

CURRICULUM VITAE

Ned H. Kalin, M.D.
Hedberg Professor
Chair, Department of Psychiatry
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Education

- 1972 BS with Distinction, Pre-Medicine, Pennsylvania State University, State College, PA
- 1976 MD, Jefferson Medical College, Philadelphia, PA

Residency and Fellowships

- 1979 Psychiatry Residency, University of Wisconsin, Madison, WI
- 1981 Research Fellow, Neuropsychopharmacology, National Institute of Mental Health, Bethesda, MD

Licensure and Certification

- 1977 Diplomat, National Board of Medical Examiners, Medical License, Wisconsin
- 1981 American Board of Psychiatry and Neurology

Current Position

Hedberg Professor and Chairman, Department of Psychiatry, University of Wisconsin School of Medicine and Public Health, Madison WI, United States

Professor, Department of Psychology, University of Wisconsin School of Medicine and Public Health, Madison WI, United States

Director, HealthEmotions Research Institute, University of Wisconsin School of Medicine and Public Health, Madison WI, United States

Director, Lane Neuroimaging Laboratory, University of Wisconsin School of Medicine and Public Health, Madison WI, United States

Principal Investigator, Conte Adolescence Center, University of Wisconsin, Madison, WI, United States

Affiliate Scientist, Wisconsin Regional Primate Center and Harlow Primate Laboratory, University of Wisconsin, Madison WI, United States

Positions Held

- 1979 - 1981 Staff Psychiatrist, (Surgeon Lt-04) Clinical Neuropharmacology Branch, National Institute of Mental Health, Bethesda, MD
- 1981 - 1983 Assistant Professor of Psychiatry, University of Wisconsin School of Medicine and Public Health, Madison WI, United States
- 1984 - 1986 Associate Professor of Psychiatry, University of Wisconsin School of Medicine and Public Health, Madison WI, United States
- 1986 - present Hedberg Professor of Psychiatry, University of Wisconsin School of Medicine and Public Health, Madison WI, United States

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| 1987 - 1991 | Vice Chairman, Department of Psychiatry, University of Wisconsin School of Medicine and Public Health, Madison WI, United States |
| 1990 - 1991 | Chief of Psychiatry Service, William S. Middleton VA Hospital, Madison WI, United States |
| 1991 - present | Chairman, Department of Psychiatry, University of Wisconsin School of Medicine and Public Health, Madison WI, United States |
| 1995 - present | Director, HealthEmotions Research Institute, University of Wisconsin School of Medicine and Public Health, Madison WI, United States |
| 2008 - present | Director, Lane Neuroimaging Laboratory, University of Wisconsin University of Wisconsin School of Medicine and Public Health, Madison WI, United States |
| 2001 – 2013 | Chief Executive Officer and Founder, Promoter Neurosciences, LLC, Madison, Wisconsin |

Teaching Activities

- Diagnostic Intake Supervision
- Resident Psychotherapy Supervision
- Resident Research Supervision and Consultation
- First-Year Medical Student Small Group Leader
- Second-Year Medical Student Small Group Leader
- Resident Seminar Teaching: Affective Disorders and Developmental Psychobiology
- Seminar instructor for Residents and Faculty: Advanced Topics in Neuroscience
- Lecture Series 1st Year Medical Students: Neurobiological Basis of Emotion & Behavior
- Integrated Neurosciences Lecture - Anxiety: Pathophysiology, Clinical Presentation & Treatment
- Lecture, Zoology-619, Biology of the Mind
- Advisor to numerous residents, post-doctoral fellows, medical students and Ph.D. candidates in Psychology, Pharmacology and Neuroscience
- Biweekly case review with faculty and providers
- Department of Psychiatry Inpatient Case Conference Series

Current Mentoring

Ashton Barber, Pre-doctoral

Rachel Puralewski, Post-doctoral

National and International Societies

- National Advisory Mental Health Council through September 2007
- International Society of Psychoneuroendocrinology
- American College of Psychiatrists

- American College of Neuropsychopharmacology
- Society for Neuroscience
- International Society for Research in Aggression, Fellow
- Society of Biological Psychiatry
- American Psychiatric Association
- American Association of Chairs of Departments of Psychiatry
- State Medical Society of Wisconsin
- American Association for the Advancement of Science
- Anxiety and Depression Association of America
- American Medical Association
- International College of Neuropsychopharmacology
- National Academy of Medicine

