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## BIOGRAPHICAL SKETCH

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NAME Warren D Taylor, MD, MHSc		POSITION TITLE Associate Professor of Psychiatry	
eRA COMMONS USER NAME TAYLO066			
EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)</i>			
INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
Duke University	M.H.Sc.	2008	Master of Health Sciences in Clinical Research
Duke University	Fellowship	2001	Geriatric Psychiatry
Duke University	Residency	2000	Adult Psychiatry
University of South Florida	M.D.	1996	Medicine
University of South Florida	B.S.	1992	Biology

### A. Personal Statement

I am an Associate Professor of Psychiatry and Director of the Mood Disorders Program at the Vanderbilt University Department of Psychiatry. My clinical and research focus has been to examine neurobiological contributors to the development and perpetuation of depression across the adult lifespan. Within this realm, I have specific expertise on the interface between vascular disease and depression occurring in later life. In the decade since I completed my residency and geriatric psychiatry fellowship training, I've completed a K23 project, managed subsequent R01 projects as Principal Investigator, and contributed substantially to the neuroimaging projects of the Duke Conte Center for the Neuroscience of Depression.

This work has required developing expertise and collaborations across a variety of disciplines. Past projects have combined clinical and neuropsychological evaluations with genetic analyses and advanced neuroimaging techniques. Ongoing projects have used these tools not only to better elucidate neurobiological contributors to depression but also examine biomarkers predictive of response to antidepressant medications. Current work proposes to "repurpose" existent drug compounds that, based on our neurobiological theories, may improve antidepressant responses.

I recently transitioned to the Department of Psychiatry at Vanderbilt University, where my primary role is that of Director of the Mood Disorder Program. This leadership role includes research, clinical, and educational responsibilities. I work closely with other departmental faculty with expertise and interest in mood disorders, both in adult and geriatric depression. Working with faculty in the Geriatric Psychiatry Outpatient Program, this role is proving an excellent vantage to facilitate recruitment for ongoing studies of depression. I am additionally an Investigator in the Center for Cognitive Medicine, directed by Dr. Paul Newhouse, which promotes research into disorders of cognition, including late-life depression.

### B. Positions and Honors

#### Positions and Employment

1996-2000	Residency, General Psychiatry, Duke University
1999-2000	Chief Resident in Psychiatry, Duke University
2000-2001	Fellowship, Geriatric Psychiatry, Duke University
2001-2003	Clinical Associate of Psychiatry, Duke University
2003-2008	Assistant Professor of Psychiatry, Duke University
2008-2012	Associate Professor of Psychiatry, Duke University
2005-2012	Chair, Institutional Review Board, Duke University
2011-2012	Senior Fellow of the Center for the Study of Aging and Human Development
2012-current	Associate Professor of Psychiatry, with Tenure, Vanderbilt University
2012-current	Director, Mood Disorders Program, Department of Psychiatry, Vanderbilt University
2012-current	Investigator, Center for Cognitive Medicine, Department of Psychiatry, Vanderbilt University
2012-current	Affiliated Faculty, Center for Biomedical Ethics and Society, Vanderbilt University
2013-current	Member, Vanderbilt Kennedy Center for Research on Human Development

## **Other Experience and Professional Membership**

1995-current Member, American Psychiatric Association  
1998-present Member, American Association for Geriatric Psychiatry  
2008-present Member, Society of Biological Psychiatry  
2002 Participant, Difficult-to-Treat Depression Consensus Conference, San Francisco, CA  
2002 Participant, NIMH Aging Consortium Conference  
2002-04 Faculty, Summer Research Institute in Geriatric Psychiatry  
2005 Participant, NIMH Conference: Translational Research in Late-Life Mood Disorders  
2009-10 NIH Study Section: Adult Psychopathology and Disorders of Aging, ad hoc reviewer  
2010-11 NIH Study Section: AD Pilot Clinical Trials special emphasis panel, ad hoc reviewer  
2011 Faculty, Advanced Research Institute in Geriatric Psychiatry

## **Honors**

2000 Pfizer Psychiatry Resident of the Year  
2001 Attendee, NIMH Summer Research Institute in Geriatric Psychiatry  
2002 International College of Geriatric Psychoneuropharmacology Travel Fellow  
2003 Attendee, Future Leaders in Psychiatry (sponsored by Emory University Dept. of Psychiatry)  
2003 Travel Scholarship, The First Congress of the International Society for Vascular Behavioural and Cognitive Disorders, Göteborg, Sweden  
2005-06 Scholar, NIMH Advanced Research Institute in Geriatric Psychiatry  
2010 The Chancellor's Clinical Leadership in Academic Medicine Program (CChAMP), Duke University

