

Biological Psychiatry

A Journal of Psychiatric Neuroscience and Therapeutics

Volume 76, Number 12, December 15, 2014

N-METHYL-D-ASPARTATE RECEPTORS, SYNAPTIC PLASTICITY, PSYCHOPATHOLOGY, AND TREATMENT

IN THIS ISSUE – DECEMBER 15TH

911 A brief summary of the articles appearing in this issue of *Biological Psychiatry*.

COMMENTARIES

912 A State Dependence of the Response to N-Methyl-D-Aspartate Receptor Antagonism

Robert W. Greene

» See companion article on page 937

914 Toward Patient-Specific Targeting and Parameter Setting of Deep Brain Stimulation for Relief of Depression

Helen Barbas and Basilis Zikopoulos

» See companion article on page 963

REVIEW

917 Extracellular Signal-Regulated Protein Kinases 1 and 2 Activation by Addictive Drugs: A Signal Toward Pathological Adaptation

Vincent Pascoli, Emma Cahill, Frank Bellivier, Jocelyne Caboche, and Peter Vanhoutte

ARCHIVAL REPORTS

927 Restoring Mood Balance in Depression: Ketamine Reverses Deficit in Dopamine-Dependent Synaptic Plasticity

Pauline Belujon and Anthony A. Grace

937 Phencyclidine Inhibits the Activity of Thalamic Reticular Gamma-Aminobutyric Acidergic Neurons in Rat Brain

Eva Troyano-Rodriguez, Laia Lladó-Pelfort, Noemi Santana, Vicent Teruel-Martí, Pau Celada, and Francesc Artigas

» See commentary on page 912

946 The Causal Role of the Dorsolateral Prefrontal Cortex in the Modification of Attentional Bias: Evidence from Transcranial Direct Current Stimulation

Patrick J.F. Clarke, Michael Browning, Geoff Hammond, Lies Notebaert, and Colin MacLeod

953 Methylphenidate Exerts Dose-Dependent Effects on Glutamate Receptors and Behaviors

Jia Cheng, Zhe Xiong, Lara J. Duffney, Jing Wei, Aiyi Liu, Sihang Liu, Guo-Jun Chen, and Zhen Yan

963 Defining Critical White Matter Pathways Mediating Successful Subcallosal Cingulate Deep Brain Stimulation for Treatment-Resistant Depression

Patricio Riva-Posse, Ki Sueng Choi, Paul E. Holtzheimer, Cameron C. McIntyre, Robert E. Gross, Ashutosh Chaturvedi, Andrea L. Crowell, Steven J. Garlow, Justin K. Rajendra, and Helen S. Mayberg

» See commentary on page 914

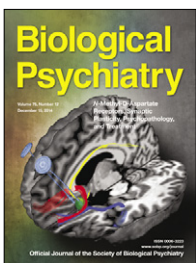
970 A Randomized Controlled Trial of Intranasal Ketamine in Major Depressive Disorder

Kyle A.B. Lapidus, Cara F. Levitch, Andrew M. Perez, Jess W. Brallier, Michael K. Parides, Laili Soleimani, Adriana Feder, Dan V. Iosifescu, Dennis S. Charney, and James W. Murrough

977 Genome-wide Methylomic Analysis of Monozygotic Twins Discordant for Adolescent Depression

Emma L. Dempster, Chloe C.Y. Wong, Kathryn J. Lester, Joe Burtage, Alice M. Gregory, Jonathan Mill, and Thalia C. Eley

984 Acknowledgments



In this issue, Riva-Posse *et al.* (pages 963-969) used diffusion tensor imaging to identify white matter connections that are involved in successful subcallosal cingulate deep brain stimulation (DBS) within the network involved in mood regulation. They identified an activation pattern among responders with treatment-resistant depression, highlighted by the cover image showing a fiber bundle target template for optimizing this treatment. Green: volume of activated tissue from DBS in the subcallosal cingulate; Red: forceps minor; Blue: uncinata fasciculus; Yellow: cingulum bundle. Michael Konomos, MS, CMI. © 2014 Emory University.
