Designing protein-based molecular switches

In the effort to create biological sensors, a researcher is blessed to find a protein that has evolved to alter its shape in response to binding the desired target. When a conformational change occurs, it can be harnessed to an optical or functional output to facilitate detection or biological regulation. But what can one do when nature does not provide such a prize?

One answer is to develop mechanisms that convert ordinary binding proteins into molecular switches. The Loh laboratory employs protein engineering approaches to coax conformational changes from even the most reticent lock-and-key binding proteins.

Tuesday, November 16th, 2010
4:15 p.m.
Stowell Hall, Room 211
Light refreshments will be served.
All are welcome.