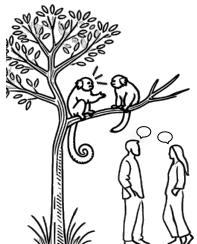
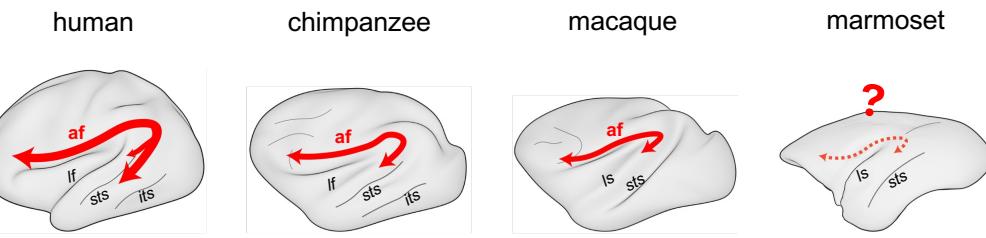


## A. Do marmosets have an arcuate fasciculus?

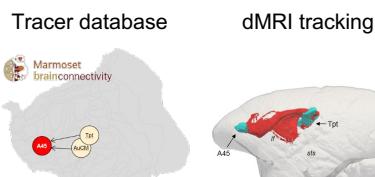


Marmosets share certain features of vocalization with humans:  
pitch perception,  
vocalization control,  
antiphonal calling,  
...



## B. Ultra-high-resolution dMRI confirmed the existence of af in marmosets

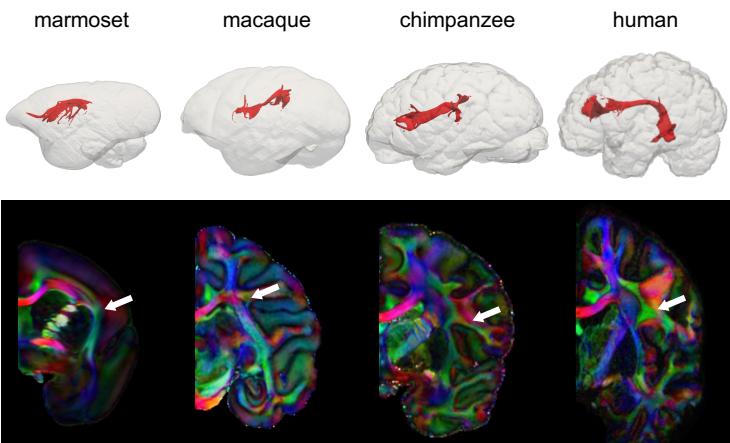
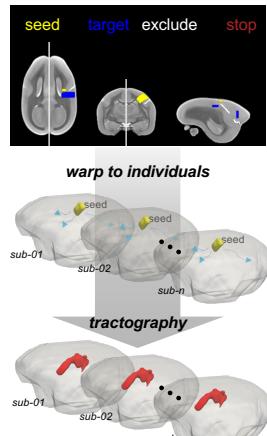
### Q1: A vPFC-pSTG dorsal pathway?



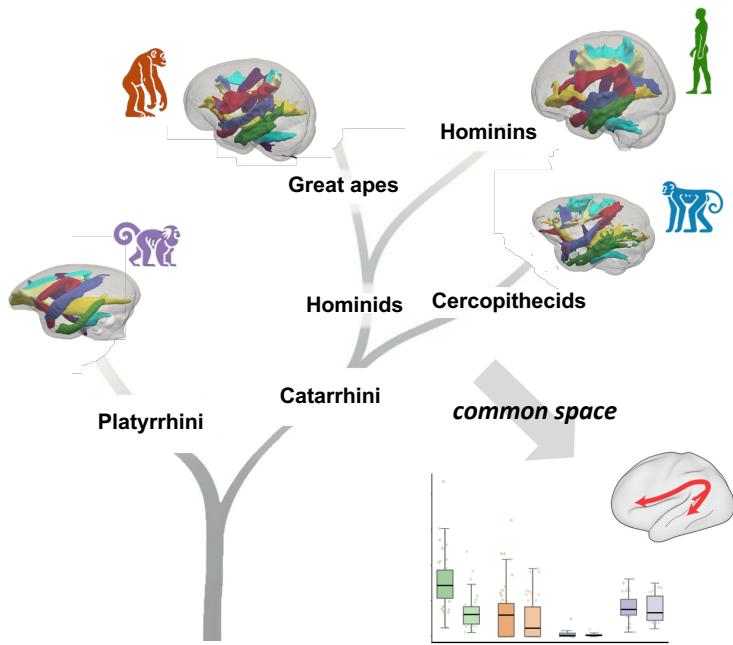
### Q2: af distinct from slf?



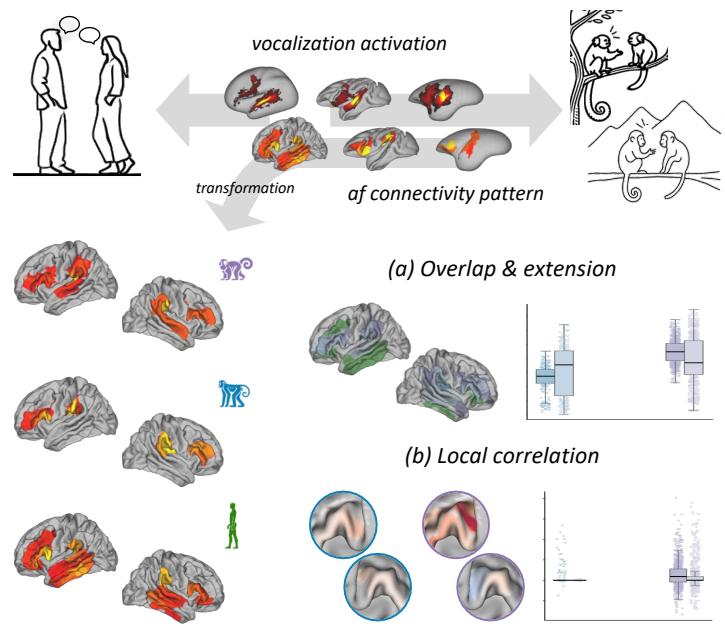
### Q3: af in four species?



