AbstractID: 6038 Title: Optimizing Mammography Image Quality and Dose

Digital mammography is quickly becoming the technology of choice for breast imaging with several FDA-approved systems already available and more on the way. Digital detectors in mammography have different characteristics than the traditional screen-film systems and care should be taken when implementing these systems into a clinical environment. This lecture is going to discuss the practical issues for the medical physicist who wants to learn how to optimize dose and image quality in mammography primarily focusing on full-field digital mammography systems (FFDM). The lecture will be broken into several parts. The first will review currently available FFDM equipment including an overview of automatic exposure modes, quality control pertaining to image quality and dose, and system technique selection. The second part will discuss techniques for measuring dose and image quality in FFDM. The third part will discuss factors affecting image quality and dose and ways to optimize FFDM systems in a clinical environment.