Scanning electron micrograph of invasive human trophoblasts in vitro. In early pregnancy, fetal cells of the placenta (trophoblasts) invade the uterus. They replicate this behavior in vitro by invading matrix-coated filters; pseudopodia pass through pores and appear on the filter's underside (shown in photo). Trophoblast invasion is regulated by cell adhesion molecules and proteinases and is essential for normal embryonic development. See page 1508 and related Articles, Reports, and News stories in this special issue on reproduction. [Photo: Clifford Librach and Susan Fisher]