Honors and Recognitions

1985	A.E. Bennett Award for Basic Research, Society of Biological Psychiatry
1986 – 1990	Member, Study Section: Neuroscience Research Review Committee, Cellular Neurobiology and Psychopharmacology Subcommittee, National Institute of Mental Health
1989 – present	A.E. Bennett Award Selection Committee, Society of Biological Psychiatry
1992 – 2018	Co-Editor-in-Chief, Psychoneuroendocrinology
1992 – 2008	Curt P. Richter Award Selection Committee, International Society of Psychoneuroendocrinology
1992 – 2008	Member Editorial Board, Depression
1993 – 2008	Member Editorial Board, Anxiety
1992 – 1993	Wisconsin/Hilldale Undergraduate/Faculty Research Award, University of Wisconsin
1994	University of Wisconsin Media Award
1995 – present	Hedberg Professor of Mind and Health, University of Wisconsin School of Medicine and Public Health, Department of Psychiatry
1995 – 2001	Scientific Advisory Board, National Center for Post-Traumatic Stress Disorder
1995 – present	Founder and Director, HealthEmotions Research Institute, University of Wisconsin
1996 – 1998	Member, Program Committee, Society for Neuroscience
1996	Distinguished Alumni of the Year, Jefferson Medical College, Department of Psychiatry
1996	Scientific Advisory Board, National Depressive and Manic Depressive Association
1997 – 1999	Member Editorial Board, Neuropsychopharmacology
2001	Fellow, American College of Psychiatrists
2001	Fellow, American College of Neuropsychopharmacology
2001	Chair, Program Committee, American College of Neuropsychopharmacology

2002	Editorial Board, Neuropsychopharmacology
2002	Wisconsin NAMI Research Award
2003 – 2007	Member, National Advisory Mental Health Council, National Institute of Health
2005	Chair, Program Committee, Society of Biological Psychiatry
2005	Edward Strecker Award, University of Pennsylvania
2005 – 2008	President, International Society of Psychoneuroendocrinology
2005 – 2007	Field Editor, Neuropsychopharmacology
2007	American College of Psychiatrists Award for Research in Mood Disorders
2007	Gerald Klerman Senior Investigator Award, Depression and Bipolar Support Alliance
2007	Advisory Board, International Journal of Sleep and Wakefulness
2008 – present	Director, Lane Neuroimaging Laboratory, University of Wisconsin School of Medicine and Public Health
2009 – 2010	Finance and Budget Committee, American Psychiatric Association
2010	Harold Lawn Memorial Lecture, University of Minnesota
2012	Distinguished Psychiatrist Lecturer, American Psychiatric Association
2013 – present	Fellow, American Association for the Advancement of Science
2012 – 2016	Scientific Council, Anxiety and Depression Association of America
2013 – 2015	Executive Council, Society of Biological Psychiatry
2014 – 2015	President, Society of Biological Psychiatry
2015 – 2020	Councilor, Society of Biological Psychiatry
2015	Anna-Monika Prize, Anna-Monika Foundation, European College of Neuropsychopharmacology
2015 – 2017	Mentor, American Psychiatric Association, Junior Investigators Research Colloquium
2015 – present	Council on Research, American Psychiatric Association
2015 – present	Board of Scientific Advisors, Pritzker Neuropsychiatric Disorders Research Consortium
2015 – present	Member, National Academy of Medicine (formerly known as Institute of Medicine)
2015 – present	Distinguished Fellow of the American Psychiatric Association
2016	Editorial Committee, Biological Psychiatry: Cognitive Neuroscience and Neuroimaging
2016 – present	Editorial Board, Personalized Medicine in Psychiatry
2016 – present	Brain & Behavioral Research Foundation, Scientific Council Member
2016	Chair Award, 9th Annual Chair Summit
2016	Charles L. Ravaris, MD Memorial Lecture, Dartmouth-Hitchcock Medical Center
2017	Honorary Degree of the Maimonides University, Buenos Aires, Argentina
2017 – present	Distinguished Life Fellow of the American Psychiatric Association
2017 – 2020	Editorial Board, Journal of Psychiatric Research

