

# Life meets mathematics

Joint workshop (Brown University and Konkuk University)

**March 28th, 2025**

**Venue** Room 107, 70 Ship Street, Providence

## Speakers & Timeline

**(08:40 – 08:50) Greeting**

**(08:50 – 09:40) Alexander Anderson** (Moffitt Cancer Center) **Migration**

Evolutionary Therapy for Metastatic Cancer

**(09:40 – 10:20) Magdalena Stolarska** (Univ of St. Thomas)

Mathematical models of membrane structures and their role in cell motility

**(10:20 – 10:30) Break**

**(10:30 – 11:10) Sean Lawler** (Brown University)

The biology and therapy of glioblastoma

**(11:10 – 11:50) Herbert Levine** (Northeastern University)

Towards a Mathematical Treatment of Drug-Resistant Persisters

**(11:50 – 12:50) Lunch**

**(12:50 – 13:30) Samuel Isaacson** (Boston University)

Spatial Particle Modeling of Immune Processes

**(13:30 – 14:10) Ian Wong** (Brown University)

Mechanobiology and Topology of Collective Cell

**(14:10 – 14:20) Break**

**(14:20 – 15:00) Yangjin Kim** (Konkuk University)

How do tumor-associated neutrophils regulate the microenvironmental landscape of brain tumors: Delivery of nano-particles through BBB

**(15:00 – 15:40) Sookkyung Lim** (University of Cincinnati)

Mathematical modeling of cell motility: bacterial swimming & glioblastoma migration

**(15:40 – 15:45) Break**

**(15:45 – 16:20) Nazanin A. Daryakenari** (Brown University)

PINNs, Pills, and Predictions: AI for the Untold Stories of Systems Medicine

**(16:20 – 16:40) Poster session**



### Organizers

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