

Scientific Program

14th International Conference on

Structural Biology

September 24-26, 2018 | Berlin, Germany



UK: Conference Series LLC Ltd
47 Churchfield Road, London, W3 6AY
Toll Free: +0-800-014-8923

DAY-1

September 24, 2018

Meeting Hall: Spreewald

08:00-9:00 Registrations

Opening Ceremony 09:00-09:25

KEYNOTE FORUM

09:25-09:30 Introduction

09:30-10:15 **Title: The centers of premeltons signal the beginning and ends of genes**
Henry M Sobell, University of Rochester, USA

Networking & Refreshments 10:15-10:30 @ Foyer

10:30-11:15 **Title: Self-assembly of amyloid proteins**
Yuri L Lyubchenko, University of Nebraska Medical Center, USA

11:15-12:00 **Title: X-ray free electron laser: opportunities for drug discovery**
Michael Hennig, LeadXpro AG, Switzerland

Sessions: Determination of 3D structures | Structural Biology in Cell Signalling

Chair: Joachim Krebs, MPI for Biophysical Chemistry, Germany

INTRODUCTION

12:00-12:30 **Title: Structural elements of stromal interaction molecule mediated store operated calcium entry regulation**
Peter B Stathopoulos, University of Western Ontario, Canada

GROUP PHOTO

Lunch Break 12:40-13:40 @ Theodor's Restaurant

13:40-14:10 **Title: Automated systems for X-ray crystallography at Photon Factory**
Toshiya Senda, High Energy Accelerator Research Organization (KEK), Japan

14:10-14:40 **Title: Calcium signaling in the CNS in health and neurodegenerative disease**
Grace E Stutzmann, The Chicago Medical School - Rosalind Franklin University, USA

14:40-15:10 **Title: Functional properties of the IP3 receptor at membrane contact sites**
Jan B Parys, KU Leuven, Belgium

SPEAKER FORUM

Networking & Refreshments 15:10-15:30 @ Foyer

Sessions: Structural Enzymology | Computational Approaches | Recent Advancements in Structural Biology

Chair: Toshiya Senda, KEK, IMSS - Structural Biology Research Center, Japan

15:30-16:00 **Title: Structure based approach to identify potent tissue selective androgen receptor modulators**
Ray Unwalla, Pfizer Inc, USA

16:00-16:30 **Title: Cryo-EM and multimodal imaging towards nanoplatform design for next generation of theranostics**
R Holland Cheng, UC Davis, USA

16:30-17:00 **Title: Endothelial membrane stiffening under osmotic challenge**
Manuela A A Ayee, University of Illinois at Chicago, USA

17:00-17:30 **Title: Effects of sarcolipin on Ca²⁺ pump SERCA1a enzymatic cycle studied by normal mode analysis**
Liliane Mouawad, Institut Curie, France

17:30-18:00 **Title: Network analysis of the conformational change of c-Src, a tyrosine kinase, by molecular dynamics simulation**
Sangwook Wu, Pukyong National University, South Korea

Panel Discussion

DAY-2

September 25, 2018

Meeting Hall: Spreewald

KEYNOTE FORUM

09:00-09:45 **Title: Regulation of the calcium pump of plasma membranes by calmodulin**
Joachim Krebs, MPI for Biophysical Chemistry, Germany

09:45-10:30 **Title: Atomic force microscopy for characterization of pericellular brush layer**
Igor Sokolov, Tufts University, USA

Networking & Refreshments 10:30-10:45 @ Foyer

10:45-11:30 **Title: Structural basis for PTPN3-p38 γ resting-state complex involved in colon cancer progression**
Tzu-Ching Meng, Academia Sinica, Taiwan

POSTER PRESENTATIONS 11:30–12:30

Poster Judge: Joachim Krebs, MPI for Biophysical Chemistry, Germany

- SB 01** **Title: Thermo-regulated set of functional subpopulations of lactate dehydrogenases**
Sergei Khrapunov, Albert Einstein College of Medicine, USA
- SB 02** **Title: Fragment based drug discovery at Astex**
Judith Reeks, Astex Pharmaceuticals, UK
- SB 03** **Title: 3D modeling of BmpA, BmpB, BmpC and BmpD from *Borrelia burgdorferi***
Mia Åstrand, Åbo Akademi University, Finland
- SB 04** **Title: Dynamically induced water transport through membrane co-transporters**
Marko Sever, National Institute of Chemistry, Slovenia
- SB 05** **Title: Structure and specificity of the arginine repressor (ArgR) from *Corynebacterium pseudotuberculosis***
Raghuvir Arni, IBILCE - UNESP, Brazil
- SB 06** **Title: Vitamin E-based glycoside amphiphiles for membrane protein structural studies**
Lubna Ghani, Hanyang University, South Korea

