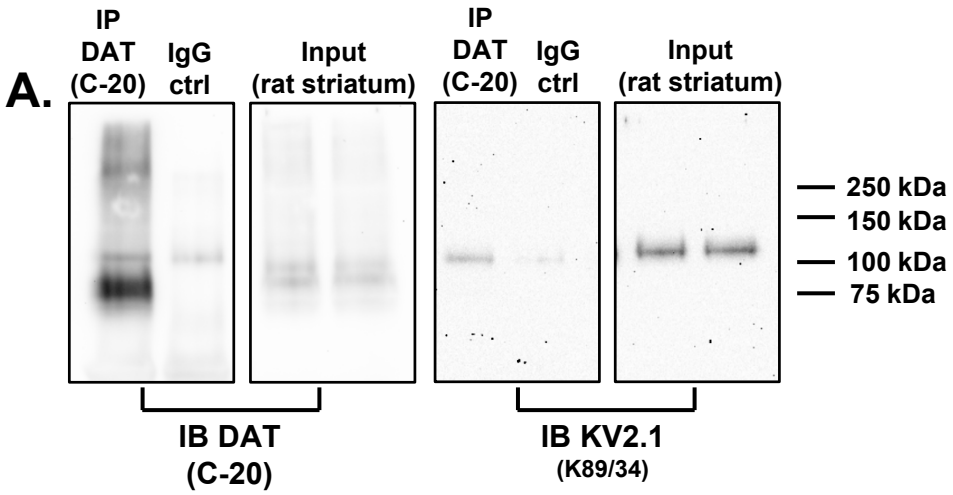
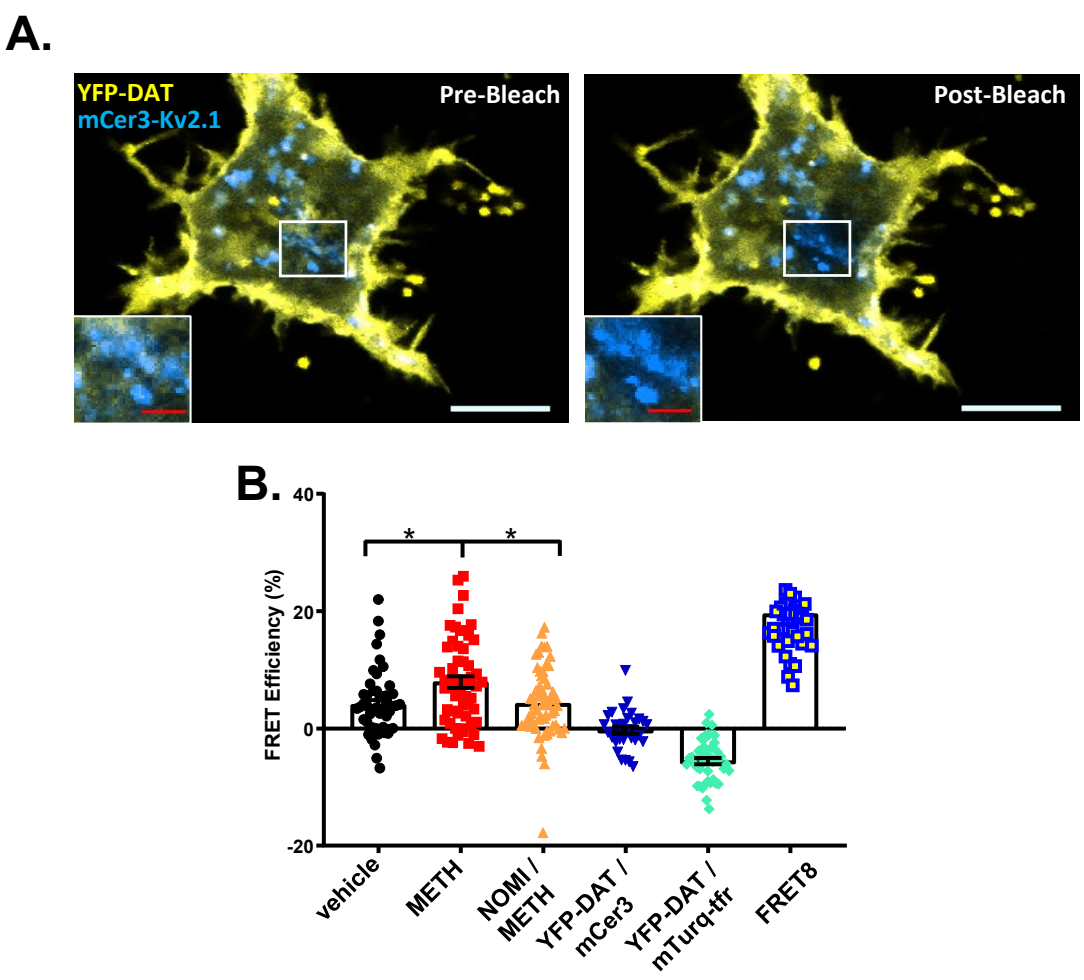


Supplemental Figure 1: Endogenous DAT and Kv2.1 associate *in vivo*. A. Blot showing the coIP between Kv2.1 and DAT in rat striatum. 75 kDa band is observed when probing for DAT (**left blots,** Santa Cruz cat# C-20) after either immunoprecipitation with a specific DAT antibody (C-20, Santa cruz) or in the whole striatal input; no 75 kDa band is present after immunoprecipitation with nonspecific IgG, confirming the specificity to DAT. A band ~ 100 kDa is detected when probing for Kv2.1 (**right blots,** NeuroMab cat# K89/34) after immunoprecipitation with a specific DAT antibody (C-20, Santa cruz), confirming the association of the two proteins *in vivo*.



Supplemental Figure 2: The increased proximity of Kv2.1 and DAT following DAT activation occurs irrespective of FRET pair used. A. Representative pre- and post-images showing acceptor photobleaching of YFP-DAT at the imaging plane containing mCerulean3-Kv2.1 clusters used for FRET measurements. (scale = 20 μm; inset scale = 2.5 μm) **B.** FRET efficiency measured between mCerulean3-Kv2.1 and YFP-DAT. Efficiency was calculated as the change in mCerulean3 (donor) signal induced by YFP (acceptor) photobleaching divided by the initial mCerulean3 intensity. (vehicle vs. METH p = 0.0058, NOM/METH vs. METH p = 0.0056; VEH n=51 cells from 6 independent experiments, METH n= 56 cells from 6 independent experiments, NOM/METH n=61 cells from 6 independent experiments, Tukey's post-hoc test following one-way ANOVA). Positive and negative FRET controls: FRET8 fusion protein (+), YFP-DAT co-expressed with a transferrin receptor tagged with suitable FRET partner chromophore (-), YFP-DAT co-expressed with empty mCerulean3 vector (-), and mCer3-Kv2.1 co-expressed with empty YFP vector(-). A summary of all plasmid constructs used in this study can be found in table 5.