2017 – 2018	Member, Board of Trustees Work Group to Review the APA Relationship to Additional Funders, American Psychiatric Association
2018	George Thompson Award, Society of Biological Psychiatry
2018 – present	Fellow Emeritus of the American College of Neuropsychopharmacology
2018	Harold Visotsky, MD Memorial Lecture, Northwestern University
2019 – present	Editor in Chief, American Journal of Psychiatry
2019 – present	Accreditation Council for Continuing Medical Education Clinical Content Review Committee
2019 – present	International Advisory Board, Canadian Journal of Psychiatry
2019	Chair, 2019 Conference Committee, Anxiety and Depression Association of America
2019 – 2023	American Foundation for Suicide Prevention, Scientific Council
2020 – present	Advisory Board, Journal of Psychiatric Research
2020	C. Charles Burlingame Award, Institute of Living, Division of Hartford Hospital
2021	Bruce McEwen Lifetime Achievement Award of the International Society of Psychoneuroendocrinology
2022	American Psychiatric Association 2022 Award for Research in Psychiatry
2023 – present	Scientific Advisory Board, Galen Mental Health

RESEARCH ACTIVITIES

Research Focus

- Neurodevelopmental underpinnings of the risk to develop anxiety and depressive disorders
- Translational approaches to understand genetic and molecular mechanisms underlying early life anxious temperament
- Defining the altered neural circuitry mediating childhood anxiety disorders and its heterogeneity
- Using nonhuman primate models to explore novel neurally informed treatments for childhood anxiety disorders

Current Funding

Principal Investigator: A translational approach for identifying factors and mechanisms underlying pathological anxiety in preadolescent girls. R01MH132671, National Institute of Mental Health, \$3,836,628 (6/21/23-4/30/28)

Principal Investigator: Brain Mechanisms Mediating Genetic Risk for Anxiety and Depression. R01MH081884, National Institute of Mental Health, \$3,873,084 (6/15/23 – 4/30/28)

Principal Investigator: Development and Regulation of Emotion in Primates. R01MH046729, National Institute of Mental Health, \$3,754,111 (4/1/22-3/31/27)

Principal Investigator: Studies to understand the pathophysiology of childhood anxiety disorders, U01MH112913, National Institute of Mental Health, \$3,420,084 (9/1/18 – 5/31/24)

Past Funding

Principal Investigator: Brain Mechanisms Mediating Genetic Risk for Anxiety and Depression. R01MH081884, National Institute of Mental Health, \$3,652,551 (2018 - 2023)

Principal Investigator: Cross-species circuit-based treatment development for anxiety, R01MH046729-26S1, National Institute of Mental Health, \$365,792 (2020 -2023)

Principal Investigator: Brain Mechanisms Mediating Genetic Risk for Anxiety and Depression Administrative Supplement, Irritability and Aggression in Clinically Impaired Youth and Rhesus Monkeys R01MH081884-10S1 National Institute of Mental Health, \$364,384 (2018 - 2021)

Principal Investigator: Extreme Anxiety in Females: The Role of the Bed Nucleus of the Stria Terminalis (BST) During the Transition to Adolescence in Human and Nonhuman Primates. R01MH107563, National Institute of Mental Health, \$3,487,141 (2015 - 2021)

Subproject on a Silvio O. Conte Center for Interdisciplinary Research on Early Neurodevelopment Origins of Anxiety: Neural Mechanisms Mediating Adversity's Impact on the Risk for Developing Anxiety. P50 MH100031, National Institute of Mental Health. Estimated total 5-year cost: \$2,533,702 (2013 - 2019)

Principal Investigator: Brain Mechanisms Underlying Childhood Generalized Anxiety Disorder. R21MH092581, National Institute of Mental Health, \$404,845, 2012-2014

Principal Investigator: Developmental Mechanisms Underlying the Risk to Develop Anxiety and Depression. P50 MH84051, Subproject on a Silvio O. Conte Center for Interdisciplinary Research on Neurobehavioral Bases of Emotion Regulation and Dysregulation in Adolescence. National Institute of Mental Health, \$1,788,850 2008-2013

Principal Investigator: Development and Regulation of Emotion in Primates. R01MH046729, National Institute of Mental Health, \$9,308,127, 1990-2017

Co-Principal Investigator: Neural Substrates of Affective Style and Emotion Regulation. R01MH043454, National Institute of Mental Health, \$150,000 Supplement, 2008-2010

Principal Investigator: Brain Mechanisms Mediating Genetic Risk Factors for Anxiety and Depression. R01MH081884. National Institute of Mental Health, \$8,664,920, 2008-2018

