

Classifying the Biology Behind Psychotic Disorders to Better Diagnose Patients



Godfrey Pearlson, MA, MBBS

Professor of Psychiatry and of Neuroscience

Yale University



Russell Margolis, MD

Clinical Director, Johns Hopkins Schizophrenia
Center

Professor of Psychiatry and Behavioral Sciences

Johns Hopkins University

Millions of Americans suffer from psychotic disorders, including [about 3.5 million with schizophrenia](#) and [more than 8 million with bipolar disorder, according to the National Institute of Mental Health](#). These conditions can cause mood swings, delusions, anxiety, and suicidal thoughts. Oftentimes, these patients receive diagnoses and treatment plans based solely on their symptoms, without taking a look at the biology behind their illness, according to Godfrey Pearlson, MD, MBBS, of Yale.

Pearlson, along with Johns Hopkins University's Russell Margolis, MD, will study the biology behind psychotic disorders and share that new information to help doctors give more accurate diagnoses based on more than symptoms.

Their project will investigate the neurobiological basis of Biotypes, or distinct groups used to classify patients with psychosis based on their biology. A collaborative group that includes Yale has classified a series of patients based on this approach. Pearlson and Margolis will now use several new, sophisticated types of MRI brain imaging uniquely available at Johns Hopkins to understand more about the specific brain alterations associated with each of these Biotypes.

Understanding the brain basis of Biotypes could affect patients at both the diagnosis and treatment stages. A better knowledge of the biological brain activity changes underlying a psychotic disorder could redefine what we know about the cause of that illness and, in turn, how doctors classify a patient's illness. It could also allow for new treatments that address the biology of the condition instead of just treating the symptoms.

Project title: 7 Tesla Measures in BSNIP Biotype Subjects

Learn more and connect with Godfrey Pearlson and Russell Margolis at godfrey.pearlson@yale.edu and rmargoli@jhmi.edu.