STATUS-SYMPOSIUM, NOVEMBER 29-30, 2022

LIFE? – A FRESH SCIENTIFIC APPROACH TO THE BASIC PRINCIPLES OF LIFE

XPLANATORIUM HERRENHAUSEN, HANOVER, GERMANY

PROGRAM

TUESDAY, NOV 29, 2022

10:30 A.M. REGISTRATION AND COFFEE

11:30 A.M. WELCOME & INTRODUCTION

PAVEL DUTOW
Program Director, Volkswagen Foundation, Hannover

11:45 A.M. KEYNOTE

A chemical perspective about the origin of life

THOMAS CARELL
University of Munich

12:45 P.M. LUNCH

2:00 P.M. SESSION 1

Forming catalysts: a basic principle of deep chemistry, life chemistry and life

HARUN TÜYSÜZ
Max-Planck-Institut für Kohlenforschung, Mülheim, Germany

Prebiotic synthesis on the rocks

CHRISTOF MAST
Technical University of Munich

Initiating Molecular Life

OLIVER TRAPP
University of Munich

Chair: OLIVER TRAPP

3:00 P.M. COFFEE BREAK

Xplanatorium HERRENHAUSEN

3:30 P.M. SESSION 2

Ghost in the protein: how do new proteins come about?

ERICH BORNBERG-BAUER
University of Münster

A Novel Complementarity at the Heart of Biology

ZOYA IGNATOVA
University of Hamburg

A plasmid goes viral: Understanding the origin and evolution of viruses by studying a newly discovered virus-like element.

SUSANNE ERDMANN
Max Planck Institute for Marine Microbiology, Bremen

Chair: SUSANNE ERDMANN

4:30 P.M. COFFEE BREAK

5:00 P.M. SESSION 3

Resolving the "lipid divide' by unravelling the evolution and role of fatty acid metabolic pathways in Archaea - Lipid Divide

BETTINA SIEBERS
University of Duisburg-Essen, Essen

Deciphering the principles of cell decision-making in multicellular systems: The Least microEnvironmental Uncertainty Principle (LEUP)

HARALAMPOS HATZIKIROU
Technical University Dresden

The evolution of trafficking: from archaea to eukaryotes

SONJA-VERENA ALBERS
University of Freiburg

Chair: SONJA-VERENA ALBERS

6:00 P.M. DINNER

PRELIMINARY PROGRAM

WEDNESDAY, NOV 30, 2022

10:00 A.M. SESSION 4

De novo organism design from membraneless orthogonal central dogma organelles

EDWARD LEMKE
University of Mainz

How the rewiring of surface protein organisation facilitated multicellular life

RALF JUNGMANN
Max Planck Institute of Biochemistry, Martinsried

OntoTime - Measuring and Modulating Timescales of Life

CHRISTIAN SCHRÖTER
Max Planck Institute of Molecular Physiology, Dortmund

Chair: CHRISTIAN SCHRÖTER

11:00 A.M. COFFEE BREAK

11:30 A.M. SESSION 5

Cellular Reconstitution of Complex 3D Tissue Shapes

ALF HONIGMANN
Technical University Dresden

From chemistry to information: a model system for the coupling of metabolism and heredity

JOB BOEKHOVEN
Technical University of Munich

Surviving under pressure: Adaptation to mechanical forces as a key step in the evolution of multicellular life

JAN LAMMERDING
Cornell University, USA

Chair: JAN LAMMERDING

12:15 P.M. CLOSING & LIGHT LUNCH