

This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Computational methods			
Search algorithm for identifying efficacious drug combinations	A closed-loop optimization approach using a stochastic search algorithm could be a useful strategy for identifying drug combinations that modify cellular activities more effectively and with lower doses than a single drug. Fewer than 15 search iterations of 100,000 possible drug combinations identified cocktails of interferons (IFNs) and antivirals that prevented vesicular stomatitis virus (VSV) infection of fibroblasts. The approach also identified a combination of cytokines that maximized activity of NF- κ B. Next steps include preclinical testing of the identified drug combinations.	Patent application filed; licensing status undisclosed	Wong, P. <i>et al. Proc. Natl. Acad. Sci. USA</i> ; published online March 17, 2008; doi:10.1073/pnas.0800823105 Contact: Pak Kin Wong, University of Arizona, Tucson, Ariz. e-mail: pak@email.arizona.edu