

This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Computational models			
Mathematical model for radiation therapy	<p>A new mathematical model may predict the effects of high radiation doses used in radiotherapy more accurately than established models. The generalized linear-quadratic model (gLQ) modifies the established clinical radiation therapy model by accounting for the number of DNA lesions that convert from sublethal to lethal, a process that occurs frequently at high radiation levels. In modeling the effects of a wide range of radiation doses on a mouse lung, the gLQ model fit the data more closely than the established model. Next steps include testing the new model in clinical trials.</p> <p>SciBX 3(28); doi:10.1038/scibx.2010.875 Published online July 22, 2010</p>	Not applicable	<p>Wang, J.Z. <i>et al. Sci. Transl. Med.</i>; published online July 7, 2010; doi:10.1126/scitranslmed.3000864 Contact: Nina A. Mayr, Ohio State University, Columbus, Ohio e-mail: Nina.Mayr@osumc.edu</p>