

Not always the face:

Differences between human and dog
neural face- and conspecific-preference



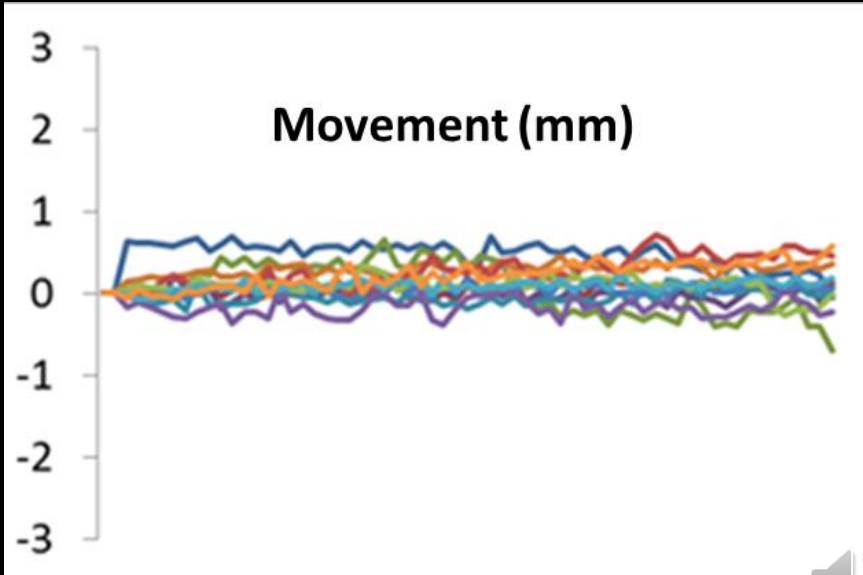
Attila Andics



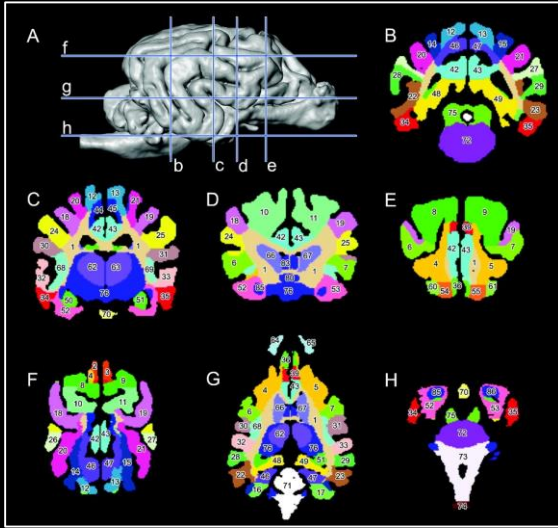
Dog fMRI in Budapest



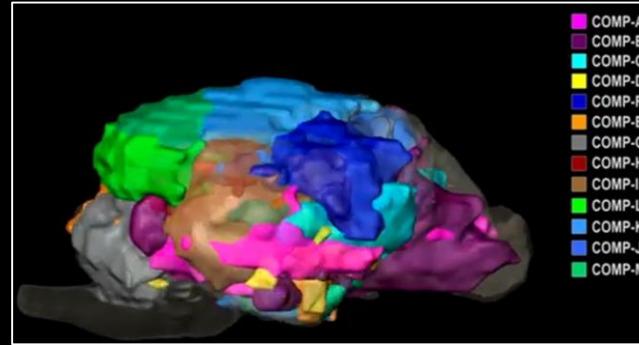
Dog fMRI in Budapest



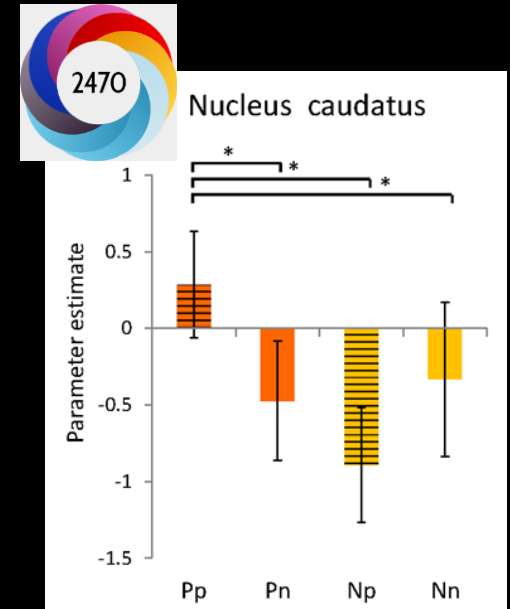
Our previous work



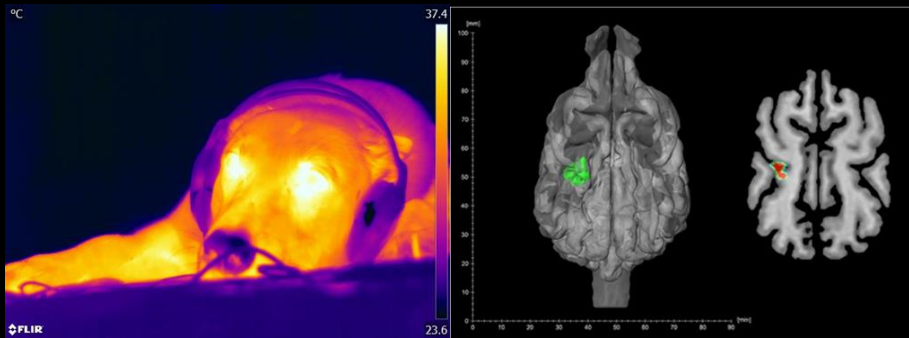
template and label map
(Czeibert 2019, Biol Fut)



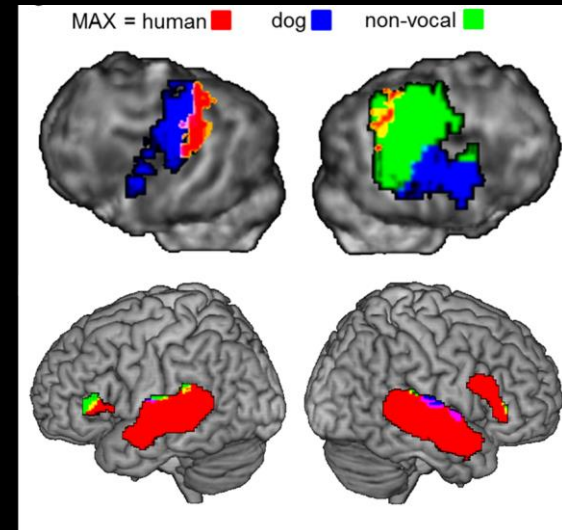
resting-state network
(Szabó 2019, Sci Rep)



speech processing
(Andics 2016, Science)



infrared heat sense
(Bálint 2020, Sci Rep)



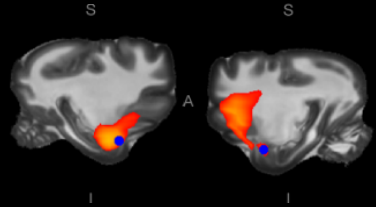
voice areas
(Andics 2014, Curr Biol)



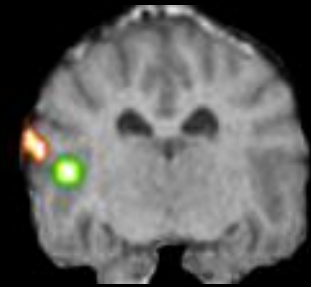
Face-sensitivity in dogs?



dogs read facial cues
(Müller 2016)



face > object
(Dilks 2015, Cuaya 2016)



dog face > human face
(Thompkins 2018)



nonfacial cues dominate
(Darwin 1872, Leopold 2010)



