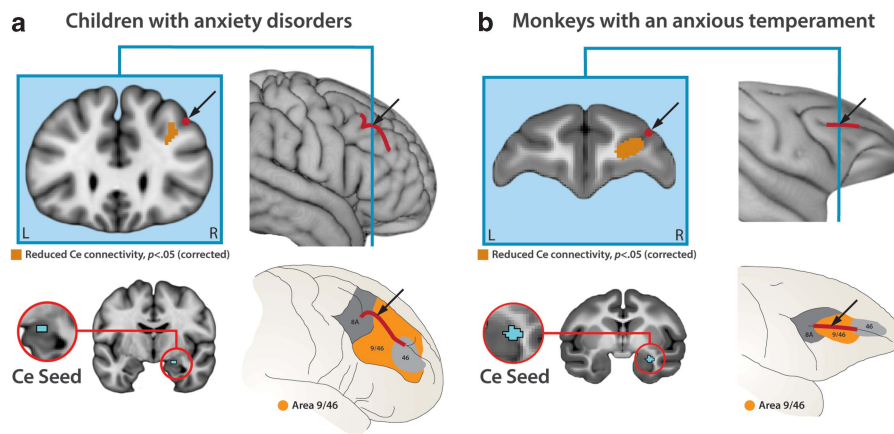


## IMAGE

# Extreme early-life anxiety is associated with an evolutionarily conserved reduction in the strength of intrinsic functional connectivity between the dorsolateral prefrontal cortex and the central nucleus of the amygdala

RM Birn<sup>1,2,3,4,5,12</sup>, AJ Shackman<sup>6,7,8,12</sup>, JA Oler<sup>2,3,4</sup>, LE Williams<sup>2,3,4</sup>, DR McFarlin<sup>2,3,4,5</sup>, GM Rogers<sup>2</sup>, SE Shelton<sup>2</sup>, AL Alexander<sup>1,5</sup>, DS Pine<sup>9</sup>, MJ Slattery<sup>2</sup>, RJ Davidson<sup>2,3,5,10,11</sup>, AS Fox<sup>2,3,4,5,10,11</sup> and NH Kalin<sup>2,3,4,5,10</sup>



*Molecular Psychiatry* (2014) **19**, 853; doi:10.1038/mp.2014.85

(a) Children with anxiety disorders. The bottom-left panel shows the Ce seed (cyan in red ring). The upper-left panel depicts a coronal slice through the human dIPFC cluster (dark orange). The bottom-right panel shows the location of the dIPFC cluster relative to the architectonic subdivisions of the human dIPFC. (b) Monkeys with a more anxious temperament. Conventions are similar to those in (a). The bottom-right panels were adapted with permission from Badre and D'Esposito.<sup>1</sup> For more information on this topic, please refer to the article by Birn *et al.* on pages 915–922.

## REFERENCE

<sup>1</sup> Badre D, D'Esposito M. Is the rostro-caudal axis of the frontal lobe hierarchical? *Nat Rev Neurosci* 2009; **10**: 659–669.

<sup>1</sup>Department of Medical Physics, University of Wisconsin, Madison, WI, USA; <sup>2</sup>Department of Psychiatry, University of Wisconsin, Madison, WI, USA; <sup>3</sup>HealthEmotions Research Institute, University of Wisconsin, Madison, WI, USA; <sup>4</sup>Lane Neuroimaging Laboratory, University of Wisconsin, Madison, WI, USA; <sup>5</sup>Waisman Laboratory for Brain Imaging and Behavior, University of Wisconsin, Madison, WI, USA; <sup>6</sup>Department of Psychology, University of Maryland, College Park, MD, USA; <sup>7</sup>Neuroscience and Cognitive Science Program, University of Maryland, College Park, MD, USA; <sup>8</sup>Maryland Neuroimaging Center, University of Maryland, College Park, MD, USA; <sup>9</sup>Section on Development and Affective Neuroscience, National Institute of Mental Health, Bethesda, MD, USA; <sup>10</sup>Department of Psychology, University of Wisconsin, Madison, WI, USA and <sup>11</sup>Center for Investigating Healthy Minds, University of Wisconsin, Madison, WI, USA

<sup>12</sup>These authors contributed equally to this work.