

CURRICULUM VITAE

May 2016

UMA RAO

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EDUCATION AND TRAININGUNDERGRADUATE

<u>Dates Attended</u>	<u>Institution</u>	<u>Degree</u>	<u>Year</u>	<u>Major Subject</u>
July 1974 - May 1976	Mount Carmel College Bangalore, India	P.U.C.	1976	Physics, Chemistry, Mathematics, Biology

GRADUATE:

Aug. 1976 - May 1981	Bangalore Medical College, Bangalore, India	M.B.B.S.	1982	Medicine & Surgery
July 1981 - June 1982	Victoria & Combined Hospitals, BMC, Bangalore, India	M.B.B.S.	1982	Rotating Internship

POST GRADUATE

<u>Dates Attended</u>	<u>Institution</u>	<u>Program Director and Discipline</u>
July 1982 - May 1983	Jayadeva Institute of Cardiology, BMC, Bangalore, India	N. Prabhudev, M.D. Cardio-Thoracic Surgery
July 1985 - June 1988	Nassau County Medical Center, SUNY at Stony Brook, East Meadow, N.Y.	Stephen Rachlin, M.D. General Psychiatry
July 1988 - June 1990	SUNY at Stony Brook, Stony Brook, N.Y.	Gabrielle A. Carlson, M.D. Child & Adolescent Psychiatry
July 1990 - Dec. 1991	College of Physicians & Surgeons at Columbia University, New York, N.Y.	David Shaffer, M.D. Post Doctoral Fellow in Clinical Research in Child Psychiatry

PROFESSIONAL POSITIONSACADEMIC

<u>Years Inclusive</u>	<u>Institution</u>	<u>Title</u>
1992 - 1995	University of Pittsburgh School of Medicine Pittsburgh, PA	Assistant Professor of Psychiatry (Tenure Series)
1995 - 2001	University of California at Los Angeles School of Medicine Los Angeles, CA	Assistant Professor of Psychiatry & Biobehavioral Sciences (Tenure Series)
2001 - 2003	David Geffen School of Medicine at University of California at Los Angeles Los Angeles, CA	Associate Professor of Psychiatry & Biobehavioral Sciences (with Tenure)
2003 - 2011	UT Southwestern Medical Center Dallas, TX	Professor of Psychiatry (with Tenure)
2003 - 2011	UT Southwestern Medical Center Dallas, TX	Sarah M. and Charles E. Seay Chair in Child Psychiatry
2005 - 2011	University of Texas at Dallas School of Behavioral and Brain Sciences Dallas, TX	Adjunct Professor
2010 - 2014	Meharry Medical College Nashville, TN	Professor of Psychiatry and Behavioral Sciences (with Tenure)
2010 - 2014	Meharry Medical College Nashville, TN	Endowed Chair in Brain and Behavior Research
2011 - 2014	Vanderbilt University School of Medicine Nashville, TN	Professor of Psychiatry
2014 - Present	University of Tennessee Knoxville, TN	Betsey R. Bush Endowed Professor in Behavioral Health; College of Social Work (with Tenure)
2014 - Present	Vanderbilt University School of Medicine Nashville, TN	Adjunct Professor of Pediatrics
2014 - Present	University of Tennessee Health Science Center Graduate School of Medicine Knoxville, TN	Adjunct Professor of Family Medicine

NON-ACADEMIC

1983 - 1985	Pro Arts Medical Center, Brooklyn, N.Y.	Assistant Pediatrician
1992 - 1993	Western Psychiatric Institute and Clinic of University Presbyterian Medical Center, Pittsburgh, PA	Assistant Medical Director, Adolescent Affective Disorders Inpatient Service
1993 - 1995	Western Psychiatric Institute and Clinic of University Presbyterian Medical Center Pittsburgh, PA	Co-Director, Child and Adolescent Mood Disorders Program; Medical Director, Family Therapy Center

PROFESSIONAL POSITIONS (Continued)NON-ACADEMIC

<u>Years Inclusive</u>	<u>Institution</u>	<u>Title</u>
1995 - 1998	University of California at Los Angeles Neuropsychiatric Institute and Hospital Los Angeles, CA	Director, Child and Adolescent Psychopharmacology Program
1997 - 2003	University of California at Los Angeles Neuropsychiatric Institute and Hospital Los Angeles, CA	Member, Mental Retardation Research Center
1998 - 2003	University of California at Los Angeles Neuropsychiatric Institute and Hospital Los Angeles, CA	Medical Director, Child and Adolescent Mood Disorders Program
1998 - 2003	University of California at Los Angeles Neuropsychiatric Institute & Hospital Los Angeles, CA	Member, Brain Research Institute
2003 - 2011	UT Southwestern Medical Center Dallas, TX	Director, Bob Smith, M.D., Center for Research in Pediatric Psychiatry
2004 - 2011	UT Southwestern Medical Center Dallas, TX	Director, Adolescent Mood and Addictive Disorders Research Program
2006 - 2011	UT Southwestern Medical Center Dallas, TX	Chief, Division of Child and Adolescent Addictions Research
2010 - 2014	Meharry Medical College Nashville, TN	Director, Center for Molecular and Behavioral Neuroscience
2010 - 2014	Meharry Medical College Nashville, TN	Senior Research Scientist, Research Centers for Minority Institutions (RCMI) Program for Women's Health
2010 - 2014	Meharry Medical College Nashville, TN	Senior Research Scientist, Meharry Clinical and Translational Research Center (MeTRC)
2011 - Present	Vanderbilt Kennedy Center for Research on Human Development Nashville, TN	Member
2014 - Present	University of Tennessee Knoxville, TN	Director, Children's Mental Health Services Research Center, College of Social Work

CERTIFICATION AND LICENSURECERTIFICATION

General Psychiatry, American Board of Psychiatry and Neurology 1993

Child and Adolescent Psychiatry, American Board of Psychiatry and Neurology 1994

CERTIFICATION AND LICENSURE (Continued)MEDICAL OR OTHER PROFESSIONAL LICENSURE

<u>Licensing Board</u>	<u>State</u>	<u>Year</u>
N.Y.S. Education Department	New York	1988
State Board of Medical Examiners of New Jersey	New Jersey	1990
Bureau of Professional Occupational Affairs	Pennsylvania	1990
Medical Board of California	California	1991
Texas State Board of Medical Examiners	Texas	2003
State of Tennessee Division of Health Related Boards	Tennessee	2012

HONORS AND AWARDS

<u>Title of Award</u>	<u>Year</u>
National Scholarship for Meritorious Students (Federal Government - India)	1974-1981
National Science Talent Award (Federal Government - India)	1975
National Research Service Award (National Institute of Mental Health)	1990-1991
Nathan Cummings Foundation Award for the Best Paper on Suicide or Depression (The American Academy of Child & Adolescent Psychiatry)	1995
Mentored Clinical Scientist Development Award (National Institute of Mental Health)	1996-2002
Academic Senate Award (UCLA School of Medicine)	1997-1998
Stein-Oppenheimer Endowment Award for Promising Research Proposal (UCLA School of Medicine)	1997-1998
Young Investigator Award (National Alliance for Research on Schizophrenia and Depression)	1999-2002
Klingenstein Third Generation Foundation Award for the Best Paper on Depression or Suicide – Co-author (The American Academy of Child & Adolescent Psychiatry)	1999
Klingenstein Third Generation Foundation Award for the Best Paper on Depression or Suicide (The American Academy of Child & Adolescent Psychiatry)	2000
Visionary Award for Community Service and Research (Sierra Tucson Organization)	2010
Outstanding Academician Award (Indo-American Psychiatric Association)	2014

