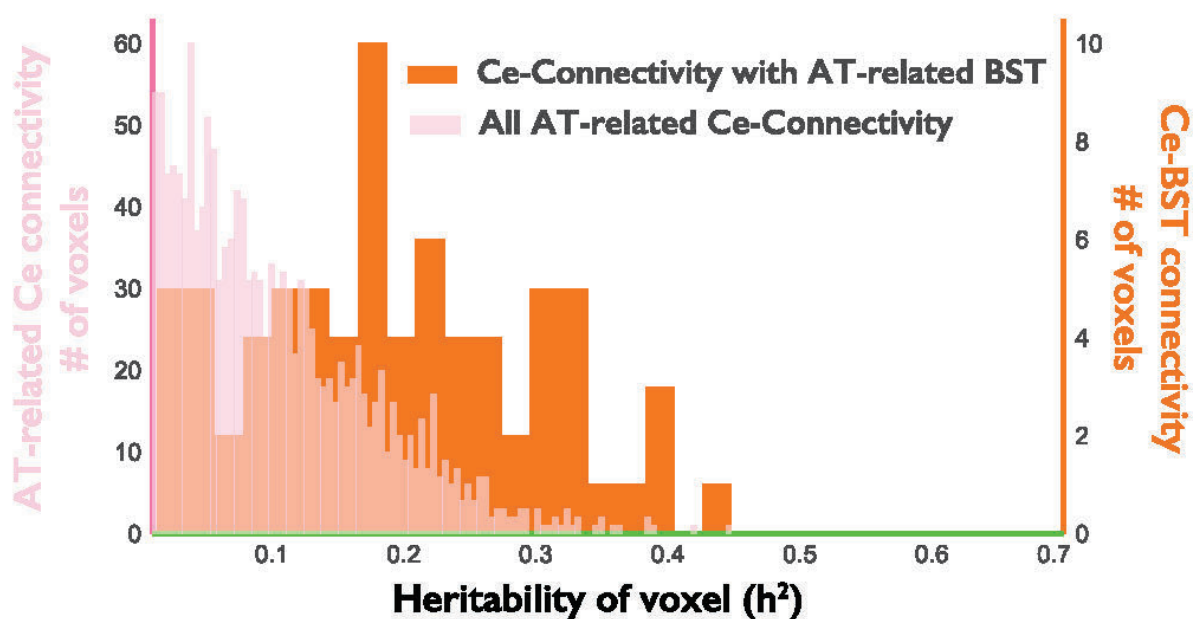


# The heritability of anxiety

July 30 2018

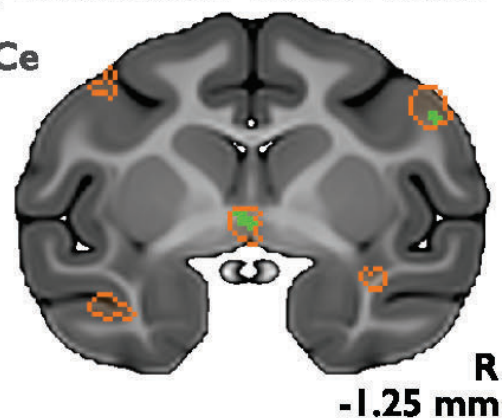
## A) Histogram of voxelwise heritability in regions with AT-related connectivity reveals enriched heritability in BST



## B) Voxelwise search for significantly heritable AT-related voxels

■ AT-related connectivity with Ce  
( $p < .005$ , uncorrected)

■ Heritable connectivity with Ce in AT-related regions  
( $p < .05$ , uncorrected)



Credit: Fox et al., *JNeurosci* (2018)

Individual differences in the connectivity between regions of the brain involved in fear and anxiety are heritable, according to a large study of hundreds of related monkeys published in *JNeurosci*. The research provides new insights into the risk and development of anxiety disorders.

Using brain imaging techniques regularly employed in human studies, Ned Kalin and colleagues found that functional connectivity between two regions of the central extended amygdala is associated with anxious temperament in pre-adolescent rhesus macaques.

As extreme early-life [anxiety](#) is a risk factor for [anxiety disorders](#) and depression in humans, further study of this nonhuman primate model may yield new directions in the prevention of these disorders in at-risk children.

This would represent an improvement over current treatments, which address symptoms rather than the mechanisms underlying the development of these [disorders](#).

**More information:** Functional connectivity within the primate extended amygdala is heritable and associated with early-life anxious temperament, *JNeurosci* (2018). [DOI: 10.1523/JNEUROSCI.0102-18.2018](#)

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