VIRTUAL CRASH COURSE:
Intrinsically Disordered Biological Macromolecules in Cellular Signaling/Regulation

Tuesday, April 19th 2022 • 1:00 PM EST
Registration (required): go.rutgers.edu/pc8prcs1

Program

Co-Chairs:
Stephen K. Burley, M.D., D.Phil., Edmund C. Lattime, Ph.D., and Clifford P. Brangwynne, Ph.D.

1:00-1:05pm  Welcome and introduction
Stephen K. Burley, M.D., D.Phil., Rutgers Institute for Quantitative Biomedicine
Steven K. Libutti, M.D., F.A.C.S., Rutgers Cancer Institute of New Jersey

1:05-1:15pm  Crash course objectives
Edmund C. Lattime, Ph.D., Rutgers Cancer Institute of New Jersey

1:15-1:45pm  Understanding membrane-less organelles/condensates within living cells
Clifford P. Brangwynne, Ph.D., Princeton University-Chemical and Biological Engineering, Howard Hughes Medical Institute

1:45-2:15pm  Theory of associative polymers and implications for biomolecular condensates
Rohit V. Pappu, Ph.D., Washington University St. Louis-Biomedical Engineering

2:15-2:45pm  How is phase behavior encoded in prion-like low-complexity domains?
Tanja Mittag, Ph.D., St. Jude Children’s Research Hospital-Structural Biology

2:45-3:15pm  Break

3:15-3:45pm  The conformational entropy of biopolymers in the dilute phase sculpts sequence-dependent phase boundaries
Ned S. Wingreen, Ph.D., Princeton University-Molecular Biology

3:45-4:15pm  Building a molecular model of Ras/Raf signaling in the control of cell proliferation
Carla Mattos, Ph.D., Northeastern University-Chemistry and Chemical Biology

4:15-4:45pm  How RNA encodes properties of condensates
Amy S. Gladfelter, Ph.D., University of North Carolina-Biology

4:45-5:00pm  Closing remarks and acknowledgements
Stephen K. Burley, M.D., D.Phil.

Questions
Contact Michelle Sanghera
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