RESEARCH ACTIVITIES

<u>Grant #</u>	<u>Grant Title</u>	<u>Role</u>	<u>Year</u>	<u>Source</u>
T32 MH016434	Research Training in Child Psychiatry	Post Doctoral Fellow	07/90-11/91	NIMH through College of Physicians and Surgeons at Columbia University
P50 MH043878	Continuity between Childhood & Adult Depression: Validity with Psychobiological Parameters	Principal Investigator	07/91-11/91	MHCRC Seed Monies from NIMH through the College of Physicians and Surgeons at Columbia University
P30 MH030915	A Longitudinal Study of Adolescent Onset Depression	Principal Investigator	01/92-08/93	MHCRC Seed Monies from NIMH through the University of Pittsburgh School of Medicine
P50 AA008746	Secondary Substance Abuse in Adolescent Onset Depression	Principal Investigator	09/92-08/93	CRC Seed Monies from NIAAA through the University of Pittsburgh School of Medicine
P30 MH030915 P50 AA008746	Sleep Measures in Parents of Probands with Adolescent Onset Depression	Principal Investigator	09/93-06/95	MHCRC and CRC Seed Monies from NIMH and NIAAA through the University of Pittsburgh School of Medicine
P01 MH041712	Psychobiology of Depression in Children and Adolescents	Clinical Core Director: Director of Project, Neal D. Ryan, M.D.	12/91-06/95	NIMH
R10 MH048879	Lithium Prophylaxis in Adolescents with Bipolar Illness	Co-principal Investigator; Principal Investigator, Neal D. Ryan, M.D.	09/92-06/95	NIMH
Protocol 29060/329	Double-Blind, Placebo Controlled Study of Paroxetine and Imipramine in Adolescents with Unipolar Major Depression	Co-investigator; Principal Investigator, Neal D. Ryan, M.D.	01/94-06/95	Smith-Kline Beecham Pharmaceutical Company
K08 MH001419	Pathways to Juvenile Depression: Biopsychosocial Models	Principal Investigator	09/96-04/02	NIMH
Stein-Oppenheimer Award	Developmental Psychopathology of Depression: A Diathesis-Stress Model	Principal Investigator	07/97-12/98	UCLA School of Medicine
T32 MH017140	Research Training: Psychobiological Sciences	Mentor for Trainees; Principal Investigator Andrew F. Leuchter, M.D.	09/98-08/03	NIMH
NARSAD Young	Chronic Stress and	Principal Investigator	07/99-06/02	National Alliance for Research

Investigator Award Hippocampal Integrity in Adolescent Depression on Schizophrenia and Depression

RESEARCH ACTIVITIES (Continued)

<u>Grant #</u>	<u>Grant Title</u>	<u>Role</u>	<u>Year</u>	<u>Source</u>
R01 MH057970	Neurodevelopmental Insults & Schizophrenia: A Rat Study	Co-investigator; Principal Investigator, Russell E. Poland, Ph.D.	07/99-06/03	NIMH
R01 MH062464	Risk for Substance Abuse in Depressed Adolescents	Principal Investigator	09/01-08/09	NIMH
R01 DA014037	Markers of Risk for Nicotine Dependence in Youngsters	Principal Investigator	09/01-06/09	NIDA
T32 MH067543	Mood Disorders Clinical Intervention Training Program	Mentor for Trainees; Principal Investigator A. John Rush, M.D.	07/03-06/08	NIMH
R25 MH068338	Psychiatric Research Education Program	Mentor for Trainees; Principal Investigator A. John Rush, M.D.	08/03-04/08	NIMH
R01 DA015131	Stress Response and Smoking Cessation in Depressed Youth	Principal Investigator	09/03-01/11	NIDA
R01 DA017804	Stress and Risk for Substance Abuse in Adolescents	Principal Investigator	07/04-01/11	NIDA
R01 DA017805	Neuronal Risk Markers for Nicotine Dependence in Youth	Principal Investigator	06/04-03/12	NIDA
R01 MH068391	Treatment Prediction in Adolescent and Adult Depression	Principal Investigator	06/04-03/14	NIMH
R25 DA018843	Psychiatrist Research Education and Training in Drug Abuse	Co-investigator; Principal Investigator Bryon Adinoff, M.D.	12/04-11/10	NIDA
U10 DA020024	Clinical Trials Network: The Texas Node	Co-investigator; Principal Investigator Bryon Adinoff, M.D.	09/05-08/10	NIDA
R25 MH074675	Child Psychiatry Research Education Program	Co-investigator; Principal Investigator Graham J. Emslie, M.D.	09/05-07/10	NIMH
NIDA-CTN-0028	Randomized Controlled Trial of Osmotic-Release Methylphenidate (OROS-	Principal Investigator, Texas Node Site	09/05-10/08 (relinquished in 2006 due to	NIDA

MPH) for Attention-Deficit
Hyperactivity Disorder
(ADHD) in Adolescents
with Substance Use
Disorders (SUD) other commitments)

RESEARCH ACTIVITIES (Continued)

<u>Grant #</u>	<u>Grant Title</u>	<u>Role</u>	<u>Year</u>	<u>Source</u>
K12 HD052225	UT Southwestern Clinical Science Scholars Program	Mentor for Trainees Principal Investigator Milton Packer, M.D.	09/05-07/10	NICHD
R01 DA017804-S1 (Minority Supplement)	Stress and Risk for Substance Abuse in Adolescents	Principal Investigator	05/06-04/08	NIDA
VA Merit Review	Trauma, Stress, and Persistence of HPA Dysregulation in Alcoholism	Co-investigator; Principal Investigator Bryon Adinoff, M.D.	10/06-08/11	Department of Veterans Affairs
U01 AA016668	Stress, HPA Axis Dysfunction, and Relapse in Alcoholism	Co-investigator; Principal Investigator Bryon Adinoff, M.D.	05/07-01/13	NIAAA
R01 DA017805-S1 (Minority Supplement)	Neuronal Risk Markers for Nicotine Dependence in Youth	Principal Investigator	06/09-03/10	NIDA
U54 RR026140/ U54 MD007593	Meharry Clinical and Translational Research Center (MeTRC)	Senior Research Scientist; Principal Investigator James Hildreth, M.D., Ph.D.; Samuel Adunyah, Ph.D.	09/09-06/14	NCRR/NIMHD
G12 RR003032/Meharry G12 MD007586	RCMI Program Senior Research in Women's Health Research	Scientist & PI of Recruitment Core; Principal Investigator Wayne J. Riley, M.D., MPH, MBA; Anna Cherrie Epps, Ph.D.	10/10-08/14	NCRR/NIMHD
VR1534 (seed funds) UL1 RR024975/ UL1 TR000445	Treatment Prediction in Adolescent and Adult Depression	Principal Investigator	06/11-05/14	NCRR/NCATS Funding to Vanderbilt University
VR1890 (seed funds) UL1 RR024975/ UL1 TR000445	Adolescent Risk-Taking Behavior: Treatment Effects on Neural Responses to Rewards	Principal Investigator	09/11-08/14	NCRR/NCATS Funding to Vanderbilt University
U10NS077318	Vanderbilt Site for Network of Excellence In Neuroscience Clinical Trials	Collaborator; Principal Investigator Beth A. Malow, M.D., M.S	09/11-08/14	NINDS
MeTRC Seed Funds (Pilot Project) U54 RR026140/ U54 MD007593	Coping with Interpersonal Violence in African-American Women	Principal Investigator	01/12-06/14	NCRR/NIMHD Funding to Meharry Medical College

RCMI Seed Funds Ethnicity, Gender, Principal Investigator 01/12-08/14 NCRR/NIMHD Funding to
 G12 RR003032/and Pain in Adolescents Meharry Medical College
 G12 MD007586

RESEARCH ACTIVITIES (Continued)

<u>Grant #</u>	<u>Grant Title</u>	<u>Role</u>	<u>Year</u>	<u>Source</u>
R24 DA021471	Methamphetamine Research Program at Meharry Medical College	Program Director (from 11/12)	09/08-05/14	NIDA
R24 DA021471-S1	Methamphetamine Research Program at Meharry Medical College	Program Director (from 11/12)	09/08-05/14	NIDA
F30 MH097344	Neural Substrates of Anticipation in Children at Risk for Anxiety	Co-Sponsor; Principal Investigator, Jacqueline A. Clauss	04/13-08/16	NIMH
K01 MH101403	Models of Risk for PTSD	Sponsor; Principal Investigator, Matthew C. Morris, Ph.D.	07/13-06/18	NIMH
R24 DA036420	Methamphetamine Research Program At Meharry Medical College	Program Director (until 08/14; transferred project to another PI due to institutional transfer)	04/14-12/18	NIDA
R01 DA040966	Prevention of Adolescent Risky Behaviors: Neural Markers of Intervention Effects	Principal Investigator	12/15-11/20	NIDA (Funding Pending)
R01 MH108155	Effects of Childhood Maltreatment on Neurocircuitry in Adolescent Depression	Principal Investigator	04/16-03/21	NIMH (Under Review)
R01 MD010148	Ethnic Influences on Stress, Energy Balance and Obesity in Adolescents	Principal Investigator	07/16-06/21	NIMHD (Under Review)

PUBLICATIONS

PEER-REVIEWED JOURNALS

1. Rao U, Carlson GA, Rapport MD (1991). Serum cholesterol and aggressive behavior in psychiatrically hospitalized children. *ACTA Psychiatrica Scandinavica* 83(1):77-78. PMID: 2011960.
2. Setterberg SR, Ernst M, Rao U, Campbell M, Carlson GA, Shaffer D, Staghezza BM (1991). Child psychiatrists' views of DSM-III-R: a survey of usage and opinions. *Journal of the American Academy of Child and Adolescent Psychiatry* 30(4):652-658. PMID: 1890101.
3. Crowell JA, O'Connor E, Wollmers G, Sprafkin J, Rao U (1991). Mothers' conceptualizations of parent-child relationships: relation to mother-child interaction and child behavior problems. *Development and Psychopathology* 3(4):431-444.