Principal Investigator: Defining corticotropin-releasing factor (CRF) system changes in amygdala and medial temporal cortex in association with depression and suicide. The Stanley Medical Research Institute, \$150,000, 2009-2011

Principle Investigator: Combining mouse and monkey models to understand human risk for psychopathology. MH091550. National Institute of Mental Health, \$275,000, 2010-2012

Co-Principal Investigator: Neural Substrates of Affective Style and Emotion Regulation. R01, MH043454, National Institute of Mental Health, \$150,000 Supplement, 2008-2011

Principal Investigator: The Role of Central and Peripheral Neuroendocrine Systems in Nonhuman Primates Undergoing Social Stress. University of Wisconsin Medical School Research Committee, \$10,000, 1981-1982

Principal Investigator: Hormones in the CSF of Rhesus Monkeys. University of Wisconsin Graduate School, \$19,000, 1981-1982

Principal Investigator: Peptide Hormones in Nonhuman Primate Models of Psychopathology and in Depressed Humans. Veterans Administration RAG Start-Up Funds, \$49,000, 1981-1982

Principal Investigator: TCDD Exposed Rhesus Monkeys: Effects on Behavior and Stress Hormones. Veterans Administration Bureau of Medicine and Surgery, \$120,000, 1982-1985

Principal Investigator: Peripheral and Central Peptides in the Behavior of Nonhuman Primates. Veterans Administration Bureau of Medicine and Surgery, \$150,000, 1982-1985

Principal Investigator: Peptide Hormones in Monkey Cerebrospinal Fluid. National Institute of Neurological and Communicative Disorders, \$150,000, 1983-1986

Principal Investigator: Stressor Control: Peptides and Cardiovascular Function. National Heart Lung and Blood Institute, \$320,000, 1985-1988

Principal Investigator: CRH Systems in Primates. National Institute of Arthritis, Diabetes, and Digestive and Kidney Disease, \$427,000, 1985-1989

Principal Investigator: Brain Release Compared to CSF Levels of CRH, ACTH and CLIP in Monkeys. Veterans Administration Merit Review, \$340,000, 1986-1989

Principal Investigator: Role of Central CRF in Stress-Induced Behavior. National Institutes of Health, \$690,000, 1986-1994

Principal Investigator: Prenatal Stress: HPA Function and Behavior in Offspring. National Institute of Mental Health, \$317,000, 1989-1992

Principal Investigator: Neurobiological Mechanisms in the Development of the Fear Response in Primates. Veterans Administration Merit Review, \$790,000, 1990-1993

Principal Investigator: Neurobiological Basis of the Development of Fear and Anxiety in Primates. University of Wisconsin Graduate School, \$22,400, 1994-1995

Principal Investigator: Effects of Stress and Mood on Disease Progression and Mortality. Hedberg Foundation, University of Wisconsin Medical School, \$100,000, 1995-1996

Principal Investigator: Effects of Exercise on Health in Breast Cancer Patients. Hedberg Foundation, University of Wisconsin Medical School, \$100,000, 1995-1997

Co-Principal Investigator: Wisconsin Study of Families and Work: Cortisol, Psychosocial Factors, and Child Development. MacArthur Foundation, \$123,783, 1995-1997

Principal Investigator: The Functional Role of the Amygdala in Mediating the Behavioral and Physiological Responses Associated with Fearful Temperament. As Part of the Center for Behavioral Science Research, National Institute of Mental Health, \$808,767, 1998-2003

Principal Investigator: Social Stress in Primates: Vulnerability and Resilience. As Part of the Center for Mind/Body Interactions and Health, National Institute of Mental Health, \$1,808,366, 1999-2005

Principal Investigator: Biological Measures Core. As Part of the Center for Mind/Body Interactions and Health, National Institute of Mental Health, \$495,213, 1999-2005

Principal Investigator: CRF influences on the amygdala in schizophrenia, bipolar disorder and major depression: an in situ hybridization study of the complete corticotropin-releasing factor system in human postmortem tissue.

