

Biophysical Society 68<sup>th</sup> Annual Meeting

Bioengineering Subgroup Symposium

Saturday February 10, 2024

Philadelphia, Pennsylvania

**Subgroup Chair:** Mark Uline, University of South Carolina, USA

**Symposium Time:** 8:30 AM - 12:30 PM EST

**Subgroup Business Meeting:** 10:30 AM

**Symposium Room:** 204C

---

8:30 AM Opening Remarks

8:32 AM Shuibing Chen, Cornell University, USA

*Human Pluripotent Stem Cells, Organoids, and Disease Modeling*

9:00 AM Ravi Radhakrishnan, University of Pennsylvania, USA

*AI-Enabled Physics Driven Digital Twin Automaton in Cancer and Nanomedicine*

9:30 AM Juan Vanegas, Oregon State University, USA

*Tension Mediated Activation of Transmembrane Protein Receptors and Ion Channels*

10:00 AM Break

10:30 AM Business Meeting

10:40 AM Gabriele Kockelkoren, University of Copenhagen, Denmark

*Nanodomains of GPCRs at the Plasma Membrane: Direct Observation, Formation and Function*

11:00 AM Michael Schick, University of Washington, USA

*The Plasma Membrane as an Emulsion: A Rational Basis for "Rafts" and a Different Picture of Them*

11:30 AM Vadim Backman, Northwestern University, USA

*Physical Genomics and The Reprogramming of the Cell's Operating System*

12:00 PM Igal Szleifer, Northwestern University, USA

*How is Chromatin Structured and Organized?*

