This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Drug platforms			
Attenuated *Plasmodium* strains for conferring protective immunity against malaria	Studies in mice suggest that genetic knockout of enzymes involved in *Plasmodium* purine metabolism could create attenuated strains suitable as prophylactic malaria vaccines. Mice infected with *P. yoelii* deficient in purine nucleoside phosphorylase (PNP) had lower rates of parasite growth, less parasitemia (infected red blood cells) and better survival than mice infected by wild-type *P. yoelii*. Mice that cleared the attenuated *PNP* knockout strain were completely protected against subsequent challenge with i.v. *P. yoelii*–infected erythrocytes. Next steps include creating an attenuated *P. falciparum PNP* knockout strain to test infection prevention in a nonhuman primate malaria model.	Patent and licensing status undisclosed	Ting, L.-M. *et al. Nat. Med.*; published online Aug. 31, 2008; doi:10.1038/nm.1867 **Contact:** Kami Kim, Departments of Medicine and Microbiology & Immunology, Albert Einstein College of Medicine, Bronx, N.Y. e-mail: kkim@aecom.yu.edu
RTS,S/AS02, a subunit vaccine from GlaxoSmithKline plc, targets the pre-erythrocytic stage of *P. falciparum* and is in Phase II trials to prevent malaria. The vaccine consists of the circumsporozoite-HBV S antigen fusion protein formulated with the AS02 or AS01 adjuvant.			