

SFB
1078



Protonation Dynamics
in Protein Function

Mon, January 25,
2021

15:15 – 16:15

Freie Universität Berlin

via WEBEX

➤ Colloquium

➤ **Prof. Isaiah (Shy) Arkin** – Department of Biological Chemistry, The Hebrew University of Jerusalem, Israel

Viral ion channels: from attractive biophysical models to drug targets

Many important enveloped viruses contain small membrane proteins that exhibit ion channel activity. On the one hand, their small size makes them ideal targets for detailed biophysical investigation. On the other hand, their essential role in the viral infectivity cycle makes them suitable for pharmaceutical point intervention. In my talk, I will focus on three such channels: M2 from the influenza virus and the E and 3a proteins from SARS-CoV-2. Biophysical investigation afforded by these proteins will revolve around detailed H-bond energetics in the hydrophobic lipid milieu. On the drug discovery front, I will present the results of drug repurposing studies against SARS-CoV-2 channels, which led to the identification of new antiviral agents.

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