4. Whitaker A, Rao U (1992). Neuroleptics in pediatric psychiatry. *Psychiatric Clinics of North America* 15(1):243-276. PMID: 1347940.
5. Rao U, Weissman MM, Martin JA, Hammond RW (1993). Childhood depression and risk of suicide: a preliminary report of a longitudinal study. *Journal of the American Academy of Child and Adolescent Psychiatry* 32(1):21-27. PMID: 8428874.
6. Rao U (1994). Psychological autopsy studies of suicide. *Current Opinion in Psychiatry* 7(4):330-333.
7. Zwier KJ, Rao U (1994). Buspirone use in an adolescent with social phobia and mixed personality disorder (Cluster A type). *Journal of the American Academy of Child and Adolescent Psychiatry* 33(7):1007-1011. PMID: 7961339.
8. Rao U, Ryan ND, Dahl RE, Williamson DE, Kaufman J, Rao R, Nelson B (1995). Unipolar depression in adolescents: clinical outcome in adulthood. *Journal of the American Academy of Child and Adolescent Psychiatry* 34(5):566-578. PMID: 7775352.
9. Williamson DE, Ryan ND, Birmaher B, Dahl RE, Kaufman J, Rao U, Puig-Antich J (1995). A case-control family history study of depression in adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry* 34(12):1596-1607. PMID: 8543531.
10. Birmaher B, Dahl RE, Perel J, Williamson DE, Nelson B, Stull S, Kaufman J, Waterman GS, Rao U, Nguyen N, Puig-Antich J, Ryan ND (1996). Corticotropin releasing hormone challenge test in prepubertal major depression. *Biological Psychiatry* 39(4):267-277. PMID: 8645773.
11. Rao U, Dahl RE, Ryan ND, Birmaher B, Williamson DE, Giles DE, Rao R, Kaufman J, Nelson B (1996). The relationship between longitudinal clinical course and sleep and cortisol changes in adolescent depression. *Biological Psychiatry* 40(6):474-484. PMID: 8879467.
12. Rao U, McCracken JT, Lutchmansingh P, Edwards C, Poland RE (1997). EEG sleep and urinary free cortisol in adolescent depression: a preliminary report of changes from episode to recovery. *Biological Psychiatry* 41(3):369-373. PMID: 9024960.
13. Kaufman J, Birmaher B, Brent D, Rao U, Flynn C, Moreci P, Williamson D, Ryan N (1997). The Schedule for Affective Disorders and Schizophrenia for School Aged Children: Present and Lifetime Version (K-SADS-PL): initial reliability and validity data. *Journal of the American Academy of Child and Adolescent Psychiatry* 36(7):980-988. PMID: 9204677.
14. Birmaher B, Kaufman J, Brent DA, Dahl RE, Perel JM, Al-Shabbout M, Nelson B, Stull S, Rao U, Waterman GS, Williamson DE, Ryan ND (1997). Neuroendocrine response to L-5-Hydroxytryptophan in prepubertal children at high risk for major depressive disorder. *Archives of General Psychiatry* 54(12):1113-1119. PMID: 9400347.
15. Strober M, Rao U, DeAntonio M, Liston E, State M, Amaya-Jackson L, Latz S (1998). Effects of ECT in adolescents with severe endogenous depression: resistant to pharmacotherapy. *Biological Psychiatry* 43(5):335-338. PMID: 9513748.
16. Birmaher B, Waterman S, Ryan ND, Perel J, McNabb J, Balach L, Beaudry MB, Naasr FN, Karambelkar J, Elterich G, Quintana H, Williamson DE, Rao U (1998). A randomized controlled trial of amitriptyline vs. placebo for adolescents with "treatment-resistant" major depression. *Journal of the American Academy of Child and Adolescent Psychiatry* 37(5):527-535. PMID: 9585655.
17. Hammen C, Rudolph K, Weisz J, Rao U, Burge D (1999). The context of depression in clinic-referred youth: neglected areas in treatment. *Journal of the American Academy Child and Adolescent Psychiatry* 38(1):64-71. PMID: 9893418.
18. Strober M, DeAntonio M, Schmidt-Lackner S, Pataki C, Freeman R, Rigali J, Rao U (1999). The pharmacotherapy of depressive illness in adolescents: an open-label comparison of fluoxetine with imipramine-treated historical controls. *Journal of Clinical Psychiatry* 60(3):164-169. PMID: 10192591.
19. Rao U, Hammen C, Daley SE (1999). Continuity of depression during the transition to adulthood: a 5-year longitudinal study of young women. *Journal of the American Academy of Child and Adolescent Psychiatry* 38(7):908-915. PMID:

10405510.

20. Rao U, McGinty DJ, Shinde A, McCracken JT, Poland RE (1999). Prenatal stress is associated with depression-related EEG sleep changes in adult male rats: a preliminary report. *Progress in Neuro-Psychopharmacology and Biological Psychiatry* 23(5):929-939. PMID: 10509385.
21. Rao U, Ryan ND, Birmaher B, Dahl RE, Rao R, Williamson DE, Perel J (1999). Factors associated with the development of substance use disorder in depressed adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry* 38(9):1109-1117. PMID: 10504809.
22. Rao U, Poland RE, Lutchmansingh P, Ott GE, McCracken JT, Lin K-M (1999). Relationship between ethnicity and sleep patterns in normal controls: implications for psychopathology and treatment. *Journal of Psychiatric Research* 33(5):419-426. PMID: 10504010.
23. Poland RE, Rao U, Lutchmansingh P, McCracken JT, Lesser IM, Edwards C, Ott GE, Lin KM (1999). REM sleep in depression is influenced by ethnicity. *Psychiatry Research* 88(2):95-105. PMID10622346.
24. Rao U, Lutchmansingh P, Poland RE (1999). Age-related effects of scopolamine on REM sleep regulation in normal control subjects: relationship to sleep abnormalities in depression. *Neuropsychopharmacology* 21(6):723-730. PMID: 10633478.
25. Rao U (2000). Continuities and discontinuities between adolescent and adult depression: clinical and policy implications. *The Economics of Neuroscience* 2(1):32-40.
26. Rao U, Daley SE, Hammen C (2000). Relationship between depression and substance use disorders in adolescent women during the transition to adulthood. *Journal of the American Academy of Child and Adolescent Psychiatry* 39(2):215-222. PMID: 10673833.
27. Rao U, Lutchmansingh P, Poland RE (2000). Contribution of development to buspirone effects on REM sleep: a preliminary report. *Neuropsychopharmacology* 22(4):440-446. PMID: 10700663.
28. Daley SE, Hammen C, Rao U (2000). Predictors of first onset and recurrence of major depression in young women during the five years following high school graduation. *Journal of Abnormal Psychology* 109(3):525-533. PMID: 11016122.
29. Birmaher B, Dahl RE, Williamson DE, Perel JM, Brent DA, Axelson DA, Kaufman J, Dorn LD, Stull S, Rao U, Ryan ND (2000). Growth hormone secretion in children and adolescents at high risk for major depressive disorder. *Archives of General Psychiatry* 57(9):867-872. PMID: 10986550.
30. Rao U, Poland RE (2000). Sleep disorders in childhood and adolescence. *Sleep and Hypnosis* 2(3):VI-XIII (Editorial).
31. Rao U (2001). Longitudinal clinical course of early-onset depressive disorders: treatment implications. *Child and Adolescent Psychopharmacology News* 6(4):6-11.
32. Rao U (2001). Depression and substance use disorders in adolescents. *The Prevention Researcher* 8(4):15-16.
33. Rao U (2002). Gender differences in depression during the transition to adulthood. *Trends in Evidence-Based Neuropsychiatry* 4:46-53.
34. Rao U, Dahl RE, Ryan ND, Birmaher B, Williamson DE, Rao R, Kaufman J (2002). Heterogeneity in EEG sleep findings in adolescent depression: unipolar versus bipolar clinical course. *Journal of Affective Disorders* 70(3):273-280. PMID: 12128239.
35. Ott GE, Rao U, Nuccio I, Lin K-M, Poland RE (2002). Effect of Bupropion-SR on REM sleep: relationship to antidepressant response. *Psychopharmacology* 165(1):29-36. PMID: 12474115.
36. Ott GE, Rao U, Lin K-M, Poland RE (2002). Sleep microarchitecture in depression: association with response to

