

Abstract Submitted
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3D cancer cell migration in a confined matrix AMANI ALOBAIDI¹,
BO SUN², Oregon State Univ — Cancer cell migration is widely studied in 2D
motion, which does not mimic the invasion processes in vivo. More recently, 3D
cell migration studies have been performed. The ability of cancer cells to migrate
within the extracellular matrix depends on the physical and biochemical features
of the extracellular matrix. We present a model of cell motility in confined matrix
geometry. The aim of the study is to study cancer migration in collagen matrix,
as a soft tissue, to investigate their motility within the confined and surrounding
collagen environment. Different collagen concentrations have been used to show the
ability of these cancer cells to move through such a complex structure by measuring
Cancer cell migration velocity as well as the displacement.

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