## **C. Selected peer-reviewed publications (from 65 peer-reviewed publications published or in press)**

### **Most Relevant to the Current Application:**

1. **Taylor WD**, Aizenstein HJ, Alexopoulos GS. The vascular depression hypothesis: Mechanisms linking vascular disease with depression. *Molecular Psychiatry*. In press, 2013. NIHMSID: 437868 PMCID: Pending
2. **Taylor WD**, Zhao Z, Ashley-Koch A, Payne ME, Steffens DC, Krishnan RR, Hauser E, MacFall JR. Fiber tract-specific white matter lesion severity: Findings in late-life depression and by AGTR1 A1166C genotype. *Human Brain Mapping*. Epub Oct 22, 2011. PMCID: PMC Journal – In Progress.
3. **Taylor WD**, Steffens DC, Ashley-Koch A, Payne ME, MacFall JR, Potocky C, Krishnan KR. Angiotensin receptor gene polymorphisms and 2-year change in cerebral hyperintense lesion volume in men. *Molecular Psychiatry*. 15:816-822, 2010. Epub: Mar 10, 2009. PMCID: PMC2891956
4. **Taylor WD**, Kuchibhatla M, Payne ME, MacFall JR, Sheline YI, Krishnan KR, Doraiswamy PM. Frontal white matter anisotropy and antidepressant remission in late-life depression. *PLoS One*. 3(9): e3267, 2008. doi:10.1371/journal.pone.0003267. PMCID: PMC2533397
5. **Taylor WD**, Steffens DC, MacFall JR, McQuoid DR, Payne ME, Provenzale JM, Krishnan KRR: White matter hyperintensity progression and late-life depression outcomes. *Archives of General Psychiatry*. 60: 1090-1096, 2003.

### **Other Representative Publications:**

6. Sheline YI, DiSabato B, Hranilovich J, Morris C, D'Angelo G, Pieper C, Tommaso T, **Taylor W**, MacFall JR, Wilkins C, Barch DM, Welsh-Bohmer KA, Steffens DC, Krishnan RR, Doraiswamy M. Treatment course with antidepressant therapy in late-life depression. *American Journal of Psychiatry*. Epub Oct 3, 2012. PMCID: PMC Journal – In Progress.
7. Wang L, Ashley-Koch A, Steffens DC, Krishnan RR, **Taylor WD**. Impact of BDNF Val66Met and 5-HTTPR polymorphism variants on neural substrates related to sadness and executive function. In press, *Genes, Brain and Behavior*. PMCID: PMC Journal – In Progress
8. **Taylor WD**, McQuoid DR, Ashley-Koch A, MacFall JR, Bridgers J, Krishnan KR, Steffens DC. The BDNF Val66Met genotype and six-month remission rates in late-life depression. *The Pharmacogenomics Journal*. 11: 146-154, 2011. PMCID: PMC2962689
9. Steffens DC, **Taylor WD**, Denny KL, Bergman S, Wang L. Structural integrity of the uncinate fasciculus and resting state functional connectivity of the ventral prefrontal cortex in late life depression. *PLoS ONE*. 6(7):e22697, 2011. PMCID: PMC3142185