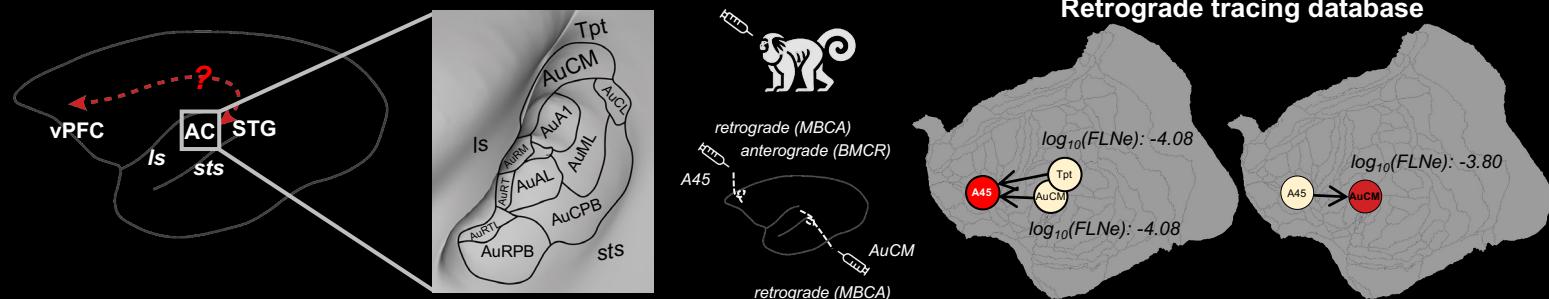
## C. Comparison of af connection pattern



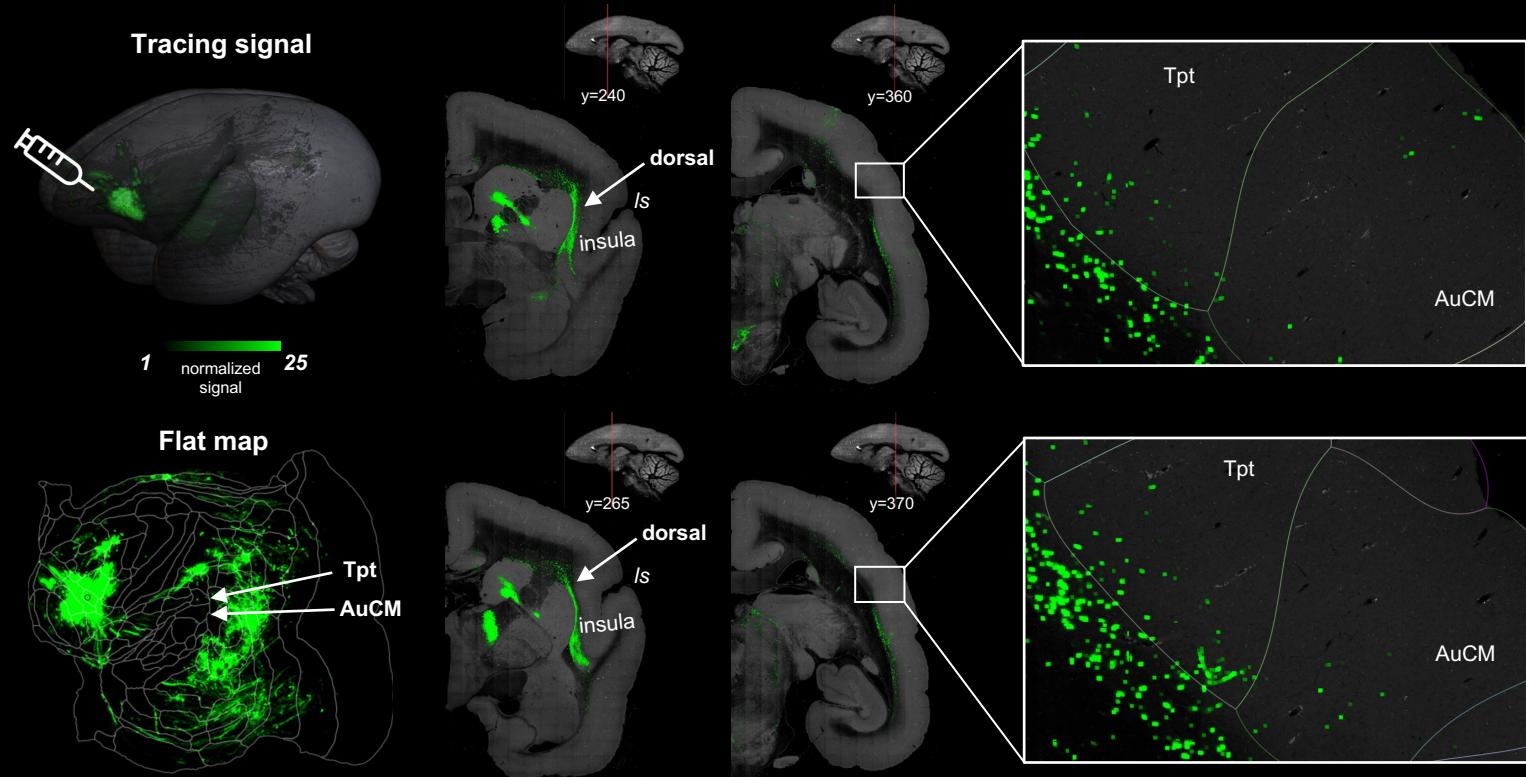
## D. Association between af and vocalization



