#### CONFERENCE SITE



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# Scientific Program

Dr. Asifa Akhtar

Max Planck Institute of Immunobiology

and Epigenetics, Freiburg
Prof. Dr. Manfred Gahr

Max Planck Institute for Ornithology, Seewiesen

#### Registration by May 31, 2017

For MPG participants:

https://extranet.mpg.de/sections/Sektionen/MPS

For external participants:

https://umfragen.vw.mpg.de/index.php/383575/lang-en

#### HOW TO GET TO THE HARNACK-HAUS



**From airport Tegel (18 km)** board bus route 109 to "Zoologischer Garten". Change at "Jakob-Kaiser-Platz" for the underground line U7 to "Rudow" and get off at "Fehrbelliner Platz". There you get on the underground line U3 to "Krumme Lanke" until "Freie Universität (Thielplatz)". Leave the underground station by walking in the direction of travel and take the left exit. The Harnack-Haus is 100 meters ahead on the right hand side.

**From airport Berlin Schönefeld (25 km)** board bus route 171 to the underground station "Rudow". There take the underground line U7 to "Rathaus Spandau" and get off at "Fehrbelliner Platz". There you get on the underground line U3 towards "Krumme Lanke" until "Freie Universität (Thielplatz)". Leave the underground station by walking in the direction of travel and take the left exit. The Harnack-Haus is 100 meters ahead on the right hand side.

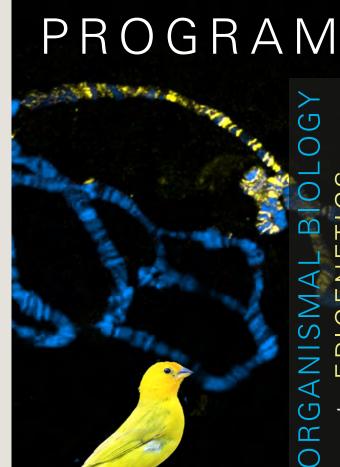
From Berlin's central station "Hauptbahnhof" (15 km) take the suburban train S7 to "Potsdam Hauptbahnhof" and get off at "Zoologischer Garten". There you get on the underground line U9 towards "Rathaus Steglitz" until "Spichernstraße". Change here for the underground line U3 to "Krumme Lanke" and get off at "Freie Universität (Thielplatz)". Leave the underground station by walking in the direction of travel and take the left exit. The Harnack-Haus is 100 meters ahead on the right hand side.

From the train station "Südkreuz" (9 km) take the suburban train S41 (only selected trains operate the station, please check before boarding) to "Heidelberger Platz". Change here for the underground line U3 to "Krumme Lanke" and get off at "Freie Universität (Thielplatz)". Leave the underground station by walking in the direction of travel and take the left exit. The Harnack-Haus is 100 meters ahead on the right hand side.

**Arriving by car**: Take highway A 115 to "Hüttenweg / exit 2". Turn right towards "Dahlem" until you reach the corner of "Clayallee" where you turn right again. At the next crossroads turn left onto "Saargemünder Straße". A short way along, you reach the Harnack-Haus at the corner to Ihnestraße.



MAX PLANCK SYMPOSIUM on Organismal Biology meets Epigenetics June 19 – 20, 2017 in Berlin



# MONDAY, JUNE 19, 2017

**08:45** Welcome and introduction

## SESSION 1 - CHAIR: ASIFA AKHTAR

09:00 Bill Hansson

Smelling to survive - insect olfactory neuroethology

09:45 Paolo Sassone-Corsi

The epigenetic language of circadian metabolism

10:30 Coffee break

### SESSION 2 - CHAIR: MANFRED GAHR

11:15 Patricia Wittkopp

Effects of single nucleotide changes on phenotypic plasticity and gene-by environment interactions

12:00 Ralf Sommer

Phenotypic plasticity: from switch genes to epigenetics

12:45 Lunch break

#### SESSION 3 – CHAIR: DETLEF WEIGEL

14:00 Caroline Dean

How plants sense and remember winter

14:45 Russell Fernald

Epigenetic DNA methylation: A role in social

dominance and body coloration

15:30 Coffee break

#### SESSION 4 - CHAIR: THOMAS JENUWEIN

16:15 Peter Visscher

Genetics of epigenetics: DNA methylation is just another complex trait

17:00 Vincent Colot

The contribution of epigenetics to phenotypic variation

in plant

17:45 Stirling Churchman

Gene expression regulation at high resolution

19:00 Dinner

21:00 Scientific discussion

# TUESDAY, JUNE 20, 2017

# SESSION 5 - CHAIR: ANDREA MUSACCHIO

09:00 Karolin Luger

Chromatin organization through the domains of life: the price of regulatory power

09:45 Steve Henikoff

Chromatin dynamics in epigenetic regulation

10:30 Coffee break

## SESSION 6 - CHAIR: MANFRED GAHR

11:15 Amy Toth

DNA methylation, genomic plasticity, and the evolution of

castes in social insects

12:00 Danny Reinberg

Epigenetics: one genome, multiple phenotypes

13:00 Lunch break

#### SESSION 7 - CHAIR: ASIFA AKHTAR

14:00 Edith Heard

The mammalian X chromosome: its genetic and epigenetic contributions to development and disease

14.45 Nathalie Dehorter

Molecular control of the interneuron integration in

health and disease

15.30 Peter Jones

Activating endogenous retroviruses for epigenetic therapy

16.15 Coffee break and discussion

**17.00** End of meeting

# ORGANISMAL BIOLOGY MEETS EPIGENETICS

#### Thematic concept

The diverse (mosaic) phenotypes within and between organisms raise the likelihood of the organism to cope well with environmental challenges. These diversified phenotypes can be distinct (polyphenisms, polymorphisms) or can be continuously distributed. In this symposium we aim on understanding of what characteristics allow phenotypic plasticity in response to internal or external environments, and what characteristics create inflexibility. At the molecular level, environment can influence gene networks, thus providing distinct means for epigenetic regulation. By bringing together scientists from evolutionary perspective, behavioural plasticity, genetics, epigenetics and comparative genomics we plan to create a vivid interdisciplinary platform for discussion of studying the complexities of organismal biology at multiple levels.