10. **Taylor WD**, MacFall JR, Boyd B, Payne ME, Sheline YI, Krishnan KR, Doraiswamy PM. One-year change in anterior cingulate cortex white matter microstructure: Relationship with late-life depression outcomes. *American Journal of Geriatric Psychiatry*. 19: 43-52, 2011. Epub June 25, 2010. PMID: PMC3000437
11. Benjamin S, McQuoid DR, Potter GG, Payne ME, MacFall JR, Steffens DC, **Taylor WD**. The *BDNF* Val66Met polymorphism, hippocampal volume and cognitive function in geriatric depression. *American Journal of Geriatric Psychiatry*. 18: 323-331, 2010. PMID: PMC2928477
12. Sheline YI, Pieper CF, Barch DM, Welsh-Bohmer K, McKinstry RC, MacFall JR, D'Angelo G, Garcia K, Gersing K, Wilkins C, **Taylor W**, Steffens DC, Krishnan RR, Doraiswamy PM. Support for the vascular depression hypothesis in late life depression: Results of a two site prospective antidepressant treatment trial. *Archives of General Psychiatry*. 67: 277-285, 2010. PMID: PMC2838210
13. Hong ED, **Taylor WD**, McQuoid DR, Potter GG, Payne ME, Ashley-Koch A, Steffens DC. Influence of the MTHFR C677T polymorphism on MRI hyperintensity volume and cognition in geriatric depression. *American Journal of Geriatric Psychiatry*. 17:847-855, 2009. PMID: PMC2805265
14. **Taylor WD**, Bae JN, MacFall JR, Payne ME, Provenzale JM, Steffens DC, Krishnan KR. Widespread effects of hyperintense lesions on cerebral white matter structure. *American Journal of Roentgenology*, 188: 1695-1704, 2007.
15. **Taylor WD**, Steffens DC, Payne ME, MacFall JR, Marchuk DA, Svenson IK, Krishnan KRR: Influence of serotonin transporter promoter region polymorphisms on hippocampal volumes in late-life depression. *Archives of General Psychiatry*. 62: 537-544, 2005.

#### **D. Research Support**

##### **Ongoing Research Support**

5R01 MH077745 – Taylor (PI) 2/1/2008-12/31/2013

“Genes and Alterations in Brain Structure and Function in Depression”

This study is enrolling a younger- to midlife-adult cohort of individuals who either have never been depressed or have recurrent, early-life onset major depressive disorder. It is examining the effect of genetic polymorphisms affecting serotonergic and dopaminergic systems (including *5HTTLPR* and *COMT*) on the structure of frontal and limbic brain regions including the orbitofrontal cortex, dorsolateral prefrontal cortex, hippocampus, and amygdala. It additionally is examining how variation in these genes affects aspects of cognition modulated by these regions and how gene-brain and gene-cognition relationships may differ in the depressed and never-depressed cohorts.

Role: PI

VR5642 – Vanderbilt Institute for Clinical and Translational Research (VICTR) Pilot Funding  
Taylor (PI) 2/5/2013-2/5/2015

“Effects of cerebral hypoperfusion and its reversal on late-life depression”

This internally-funded pilot project examines the hypothesis that, in late-life depression, cerebral perfusion deficits contribute to poor response to SSRIs. It further examines how use of candesartan, an angiotensin receptor blocker, may improve cerebral perfusion and if such changes are associated with improvement in mood.

##### **Completed Research Support**

1R01 AG040093 – Devanand (overall PI); Doraiswamy (Duke PI) 9/1/2011 – 7/31/2012

"Pilot Combination Treatment Trial of Mild Cognitive Impairment with Depression"

This two-site project conducted between Columbia University and Duke University will examine the role of donepezil in treating the coexistence of depression with cognitive deficits over an 18-month study period. The study will also evaluate moderating factors such as apolipoprotein E4 genotype and hippocampal volumes on the primary cognitive outcomes.

Role: Investigator

5R01 MH078216 – Taylor (PI) 4/1/2007-9/30/2011

“Geriatric Depression: Longitudinal Changes”

This is a collaborative R01 with Washington University following a cohort of older depressed and nondepressed subjects initially recruited as part of a previous study examining sertraline in vascular

depression. This will collect longitudinal assessments on depression course and treatment, as well as volumetric and diffusion tensor imaging MRI data, and neuropsychological test data.

Role: PI

5P50 MH060451 – Krishnan (PI)

1/1/2009 – 9/30/2011

“Conte Centers for the Neuroscience of Depression”

This Conte Center includes several projects aimed at better understanding the pathophysiology of depression. It includes sub-projects focused on animal models and functional neuroimaging. Dr. Taylor is heavily involved in the human structural neuroimaging sub-project which has strong collaborations with the Center’s Recruitment and Assessment Core.

Role: Investigator

5K23 MH065939 – Taylor (PI)

7/1/2003-12/31/2008

“Geriatric Depression Outcomes: Prognostic Factors”

This study is using diffusion tensor imaging to collect data on neural connectivity of frontal and subcortical brain regions and relate these findings to antidepressant treatment outcomes.

Role: PI

Young Investigator Award - Taylor (PI)

7/1/2002-12/30/2004

National Alliance for Research on Schizophrenia and Affective Disorders (NARSAD)

“Diffusion Tensor Imaging Changes of the Prefrontal Cortex in Late-Life Depression”

The study collected preliminary data of diffusion changes in the frontal white matter of depressed elders.

Role: PI