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HARVARD MEDICAL SCHOOL

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Do Humans Still Matter? Data Analysis & Visualization in the Era of Generative AI



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Generative AI agents are increasingly able to produce code that can analyze and visualize myriad datasets. Given this potent automating capability, it's worth asking whether human involvement is limited to mere oversight, or even eliminated entirely. In this talk, I will explore the capabilities of GenAI systems for data analysis, highlighting both opportunities and core limitations of this technology. I will also examine specific use cases in biomedical data analysis and the unique

challenges it poses to AI systems, particularly those built around large biomedical foundation models. I conclude by drawing attention to the hard problems in data analysis and how these can serve as a yardstick to measure both AI progress and the value of human insight.

Thursday, November 20, 2025 • 1:00–2:00pm • Countway Library • Minot Room (5th Floor)
Zoom option <https://tinyurl.com/anacrisan>

The DBMI Open Insights Seminars are occasional research talks related to the mission of the Department of Biomedical Informatics. This includes themes such as:

- Provisioning big data to the scientific community
- Getting the big picture on human health
- Learning from each patient
- Advancing basic science with data science
- Understanding disease beyond heredity: environmental impact
- Instrumenting the health enterprise for discovery and intervention



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