

FORUM

EXPERIMENT!

2019

Xplanatorium
HERRENHAUSEN

NOVEMBER 26-27, 2019

PROGRAM

TUESDAY, NOV 26

11:00 A.M. WELCOME & INTRODUCTION

ULRIKE BISCHLER
Program Director, Volkswagen Foundation

11:10 A.M. SESSION 1 Biomedicine

Take, remember, give back: The potential of Z-DNA as a carrier of epigenetic memory

LEONIE RINGROSE
Humboldt University Berlin

11:30 A.M. Why is there no antimicrobial sensitivity testing available for antiseptics?

BONG-SUNG KIM
RWTH Aachen University

11:50 A.M. Designing bacteriomimetic particles to treat inflammatory dispositions

GREGOR FUHRMANN
Helmholtz-Centre for Infection Research Saarbrücken

12:10 P.M. Towards an in depth analysis of the lymph

XAVER SEWALD, CHRISTIAN SCHÖLZ
Ludwig-Maximilians-Universität München

12:30 P.M. LUNCH

1:30 P.M. SESSION 2:
Bioinformatics, Biotechnology

Preventing food fraud: DNA methylation patterns to identify organic food
IVO GROSSE
University Halle-Wittenberg

1:50 P.M. NanoProtect - Can we cure an Esca-infected grapevine plant?
JOCHEN FISCHER
Institut für Biotechnologie und Wirkstoffforschung, Kaiserslautern
FREDERIK WURM
Max-Planck Institute for Polymer Research, Mainz

2:10 P.M. Engineering “plant tears” into a low-tech protein production platform
MARTIN SCHATTAT
University Halle-Wittenberg

2:30 P.M. Lightning Talks
BY ALL POSTER PRESENTERS

3:00 P.M. COFFEE BREAK & POSTER SESSION

4:00 P.M. SESSION 3
Ecology, Microbiology

“Transparent soil” - A new tool to study the competition for nitrogen in trees
JUDY SIMON
University of Konstanz

- 4:20 P.M.** Discovering RNA viruses of archaea
URI GOPHNA
Tel Aviv University, Israel
- 4:40 P.M.** When two phages quarrel does the bacterium rejoice?
ROBERT HERTEL
University of Göttingen
- 5:00 P.M.** COFFEE BREAK
- 5:20 P.M.** SESSION 4
Psychology, Physics
- Is animal-like behavior conserved in humans? A re-translational approach
PAUL PAULI, DANIEL GROMER, DOMINIK KISER
University of Würzburg
- 5:40 P.M.** See it, Hear it, Feel it: Human Exploration of Nanomechanical Surface Properties
ROBERT MAGERLE, ALEXANDRA BENDIXEN
TU Chemnitz
- 6:00 P.M.** Adaptive computing with electrospun nanofiber networks
ANDREA EHRMANN
Bielefeld University of Applied Sciences
TOMASZ BLACHOWICZ
Silesian University of Technology, Gliwice, Poland
- 6.20 P.M.** ACCOMPANYING RESEARCH
- Tba (first survey results)
MARTINA RÖBBECKE, DAGMAR SIMON
Evaconsult, Berlin
LISA SCHÖN
Joanneum Research, Graz, Austria
- 7:00 P.M.** DINNER

WEDNESDAY, NOV 27

9:00 A.M. SESSION 5 Engineering

Beyond rigidity - Collapsing structures in experimental hydraulics

NILS GOSEBERG
TU Braunschweig

9:20 A.M. HP-GMAW - High Pressure Gas Metal Arc Welding HENNING WICHE TU Clausthal

9:40 A.M. Paraffin wax for self-sealing of sensible heat storage systems PETER BAYER, University Halle-Wittenberg CHRISTOPH BOTT, TU Ingolstadt

10:00 A.M. Using Shape Memory Materials and Lost Heat as a New Renewable Energy Source INGO NAUE Karlsruhe Institute for Technology (KIT)

10:20 A.M. COFFEE BREAK

10:50 A.M. SESSION 6 Medical Diagnostics and Therapy

Hybernation-on-demand: A feasible approach to medical intervention

JAN SIEMENS
University of Heidelberg

11:10 A.M. Automatic Multi-Spectral Tissue Analysis During Surgery PETER EISERT Humboldt University Berlin

11:30 A.M. Optical label-free (tumour) cell detection and beyond LARS KAESTNER Saarland University

- 11:50 A.M.** Personalized, Model-Based Acoustic Hearing Diagnostic
MICHAEL LAUXMANN
Reutlingen University
- 12:10 P.M.** A Hitch-Hiker's Ride to Immunity: Antigen backpacks as vaccines to induce mucosal immune responses
ANDREAS FREY
Forschungszentrum Borstel
- 12:30 P.M.** LUNCH
- 1:30 P.M.** SESSION 7
Computing
- Teaching computers to see ... sharp: A deep neural network for single image autofocus and artificial accommodation
THORSTEN STRAßER
University Hospital Tübingen
- 1:50 P.M.** The Neural Microcircuits of Problem-solving and Goal-directed Behavior
MANFRED EPPE
University of Hamburg
- 2:10 P.M.** How we search for symmetry by breaking it
REBECCA WALDECKER, WILFRED WILSON
University Halle-Wittenberg
- 2:30 P.M.** Consistent Rational Argumentation
CHRISTOPH BENZMÜLLER
FU Berlin
- 2:50 P.M.** CLOSING
- PAVEL DUTOW
Program Director, Volkswagen Foundation
- 3:00 P.M.** END OF THE CONFERENCE
- OPTIONAL:
HERRENHAUSEN GARDEN VISIT (UNGUIDED)