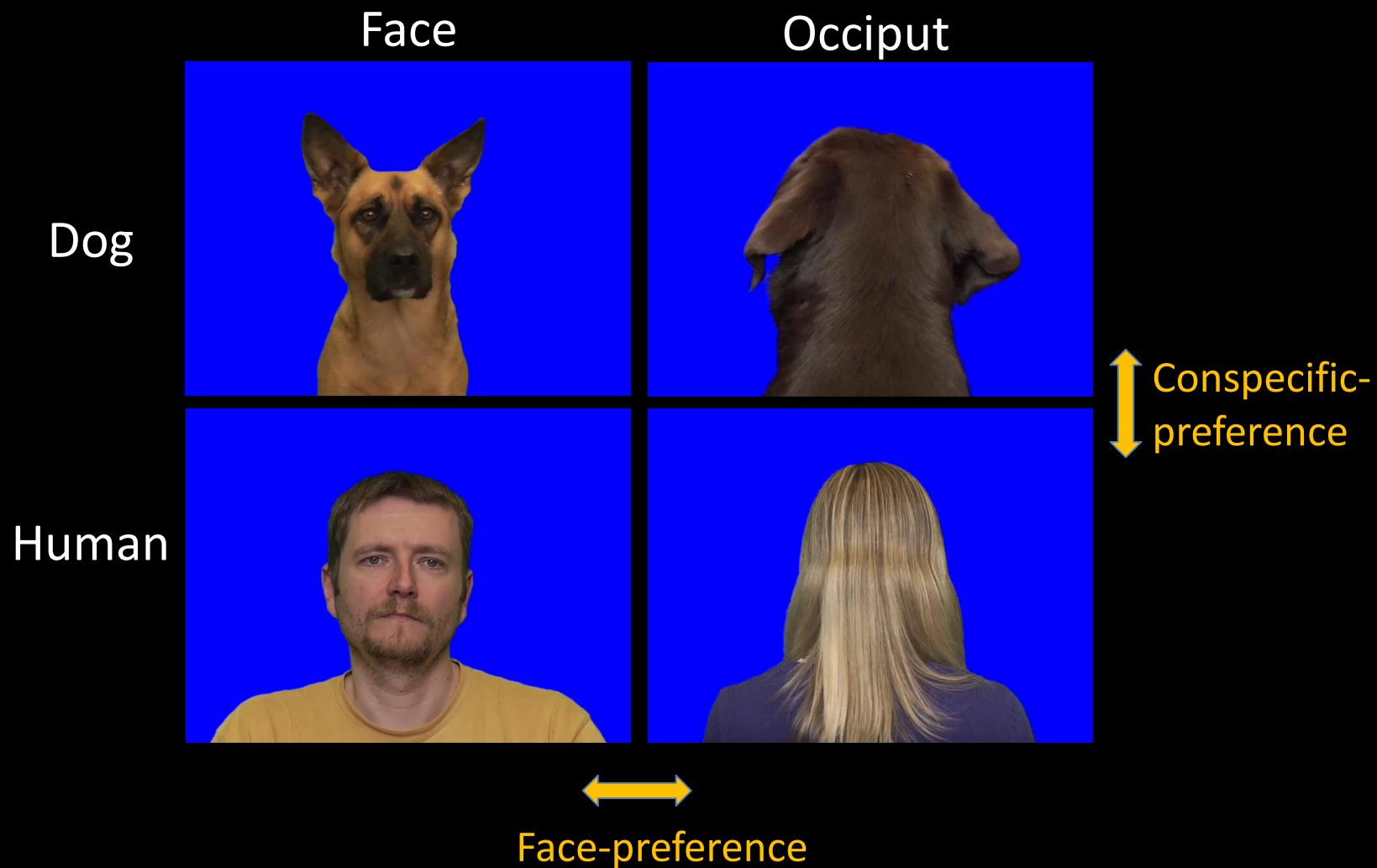
face = scrambled (coarse)
(Dilks 2015)



face = scrambled (fine)
(Szabó 2020)

