Abstract Submitted
for the MAR07 Meeting of
The American Physical Society

Complex diffusion in biopolymer networks with added molecular crowding DANIEL R. SISAN, JEFFREY S. URBACH, Georgetown University — Intra- and extracellular diffusion can depend sensitively on the environmental details. In general the diffusion is hindered and can be subdiffusive, varying heterogeneously due to molecular crowding and interactions with an immobile polymer network. We study the combined effects of polymer-hindrance and molecular crowding using particle tracking and correlation analyses applied to microspheres diffusing in Type I collagen with added polyethylene glycol.

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Date submitted: 29 Nov 2006 Electronic form version 1.4