- bupropion treatment. *Sleep and Hypnosis* 4(2):77-84.
37. The Depression and Bipolar Disorder Support Alliance Consensus Development Panel (2003). Depression and Bipolar Alliance consensus statement on the unmet needs in diagnosis and treatment of mood disorders in children and adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry* 42(12):1494-1503.
 38. Schepis TS, Adinoff B, Rao U (2004). Reward, reinforcement and relapse: the neurobiology of addiction. *Child & Adolescent Psychopharmacology News* 9(7):5-8.
 39. Rao U, Lin K-M, Schramm P, Poland RE (2004). REM sleep and cortisol responses to scopolamine during depression and remission in women. *International Journal of Neuropsychopharmacology* 7(3):265-274. PMID: 15132761. PMID: 15132761.
 40. Ott GE, Rao U, Gertsik L, Poland RE (2004). Effect of short-term treatment with bupropion on EEG sleep: relationship to antidepressant response. *International Journal of Neuropsychopharmacology* 7(3):275-281. PMID: 15122973.
 41. Schepis TS, Rao U (2005). The epidemiology and etiology of adolescent smoking. *Postgraduate Obstetrics & Gynecology* 25(19):1-5.
 42. Rao U, Ott GE, Lin K-M, Gertsik L, Poland RE (2005). Effect of bupropion on nocturnal urinary free cortisol and its association with antidepressant response. *Journal of Psychiatric Research* 39(2):183-190. PMID: 15589567.
 43. Stewart SM, Rao U, Emslie G, Klein D, White P (2005). Depressive symptoms predict hospitalization in adolescents with Type I diabetes. *Pediatrics* 115(5):1315-1319. PMID: 15867041.
 44. Lam TH, Stewart SM, Ho SY, Lai SMK, Mak KH, Chao KV, Rao U, Salili F (2005). Depressive symptoms and smoking among Hong Kong Chinese adolescents. *Addiction* 100(7):1003-1011. PMID: 15955016.
 45. Wong JPS, Stewart SM, Ho SY, Rao U, Lam TH (2005). Exposure to suicide and suicidal behaviors among Hong Kong adolescents. *Social Science and Medicine* 61(3):591-599. PMID: 15899318.
 46. Schepis TS, Rao U (2005). The epidemiology and etiology of adolescent smoking. *Current Opinion in Pediatrics* 17(5):607-612. PMID: 16160535.
 47. Stewart SM, Rao U, White P (2005). Depression and diabetes in children and adolescents. *Current Opinion in Pediatrics* 17(5):626-631. PMID: 16160538.
 48. Rao U (2006). Links between depression and substance abuse in adolescents: neurobiological mechanisms. *American Journal of Preventive Medicine* 31(6 Suppl 1):S161-S174. PMID: 17175411.
 49. Rao U (2006). Development and natural course of pediatric depression: treatment implications. *Clinical Neuropsychiatry: Journal of Treatment Evaluation* 3(3):194-204.
 50. Adinoff B, Rilling LM, Williams MJ, Schreffler E, Schepis TS, Rosvall T, Rao U (2007). Impulsivity, neural deficits and the addictions: the "oops" factor in relapse. *Journal of Addictive Diseases* 26 (Suppl 1):25-39. PMID: PMC 4321793.
 51. Wong JP, Stewart SM, Claasen C, White PW, Rao U, Lam TH (2008). Repeat suicide attempts in Hong Kong community adolescents. *Social Science and Medicine* 66(2):232-241. PMID: 17919796.
 52. Rao U, Chen L-A (2008). Neurobiological and psychosocial processes associated with depressive and substance-related disorders in adolescents. *Current Drug Abuse Reviews* 1(1):68-80. PMID: 19630707.
 53. Schepis TS, Adinoff B, Rao U (2008). Neurobiological processes in adolescent addictive disorders. *The American Journal on Addictions* 17(1):6-23. PMID: PMC2274940.
 54. Schepis TS, Rao U (2008). Smoking cessation for adolescents: a review of pharmacological and psychosocial treatments. *Current Drug Abuse Reviews* 1(2):142-155. PMID: 19630713.

55. Rao U, Hammen C, Ortiz LR, Chen L-A, Poland RE (2008). Effects of early and recent adverse experiences on adrenal response to psychosocial stress in depressed adolescents. *Biological Psychiatry* 64(6):521-526. PMID: PMC2559463.
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Rao U: Adolescent depression: What are the long-term consequences? Grand Rounds, Department of Psychiatry & Biobehavioral Sciences, UCLA Neuropsychiatric Institute, Los Angeles, CA, April 16, 1996.

Rao U: Sleep disorders and their treatment in children and adolescents. Research Presentation, Division of Child and Adolescent Psychiatry, Harbor-UCLA Medical Center, Torrance, CA, July 17, 1996.

Rao U: Pathways to juvenile depression: biopsychosocial models. Grand Rounds, Division of Child and Adolescent Psychiatry, UCLA Neuropsychiatric Institute, Los Angeles, CA, October 9, 1996.

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Rao U: Risk Markers for Depression in Adolescents: Sleep and HPA Changes. Presented at the Second Interim Congress of the World Federation of Sleep Research and Sleep Medicine Societies, New Delhi, India, September 22-26, 2005.

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- Rao U: Childhood adversity: neurobiological and psychological consequences. Combined Grand Rounds for the Departments of Neurology and Psychiatry, UT Southwestern Medical Center, Dallas, TX, October 4, 2006.
- Rao U: Reward Processes in Adolescent Depression. Presented at the Annual Meeting of the Society for Neuroscience, Atlanta, GA, October 13-18, 2006.
- Rao U: Vulnerability for substance use disorders in adolescents. Presented at the 53rd Annual Meeting of the American Academy of Child and Adolescent Psychiatry, San Diego, CA, October 24-29, 2006.
- Moon SS, Rao U: Association between depressive symptoms and child-family relationship and child-school relationship in a diverse sample. World Psychiatric Association (WPA) Regional Meeting. Seoul, Korea, April 2007.
- Rao U: The link between drugs and depression. Presented at the Annual Meeting of the Texas Association of School-Based Health Centers, Austin, TX, February 22-24, 2007.
- Chen L-A, Rao U: Vulnerability for substance use disorders in adolescents. Presented at the 62nd Annual Meeting of the Society of Biological Psychiatry, San Diego, CA, May 17-19, 2007.
- Chen L-A, Rao U: Early adversity, adolescent depression and HPA responsivity to stress. Presented at the 62nd Annual Meeting of the Society of Biological Psychiatry, San Diego, CA, May 17-19, 2007.
- Rao U: Vulnerability for addictive disorders in adolescents. Presented at the International Conference on Psychology in Mental Health, Bangalore, India, July 26-28, 2007.
- Rao U: Links between depression and substance abuse in adolescents. Presented at the Special Seminar Series on Depression and Suicide, University of New South Wales, Sydney, Australia, June 23, 2008.
- Rao U: Interactions between neurobiological and psychosocial factors in the onset and course of psychiatric disorders in youngsters: Adversity and Brain Development. Presented at the Research Round Table Series of Mental Health Connection of Tarrant County, Texas, August 25, 2009.
- Rao U: Course of psychiatric disorders in youngsters: Neurobiological and psychosocial predictors. Presented at the 6th World Psychiatric Association and the Indo-Australian Psychiatric Association Meeting, Gold Coast, Queensland, Australia, October 16-18, 2009.
- Rao U: Childhood adversity: neurobiological and psychosocial consequences. Presented at the 6th World Psychiatric Association and the Indo-Australian Psychiatric Association Meeting, Gold Coast, Queensland, Australia, October 16-18, 2009.
- Rao U: Contribution of HPA activity and environmental stress to vulnerability for smoking. Presented at the 47th National Conference of the Indian Academy of Pediatrics, Hyderabad, Andhra Pradesh, India, January 8-10, 2010.
- Rao U: Mood disorders in children. Presented at the Inaugural of the Indian Global Psychiatric Initiative, Jaipur, Rajasthan, India, January 15-16, 2010.
- Rao U: Hippocampal changes associated with early-life adversity and vulnerability to depression. Presented at the 62nd Annual National Conference of the Indian Psychiatric Society, Jaipur, Rajasthan, India, January 17-20, 2010.
- Rao U: LHPA dysregulation and vulnerability to adolescent depression. Presented at the 57th Annual Meeting of the American Academy of the Child and Adolescent Psychiatry, New York, October 25- 31, 2010.
- Rao U: Adolescent depression: neurobiological and psychosocial predictors. Presented at the Meharry/Vanderbilt Joint Grand Rounds, Nashville, TN, February 24, 2011.
- Rao U: Adolescent depression: neurobiological and psychosocial predictors – Next Steps. Presented at the Mood Disorders Seminar; Department of Psychiatry; Vanderbilt University, Nashville, TN, March 16, 2011.

