



**Longwood**  
SEMINARS

# **MD vs Machine: Artificial intelligence in health care**

April 17, 2019

Recent advances in artificial intelligence and machine learning are changing the way doctors practice medicine. Can medical data actually improve health care? At this seminar, Harvard Medical School scientists and physicians will discuss how AI assists doctors in diagnosing disease, determining the best treatments and predicting better outcomes for their patients.

**#HMSMiniMed**

## MD vs Machine: Artificial intelligence in health care

### About the Speakers

---

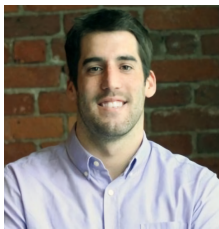
#### Isaac Kohane, MD, PhD



Dr. Kohane is chair of the Department of Biomedical Informatics and the Marion V. Nelson Professor of Biomedical Informatics in the Blavatnik Institute at Harvard Medical School. His vision for biomedical research has been to find new cures, provide new diagnoses and deliver the best care available by converting data more rapidly to knowledge and knowledge to practice. Kohane, who is also Harvard Medical School professor of pediatrics at Boston Children's Hospital, currently leads the following projects funded by the National Institutes of

Health: the Center for Excellence in Genomic Science, Coordinating Center for Undiagnosed Diseases Network and Center for Excellence in Big Data to Knowledge.

#### Brett Beaulieu-Jones, PhD



Dr. Beaulieu-Jones is research fellow in biomedical informatics in the Blavatnik Institute at Harvard Medical School. He is working to expand this concentration to include large-scale data integration to better understand disease etiology as well as provide precise therapeutic recommendations. Initially, he is working to develop targeted models of drug selection for patients

with refractory epilepsy and to further develop machine learning methods that model the way patients progress over time using longitudinal data.

#### Katherine Liao, MD, MPH



Dr. Liao is assistant professor of biomedical informatics in the Blavatnik Institute at Harvard Medical School and Harvard Medical School associate professor of medicine and associate physician in the Division of Rheumatology, Immunology, and Allergy at Brigham and Women's Hospital. She is also a staff rheumatologist at VA Boston Healthcare System. Liao's research focuses on the clinical

impact of inflammation on cardiovascular disease with a specific interest in rheumatoid arthritis.



## MD vs Machine: Artificial intelligence in health care

### Supplemental Reading

---

#### Articles

##### **What artificial intelligence will look like in 2030**

*The Harvard Gazette*

Barbara Grosz (HMS) is quoted

<https://news.harvard.edu/gazette/story/2016/09/what-artificial-intelligence-will-look-like-in-2030/>

##### **The Importance of Nuance**

*Harvard Medicine Magazine*

Brett Beaulieu-Jones (HMS) and Kun-Hsing Yu (HMS) are quoted

<https://hms.harvard.edu/magazine/artificial-intelligence/importance-nuance>

##### **The History of Artificial Intelligence**

*Science in the News (SITN) Harvard Graduate School of the Arts and Sciences*

<http://sitn.hms.harvard.edu/flash/2017/history-artificial-intelligence/>

#### Videos

##### **Preparing for the Future of Artificial Intelligence**

Youtube

<https://www.youtube.com/watch?v=GoJsr4lwCm4>

##### **What is Artificial Intelligence (Or Machine Learning)?**

YouTube

<https://www.youtube.com/watch?v=mJeNghZXtMo>

Further information can be found at [Harvard Health Publications](https://www.health.harvard.edu/) (<https://www.health.harvard.edu/>).

Sign up for [Harvard Medicine News](https://hms.harvard.edu/news/sign-email-communications) (<https://hms.harvard.edu/news/sign-email-communications>) to receive weekly updates on scientific research, medical education and community news from Harvard Medical School.

Sign up to receive future issues of [Harvard Medicine](https://hms.harvard.edu/news/sign-email-communications) (<https://hms.harvard.edu/news/sign-email-communications>). The magazine of Harvard Medical School presents topics ranging from space-based medical research to climate change and human health. The magazine captures the work of the HMS faculty, students, and alumni and illuminates their contributions to human health.

