

## Biomedical Informatics Grand Rounds

Wednesday, September 10, 2025 3:00 pm – 4:00 pm

## Accelerating Informatics: Data foundations and AI

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## **Remote Access**

Join Zoom Meeting <a href="https://stonybrook.zoom.us/j/95617197636?pwd=KytzZ2pVRG9SZGpKZUtpNXJISjNjZz09">https://stonybrook.zoom.us/j/95617197636?pwd=KytzZ2pVRG9SZGpKZUtpNXJISjNjZz09</a> Meeting ID: 956 1719 7636 Passcode: 924293

**Bio:** Dr. Janos G. Hajagos is Chief of Data Analytics and Research Assistant Professor in the Department of Biomedical Informatics at Stony Brook University. He is the lead data scientist across several quality initiatives at Stony Brook Medicine and for the Suffolk Care Collaborative's DSRIP award. Before his current position he was the Associate Director of Data Computation in the Division of Applied Informatics. There he was integral in several data analytic applications and the development of production web applications for the New York State Department of Health's Medicaid Program. Dr. Hajagos has published and presented his informatics work at a range of national conferences. He received his PhD in Ecology and Evolution in 2005 from Stony Brook University.

**Abstract:** We are almost 3 years out from the release of ChatGPT-3.5 which brought large language models (LLM)s to a wider audience. This talk will examine how this new AI is accelerating the process of working with data in the academic healthcare environment. The particular focus will be on the data foundations that are needed to fully enable AI. We will examine several use cases including:

- 1) Embedding narrative text and images for retrieval and machine learning tasks
- 2) Visualizing high frequency data collected from personal health devices
- 3) Reasoning over medical codes for building concept sets for cohort discovery

The use cases will showcase how informatics approaches are critical in leveraging these new class of models.

## **Educational Objectives:**

- 1) Participants will understand the importance of standardized data models in the AI landscape.
- 2) Participants will understand how AI generated artifacts can enable rapid access to data products to gain insight from data.
- 3) Participants will learn how to work safely with AI models that access health care data

**Disclosure Statement**: The faculty and planners have no relevant financial relationship with ineligible companies, whose primary business is producing, marketing, selling, reselling, or distributing health care products used by or on patients.

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