



Drug Discovery and Therapeutics

AGENDA

NYU ABU DHABI SAADIYAT CAMPUS

Institute Conference Center

6 - 8 May, 2024

6th May, 2024 | DAY 1

- 9:00 – 9:30 AM** **Registration**
Institute Conference Center
Meeting Room Foyer
- 9:30 – 9:45 AM** **Welcome Remarks & Introduction**
Program Organizer(s)
- 9:45 – 12:50 PM** **SESSION 1: Novel therapeutic approaches for neurodegenerative diseases and cancer**
Chair: Mazin Magzoub
- 9:45 – 10:30 AM** **KEYNOTE**
Chemical Approaches to the Disruption of Protein-Protein Interactions
Andrew Hamilton, New York University
- 10:30 – 11:00 AM** **Break & Refreshments**
Atrium
- 11:00 – 11:30 AM** *High throughput synthetic protein mimetic approaches to modulate pathological protein-protein interactions*
Sunil Kumar, University of Denver
- 11:30 – 12:00 AM** *Uncovering novel therapeutic targets of the Human Papillomavirus E7 Oncoprotein*
Lawrence Banks, International Center for Genetic Engineering and Biotechnology (ICGEB), Trieste
- 12:00 AM – 12:30 PM** *Development of Generic G Protein Peptidomimetics Able to Stabilize Active State Gs and Gq Protein-Coupled Receptors for Application in Drug Discovery*
Steven Ballet, VUB Brussels, Belgium
- 12:30 – 1:00 PM** *A protein mimetic-based strategy to abrogating cancer-associated mutant p53 amyloid aggregation and restoring its tumor suppressor function*
Mazin Magzoub, NYU Abu Dhabi
- 1:00 – 2:00 PM** **Lunch**
Atrium
- 2:00 - 5:00 PM** **SESSION 2: Deep Learning, Networks and Drug Discovery**
Chair: Kourosch Salehi-Ashtiani, NYU Abu Dhabi
- 2:00 – 2:30 PM** *Network Biology Framework to Elucidates Molecular Mechanisms of Microbial Pathogenesis*
Shahid Mukhtar, UAB
- 2:30 – 3:00 PM** *Network organization of genetic susceptibility to disease*
Bushra Dohai, Helmholtz Center, Munich
- 3:00 – 3:30 PM** *A new era in Natural Product Drug Discovery*
Alan Healy, NYU Abu Dhabi
- 3:30 – 4:00 PM** **Break & Refreshments**
Atrium

4:00 – 4:30 PM *Generative AI and next-generation robotics for drug discovery and longevity research*
Alex Aliper, Insilico Medicine, Abu Dhabi

4:30 – 5:00 PM *Cross-Domain Training of a Large Language Model for Natural Languages and Protein Sequences*
Kourosh Salehi-Ashtiani, NYU Abu Dhabi

7th May, 2024 | DAY 2

9:30 – 12:00 AM **SESSION 3: Protein Evolution and Novel Targets for Infectious Diseases**
Chair: Jean-Claude Twizere

9:30 – 10:00 AM *When chemistry meets biology: a travel to the protein multiverse*
Oleksandr Volkov, VIB-Center for Structural Biology, VUB Brussels, Belgium

10:00 – 10:30 AM *Innate immune mechanisms in tuberculosis pathogenesis*
Dhiraj Kumar, International Center for Genetic Engineering and Biotechnology (ICGEB), New Delhi

10:30 – 11:00 AM **Break & Refreshments**
Atrium

11:00 – 11:30 AM *Unravelling and targeting Plasmodium falciparum merozoite invasion of human RBCs*
Pawan Malhotra, International Center for Genetic Engineering and Biotechnology (ICGEB), New Delhi

11:30 – 12:00 AM *Towards identification of pan-viruses targets and broad-spectrum antivirals*
Jean-Claude Twizere, University of Liege, Belgium

12:00 – 2:00 PM **Lunch and Poster Session**
Atrium

2:00 AM – 4:45 PM **SESSION 4: Drug discovery and delivery (Tentative title to be changed into a more specific one)**
Chair: Ali Trabolsi

KEYNOTE
Systems biology and drug discovery using C. elegans
2:00 – 2:45 PM **Fabio Piano**, New York University and NYU Abu Dhabi

2:45 – 3:15 PM *Hybrid nanomaterials and their targeting delivery*
Luisa De Cola, University of Milan

3:15 – 3:45 PM **Break & Refreshments**
Atrium

3:45 AM – 4:15 PM *The process prescribes the biosimilar product*
Natasa Skoko, International Center for Genetic Engineering and Biotechnology (ICGEB), Trieste

4:15 AM – 4:45 PM *Smart Materials for Personalized Medicine*
Ali Trabolsi, NYU Abu Dhabi

8th May, 2024 | DAY 3

9:30 AM – 1:00 PM **SESSION 5: Biologics in Drug Discovery**
Chair: Piergiorgio Percipalle

9:30 AM – 10:00 AM *Functional miRNA screenings for the development of miRNA based therapies for Idiopathic Pulmonary Fibrosis*
Luca Braga, International Center for Genetic Engineering and Biotechnology (ICGEB), Trieste

10:00 AM – 10:30 AM *RNA therapeutics in cancer and age-related disorders*
Fabrizio D'Adda di Fagagna, IFOM, Milan

10:30 AM – 11:00 AM *The art of delivery: labeling and manipulating intracellular targets*
Cristina Cardoso, TU Darmstadt

11:00 – 11:30 AM **Break & Refreshments**
Atrium

11:30 AM – 12:00 PM *Combining nanobody technology, RNA therapeutics and lipid nanoparticles to design novel anti corona virus inhibitors*
Piergiorgio Percipalle, NYU Abu Dhabi

12:00 AM – 12:30 PM *Nanobodies: Revolutionizing Targeted Therapeutics in Drug Discovery*
Chayma El Khamlichi, BRC, TII, Abu Dhabi

12:30 PM – 1:00 PM *Development of new antibody reagents for cancer therapy*
Heinrich Leonhardt, Munich

1:00 – 2:00 PM **Lunch**
Atrium

2:00 – 5:30 PM **SESSION 6: Novel Targets in Metabolic Diseases**
Chair: Wael Rabeh

2:00 – 2:30 PM *Phage-inspired antibacterials*
You Hee Cho, CHA University, Gyeonggi-do, S. Korea

2:30 – 3:00 PM *Chemistry from Extreme Environments*
Ryan Young, BRC, TII, Abu Dhabi, UAE

3:00 – 3:30 PM *Inside the Black Box: a Look Behind the Scenes of Scientific Publishing*
Richard Hodge, PLoS Biology

3:30 – 4:00 PM **Break & Refreshments**
Atrium

4:00 – 4:30 PM *Covalent HDAC Inhibitor against Acute Myeloid Leukemia and Duchenne Muscular Dystrophy*
Yasir Raouf, UAE University

4:30 – 5:00 PM *Enzymes' Allosteric Sites in Drug Discovery and Design*
Wael Rabeh, NYU Abu Dhabi

Concluding Remarks