



# ARTIFICIAL INTELLIGENCE IN SURGERY

## SRS 2024

FRIDAY, JUNE 21 • PLUMERIA C & D

**COURSE DIRECTORS:** Andrew Hung and Vipul Patel  
**COURSE CHAIRS:** Todd Heniford (Director of MIS, Atrium Health),  
Pegah Khosravi (Assistant Professor of Biomedical AI, CUNY), Tony Jarc (Intuitive Surgical)

7:30am - 7:35am **Introductions** *Todd Heniford, Pegah Khosravi, Tony Jarc*

### PRIMER SESSIONS

7:45am - 8:00am **The Basics: What is AI/Machine Learning/Deep Learning/Generative AI?**  
*Dani Kiyasseh, DPhil*

### BROAD USES OF AI IN MEDICINE

8:00am - 8:15am **Large Language Models to Extract, Analyze, and Produce Textual Data**  
*Jack Cavanagh (MIT/Poverty Lab)*

8:15am - 8:30am **Generative AI Applications in Surgery** *Pieter de Backer (Orsi Academy)*

### AI IN SURGERY

8:30am - 8:50am **Keynote Speaker: Teodor Grantcharov - Black Box**

### SURGICAL DATA SCIENCE

8:50am - 9:05am **Creating an Algorithm for Surgical Data** *Pegah Khosravi*

9:05am - 9:20am **AI in Surgical Data / Skills Assessment** *Andrew Hung (Cedars)*

9:20am - 9:35am **Kinematic and Video Data to Predict Clinical Outcomes** *Filippo Filicori (Northwell Health)*

9:35am - 9:50am **AI in Surgical Data in Neurosurgery** *Dan Donoho (Neurosurgery - National Children's Hospital)*

9:50am - 10:05am **BREAK**

### APPLICATIONS OF SURGICAL DATA SCIENCE

10:05am - 10:20am *Nadine Haram (Proximie)*

10:20am - 10:35am **From Surgical Video to Surgical Intelligence: Leveraging AI to Unlock Value** *Tamir Wolf (Theator)*

10:35am - 10:50am *Tony Jarc PhD (Intuitive)*

10:50am - 11:05am **Method AI** *Doug Teany*

11:05am - 11:20am **Levita** *Chauncey Graetzel*

11:20am - 11:35am **NVIDIA** *Mostafa Toloui*

11:35am - 11:50am **Medtronic** *George Murgatroyd*

11:50am - 12:05pm **Johnson and Johnson** *Shan Jegatheeswaran*

12:05pm - 12:15pm **The Future: Autonomous Surgery** *Dan Fer*

12:15pm - 12:30pm **Panel Discussion: Next Steps: Moving Surgical AI Forward**

12:30pm **Takeaway Messages** *Co-Chairs*