

Programme

Artificial Biology

15-Aug-2022

08:00 - 09:00 **Registration in iNANO Foyer**

09:00 - 09:20 **Opening**

09:20 - 10:05 **Professor Kenneth Shea, University of California, Irvine, USA - Synthetic Antibodies from Statistical Hydrogel Copolymers**

10:05 - 10:25 **Janine Kehrli - Development of fluorogenic nucleic acid-based biosensors**

10:25 - 10:45 **Dr. Cesar Rodriguez-Emmenegger - New concepts for synthetic cell membranes as a platform to interact with biology**

10:45 - 11:15 **Break**

11:15 - 12:00 **Professor Dr. Seraphine V. Wegner, University of Münster, Germany - Spatiotemporal control in synthetic cells using light**

12:00 - 12:20 **Assistant Prof. Pratik Shah - Non-canonical Head-to-Head DNA Dimerization Mediated by Silver Nanoclusters**

12:20 - 13:20 **Lunch**

13:20 - 14:00 **Walk & Talk**

14:00 - 14:45 **Professor Dr. Thomas R. Ward, University of Basel, Switzerland - Artificial Metalloenzyme for New-to-Nature Chemistry: Challenges and Opportunities**

14:45 - 15:05 **Isabella Westensee - 'Mimicry of Communication between Mammalian Cells and Hydrogel-based Artificial Cells**

15:05 - 15:35 **Break**

15:35 - 16:35 **4 min Speed Presentations**

16:35 - 18:00 **Poster Session & Beer**

18:15 - 19:00 **Departure for walk through Aarhus to Street Food**

19:00 - 21:00 **Street Food Dinner**

09:00 - 09:45	Professor Dr. Cornelia Palivan - Artificial organelles and cells: How do they support medical applications?
09:45 - 10:05	Dr. Miguel A. Ramos Docampo - Polymers to Trigger Locomotion in Motors
10:05 - 10:25	Associate Prof. Leticia Hosta-Rigau - Multifunctional Synthetic Mimics of Red Blood Cells
10:25 - 11:00	Break
11:00 - 11:45	Professor Jonathan Clayden MA PhD CChem FRSC, University of Bristol, United Kingdom - Artificial Translation: Communicating messages using molecular conformation
11:45 - 12:05	Dr. Mette Malle - Programmable RNA loading of extracellular vesicles with toehold release purification
12:05 - 12:25	Dr. Xin Shi - Nanopore-powered DNA turbines
12:25 - 13:30	Lunch
13:30 - 14:15	Associate Professor Rona Chandrawati, University of New South Wales (UNSW Sydney), Australia - Nanozymes and polymers for nitric oxide delivery from prodrugs
14:15 - 14:35	Dr. Veikko Linko - DNA origami in biological settings
14:35 - 14:55	Ane Bretschneider Søgaard - Artificial Receptors
14:55 - 15:40	Professor Joseph Wang, University of California San Diego, USA (online) - Synthetic Micromotors Go In Vivo: From the Bench to Live Animals
15:40 - 16:10	Break
16:10 - 16:40	Prof. Karsten Haupt
16:40 - 17:10	Associate Prof. Allen Liu - Engineering Functional Membrane-Membrane Interface using Cell-Free Expression
17:15 - 17:40	Departure for walk to ARoS
17:40 - 20:30	Museum Tour & Conference Dinner at ARoS

09:00 - 09:45	Professor Elisa Franco, UCLA, Samueli School of Engineering, USA (online) - Biochemical control of DNA condensation
09:45 - 10:05	Jesper Medin - Towards an artificial replication of the nuclear pore complex
10:05 - 10:25	Dr. Néstor Sampredo - RNA origami designs robotic modules
10:25 - 11:00	Break
11:00 - 11:20	Prof. Hui Wei (online) - Nanozymes: from rational design and biomedical applications
11:20 - 11:40	Mireia Casanovas Montasell - Chemical zymogens for the protein cysteinome
11:40 - 12:25	Professor David Margulies, Weizmann Institute of Science, Israel - Protein and Cell Identification with Fluorescent Molecular Probes: From Fingerprint-Generating Probes to Bacterial Probes (B-probes) Protein and Cell Identification with Fluorescent Molecular Probes: From Fingerprint-Generating Probes to Bacterial Probes (B-probes) Integrating Living Bacteria and Artificial Cell Surface Receptors
12:25 - 12:40	Closing Remarks
12:40 - 13:30	(Packed) Lunch