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**Rebecca Segal\*** ([rasegal@vcu.edu](mailto:rasegal@vcu.edu)), Department of Mathematics, Virginia Commonwealth University, PO Box 842014, Richmond, VA 23221-2041, and **Angela Reynolds**. *A Model of Wound Healing via Collagen Accumulation*.

Wound healing is achieved through the production of collagen by fibroblast cells. In this differential equation model we investigate the competing actions of fibroblast cells and inflammatory cells on collagen accumulation. The healing time course and collagen accumulation rates are confirmed with experimental data. The model can replicate non healing wounds as well and will be used to investigate the impact of circulating systemic hormones on wound and patient outcomes. (Received September 07, 2010)