## **FIGURES**



Figure 1. Contrast-enhanced digital mammography study of a 54-year-old female with a previously biopsied grade 2 invasive ductal carcinoma of the left breast. A. Low- energy MLO mammogram (equivalent to a standard unenhanced mammogram) shows the metallic marker at the cancer site, but the cancer is obscured by heterogeneously dense parenchyma. B. Corresponding dual-energy subtraction image clearly depicts the cancer (arrow) as an intensely enhancing irregular mass. Note that the background non-enhancing fibroglandular tissue is subtracted out. C. Image from a contrast-enhanced MRI performed the following day shows the lesion as an enhancing irregular mass (arrow). Note the similarity of the appearance on the CEDM and MRI studies.



Figure 2. 48-year-old woman with screening detected invasive lobular carcinoma. Standard MLO and CC mammograms (A,B) show extremely dense parenchyma with subtle distortion on the CC view (long arrow). MLO and CC CEDM subtracted images (C,D) show the cancer as segmental nonmass clumped enhancement (short arrows).



Figure 3. 56-year-old woman with heterogeneously dense breasts on standard mammography (upper images) and moderate risk of breast cancer. Screening CEDM (lower images) shows focal enhancement in the left breast at 8 o'clock (arrow). The finding was identified on ultrasound, and US-guided biopsy showed invasive ductal carcinoma. Note the background parenchymal enhancement, analogous to that seen in contrast-enhanced MRI. *Images courtesy of Jennifer Harvey, MD*.



Figure 4. High-risk screening CEDM. 57-year-old woman with high lifetime risk of breast cancer due to family history. Standard digital mammograms (upper images) show heterogeneously dense parenchyma, benign-appearing round mass upper right breast and surgical clips left breast. Patient chose to undergo CEDM (lower images) instead of MRI due to high out-of-pocket costs with MRI. Non-mass enhancement is seen in the right breast at 4 o'clock (arrows). Biopsy of an US correlate showing fibrocystic changes was considered discordant. Excisional biopsy showed high grade DCIS. *Images courtesy of Jennifer Harvey, MD*.