- Rao U: Reward systems and decision-making in adolescents. Presented at the Vanderbilt University Institute of Imaging Science, Nashville, TN, March 28, 2011.
- Rao U: Developmental trajectories in depression and substance use disorders: biopsychosocial models. Keynote Address at Bi-Annual Meeting of the International Society for Research in Child and Adolescent Psychopathology, Chicago, IL, June 16-18, 2011.
- Rao U: Long-term outcomes of childhood depression. Presented at the 3rd World Congress of Asian Psychiatry, Melbourne, Australia, July 31-August 4, 2011.
- Rao U: Reward systems and decision-making in adolescence. Presented at the 3rd World Congress of Asian Psychiatry, Melbourne, Australia, July 31-August 4, 2011.
- Rao U: Adolescent depression, and sleep and HPA markers. Presented at the Center for Molecular and Behavioral Neuroscience, Rutgers University, Newark, NJ, September 6, 2011.
- Rao U: Links between Depression and Addictive Disorders in adolescents. Presented at the Child and Adolescent Psychiatry Colloquium, University of Chicago, Chicago, IL, September 14, 2011.
- Rao U: Adolescent depression: Neurobiological and psychosocial processes. The Gloria H. Park Memorial Lecture and Grand Rounds, Department of Psychiatry and Behavioral Neuroscience, University of Chicago, Chicago, IL, September 15, 2011.
- Rao U: Stress response in adolescents with childhood maltreatment: moderation by gender and genetic factors. Presented at the International Conference on Environment, Genes, Health and Disease, Bharatiya University, Tamilnadu, India, December 9-11, 2011.
- Rao U: Cognitive-behavioral treatment for smoking cessation in adolescents. Presented at the Second International Conference on Counseling, Psychotherapy and Wellness and the Third Congress of SithCp3, Christ University, Bangalore, Karnataka, India, January 4-6, 2012.
- Rao U: Reward Processes and risk of psychopathology in adolescents. Presented at the 2012 Indian Global Psychiatric Initiative, Kochi, Kerala, India, January 17-18, 2012.
- Rao U: White matter disruptions in healthy adolescents exposed to maltreatment during childhood. Presented at the 64th Annual National Conference of the Indian Psychiatric Society, Kochi, Kerala, India, January 19-22, 2012.
- Rao U: Longitudinal outcomes in child psychiatric disorders: longitudinal course of pediatric depression. Presented at the 64th Annual National Conference of the Indian Psychiatric Society, Kochi, Kerala, India, January 19-22, 2012.
- Rao U, Huang H, Gundapuneedi T: White matter disruption in adolescents with childhood maltreatment history. Presented at the XXXI Annual National Conference of Indian Society of Professional Social Work, Manipal, Karnataka, India, January 3-5, 2013.
- Rao U: Neurobiological markers of risk for adolescent mood disorders: Implications for treatment. Presented at the 65th Annual National Conference of the Indian Psychiatric Society, Bengaluru, Karnataka, India, January 10-13, 2013.
- Rao U, Gorodetsky E, Goldman D: Stress response in adolescents with childhood maltreatment: moderation by gender and genetic factors. Presented at the 65th Annual National Conference of the Indian Psychiatric Society, Bengaluru, Karnataka, India, January 10-13, 2013.
- Rao U: Adolescent depression: Developmental issues. Presented at the 2013 Indian Global Psychiatric Initiative, Bengaluru, Karnataka, India, January 13-14, 2013.
- Rao U, Murry VM: Risk-taking behavior in youth: neurobiology and intervention strategies. Presented at the Annual Meeting of the Association of Psychologists in Academic Health Centers, Nashville, TN, January 31-February 2, 2013.
- Morris MC, Rao U: Risk and resilience in the aftermath of trauma. Presented at the Research Centers in Minority Institutions Translational Research Network (RTRN) Researcher Spotlight Series Webinar, August 14, 2013.

Rao U: Premorbid structural and functional neural markers in adolescents at risk for depression. Presented as part of the symposium "Brain Connectivity in Adolescents with and at Risk for Mood Disorders" at the 60th Annual Meeting of the American Academy of Child and Adolescent Psychiatry, Orlando, FL, October 22-27, 2013.

Morris MC, Rao U: Coping with traumatic stress. Presented at the Meharry Clinical and Translational Research Center (MeTRC) seminar series, Meharry Medical College, Nashville, TN, November 6, 2013.

Rao U: Risky decision-making in adolescents. Presented at the 3rd Annual Regional Meeting of the Tennessee Chapter of the Indo-American Psychiatric Association, Nashville, TN, November 9, 2013.

Rao U: Links between depressive and addictive disorders in adolescents. Presented at the Tennessee State University, Nashville, TN, November 15, 2013.

Morris MC, Rao U: Cortisol reactivity to psychosocial stress: the role of maltreatment and depression status. Presented at the 47th Annual Convention of the Association for Behavioral and Cognitive Therapies, Nashville, TN, November 21-24, 2013.

Rao U: DSM-5 changes in child psychiatric disorders. Presented at the 66th Annual National Conference of the Indian Psychiatric Society, Pune, Maharashtra, India, January 16-19, 2014.

Rao U: Stress-related disorders in females. Presented at the 66th Annual National Conference of the Indian Psychiatric Society, Pune, Maharashtra, India, January 16-19, 2014.

Rao U: Developmental psychopathology of depression. Presented at the Children's Mental Health Services Research Center, and the College of Social Work, the University of Tennessee, Knoxville, TN, February 17, 2014.

Clauss JA, Rao U, Blackford JU: Limbic intrinsic connectivity correlates with cortisol concentration during mild stress. Presented at the Wisconsin Symposium on Emotion, Madison, WI, April 23, 2014.

Rao U: Developmental psychopathology of depression. Presented at the Annual Meeting of the 34th Annual Meeting of the Indo-American Psychiatric Association for receiving the Outstanding Academician Award, New York, NY, May 4, 2014.

Rao U, Morris MM: Cortisol responses to psychosocial stress: The role of childhood maltreatment and depression. Presented at the Annual Meeting of the International Conference of Public Mental Health and Neurosciences, Bangalore, India, December 18-20, 2014.

Rao U: Disruptive mood dysregulation disorder (DMDD): The relevance. Presented at the Presented at the Annual Meeting of the Indian Global Psychiatric Initiative, Hyderabad, India, January 6-7, 2015.

Rao U: Neurocognitive deficits in adolescents at risk for substance abuse. Presented at the 67th Annual National Conference of the Indian Psychiatric Society, Hyderabad, Andhra Pradesh, India, January 8-11, 2015.

Clauss JA, Rao U, Blackford JU: Limbic intrinsic connectivity correlates with cortisol concentration during mild stress. Presented at the 70th Annual Scientific Meeting of the Society of Biological Psychiatry, Toronto, ON, CA, WI, May 14-16, 2015.

POSTER PRESENTATIONS

Rao U: Interaction between neurobiological and psychosocial processes in determining the clinical course of depression in youth. Presented at the First World Congress on Asian Psychiatry, Goa, India, August 2-5, 2007.

Rao U: Links between depression and substance abuse in adolescents. Presented at the University of New South Wales, Sydney, Australia, June 23, 2008.

Rao U, Ryan ND, Birmaher B, Dahl RE, Williamson DE: Depression in adolescents: clinical outcome in early adulthood. 40th Annual Meeting of the American Academy of Child and Adolescent Psychiatry, San Antonio, TX, October 26-31, 1993.

Rao U, Ryan ND, Birmaher B, Dahl RE, Williamson DE: Depression in adolescents: clinical outcome in early adulthood. 147th Annual Meeting of the American Psychiatric Association, Philadelphia, PA, May 21-26, 1994.

