CELEBRATING PROTEIN DATA BANK CONTRIBUTIONS FROM RUTGERS UNIVERSITY STRUCTURAL BIOLOGISTS

Tuesday, November 2, 2021 • 1:00 PM
VIRTUAL EVENT • Register at go.rutgers.edu/khhhy45r

Program

1:00-1:05pm Welcome and introductions
Stephen K. Burley, M.D., D.Phil.: Founding Director, Institute for Quantitative Biomedicine

1:05-1:25pm Protein Data Bank at 50 years of age
Stephen K. Burley, M.D., D.Phil.: Director, RCSB PDB; IQB; SAS-C&CB; CINJ

1:25-1:45pm Structural biology of transcription and transcriptional regulation
Richard Ebright, Ph.D.: Wi; SAS-C&CB

1:45-2:05pm Structural elucidation of beta-(1,3)-glucan synthase from Candida glabrata using cryo-electron tomography
Wei Dai, Ph.D.: IQB; SAS-CBN

2:05-2:25pm Use of structural information to guide successful design of HIV/AIDS treatments
Eddy Arnold, Ph.D.: CABM; SAS-C&CB; CINJ

2:25-2:45pm How Colicin E1 stops the multidrug efflux pump TolC
Jason Kaelber, Ph.D.: IQB; Rutgers Cryo-EM and Nanoimaging Facility; CINJ

2:45-3:00pm Break

3:00-3:20pm Bacterial response regulators: Diverse regulatory mechanisms enabled by structurally conserved domains
Ann Stock, Ph.D.: CABM; RWJMS-B&MB; CINJ

3:20-3:40pm Solving protein structures with proton detected solid-state NMR: 15 years of progress
Andrew Nieuwkoop, Ph.D.: SAS-C&CB

4:00-4:20pm Investigating alpha-Synuclein amyloid seeding processes by NMR
Jean Baum, Ph.D.: SAS-C&CB

2:40-4:40pm A story from under the poisonous umbrella: Towards cryo-EM structure determination of the ribosome-Shiga toxin complex
Arek Kulczyk, Ph.D.: IQB; SEBS-M&B; CINJ

4:40-5:00pm Conformational plasticity in molecular recognition
Gaetano T. Montelione, Ph.D.: Renssalaer Polytechnic Institute-C&CB (previously Rutgers CABM; SAS-MBB)

5:00-5:20pm Structure determination of small proteins by single-particle cryo-electron microscopy
Vasileios Petrou, Ph.D.: Cli; RNJMS-MB&MG

5:20-5:40pm Receptor binding and entry of Hepatitis C Virus
Joe Marcotrigiano, Ph.D.: National Institute of Allergy and Infectious Disease (previously Rutgers CABM; SAS-C&CB)

5:40-6:00pm Nucleic acid structures and the Protein Data Bank
Helen M. Berman, Ph.D.: Director Emerita, RCSB PDB; IQB; SAS-C&CB

6:00pm Closing remarks and acknowledgements
Stephen K. Burley, M.D., D.Phil.