Lunch Break 12:30-13:15 @ Theodor's Restaurant

Special Session on: Structural Biology and Single Molecules

Chair: Yuri L Lyubchenko, University of Nebraska Medical Center, USA

SPEAKER FORUM

- 13:15-14:00** **Title: Nanoscale dynamics of protein-DNA complexes as revealed with high-speed AFM**
Yuri L. Lyubchenko, University of Nebraska Medical Center, USA
- 14:00-14:25** **Title: Towards an accurate description of the S-nitrosylated cysteine by classical molecular simulations: implications for the study of cancer related SNO-proteins**
Emmanuelle Bignon, Danish Cancer Society, Denmark
- 14:25-14:50** **Title: Small viral channel forming proteins-structure based computational modeling and analysis**
Wolfgang B Fischer, National Yang-Ming University, Taiwan
- 14:50-15:15** **Title: Hybrid methods reveal the structural architecture of PTPN3-p38 γ active-state complex**
Shu-Fang Hsu, Academia Sinica, Taiwan

Sessions : Structural Biology | Sequence Analysis | Molecular Modelling

Chair: Igor Sokolov, Tufts University, USA

SPEAKER FORUM

- 15:15-15:45** **Title: Quantitative and repeatable measurements of elastic moduli of cells**
Igor Sokolov, Tufts University, USA

15:45-16:10 **Title: Steered molecular dynamics and single molecule atomic force microscopy to explore the mechanical response of talin**
Vesa P Hytönen, University of Tampere, Finland

16:10-16:35 **Title: Crystallization strategy when no crystals are obtained in the initial screening**
Miki Senda, High Energy Accelerator Research Organization (KEK), Japan

Networking & Refreshments 16:35-16:55 @ Foyer

16:55-17:20 **Title: Protein folding and unfolding by quantum mechanics**
Thomas Prevenslik, QED Radiations Discovery Bay, China

POSTER PRESENTATIONS 17:20–18:20

Poster Judge: Joachim Krebs, MPI for Biophysical Chemistry, Germany

SB 07 **Title: Heterologous production of α -rhamnosyl- β -glucosidases for crystallographic studies**
Michael Kotik, Czech Academy of Sciences, Prague

SB 08 **Title: Characterization of new CRISPR/Cas9 system from uncharacterized bacterium**
Trung Thanh Thach, SAINT - Sungkyunkwan University, South Korea

SB 09 **Title: Quantification of used drug releasing thread by mechanical surgical sewing machine**
Sang Jin Yoon, Gil Hospital, South Korea

SB 10 **Title: Towards new therapeutic derivatives - *in silico*-based design of new kinase inhibitors against *Mycobacterium tuberculosis***
Mohd Shahbaaz, University of Western Cape, South Africa

SB 11 **Title: Inhibition of MST1 kinase activity: Blocking SARAH domain interactions with peptides**
Mahlet Z Tamirat, Åbo Akademi University, Finland

SB 12 **Title: New steroid based amphiphiles for membrane protein structural study**
Muhammad Ehsan, Hanyang University, South Korea

PANEL DISCUSSION

DAY-3

September 26, 2018

Meeting Hall: Spreewald

KEYNOTE FORUM

Introduction

10:00-10:45 **Title: The impact of reproducibility on structure based drug discovery**
Wladek Minor, University of Virginia, USA

Networking & Refreshments 10:45-11:05 @ Foyer

11:05-11:50 **Title: Structural changes in proteins at fluid-fluid interfaces**
Marek Cieplak, Polish Academy of Sciences, Poland

11:50-12:35 **Title: The study of the misfolding mechanism of the prion protein by incorporating the Wenxiang diagrams into NMR spectroscopy**
Guo-Ping Zhou, Guangxi Academy of Sciences, China

Lunch Break 12:35-13:35 @ Theodor's Restaurant

Sessions : Structural Biology in Drug Design | Frontiers in Structural Biology

Chair: Peter B Stathopoulos, University of Western Ontario, Canada

SPEAKER FORUM

13:35-14:05 **Title: The Morpheus III protein crystallization screen: at the frontier of drug discovery**
Fabrice Gorrec, MRC Laboratory of Molecular Biology, UK

14:05-14:35 **Title: The human sliding clamp as a therapeutic target**
John B Bruning, The University of Adelaide, Australia

14:35-15:05 **Title: Automated protocols for macromolecular crystallization at the MRC Laboratory of Molecular Biology**
Fabrice Gorrec, MRC Laboratory of Molecular Biology, UK

15:05-15:35 **Title: Development of new and effective anti-schistosomal drugs using antimicrobial peptides as lead compounds: A computer-aided drug design study**
Raphael Taiwo Aruleba, University of Zululand, South Africa

15:35-16:05 **Title: Probing structures, interactions and rearrangements by EPR**
Patrick Carl, Bruker Biospin, Germany

Networking & Refreshments 16:05-16:20 @ Foyer

PANEL DISCUSSION

Awards & Closing Ceremony

Bookmark your Dates

18th International Conference on **Structural Biology**

October 14-16, 2019 | London, UK

E: structuralbiology@joinyourpeers.org
Website: structuralbiology.conferenceseries.com