- Rao U, Dahl RE, Ryan ND, Birmaher B, Williamson DE, Rao R: Recurrence of unipolar depression in adolescents: psychobiological predictors. 147th Annual Meeting of the American Psychiatric Association, Philadelphia, PA, May 21-26, 1994.
- Rao U, Ryan ND, Birmaher B, Dahl RE, Williamson DE, Mezzich A: Secondary substance abuse in adolescent onset depression. Annual Meeting of Research Society on Alcoholism, Maui, HI, June 18-23, 1994.
- Rao U, Dahl RE, Ryan ND, Birmaher B, Williamson DE, Rao R: Bipolar outcome in adolescent depression: psychobiological predictors. First International Conference on Bipolar Disorder, Pittsburgh, PA, June 23-24, 1994.
- Rao U, Ryan ND, Birmaher B, Dahl RE, Williamson DE, Mezzich A: Secondary substance abuse in adolescent depression. 41st Annual Meeting of the American Academy of Child and Adolescent Psychiatry, New York, NY, October 25-30, 1994.
- Henson MR, Nahum J, Chiu J, Hwang J, Rao U: Stressful life events and depression in adolescence. Poster presented at the 44th Annual Meeting of the American Academy of child and Adolescent Psychiatry, October 14-19, 1997.
- Shinde A, Rao U, McGinty D, McCracken J, Poland R (1998): Sleep EEG changes in adult rats exposed to prenatal stress. 12th Annual Meeting of Associated Professional Sleep Societies, New Orleans, LA, June 18-23, 1998.
- Torreblanca J, Olaes K, Chiu J, Poland R, Hammen C, Rao U: Life stress and nocturnal urinary free cortisol in adolescent depression. 45th Annual Meeting of the American Academy of Child and Adolescent Psychiatry, Anaheim, CA, October 27-November 1, 1998.
- Rao U, Lutchmansingh P, Poland RE: Age-related effects of scopolamine on REM sleep regulation. 46th Annual Meeting of the American Academy of Child and Adolescent Psychiatry, Chicago, IL, October 19-24, 1999.
- Rao U, Lutchmansingh P, Poland RE: The contribution of development to buspirone effects on REM sleep regulation. 46th Annual Meeting of the American Academy of Child and Adolescent Psychiatry, Chicago, IL, October 19-24, 1999.
- Rao U, Poland RE: Stability of EEG sleep and HPA measures in depressed and non-depressed adolescents. Presented at the 41st Annual Meeting of the American College of Neuropsychopharmacology, San Juan, Puerto Rico, December 8-12, 2002.
- Rao U, Hammen C, Poland RE: Social factors and the psychobiology of adolescent depression: relations between life stress and HPA activity. Presented at the 41st Annual Meeting of the American College of Neuropsychopharmacology, San Juan, Puerto Rico, December 8-12, 2002.
- Poland RE, Ott GE, Rao U: Effect of bupropion on EEG sleep and HPA activity: relationship to antidepressant response. Presented at the 41st Annual Meeting of the American College of Neuropsychopharmacology, San Juan, Puerto Rico, December 8-12, 2002.
- Rao U, Poland RE: Stability of EEG sleep and HPA measures in depressed and non-depressed adolescents. Presented at the 11th Scientific Meeting of the International Society for Research in Child and Adolescent Psychopathology, Sydney, Australia, June 25-29, 2003.
- Rao U, Hammen C, Poland RE: Social factors and the psychobiology of adolescent depression: relations between life stress and HPA activity. Presented at the 11th Scientific Meeting of the International Society for Research in Child and Adolescent Psychopathology, Sydney, Australia, June 25-29, 2003.
- Rao U, Hammen C, Poland RE: Relationships among depression, cigarette smoking and HPA activity in adolescents. Presented at the 11th Scientific Meeting of the International Society for Research in Child and Adolescent Psychopathology, Sydney, Australia, June 25-29, 2003.
- Rao U, Hammen C, Emslie GJ, Poland RE: HPA response to psychosocial stress in depressed and non-depressed adolescents. Presented at the 11th Scientific Meeting of the International Society for Research in Child and Adolescent Psychopathology, Sydney, Australia, June 25-29, 2003.
- Rao U, Poland RE: Stability of EEG sleep and HPA measures in depressed and non-depressed adolescents. Presented at the 50th Annual Meeting of the American Academy of Child and Adolescent Psychiatry, Miami Beach, FL, October 14-19, 2003.
- Rao U, Hammen C, Poland RE: Social factors and the psychobiology of adolescent depression: relations between life stress and HPA activity. Presented at the 50th Annual Meeting of the American Academy of Child and Adolescent Psychiatry, Miami

Beach, FL, October 14-19, 2003.

Rao U, Hammen C, Poland RE: Relationships among depression, cigarette smoking and HPA activity in adolescents. Presented at the 50th Annual Meeting of the American Academy of Child and Adolescent Psychiatry, Miami Beach, FL, October 14-19, 2003.

Rao U, Hammen C, Emslie GJ, Poland RE: HPA response to psychosocial stress in depressed and non-depressed adolescents. Presented at the 50th Annual Meeting of the American Academy of Child and Adolescent Psychiatry, Miami Beach, FL, October 14-19, 2003.

Parker A, Ernst M, Rao, U: Relationship between decision-making and substance abuse in adolescents. Presented at the 51st Annual Meeting of the American Academy of Child and Adolescent Psychiatry, Washington, DC, October 19-24, 2004.

Thomas BP, Tamminga CA, Ernst M, Rao U: Neuronal risk markers for substance abuse in youth. Presented at the 43rd Annual Meeting of the American College of Neuropsychopharmacology, San Juan, Puerto Rico, December 12-16, 2004.

Thomas BP, Tamminga CA, Ernst M, Rao U: Neuronal substrates of risk-taking in depressed and healthy adolescents. Presented at the Annual Meeting of Human Brain Mapping, Toronto, Ontario, Canada, June 12-16, 2005.

Wong JPS, Stewart SM, Lam TH, Ho SY, Rao U: Predictive factors for future suicide attempts in Chinese adolescents. Presented at the 12th Scientific Meeting of the International Society for Research in Child and Adolescent Psychopathology, New York, NY, June 22-26, 2005.

Stewart SM, Rao U, Emslie G, Klein D, White P: Depressive symptoms predict hospitalization in adolescents with Type I diabetes. Presented at the 12th Scientific Meeting of the International Society for Research in Child and Adolescent Psychopathology, New York, NY, June 22-26, 2005.

Stewart SM, Lam TH, Ho SY, Rao U: Depressive symptoms and smoking among Hong Kong Chinese adolescents. Presented at the 12th Scientific Meeting of the International Society for Research in Child and Adolescent Psychopathology, New York, NY, June 22-26, 2005.

Bidesi AS, Mehta SQ, Ernst M, Tamminga C, Rao U: Neuronal circuits involved in motivational processes: alterations in adolescent depression. Presented at the 52nd Annual Meeting of the American Academy of Child and Adolescent Psychiatry, Toronto, ON, Canada, October 18-23, 2005.

Rivers JJ, Rao U: Relationship between chronic stress and HPA responsivity in adolescent depression. Presented at the 52nd Annual Meeting of the American Academy of Child and Adolescent Psychiatry, Toronto, ON, Canada, October 18-23, 2005.

Rao U, Bidesi A, Ernst M, Tamminga CA: Adolescent depression and neuronal circuits associated with reward processes. Presented at the 44th Annual Meeting of the American College of Neuropsychopharmacology, Kona, HI, December 11-15, 2005.

Schepis TS, Warren KA, Rao U: The modified brief office intervention for smoking cessation: preliminary data. Presented at the 37th Annual Sigma Xi Research Forum, Dallas, TX, November 7-10, 2005.

Schepis TS, Warren KA, Rao U: Evaluation of a cognitive-behavioral smoking cessation treatment for adolescents and young adults. Presented at the 12th Annual Meeting of the Society for Research in Nicotine and Tobacco, Orlando, FL, February 15-18, 2006.

Rao U: Association between stress and HPA responsivity in adolescent depression. Presented at the 61st Annual Meeting of the Society for Biological Psychiatry, Toronto, ON, Canada, May 18-20, 2006.

Noffsinger MA, Ortiz LR, Stavinoha P, Perez E, Rao U: Parent- and self-reports of executive function in adolescents: relationship between the BRIEF and objective measures. Presented at the North American Brain Injury Society Conference, Miami, FL, September 14-16, 2006.

Ortiz LR, Rao U: HPA responsivity in adolescent depression: effect of early trauma. Presented at the 53rd Annual Meeting of the American Academy of Child and Adolescent Psychiatry, San Diego, CA, October 24-29, 2006.

Ortiz LR, Noffsinger MA, Stavinoha P, Perez E, Rao U: H Executive functioning in depressed youth: performance on the WCST, Trail-Making Test, and Woodcock-Johnson Executive Processes Cluster. Presented at the 53rd Annual Meeting of the American Academy of Child and Adolescent Psychiatry, San Diego, CA, October 24-29, 2006.

Warren KA, Noffsinger MA, Schepis TS, Patten CA, Rao U: Effective smoking cessation treatment: using a cognitive-behavioral intervention with adolescent and young adult smokers. Presented at the Annual Meeting of the Association for Behavioral and Cognitive Therapies, Chicago, IL, November 16-19, 2006.

Noffsinger MA, Warren KA, Schepis TS, Patten CA, Rao U: Cognitive-behavioral intervention for young smokers: predictors of response to treatment. Presented at the Annual Meeting of the Association for Behavioral and Cognitive Therapies, Chicago, IL, November 16-19, 2006.

