A Sampling of NARSAD Grants at Work: **Highlights from 2012**

Basic Research: Depression

Ronald S. Duman, Ph.D. Discovers how stress and depression can shrink the brain



SC, 2002 Outstanding Achievement in Mood Disorders Research Prizewinner 1989 YI, 1997 II, 2005 DI

Basic Research: Autism

Identify chemicals in the brain that improve symptoms of Fragile X Syndrome (FXS), the most common known genetic cause of autism



Olivier Manzoni, Ph.D. 2010 II

> Daniele Piomelli, Ph.D 1988, 1990 YI, 1999 II, 2005, 2009 DI



Basic Research: Bipolar Disorder, Depression, Schizophrenia

Chiara Nosarti, Ph.D.

Demonstrates that premature birth heightens risk for mental illness



Diagnostic Tools / Early Intervention: Depression

Andrew Miller, M.D.,

Demonstrates antidepressant response by treating inflammation—patient responsiveness predicted with simple blood test



1997 II

Diagnostic Tools / Early Intervention: Depression

Carlos Zarate, M.D.

Discovers biological predictor for patient responsiveness to rapid-acting antidepressant, ketamine





Diagnostic Tools / Early Intervention: Schizophrenia

Anil Malhotra, M.D.

Identification of gene variant linked to antipsychotic-medication-induced weight gain—could help optimize treatment decisions



SC. 1999 YI. 2001 and 2006 II

New Technologies: Schizophrenia

Paola Dazzan, M.D.

Develops new technology that can predict future course of illness after first psychotic episode



Next Generation Therapies: Anxiety / Depression

Olivier Berton, Ph.D. Identification of protein linked to natural resiliency to stress points to new treatment possibility



2005, 2008 YI

Next Generation Therapies: Depression

In separate research projects, investigators demonstrate how dopamine neurons are linked to depression, opening new pathway for treatment



Karl Deisseroth, M.D., Ph.D. SC, 2005 YI

Eric Nestler, M.D., Ph.D.



SC, 2008 Outstanding Achievement in Cognitive Neuroscience Research Prizewinner, 2009 Outstanding Achievement in Mood Disorders Research Prizewinner, 1996 DI

Next Generation Therapies: Schizophrenia

Show targeted computer 'brain training' improves behavioral symptoms and brain activity in schizophrenia



Karuna Subramaniam, Ph.D. 2010 YI

Sophia Vinogradov, M.D.



SC = Brain & Behavior Research Foundation Scientific Council Member

NARSAD Grantees: YI = Young Investigator II = Independent Investigator DI = Distinguished Investigator