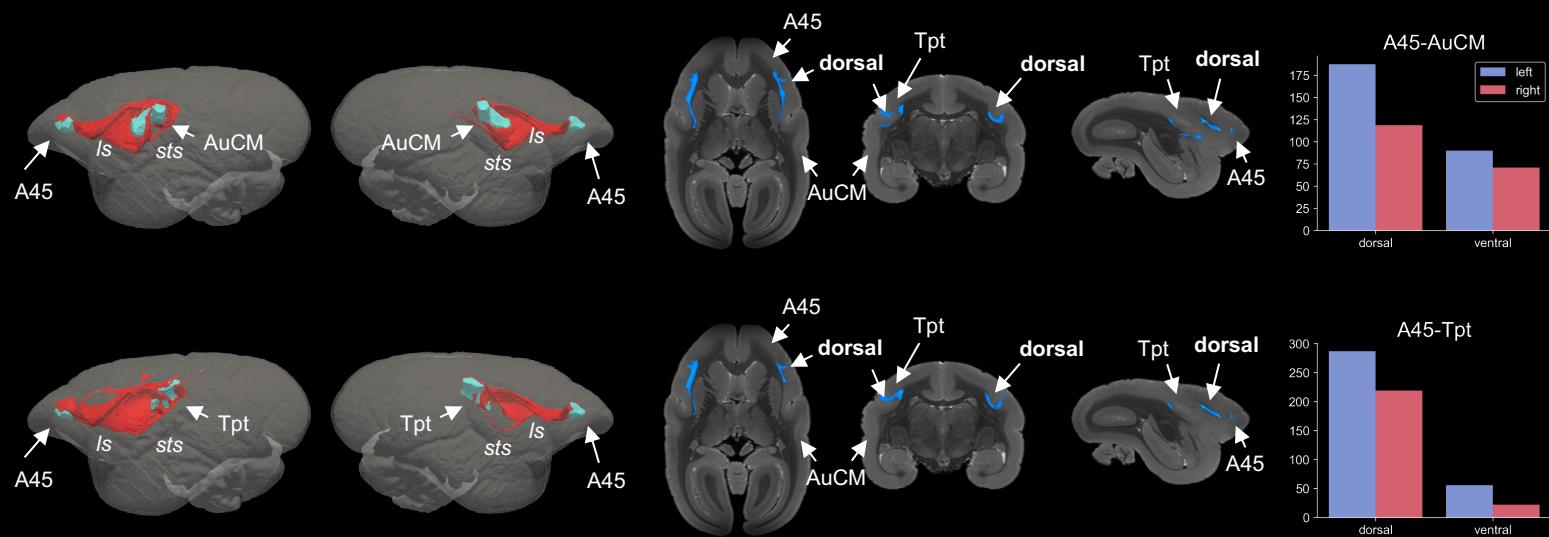
**A. Do marmosets have an af homolog? B. Retrograde tracing showed vPFC-pSTG connection**



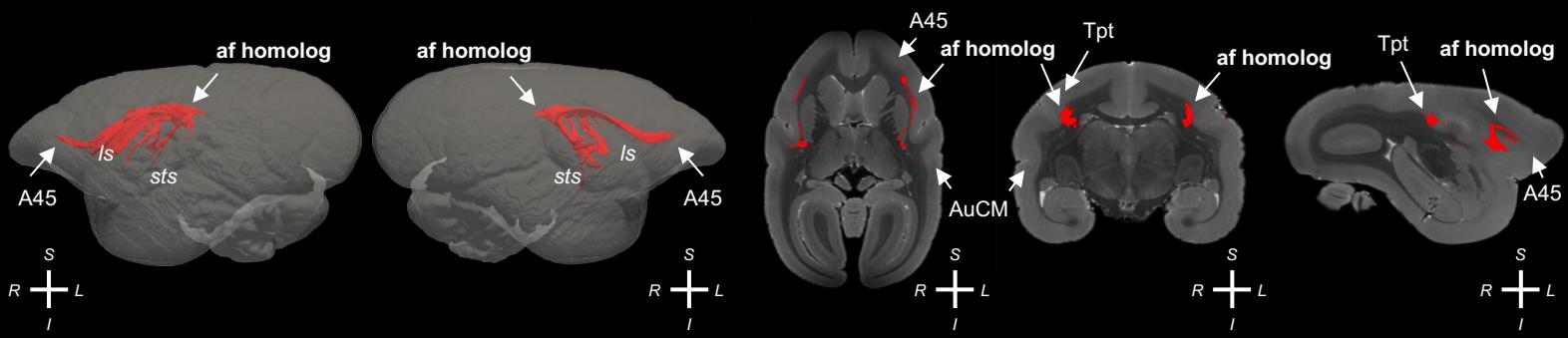
**C.** Anterograde tracing showed dorsal pathway between vPFC and pSTG