Rao U, Hammen C, London ED, Poland RE: Vulnerability for cigarette smoking in adolescents: a diathesis-stress model. Presented at the 13th Annual Meeting of the Society for Research on Nicotine and Tobacco, Austin, TX, February 21-24, 2007.

Sidhartha T, Ernst M, Rao U: Adolescent decision-making under conditions of probabilistic monetary rewards. Presented at the 54rd Annual Meeting of the American Academy of Child and Adolescent Psychiatry, Boston, MA, October 23-28, 2007.

Huang D, Bidesi A, Zheng S, Rao U: Hippocampal changes associated with adolescent depression. Presented at the 93rd Annual Congress of the American College of Surgeons, New Orleans, LA, October 7-11, 2007.

Rao U, Huang D, Zheng S, Bidesi A: Effect of early adversity on hippocampal volume in depressed adolescents. Presented at the 46th Annual Meeting of the American College of Neuropsychopharmacology, Boca Raton, FL, December 9-13, 2007.

Sidhartha T, Ernst M, Rao U: Adolescent decision-making under conditions of probabilistic monetary rewards. Presented at the 46th Annual Meeting of the American College of Neuropsychopharmacology, Boca Raton, FL, December 9-13, 2007.

Huang D, Zheng S, Bidesi A, Rao U: Hippocampal changes associated with adolescent depression. Presented at the 46th Annual Medical Student Research Forum, UT Southwestern Medical Center, Dallas, TX, January 22, 2008.

Sidhartha T, Ernst M, Rao U: Preference for risky rewards in depressed adolescent smokers. Presented at the 14th Annual Meeting of the Society for Research on Nicotine and Tobacco, Portland, OR, February 27-March 1, 2008.

Gibbs T, Nichols E, Zheng S, Chen L-A, Rao U: Relationship between temperament, stress response and depression in youth. Presented at the 63rd Annual Meeting of the Society for Biological Psychiatry, Washington, DC, May 1-3, 2008.

Kuhn-McKearin M, Nichols E, Zheng S, Chen L-A, Rao U: Adaptive stress response in depressed adolescents with continuous exposure to stress. Presented at the 63rd Annual Meeting of the Society for Biological Psychiatry, Washington, DC, May 1-3, 2008.

Rao U, Bidesi A, Ernst M: Neural substrates underlying decision-making in adolescents. Presented at the 14th Annual Meeting of the Organization for Human Brain Mapping, Melbourne, Australia, June 15-19, 2008.

Rao U, Hammen CL, Poland RE: Markers of risk for development of depression in adolescents: sleep and HPA measures. Presented at the 47th Annual Meeting of the American College of Neuropsychopharmacology, Scottsdale, AZ, December 7-11, 2008.

Bidesi A, Chen L-A, Ernst M, Rao U: Neural substrates underlying decision-Making in adolescents. Presented at the 47th Annual Meeting of the American College of Neuropsychopharmacology, Scottsdale, AZ, December 7-11, 2008.

Huang H, Bidesi A, Rao U: White matter structural changes in high-risk major depressive disorder youths detected by diffusion tensor images. Presented at the 17th Annual Meeting of the International Society for Magnetic Resonance in Medicine, Honolulu, HI, April 18-24, 2009.

Rao U, Hammen CL, Poland RE: Longitudinal course of adolescent depression: Neuroendocrine and psychosocial predictors. Presented at the 56th Annual Meeting of the American Academy of the Child and Adolescent Psychiatry, Honolulu, HI, October 26- November 2, 2009.

Taiym W, Olvera RL, Ramage AE, Glahn DC, Rao U, Williamson DE: Gene-stress-brain contributions to symptoms of depression in adolescents: the combined roles of the CRHR1 gene, stress, and hippocampus. Presented at the 57th Annual

Meeting of the American Academy of the Child and Adolescent Psychiatry, New York, October 25- 31, 2010.

Kozel A, Rao U, Lu H, Nakonezny P, Grannemann B, McGregor T, Croarkin PE, Mapes KS, Tamminga C, Trivedi MH: Connectivity of brain structures correlates with treatment outcome in Major Depressive Disorder. Presented at the 49th Annual Meeting of the American College of Neuropsychopharmacology, Miami Beach, FL, December 5-9, 2010.

Huang H, Fan X, Rao U: Similar traits of white matter disruption for major depression disorder (MDD) and high risk MDD of adolescents. Presented at the 19th Annual Meeting of the International Society for Magnetic Resonance in Medicine, Montreal, Quebec, May 7-13, 2011.

Rao U, Huang H, Gundapuneedi T: White Matter Disruption in Adolescents with Childhood Maltreatment History. Presented at the 50th Annual Meeting of the American College of Neuropsychopharmacology, Waikola, HI, December 4-8, 2011.

Kozel FA, Liu P, Rao U, Mapes KS, Marsh P, de Almeida JRC, Phillips ML, Croarkin PE, Tamminga CA, Trivedi MH, Lu H: Can ASL Measures of Anterior Cingulate Cortex Perfusion Predict Treatment Outcome in Major Depressive Disorder? Presented at the 50th Annual Meeting of the American College of Neuropsychopharmacology, Waikola, HI, December 4-8, 2011.

Huang H, Gundapuneedi T, Rao U: White matter disruption of healthy adolescents. Multimedia presentation at the 20th Annual Meeting of the International Society for Magnetic Resonance in Medicine, Melbourne, Australia, May 5-11, 2012.

Schramm P, Poland RE, Rao U: An electrocardiogram-based method to determine the effect of bupropion on sleep quality in patients with major depression. Presented at the 26th Annual Meeting of the Associated Professional Sleep Societies, LLC, Boston, MA, June 9-13, 2012.

Rao U, Gorodetsky E, Goldman D: Stress response in adolescents with childhood maltreatment: moderation by gender and genetic factors. Presented at the 51st Annual Meeting of the American College of Neuropsychopharmacology, Hollywood, FL, December 2-6, 2012.

Ouyang M, Rao U, Gundapuneedi T, Huang H: Integration of functional and structural connectivity from rs-fMRI and DTI to study healthy maltreated adolescents. Multimedia presentation at the 21st Annual Meeting of the International Society for Magnetic Resonance in Medicine, Salt Lake City, UT, April 20-26, 2013.

Rao U, Morris MC: Cortisol responses to psychosocial stress during depression and remission. Presented at the 52nd Annual Meeting of the American College of Neuropsychopharmacology, Hollywood, FL, December 8-12, 2013.

Hellman N, Morris MC, Rao U, Garber J: Psychological and cortisol responses to stress in young adults at varied risk for depression. Presented at the 60th Annual Meeting of the Southeastern Psychological Association, Nashville, TN, March 5-8, 2014.

Morris MC, Walker L, Bruehl S, Hellman N, Sherman AL, Hunt H, Rao U: Race effects on temporal summation to heat pain in youth. Presented at the National Institute on Minority Health and Health Disparities Grantees' Conference, National Harbor, MD, December 1-3, 2014.

Morris MC, Hellman N, Rao U: Risk for posttraumatic stress disorder in the early aftermath of interpersonal violence. Presented at the 53rd Annual Meeting of the American College of Neuropsychopharmacology, Phoenix, AZ, December 7-11, 2014.

Benningfield MM, Theiss J, Blackford JU, Rao U: Neural correlates of inhibitory control in youth at risk for depression. Presented at the 53rd Annual Meeting of the American College of Neuropsychopharmacology, Phoenix, AZ, December 7-11, 2014.

Hellman N, Morris MC, Rao U: Psychobiological risk factors for PTSD following exposure to interpersonal violence. Presented at the Annual Conference of the Anxiety and Depression Association of America, Miami, FL, April 9-11, 2015.

Hellman N, Morris MC, Walker L, Bruehl S, Sherman A, Rao U: Race effects on conditioned pain modulation in youth. Presented at the 27th Annual Convention of Association for Psychological Science, New York, NY, May 21-24, 2015.

