Two of the most important technologies for improving breast cancer detection and diagnosis are full-field digital mammography and computer-aided diagnosis. Over the past 15 years, these 2 technologies have been developed independently, while acknowledging the natural synergy that exist between the two. With one CAD system having received FDA approval and several FFDM systems in the approval process, it will not be long before FFDM with CAD capabilities become a clinical reality. In this talk, I will describe existing FFDM systems and new detector technologies on the horizon. I will also give an overview of the state-of-the-art in CAD systems and active areas of research. I will end by describing the potential of combining these two technologies, including a discussion on pixel size required for a combined system.

Financial Disclosure

Robert M. Nishikawa is a shareholder in R2 Technology, Inc. (Los Altos, CA).

Education Objectives:

- 1. To learn about the latest advances in full-field digital mammography (FFDM) technology.
- 2. To learn about the latest advances in computer-aided diagnosis (CAD).
- 3. To learn about the potential of combining CAD and FFDM.