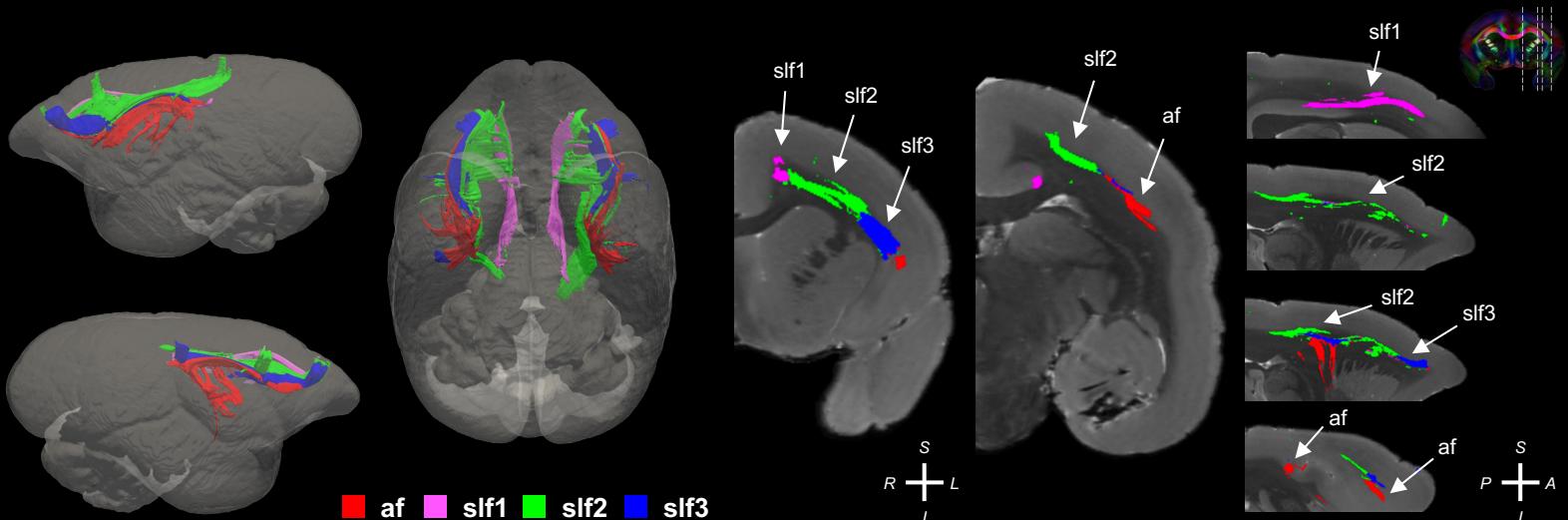
**D. Ultra-high-resolution dMRI tracking showed dorsal pathway between vPFC and pSTG**



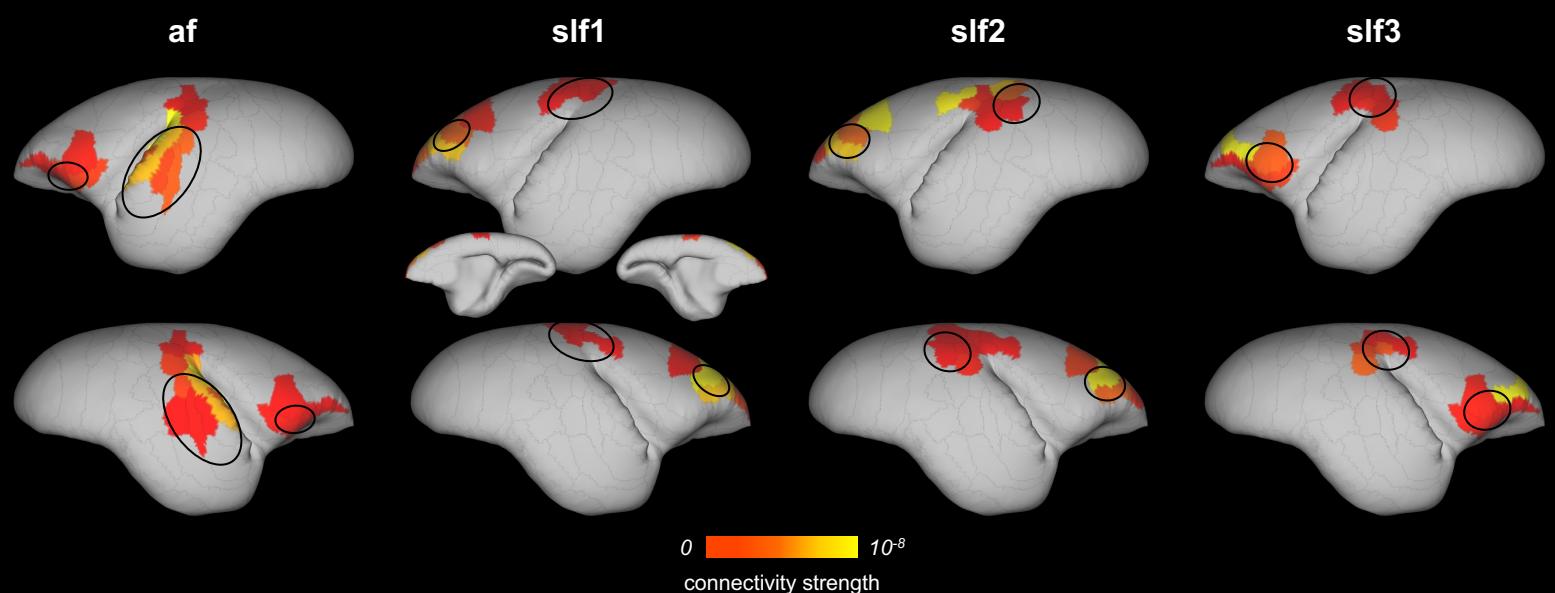
### A. af homolog in marmosets



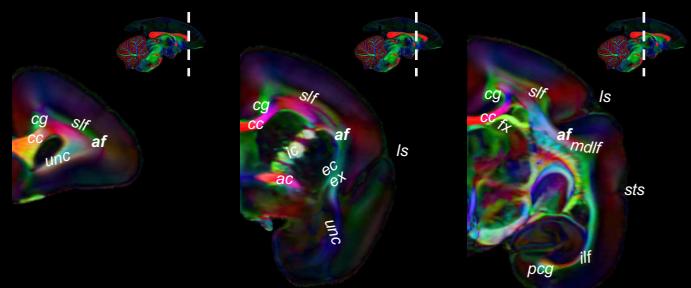
### B. Distinction between af and slf



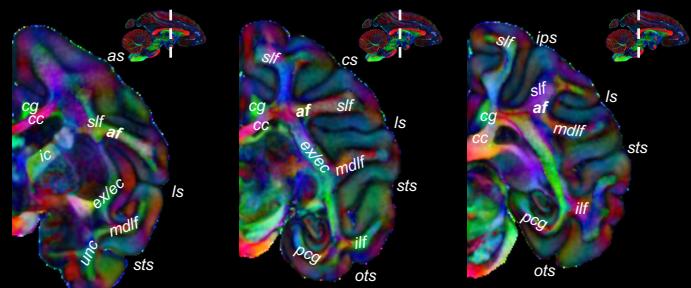
### C. Cortical connectivity pattern of af and slf