SERVICE1. University and Medical School

- 1992 - 1995: Utilization Review Committee, Western Psychiatric Institute and Clinic of Presbyterian University Hospital, Pittsburgh, PA.
- 1992 - 1995: Faculty Mentorship Program for Child and Adolescent Psychiatry Residents, University of Pittsburgh School of Medicine, Pittsburgh, PA.
- 1994 - 1995: Clinical Services Committee, Western Psychiatric Institute and Clinic of Presbyterian University Hospital, Pittsburgh, PA.
- 1995 - 1998: Child & Adolescent Psychiatry Training Program: Selection Committee, UCLA School of Medicine, Los Angeles, CA.
- 1995 - 2003: Faculty Mentorship Program for the Child and Adolescent Psychiatry Training Program, UCLA School of Medicine, Los Angeles, CA.
- 1995 - 2003: Pharmacy and Therapeutics Committee, UCLA Neuropsychiatric Institute and Hospital, Los Angeles, CA.
- 1995 - 2003: UCLA Student Research Program, Los Angeles, CA.
- 1996 - 2003: UCLA Neuroscience Training Program, Los Angeles, CA.
- 1998 - 2003: UCLA Training Program in Psychology, Los Angeles, CA
- 2002 - 2003: Postdoctoral Research Training in Psychobiological Sciences, UCLA, Los Angeles, CA.
- 2002 - 2003: Advisory Board Member, General Clinical Research Center, David Geffen School of Medicine at UCLA, Los Angeles, CA.
- 2003 - 2011: Appointments and Promotions Committee, UT Southwestern Medical Center, Dallas, TX.
- 2003 - 2011: Faculty Mentorship Program, UT Southwestern Medical Center, Dallas, TX.
- 2005 - 2011: Advisory Board Member, Clinical and Translational Research Center, UT Southwestern Medical Center, Dallas, TX.
- 2006 - 2008: Institutional Review Board, UT Southwestern Medical Center, Dallas, TX.
- 2007 - 2011: Medical Student Selection Committee, UT Southwestern Medical Center, Dallas, TX.
- 2011 - 2014: Executive Internal Advisory Committee for Research, Meharry Medical College, Nashville, TN.
- 2011 - 2014: Advisory Committee, Meharry Clinical and Translational Research Center, Meharry Medical College, Nashville, TN.
- 2011 - 2012: Advisory Committee, Diversity-promoting Institutions for Drug Abuse Research Program, Meharry Medical College, Nashville, TN.
- 2011 - 2014: Selection Committee, Annual Student Research Day, Meharry Medical College, Nashville, TN.
- 2011 - 2014: Advisory Committee, Center for Cardiovascular Health Disparities Research at Meharry Medical College, Nashville, TN.
- 2011 - 2014: Appointment, Promotion and Tenure Committee, Meharry Medical College, Nashville, TN.

- 2011 - 2014: Co-leader, Meharry Clinical and Translational Research Center (MeTRC) seminar series, Meharry Medical College, Nashville, TN.
- 2012 - 2014: Ethics and Conflicts Committee, Meharry Medical College, Nashville, TN.
- 2014 - Present: Retention, Promotion and Tenure Committee, College of Social Work, University of Tennessee, Knoxville, TN.

2. Professional and Scientific Organizations

- 1995 - 2000: Member, Program Committee, American Academy of Child and Adolescent Psychiatry.
- 1995 - 1996: Member, New Research Subcommittee, American Academy of Child and Adolescent Psychiatry.
- 1996 - 2000: Chair, New Research Subcommittee, American Academy of Child and Adolescent Psychiatry.
- 2001 - 2006: Member, Work Group on Research, American Academy of Child and Adolescent Psychiatry.
- 1996 - Present: Ad Hoc Reviewer, Canadian Psychiatric Research Foundation.
- 2000 - Present: Ad Hoc Reviewer, Nova Scotia Health Research Foundation.
- 2000 - Present: Examiner, American Board of Psychiatry and Neurology, Inc.
- 2001- Present: Member, Mentor for the Early Investigators' Group, American Academy of Child and Adolescent Psychiatry.
- 2002 - Present: Mentor, Early Career Research Mentorship Program, Division of Research, American Psychiatric Association.
- 2002 - 2004: Ad-Hoc Reviewer, Center for Scientific Review, National Institutes of Health.
- 2003 - Present: Reviewer for Special Emphasis Panels, National Institutes of Health.
- 2003 - Present: Mentor for Travel Awardees, American College of Neuropsychopharmacology.
- 2004 - 2006: Education and Training Committee, American College of Neuropsychopharmacology.
- 2004 - 2009: Member, Biobehavioral Mechanisms of Emotion, Stress and Health Study Section, Center for Scientific Review, National Institutes of Health.
- 2005 - 2012: Member, Program Committee, American Academy of Child and Adolescent Psychiatry.
- 2006 - 2012: Annual Meeting Section Editor, AACAP News, American Academy of Child and Adolescent Psychiatry.
- 2007- 2009: Chair, Biobehavioral Mechanisms of Emotion, Stress and Health Study Section, Center for Scientific Review, National Institutes of Health.
- 2008 - 2011: Member, A.E. Bennett Research Award Selection Committee, Society of Biological Psychiatry
- 2008 - 2011: Member, Mental Health Connection Research Council of Tarrant County, Fort Worth, TX.
- 2009 - 2012: Member, Program Planning Committee, Society of Biological Psychiatry.
- 2011 - Present: Mentor/Mentee Program, Society of Biological Psychiatry.

- 2011 - 2017: Member, Child Psychopathology and Developmental Disabilities Study Section, Center for Scientific Review, National Institutes of Health.
- 2012 - 2013: Member, Council on Children, Adolescents and Their Families, American Psychiatric Association.
- 2013 - Present: Editor, AACAP News, American Academy of Child and Adolescent Psychiatry.
- 2013 - Present: Member, Program Committee, American College of Neuropsychopharmacology.
- 2014 - Present: Member, Selection Committee for the Outstanding Academician Award, Indo-American Psychiatric Association.
- 2014 - Present: Member, Women's Senior Leadership group, Society of Biological Psychiatry.
- 2015 - Present: Member, Selection Committee for Dr. V. Sagar Sethi Early Career Psychiatrist Award, Indo-American Psychiatric Association.

3. Refereed Journals

- 1994 - Present: Reviewer, Journal of the American Academy of Child and Adolescent Psychiatry.
- 1996 - 2001: Editorial Board Member, Journal of the American Academy of Child and Adolescent Psychiatry.
- 1996 - Present: Reviewer, Psychosomatic Medicine.
- 1998 - Present: Editorial Board Member, Journal of Child and Adolescent Psychopharmacology.
- 2000 - Present: Reviewer, Biological Psychiatry.
- 2000 - Present: Reviewer, International Journal of Neuropsychopharmacology.
- 2001 - Present: Reviewer, Journal of Abnormal Psychology.
- 2002 - Present: Reviewer, American Journal of Psychiatry.
- 2003 - Present: Reviewer, Archives of General Psychiatry.
- 2003 - Present: Reviewer, Pediatrics.
- 2006 - Present: Reviewer, Journal of Child Psychology & Psychiatry.
- 2006 - Present: Reviewer, Bipolar Disorder.
- 2006 - Present: Reviewer, Neuropsychopharmacology
- 2007 - Present: Reviewer, Health Psychology.
- 2007 - Present: Reviewer, American Psychologist.
- 2007 - Present: Editorial Board Member, Clinical Medicine: Psychiatry.
- 2008 - Present: Editorial Board Member, Asian Journal of Psychiatry.
- 2009 - Present: Reviewer, Journal of Neuroendocrinology.

2009 - Present: Reviewer, Psychiatry Research.

2012 - Present: Editorial Board Member, American Journal of Drug and Alcohol Abuse.

2014 - Present: Academic Editor, PLOS One.

2014 - Present: Editorial Board Member, Austin Journal of Sleep Disorders

MEMBERSHIP IN
PROFESSIONAL AND SCIENTIFIC ORGANIZATIONS

<u>Organization</u>	<u>Year</u>
American Medical Association	1985 - 1988
American Psychiatric Association, Member	1986 - 2012
American Psychiatric Association, Fellow	2012 - Present
American Academy of Child & Adolescent Psychiatry, Member	1988 - 1998
American Academy of Child & Adolescent Psychiatry, Distinguished Fellow	1998 - Present
Child and Adolescent Depression Consortium Group	1989 - Present
Society for Child Psychology & Psychiatry	1991 - 1992
International Society for Research in Child & Adolescent Psychopathology	1996 - Present
Society of Biological Psychiatry	1996 - Present
Child & Adolescent Psychosocial Intervention Research Consortium	1996 - Present
Sleep Research Society	1998 - Present
Karnataka State Medical and Dental Association	2000 - Present
American College of Neuropsychopharmacology	2003 - 2004
American College of Neuropsychopharmacology, Fellow	2015 - Present
New York Academy of Sciences	2003 - Present
Society for Neuroscience	2004 - Present
Society for Research on Nicotine and Tobacco	2004 - Present
The College on Problems of Drug Dependence	2005 - Present
Society for Research in Child Development	2005 - Present
The Organization for Human Brain Mapping	2006 - Present
The Indian Global Psychiatric Initiative	2010 - Present
Indo-American Psychiatric Association	2011 - Present

Sarvasumana Association

2014 - Present