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 GOHNA
          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-transla-
          tional approach
          PAUL PAULI, DANIEL GROMER, DOMINIK KISER
          University of Würzburg

5:40 P.M.  See it, Hear it, Feel it: Human Exploration of Nanomechnical
          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 (UN GUIDED)