Principal Investigator: Investigating the Role of the Lateral Prefrontal Cortex in Modulating Emotion and in Mediating the Behavioral and Physiological Characteristics of the Anxious Endophenotype. DHHS, PHS P50 MH069315, Subproject on a Interdisciplinary Behavioral Science Center for Mental Health, \$2,038,820, 2004-2008, The Stanley Medical Research Institute, \$100,000, 2001-2003

Principal Investigator: Treating Stress Disorders with CRF Receptor DNA Enzymes. Promoter Neurosciences, LLC, \$54,587, 2004-2005

Principal Investigator: Role of Central CRF in Stress-Induced Behavior. R01MH040855 National Institutes of Health, \$1,868,722, 2003-2007

Patents

Promoter sequences for corticotropin-releasing factor CRF2alpha and method of identifying agents that alter the activity of the promoter sequences: U.S. Patent issued on 07-04-06; patent #7,071,323 and U.S. Patent issued on 05-12-09; patent #7,531,356

Promoter sequences for urocortin II and the use thereof: U.S. Patent issued on 08-08-06; patent #7,087,385

Promoter sequences for corticotropin-releasing factor binding protein and use thereof: U.S. Patent issued on 10-17-06; patent #7,122,650

Reviewer

Ad hoc reviewer for NIH, NSF, and VA grants

American Journal of Physiology

American Journal of Psychiatry

Archives of General Psychiatry

Behavioral Neuroscience

Biological Psychiatry

Brain Research

Child Development

Journal of Neurosciences

Life Sciences

Neuroendocrinology

Neuropharmacology

Neuropsychopharmacology

Peptides

Proceedings of the National Academy of Sciences

Psychiatry Research

Psychoneuroendocrinology

Psychopharmacology

Regulatory Peptides

Science Journal of Reproductive Biology

Synapse

BIBLIOGRAPHY

Journal Articles

1. Kalin NH. Frustrations of a medical student: A new approach to disease. *The New Physician* Oct. 1976
2. Jefferson JW, Kalin NH. Serum lithium levels and long-term diuretic use. *JAMA* 241:1134-6, 1979
3. Kalin NH. Genital and abdominal self-surgery. A case report. *JAMA* 241:2188-9, 1979
4. Insel TR, Kalin NH, Risch SC, Cohen RM, Murphy DL. Abducens palsy after lumbar puncture. (Letter) *New England Journal of Medicine* 303:703, 1980
5. Kalin NH, Cohen, RM, Murphy DL. Circadian variation in the CSF cortisol concentration of the rhesus monkey. *Life Sciences* 26:1485-7, 1980
6. Kalin NH, Risch SC, Cohen RM, Insel T, Murphy DL. Dexamethasone fails to suppress beta-endorphin plasma concentrations in humans and rhesus monkeys. *Science* 209:827-8, 1980
7. Marshall JR, Kalin NH, Tariot AM. An organic psychosis associated with electroconvulsive therapy. *Psychiatric Opinion* 17:33-9, 1980

