Biophysical Society

Biophysicists Address COVID-19 Challenges

OCTOBER 29, 2020 | 11:00 AM – 3:00 PM EDT

Program

11:00 AM	**Welcome & *Biophysical Journal* Issue Call for Papers** Jane Dyson, Scripps Research Institute, USA
Session I	**Protein Structure and Function** Eric Sundberg, Emory University, USA, Moderator
11:10 AM – 11:35 AM	John Briggs, MRC Laboratory of Molecular Biology, United Kingdom ***Structural Studies of the SARS-CoV-2 Spike Protein, In Vitro and In Situ***
11:35 AM – 12:00 PM	Karla Satchell, Northwestern University, Feinberg Schoolof Medicine, USA ***High Resolution Structures of the SARS-CoV-2 nsp16/nsp10 2'-O-methyltransferase Reveals Strategies for Structure-Based Inhibition***
12:00 PM – 12:25 PM	Pamela Bjorkman, California Institute of Technology, USA ***SARS-CoV-2 Neutralizing Antibody Structures Inform Therapeutic Strategies***
Session II	**RNA Structure and Function** Susan Schroeder, University of Oklahoma, USA, Moderator
12:25 PM – 12:50 PM	Rhiju Das, Stanford University, USA ***Accelerated 3D RNA Structure Determination and the SARS-CoV-2 Genome***
12:50 PM – 1:15 PM	Amy Gladfelter, University of North Carolina, USA ***RNA-Driven Phase Separation of Nucleocapsid***
1:15 PM – 1:40 PM	Tamar Schlick, New York University, USA ***To Knot or Not: Graph Theory and Chemical Reactivity to Unravel the Structure of the SARS-CoV-2 Frame-Shifting Element***
Session III	**Systems and Computational Biology** Madan Babu, St. Jude Children's Research Hospital, USA, Moderator
1:40 PM – 2:05 PM	Sarah Teichmann, Wellcome Sanger Institute, United Kingdom ***Cell Atlas Approaches to Covid-19***
2:05 PM – 2:30 PM	Christian Muench, Goethe University Frankfurt, Germany ***Dynamic Host Cell Responses to SARS-CoV-2 Infection***
2:30 PM – 2:55 PM	Sean O'Donoghue, Garvan Institute of Medical Research/CSIRO, Australia ***SARS-CoV-2 Structural Coverage Map Reveals State Changes That Disrupt Host Immunity.***
2:55 PM – 3:00 PM	**Closing Remarks** Eric Sundberg, Emory University, USA

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