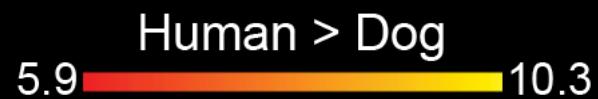
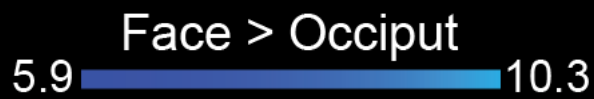
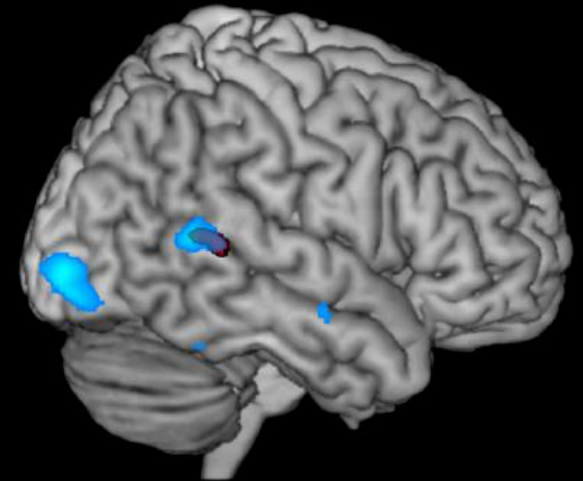
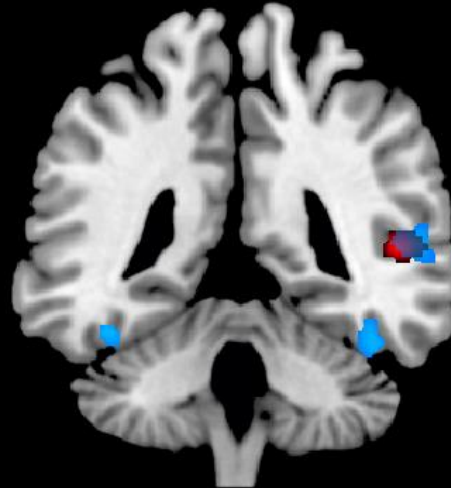
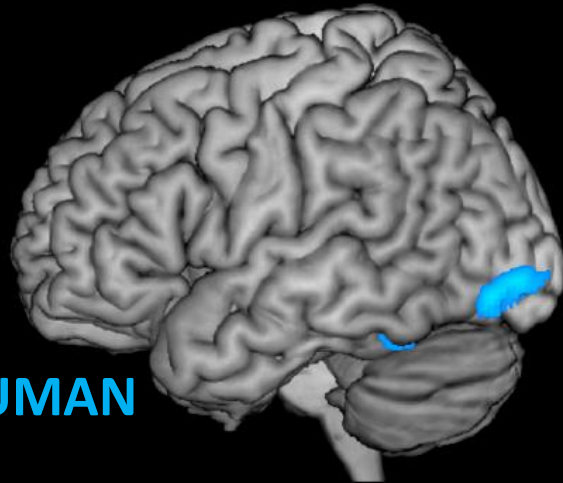


Design

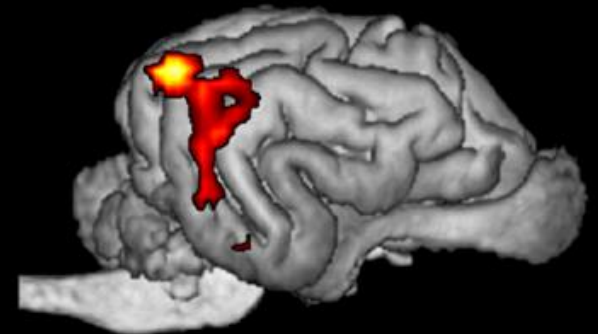
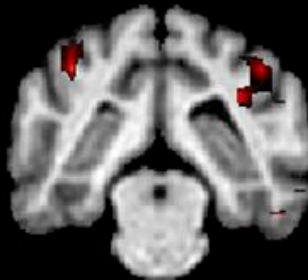
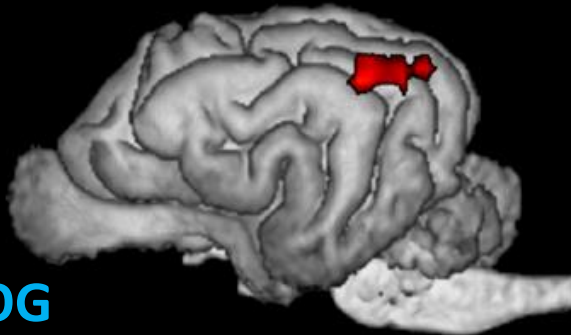


