



**Figure S5.** Validation results under different correlation thresholds showing that the relationship between metabolic connectivity strength and metabolism across voxels was significantly diminished during deep anesthesia compared with during sedation. This finding was consistent under different correlation thresholds ( $0 \leq r \leq 0.8$  in increments of 0.1). \* $P < 0.05/3$  with Bonferroni's correction for mild sedation vs. deep anesthesia and deep sedation vs.

deep anesthesia, assessed using the non-parametric permutation test.