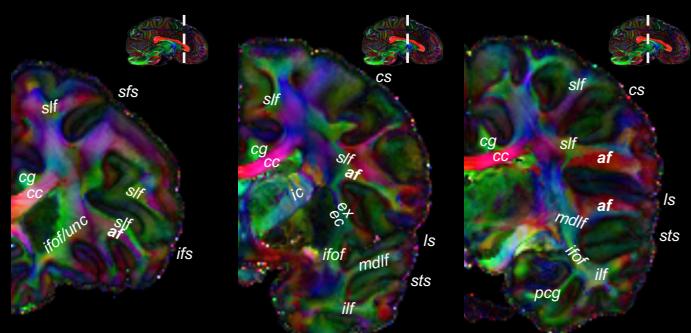
### marmoset



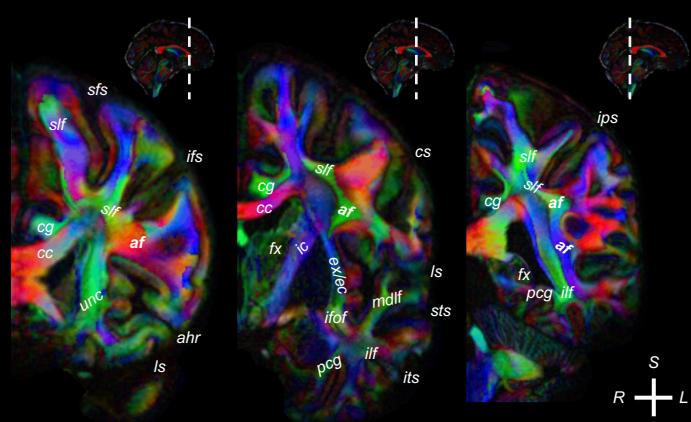
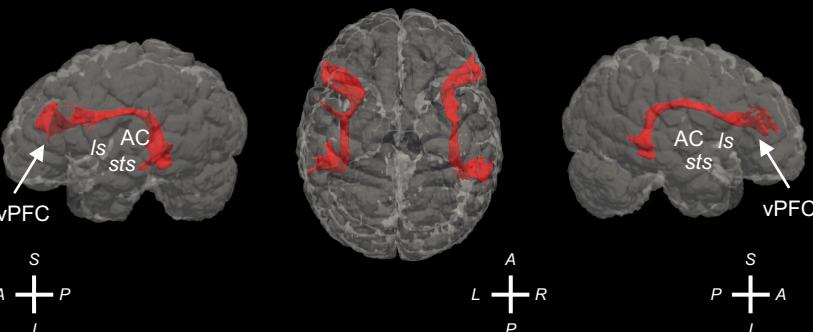
### macaque



