This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Endocrine disease				
Obesity associated with Bardet-Bidel syndrome (BBS)	Somatostatin receptor 3 (SSTR3); melanin-concentrating hormone receptor 1 (MCHR1)	A study in mice suggests that restoring function to certain BBS proteins could help treat obesity and other BBS symptoms associated with ciliary dysfunction. In mice lacking either the BBS gene *Bbs2* or *Bbs4*, the G protein–coupled receptors (GPCRs) SSTR3 and MCHR1 failed to localize to cilia on central neurons. Heterologous expression of the missing BBS proteins restored localization of both receptors. MCHR1 plays a role in feeding and energy balance, suggesting that altered ciliary localization of the GPCRs could be linked to obesity. Further research is necessary to identify the signaling pathways specific to ciliary GPCRs, molecules that target those pathways and molecules that can mediate ciliary localization.	Research not patented; unavailable for licensing	Berbari, N. *et al. Proc. Natl. Acad. Sci. USA*; published online Feb. 27, 2008; doi:10.1073/pnas.0711027105 **Contact:** Kirk Mykytyn, Ohio State University, Columbus, Ohio e-mail: mykytyn.1@osu.edu