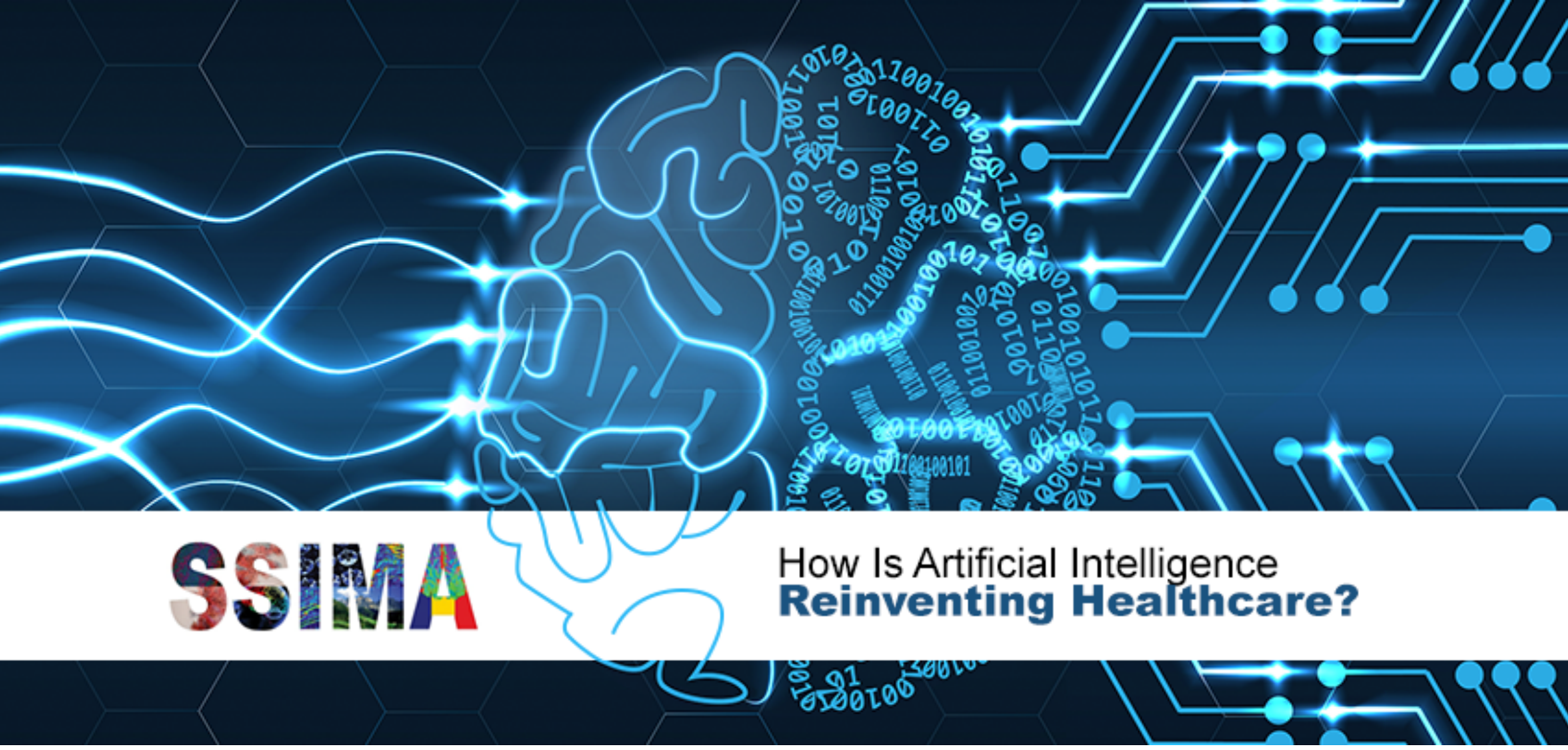


**Nahum Kiryati**
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**Why is it so difficult to obtain medical images for R&D?**

Research in medical image analysis (MIA) requires access to medical image databases. Following the deep-learning revolution, the development of state of the art MIA technologies often depends on access to huge medical image collections. While specific classes of medical images have been made available for scientific “challenges”, data for the development of real-world clinical technologies relies on access to medical records held by hospitals and health care providers. However, obtaining the necessary data is notoriously difficult. In this talk, I review the legal and ethical framework regulating access to patients’ data, discuss thorny conundrums, such as “who owns a medical record”, and consider various approaches, old and new, for clearing the access-to-data bottleneck.

**Clinically driven research in medical image analysis**

Close collaboration between academic researchers and hospital clinicians raises exciting research topics. In this talk, I will review clinically-driven research projects carried out in collaboration between my group at Tel Aviv University and the Imaging Institute at the Sheba Medical Center, Tel Hashomer. We analyze and enhance images acquired with exciting imaging modalities, such as ultra-low-field interventional MRI (iMRI), ultra low-dose CT, and contrast-enhanced spectral mammography (CESM). Clinically-driven applications include reducing unnecessary biopsies in breast-cancer diagnosis, low-radiation lung cancer screening, and incidental detection of renal cysts.