Face- and conspecific-preference

HUMAN



DOG



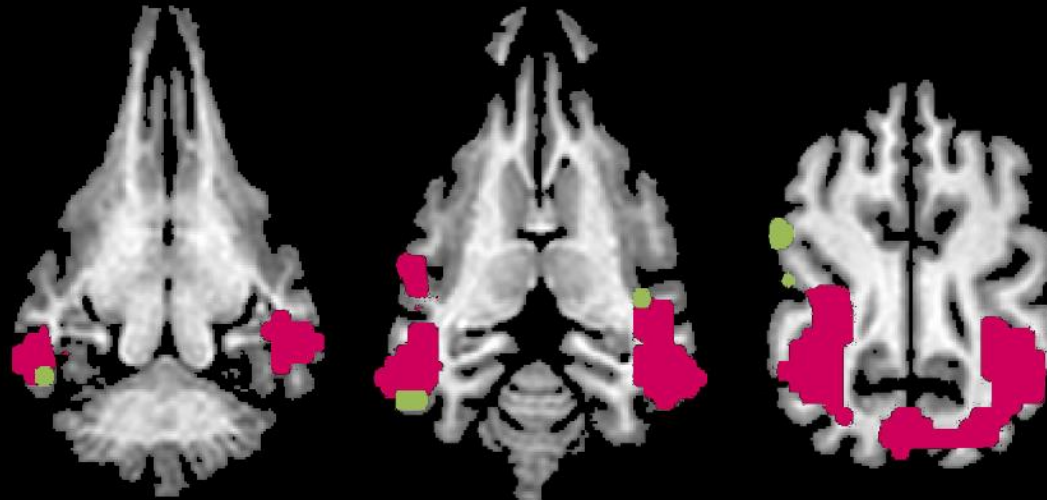
Comparing preferences

● Face-over-conspecific preference ● Conspecific-over-face preference

HUMAN



DOG

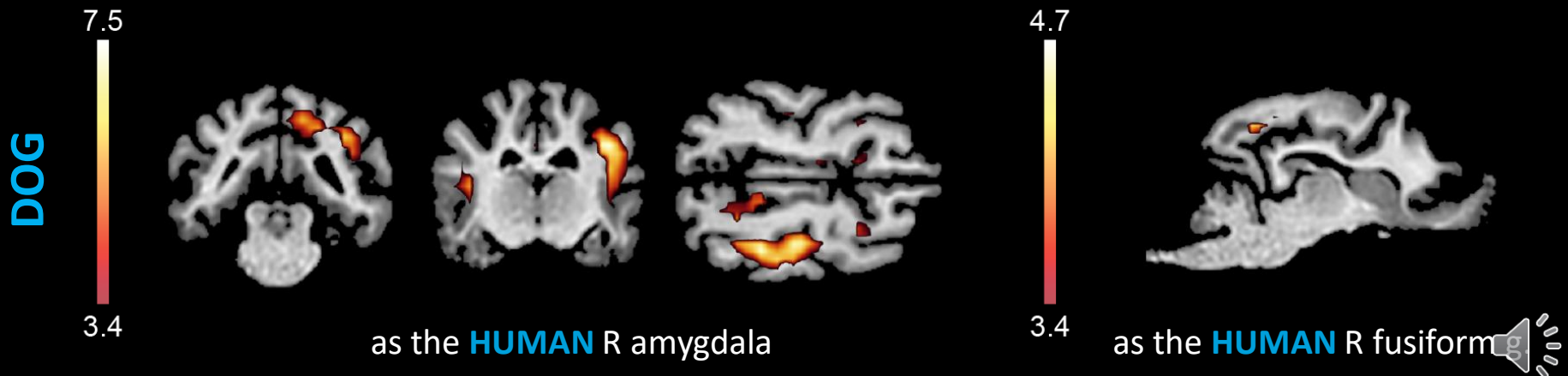


Across-species RSA

Physical matching [dog face_{DOG} ~ dog face_{HUMAN}]



Functional matching [dog face_{DOG} ~ human face_{HUMAN}]



Visual perception of individuals

in HUMANS: face or not

in DOGS: dog or not



E22



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