>Raúl Andino</i> : Virus evolution and the quest for live-attenuated vaccines

## Workshop on

### *Forms of innate immune memory: comparing immune priming and trained immunity*

Immune memory in vertebrates, known as adaptive immunity, is a phenomenon that enhances the elimination of pathogens and parasites and thus increases survival upon subsequent exposures. Formerly regarded as an exclusive feature of vertebrates, the paradigm has shifted in the last two decades, with demonstrations of similar phenomena in invertebrates and plants. The terminology used to describe such phenomena has made use of terms like immune priming, innate immune memory, or trained immunity. However, these terms often lack clear definitions and are sometimes used interchangeably. After two decades of research in this field, the widespread occurrence and relevance of such phenomena are beyond doubt, but experts and students alike would benefit from a consensus on fundamental terminology. Such agreement would facilitate advancing our comprehension of the occurrence, mechanisms, and potential applications, including the development of "vaccines" for invertebrates and plants. In our workshop, we aim to critically consider whether the conflation of specific memory with non-specific responses and the inclusion of molecular mechanisms in its definitions hinders our understanding of the evolutionary processes that have led to immune responses becoming specific, non-specific, or semi-specific.

#### **Zoom link:**

<https://wwu.zoom-x.de/j/61164470117?pwd=dlhVZTAvRHVSS3pBZGJtMXM3OGpZZz09>

Meeting ID: 611 6447 0117

Passcode: 973441