

This week in techniques

| Approach | Summary | Licensing status | Publication and contact information |
|---------------------------------|--|---|--|
| Disease models | | | |
| Pigtailed macaque model of AIDS | <p>Monkey studies suggest pigtailed macaques that lack an HIV-1 restricting protein, tripartite motif-containing 5 (TRIM5), could be used as a primate model of AIDS. An HIV-1 clone, which attaches to cells through CC chemokine receptor 5 (CCR5; CD195) and encodes the simian immunodeficiency virus's virion infectivity factor (Vif), was used to infect pigtailed macaques that were transiently depleted of CD8⁺ T cells. The virus was then serially propagated in five subsequent groups of monkeys, in which it gained the ability to replicate to higher levels and resulted in CD4⁺ T cell depletion and clinical features associated with AIDS. Also in the macaques, CD8⁺ T cell depletion during acute virus infection led to rapid progression to AIDS. Next steps could include validating the macaque model with known HIV-1 therapies and using it to evaluate new prevention and eradication strategies.</p> <p>SciBX 7(29); doi:10.1038/scibx.2014.877 Published online July 31, 2014</p> | Patent and licensing status unavailable | <p>Hatzioannou, T. <i>et al. Science</i>; published online June 20, 2014; doi:10.1126/science.1250761 Contact: Paul D. Bieniasz, Aaron Diamond AIDS Research Center, New York, N.Y. e-mail: pbienias@adarc.org Contact: Theodora Hatzioannou, same affiliation as above e-mail: thatzio@adarc.org Contact: Jeffrey D. Lifson, Frederick National Laboratory, Frederick, Md. e-mail: lifsonj@mail.nih.gov Contact: Vineet N. KewalRamani, National Cancer Institute, Frederick, Md. e-mail: vineet.kewalramani@nih.gov</p> |