8. Murphy DL, Kalin NH. Biological and behavioral consequences of alterations in monoamine oxidase activity. *Schizophrenia Bulletin* 6:355-7, 1980
9. Risch SC, Cohen RM, Janowsky DS, Kalin NH, Murphy DL. Mood and behavioral effects of physostigmine on humans are accompanied by elevations in plasma beta-endorphin and cortisol. *Science* 209:1545-6, 1980
10. Risch SC, Cohen RM, Kalin NH. Propranolol, chlorpromazine, and tardive dyskinesia. (Letter) *American Journal of Psychiatry* 137:1125, 1980
11. Risch SC, Kalin NH, Janowsky DS, Huey LY. Indications and guidelines for plasma tricyclic antidepressant concentration monitoring. *Journal of Clinical Psychopharmacology* 1:59-63, 1981
12. Kalin NH, Risch SC, Janowsky DS, Murphy DL. Use of dexamethasone suppression test in clinical psychiatry. *Journal of Clinical Psychopharmacology* 1:64-9, 1981
13. Kalin NH, Insel TR, Cohen RM, Risch SC, Murphy DL. Diurnal variation in the cerebrospinal fluid prolactin concentration of the rhesus monkey. *Journal of Clinical Endocrinology & Metabolism* 52:857-8, 1981
14. Naber D, Pickar D, Davis GC, Cohen RM, Jimerson DC, Elchisak MA, De Fraites EG, Kalin NH, Risch SC, Buchsbaum MS. Naloxone effects on beta-endorphin, cortisol, prolactin, growth hormone, HVA, and MHPG in plasma of normal volunteers. *Psychopharmacology* 74:125-8, 1981
15. Kalin NH, Cohen RM, Kraemer GW, Risch SC, Shelton S, Cohen M, McKinney WT, Murphy DL. The dexamethasone suppression test as a measure of hypothalamic-pituitary feedback sensitivity and its relationship to behavioral arousal. *Neuroendocrinology* 32:92-5, 1981
16. Kalin NH, Risch SC, Murphy DL. Involvement of the central serotonergic system in affective illness. *Journal of Clinical Psychopharmacology* 1:232-7, 1981
17. Naber D, Cohen RM, Pickar D, Kalin NH, Davis G, Bunney WE Jr. Episodic secretion of opioid activity in human plasma and monkey CSF: Evidence for a diurnal rhythm. *Life Sciences* 28:931-5, 1981
18. Pickar D, Naber D, Post RM, van Kammen DP, Ballinger J, Kalin NH, Bunney WE Jr. Measurement of endorphins in CSF: Relationship to psychiatric diagnosis. *Modern Problems in Pharmacopsychiatry*. 17:246-62, 1981
19. Risch SC, Cohen RM, Janowsky DS, Kalin NH, Sitaram N, Gillin JC, Murphy DL. Physostigmine induction of depressive symptomatology in normal human subjects. *Psychiatry Research* 4:89-94, 1981
20. Risch SC, Janowsky DS, Kalin NH, Cohen RM, Murphy DL. Cholinergic-endogenous opioid mechanisms in mood and cognition in man. *Psychopharmacology Bulletin* 17:132-7, 1981
21. Risch SC, Kalin NH, Cohen RM, Weker JL, Insel TR, Cohen ML, Murphy DL. Muscarinic cholinergic influences on ACTH and beta-endorphin release mechanisms in human subjects. *Peptides* 2:95-7, 1981
22. Risch SC, Kalin NH, Janowsky DS. Cholinergic challenges in affective illness: Behavioral and neuroendocrine correlates. *Journal of Clinical Psychopharmacology* 1:186-92, 1981
23. Risch SC, Kalin NH, Murphy DL. Neurochemical mechanisms in the affective disorders and neuroendocrine correlates. *Journal of Clinical Psychopharmacology* 1:180-5, 1981
24. Risch SC, Kalin NH, Murphy DL. Pharmacological challenge strategies: Implications for neurochemical mechanisms in affective disorders and treatment approaches. *Journal of Clinical Psychopharmacology* 1:238-43, 1981
25. Insel TR, Kalin NH, Guttmacher LB, Cohen RM, Murphy DL. The dexamethasone suppression test in patients with primary obsessive-compulsive disorder. *Psychiatry Research* 6:153-60, 1982
26. Kalin NH, Burns RS, Risch SC, Cosgrove SA, Warden D, Murphy DL. The relationship between blood and cerebrospinal fluid prolactin in nonhuman primates. *Life Sciences* 31:159-63, 1982

