



**Dr Irene Georgakoudi** is a Professor in the Biomedical Engineering Department at Tufts University. She received her BA in Physics from Dartmouth College, her PhD in Biophysics from the University of Rochester and performed postdoctoral work at the MIT GR Harrison Spectroscopy Lab and the Wellman Center for Photomedicine at Massachusetts General Hospital. Her lab is interested in the development of new and improved methods to assess different aspects of normal and diseased development of human tissues that rely on light interactions with endogenous chromophores and are non-destructive. She is particularly interested in the development of quantitative methods to assess cell metabolism and matrix organization features in tissues non-invasively. Main application areas of research in the lab include cancer diagnostics, adipose tissue function, osteoarthritis, cardiovascular and neurodegenerative diseases. She is currently an Associate Editor for the journal *Optica* and a fellow of the American Institute of Medical and Biological Engineering, of *Optica* and of SPIE.