

The Division of Geriatric Psychiatry

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Overview

The Division of Geriatric Psychiatry is engaged in a wide range of research efforts focused on investigational studies and somatic therapies in geriatric psychiatry. These include the operation of three outpatient research clinics: the Late Life Depression Clinic, Huntington's Disease Center of Excellence, and Memory Disorders Center. The Division also has laboratories for the study of psychiatric treatments in animal models, including models of depression, and neurogenesis.

Staff

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Gregory H. Pelton, MD, Assistant Professor of Clinical Psychiatry
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Steven P. Roose, MD, Professor of Clinical Psychiatry
Bret Rutherford MD, Research Fellow
Joel Sneed PhD, Assistant Professor of Clinical Psychology in Psychiatry
Yaakov Stern, PhD, Research Scientist VI

Current Research

Aging, Memory Disorders, And Late Life Depression: Dr. Devanand is continuing his leadership of a multi-center clinical trial to determine how long Alzheimer's patients who develop psychosis or agitation need to continue on antipsychotic medication treatment. He has also received a new five-year federal grant to continue his studies of which patients with mild memory and cognitive problems go on to develop dementia. This work is coupled with Dr. Devanand's pioneering work on the use of olfactory identification of deficits as an early diagnostic marker of Alzheimer's disease. In the area of late life depression, Dr. Devanand's work showed that fluoxetine may not be very effective in treating elderly patients with chronic mild-to-moderate depression (dysthymic disorder), and that the dual serotonin-norepinephrine reuptake inhibitor

venlafaxine, and now duloxetine, may be a promising treatment in this patient group. Dr. Gregory Pelton has begun the first prospective study of whether the use of combined antidepressants and cognitive enhancers will slow the onset of dementia in patients who present with both depression and mild cognitive impairment. Dr. Sneed has published on redefining the diagnostic criteria for vascular depression, which is the focus of his K-award, and has begun studies of depression in African-Americans at Harlem Hospital in a new approach to study the vascular depression hypothesis. Dr. Rutherford has begun a unique series of studies to define the impact of patient and doctor expectations on the outcome of antidepressant clinical trials. Dr. Devier, who recently graduated as a research fellow in the division, began a clinical study (NARSAD-supported) in which MR spectroscopy and MR cerebral volume measurements are used to evaluate the effects of antidepressant treatment on neurogenesis in humans for the first time. This research includes collaboration with Drs. McGrath and Stewart in the Depression Evaluation Service. Dr. Moeller has been conducting brain imaging analysis on network approaches to understand the impact on CNS infection and inflammation on brain function, eg, Lyme disease. Dr. Roose, assisted by Dr. Devanand and Dr. Marder, leads the research fellowship training program in the division.

In the areas of geriatric depression and memory disorders, there are extensive collaborations with Radiology and Nuclear Medicine at New York Presbyterian Hospital, as well as the Molecular Neuroimaging group with Drs. Mann and Parsey as research collaborators. MRI research is also conducted in collaboration with Dr. Bradley Peterson's group in the Division of Child and Adolescent Psychiatry. The Memory Disorders program includes the Memory Disorders Clinic at NYSPH and involves a joint research collaboration with Drs. Mayeux and Stern at the Sergievsky Center, Taub Institute and Department of Neurology. Several funded grants and research publications reflect this close collaboration.

Neurogenesis: Research studies on variations in ECT technique and their impact on outcome have yielded important new insights into the challenges of bringing best practice into widespread implementation in the community. Dr. Perera continues his work on animal models of focal stimulation to define the neural effects of these procedures. Dr. Perera has shown that electroconvulsive shock, the animal analog of therapeutic ECT causes a robust increase in newly generated neurons. By blocking neurogenesis with irradiation in non-human primates, he demonstrated that neurogenesis is necessary for therapeutic effects of antidepressants. By implementing a dentate gyrus-specific task, his team showed that neurogenesis was correlated with performance when animals were required to learn a modified version of a familiar task.

Grants

2005-2009 NIA P50 AG08702: 11-15. Alzheimer's Disease Research Center. \$5,314,086 direct costs. Principal Investigator: Michael Shelanski. Co-Investigator: D.P. Devanand.

2003-2008 T32-MH20004. Clinical Research Training in Geriatric Psychiatry. Total Direct Costs: \$1,250,000. Principal Investigator: Steven P. Roose. Co-Principal Investigator: D.P. Devanand.

2003-2009 AG021488. Antipsychotic Discontinuation in Alzheimer's Disease. Total Direct Costs: \$1,260,840 (\$4,226,380 across 5 sites; multicenter study with NYSPI as lead coordinating site). Principal Investigator: D.P. Devanand.

2006-2009 Eli Lilly. Duloxetine treatment of dysthymic disorder in the elderly. Total Direct Costs: \$120,000. Principal Investigator: D.P. Devanand.

2006-2009 Forest Laboratories. Effects of combined Memantine and Escitalopram treatment in elderly depressed patients with cognitive impairment. Total Direct Costs: \$150,000. Principal Investigator: Gregory H. Pelton. Co-Principal Investigators: Steven P. Roose, D.P. Devanand.

2006-2009 Glaxo Smith Kline. PET amyloid imaging in Alzheimer's disease, mild cognitive impairment, and healthy controls. Total Direct Costs: \$960,040. Principal Investigator: J. John Mann. Co-Principal Investigator: D.P. Devanand.

2007-2012 NIA. R01 AG17761. Questionable Dementia: Course and Predictors of Outcome. \$4,826,377 total direct costs. Principal Investigator: D.P. Devanand.

2006-2010 K23 MH70056-01A1. National Institute of Mental Health (NIMH) Vascular depression: A distinct diagnostic entity? Principal Investigator: Joel Sneed.

2004-2008 RO1 NS 047668 Eidelberg D (PI). Brain and Behavior in Dystonia. Co-investigator James R. Moeller.

2007-2010 R01 EB006204 Habeck C (PI). Multivariate Approaches to Neuroimaging analysis. Co-investigator James R. Moeller.

2006-2010 NIMH K23 award (7/06-6/10). Joel Sneed (PI)

Honors and Awards

2008-2009 Clinical Trials Pilot Award, Rutherford (PI), Clinical and Translational Science Award, Columbia University. Expectancy Effects and Treatment of Depression: Cognitive and Neural Mechanisms

2008-2009 Imaging Pilot Award, Rutherford (PI)
Clinical and Translational Science Award, Columbia University
The neural bases of expectancy effects in depression: a pilot study

2008-2009 Research Advisory Board Grant, Rutherford (PI)

Publications

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