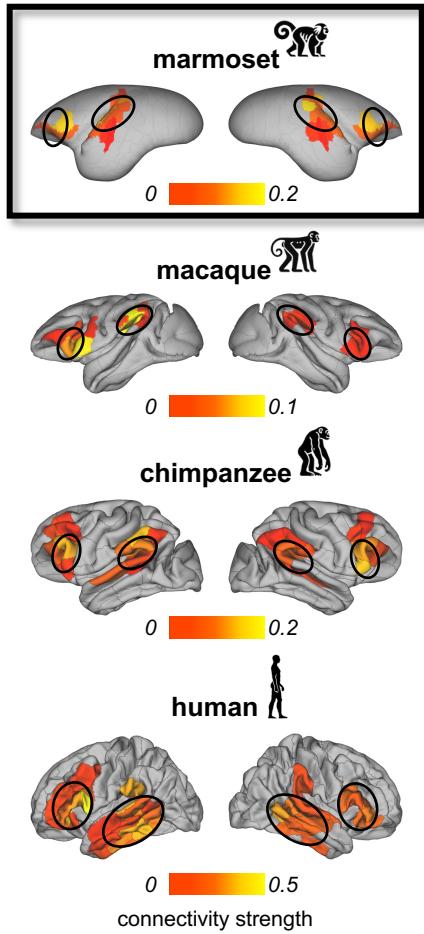
### chimpanzee



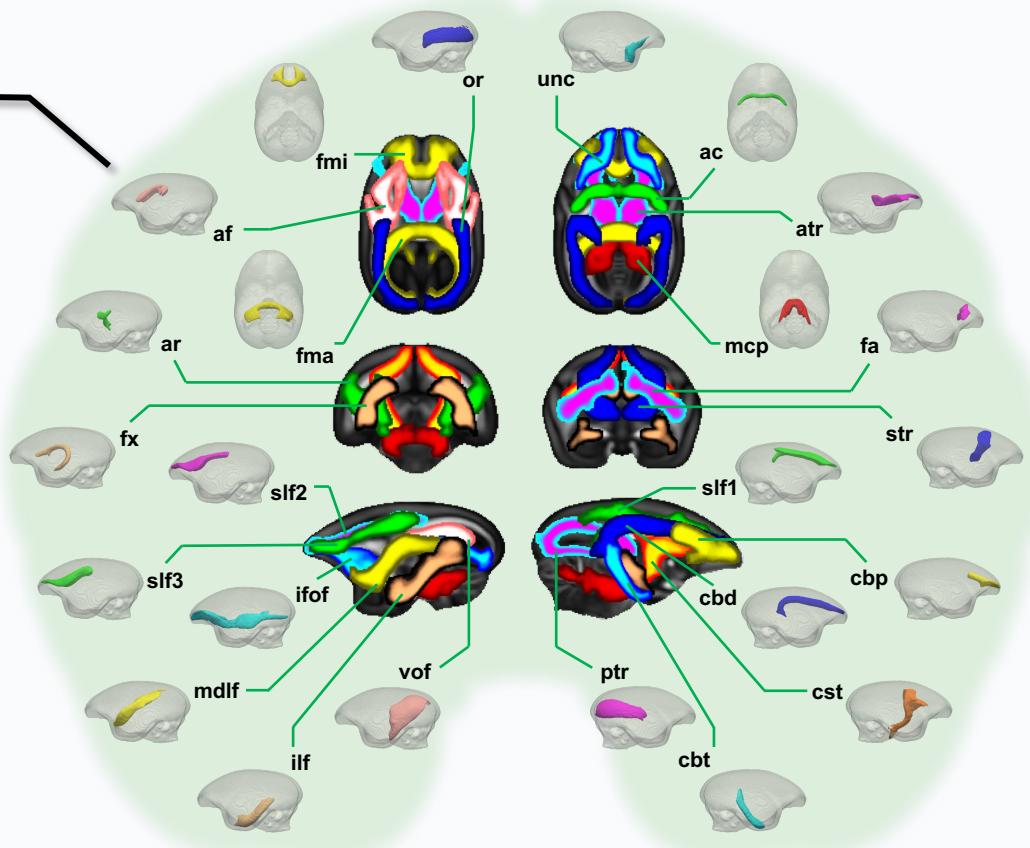
### human



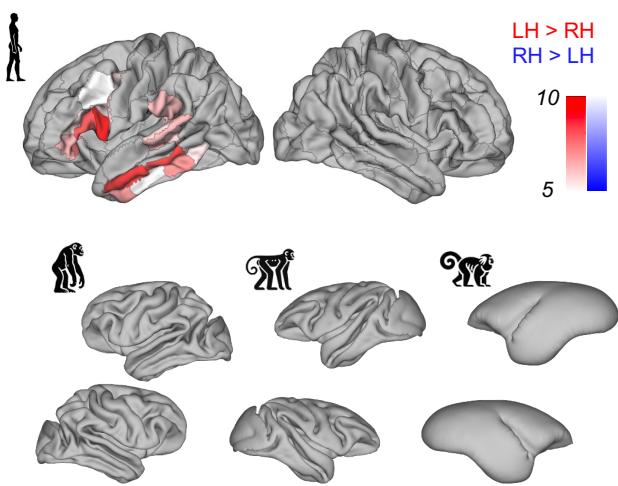
### A. Connectivity pattern of af



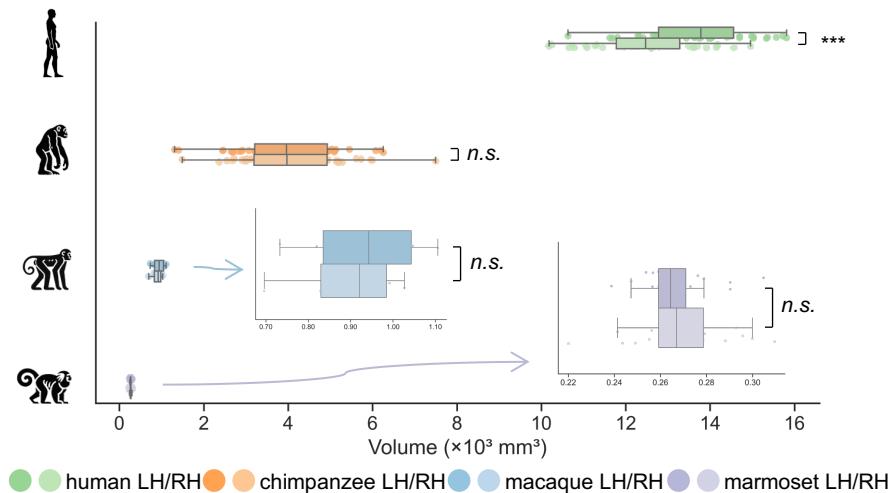
### D. Marmoset white matter tracts



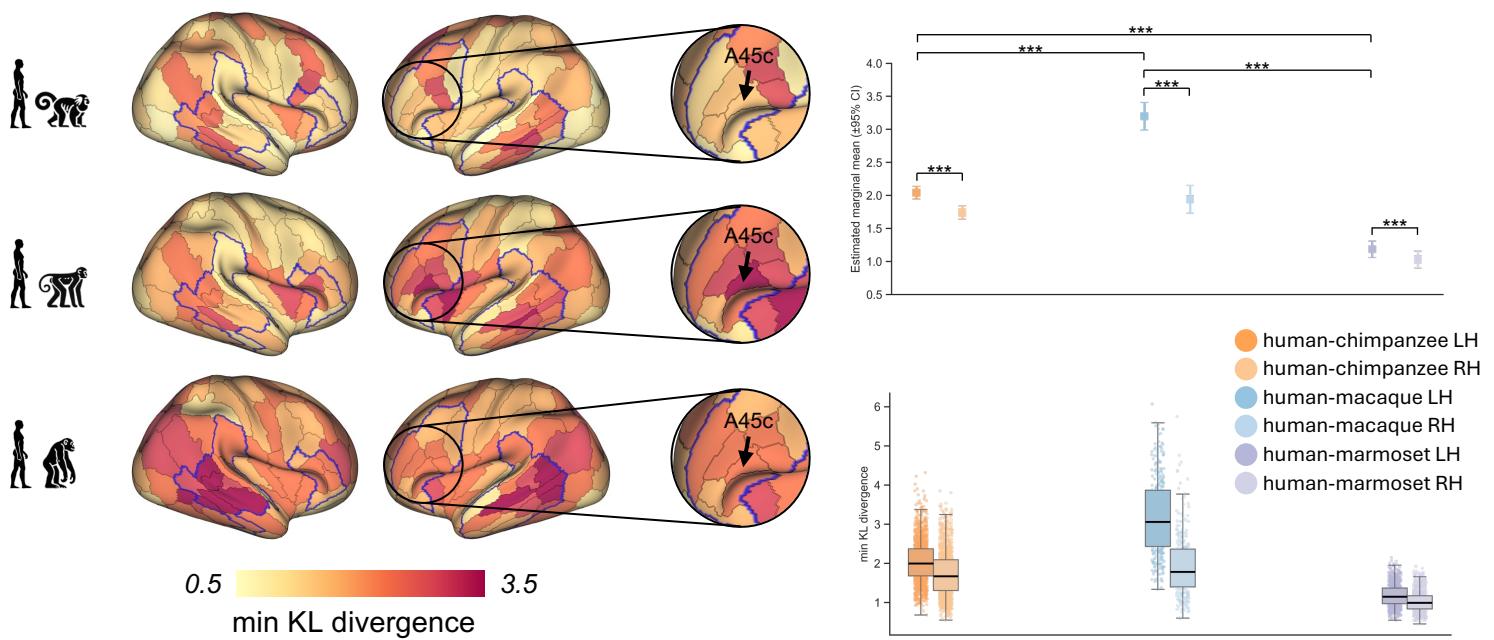
### B. Asymmetry of af connectivity pattern



