

New Directions in Psychiatry

Murali Rao*

Professor & Chair, Stritch School of Medicine, Loyola University Chicago, USA

The field of Psychiatry continues to be more exciting and promising than ever before. The fascinating study of brain - the genomics, the innovative modalities of neuroimaging, the ‘Connectome’ project, neuro-inflammation, neuro-immunology – already yielding information previously unknown regarding network patterns, structural and functional connectivity unique to certain syndromes – have just heralded neuro-circuitry based bio-typing of depression that could help treatment selection, precision and personalized care first time possible in our field. This emerging knowledge paired with emerging new multi-modal neuromodulation technologies conceivably could refine the new therapeutics. Emerging new findings based on optogenetics, hopefully, may soon provide the knowledge necessary to establish circuit-centric therapeutics, overcoming the limitations of molecular- (and chemistry)-based drug designs.

Biological research of psychotherapy already establishing neural mechanisms, changes in neural architecture as a consequence

of psychotherapy is bringing behavioral neurosciences closer than ever before.

Another new development is the finding that microbiota environment in the intestines being in direct communication with the brain and the role of pre and probiotics in management of mental illnesses.

The new NIMH Director Dr. Joshua Gordon has opted to continue with the Research Domain Criteria (RDoC) project which is: To take a behavior, break it down into its component parts, and study the psychobiological factors relating to these parts, from genes and molecules to neural circuits and behavior. Indeed, this is a natural extension of what cognitive psychologists, behavioral neuroscientists, and others have been doing for decades.

We could certainly anticipate a neuroscience-based diagnostic and treatment selection system in our very near future.

*Correspondence regarding this article should be directed to:
MRAO1@lumc.edu