## Supplemental Information for:

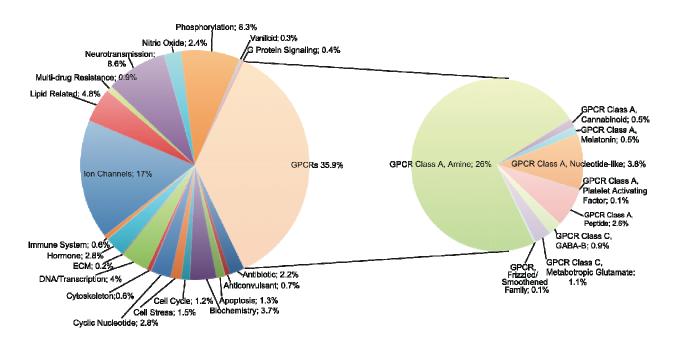
A chemical screen identifies class A G-protein coupled receptors as regulators of cilia

Prachee Avasthi<sup>1</sup>, Aaron Marley<sup>2</sup>, Henry Lin<sup>3</sup>, Elisabet Gregori-Puigjane<sup>3</sup>, Brian K. Shoichet<sup>3</sup> Mark von Zastrow<sup>2</sup>, and Wallace F. Marshall<sup>1</sup>\*

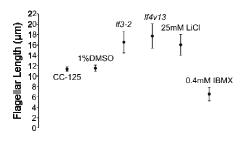
- 1. Dept. of Biochemistry & Biophysics, UCSF
- 2. Dept. of Psychiatry, UCSF
- 3. Dept. of Pharmaceutical Chemistry, UCSF

\*Corresponding Author: Wallace F. Marshall, Department of Biochemistry and Biophysics, GH-N372F, UCSF, 600 16th St. San Francisco, CA 94158, (415) 514-4304, wallace.marshall@ucsf.edu

## **Supporting Figures:**



Supplementary Figure 1 Distribution of drug targets in LOPAC1280 library



Supplementary Figure 2 Validation of method to identify changes in flegellar length at N=10. Compounds known to alter flagella length like IBMX and LiCl along with flagellar length mutants *//*3 and *if4* have significantly altered flagellar length. Error bars are 95% confidence intervals.

## Supporting Tables are in tabs of a single excel file entitled

"Avasthi\_Marshall\_Supporting\_Tables\_ACSCB":

Supplementary Table 1 Shortening Factors for All Compounds Supplementary Table 2 Compounds Inducing Short Flagella Supplementary Table 3 Compounds Resulting in Flagella-less Cells Supplementary Table 4 Cytotoxic Compounds Supplementary Table 5 Compounds Activating the Flagellar Autotomy Pathway Supplementary Table 6 Compounds Clustered by Phenotypic Signature