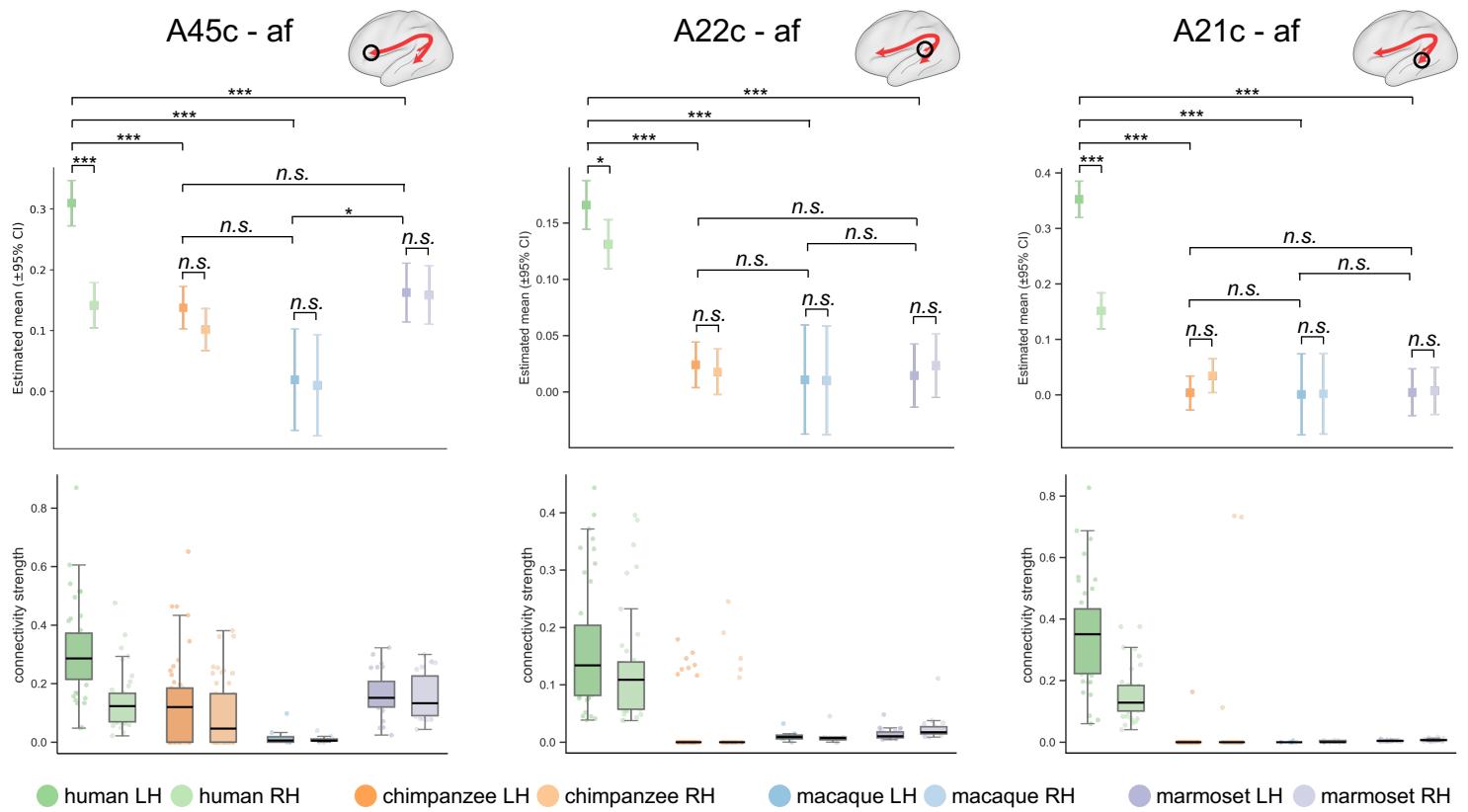
### C. Asymmetry of volume of af



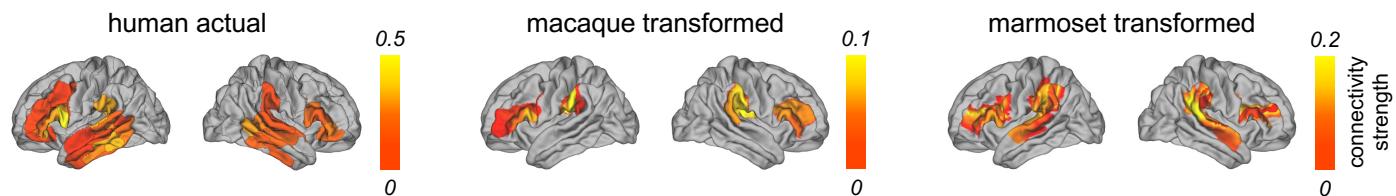
## A. Connectivity divergence between humans and non-human primates



