

Prof. Maryellen L. Giger

University of Chicago, USA

Título: “**Machine Learning in Breast Cancer Diagnosis and Management**”

Día y hora: jueves 5 de julio de 16.15 a 17.00h

Resumen:

Quantitative radiomic analyses and machine learning are yielding novel image-based tumor characteristics, i.e., signatures that may ultimately contribute to the design of patient-specific breast cancer diagnostics and treatments. The role of quantitative radiomics continues to grow beyond computer-aided detection, with methods being developed to (a) quantitatively characterize the radiomic features of a suspicious region or tumor, (b) merge the relevant features into diagnostic, prognostic, or predictive image-based signatures, (c) estimate the probability of a particular disease state, and (d) explore imaging genomics association studies between the image-based features/signatures and histological/genomic data. Advances in machine learning are allowing for these computer-extracted features (phenotypes) to characterize a patient's tumor via “virtual digital biopsies”.