The document is a research report from the Cornell NanoScale Facility, focusing on the biological applications of microfabricated devices for cell organization. The report includes details on the CNF project number, principal investigator, user, affiliation, source of research funding, contact information, and primary CNF tools used. The abstract outlines the study of spatiotemporal dynamics of cell organization in a binary cellular mixture (MDA-MB-231 and MCF10A cells) seeded in microfabricated microwells. The summary of research describes the fabrication of Polydimethylsiloxane (PDMS) microwells and the formation of cell aggregates in these microwells. The references section cites a paper on cytosystems dynamics in self-organization of tissue architecture.
Figure 1, left: A microscopic image of PDMS microwells. Scale bar: 1000 µm. Figure 2, middle: A fluorescent image of cell segregation of MDA-MB-231 (red colour) and MCF10A (green colour) cells at 1:1 cell seeding ratio over 9 days of culture. Scale bar: 400 µm. See full color version on pages xxviii-xxix. Figure 3, right: A fluorescent image of cell segregation of MDA-MB-231 (red colour) and MCF10A (green colour) cells at 4:1 cell seeding ratio over nine days of culture. Scale bar: 400 µm. See full color version on pages xxviii-xxix.