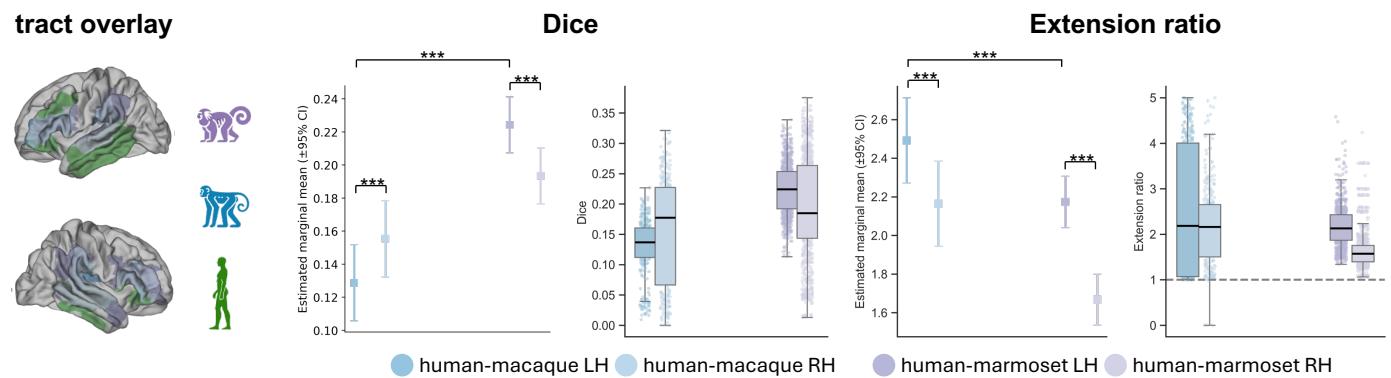
## B. Cross-species differences in af–cortical connectivity strength



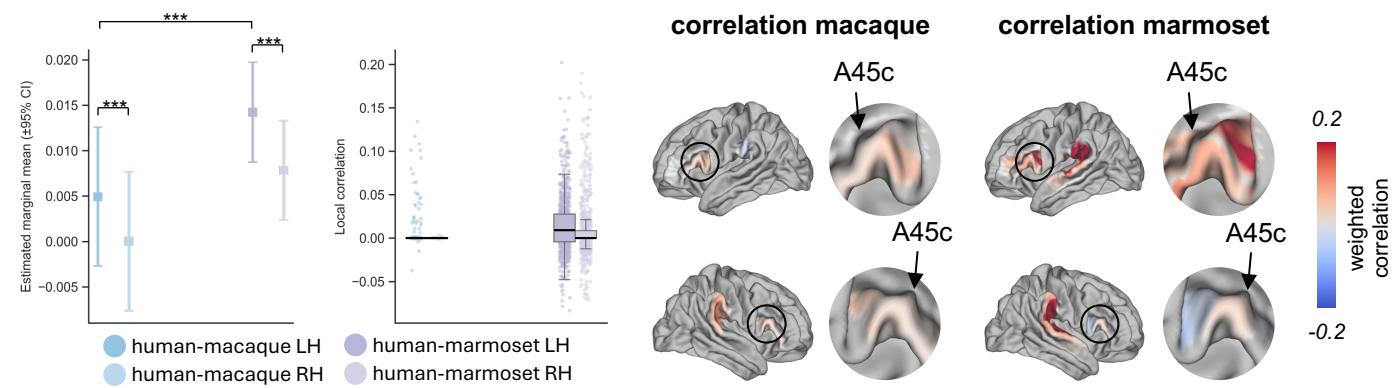
## A. Transform into common space



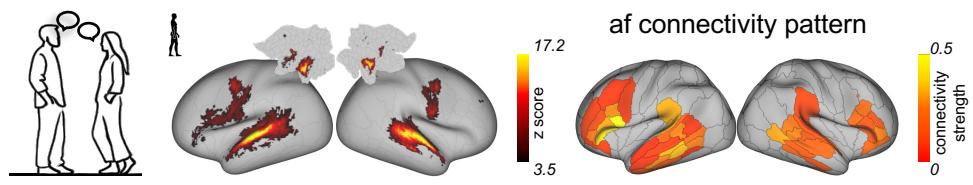
## B. Overlap of connectivity pattern of af



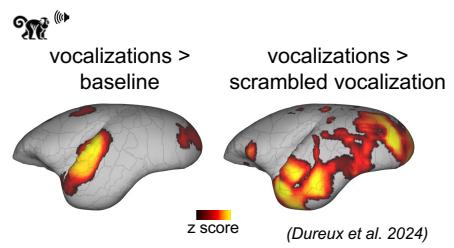
## C. Local correlation of connectivity pattern of af



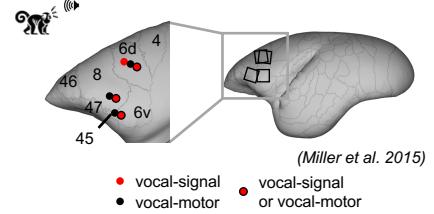
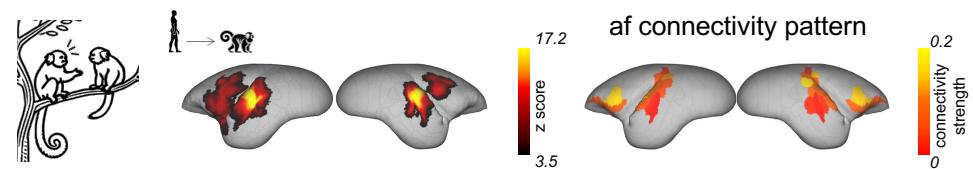
## A. Activation patterns of human speech



## D. Activation of NHP vocalization



## B. Transform the human activation patterns to marmosets



## C. Transform the human activation patterns to macaques