27. Kalin NH, Shelton SE, Kraemer GW, McKinney WT Jr. Corticotropin-releasing factor causes hypotension in rhesus monkeys. *Lancet* 2:1042, 1982
28. Kalin NH, Weiler SJ, McKinney WT, Kraemer GW, Shelton S. Where is the lesion in patients who fail to suppress plasma cortisol concentrations with dexamethasone? *Psychopharmacology Bulletin* 18:219-21, 1982
29. Kalin NH, Weiler SJ, Shelton SE. Plasma ACTH and cortisol concentrations before and after dexamethasone. *Psychiatry Research* 7:87-92, 1982
30. Siever LJ, Uhde TW, Silberman EK, Lake CR, Jimerson DC, Risch SC, Kalin NH, Murphy DL. Evaluation of alpha-adrenergic responsiveness to clonidine challenge and noradrenergic metabolism in the affective disorders and their treatment. *Psychopharmacology Bulletin* 18:118-9, 1982
31. Carnes M, Smith JC, Kalin NH, Bauwens SF. Effects of chronic medical illness and dementia on the dexamethasone suppression test. *Journal of the American Geriatric Society* 31:269-71, 1983
32. Carnes M, Smith JC, Kalin NH, Bauwens SF. The dexamethasone suppression test in demented outpatients with and without depression. *Psychiatry Research* 9:337-44, 1983
33. Kalin NH, Gonder, JC, Shelton SE. Effects of synthetic ovine CRF on ACTH, cortisol and blood pressure in sheep. *Peptides* 4:221-3, 1983
34. Kalin NH, Shelton SE, Kraemer GW, McKinney WT. Associated endocrine, physiological and behavioral changes in rhesus monkeys after intravenous corticotropin-releasing factor administration. *Peptides* 4:211-5, 1983
35. Kalin NH, Shelton SE, Kraemer GW, McKinney WT. Corticotropin-releasing factor administered intraventricularly to rhesus monkeys. *Peptides* 4:217-20, 1983
36. Kalin NH, Shelton SE, McKinney WT, Kraemer, GW, Scanlon J, Suomi SJ. Stress alters the dexamethasone suppression test in rhesus monkeys. *Psychopharmacology Bulletin* 19:542-5, 1983
37. Kalin NH, Weiler SJ, Shelton SE. Pituitary ACTH secretion altered in cortisol nonsuppression. Author's reply. *Psychiatry Research* 6:156, 1983
38. Risch SC, Kalin NH, Janowsky DS, Cohen RM, Pickar D, Murphy DL. Co-release of ACTH and beta-endorphin immunoreactivity in human subjects in response to central cholinergic stimulation. *Science* 222:77, 1983
39. Russ CS, Hendricks TA, Chrisley BM, Kalin NH, Diskell JA. Vitamin B-6 status of depressed and obsessive-compulsive patients. *Nutrition Reports International* 27:867-73, 1983
40. Scallet AC, Rush DR, Kalin NH, Risch SC, Suomi SJ, Zaas T. Shuttlebox avoidance in rhesus monkeys: Effects on plasma cortisol and beta-endorphin. *Peptides* 4:19-24, 1983
41. Bullinger M, Naber D, Pickar D, Cohen RM, Kalin NH, Pert A, Bunney WE Jr. Endocrine effects of the cold pressor test: Relationships to subjective pain appraisal and coping. *Psychiatry Research* 12:227-33, 1984
42. Carnes M, Kalin NH. Further remarks on the dexamethasone suppression test in the elderly. *Clinical Gerontology* 3:28-35, 1984
43. Kalin NH, Carnes M. Biological correlates of attachment bond disruption in humans and nonhuman primates. *Progress in Neuro-Psychopharmacology & Biological Psychiatry* 8:459-69, 1984
44. Kalin NH, Shelton SE. Acute behavioral stress affects the dexamethasone suppression test in rhesus monkeys. *Biological Psychiatry* 19:113-7, 1984
45. Kalin NH. Animal models of depression. Introduction to symposium. *Progression of Neuro-Psychopharmacol Biological Psychiatry* 8:423-4, 1984

46. Wamboldt FW, Weiler SJ, Kalin NH. Cyclosporin-associated mania. (Letter) *Biological Psychiatry* 19:1161-3, 1984
47. Kalin NH, Carnes M, Barksdale CM, Shelton SE, Stewart RD, Risch SC. Effects of acute behavioral stress on plasma and cerebrospinal fluid ACTH and beta-endorphin in rhesus monkeys. *Neuroendocrinology* 40:97-101, 1985
48. Kalin NH, Gibbs DM, Barksdale CM, Shelton SE, Carnes M. Behavioral stress decreases plasma oxytocin concentrations in primates. *Life Sciences* 36:1275-80, 1985
49. Kalin NH, Shelton SE, Barksdale CM, Carnes M. The diurnal variation of immunoreactive adrenocorticotropin in rhesus monkey plasma and cerebrospinal fluid. *Life Sciences* 36:1135-40, 1985
50. Kalin NH. Behavioral effects of ovine corticotropin-releasing factor administered to rhesus monkeys. *Federation Proceedings* 44:249-53, 1985
51. Wamboldt MZ, Kalin NH, Weiler SJ. Consistent reversal of abnormal DSTs after different antidepressant therapies in a patient with dementia. *American Journal of Psychiatry* 142:100-3, 1985
52. Carnes M, Brownfield MS, Kalin NH, Lent S, Barksdale CM. Episodic secretion of ACTH in rats. *Peptides* 7:219-23, 1986
53. Kalin NH, Dawson GW. Neuroendocrine dysfunction in depression: Hypothalamic-anterior pituitary systems. *Trends in Neuroscience* 9:261-6, 1986
54. Kalin NH, Shelton SE, Thompson RM, Barksdale, CM. A rostral-caudal concentration gradient in cerebrospinal fluid adrenocorticotropin. *Neuroendocrinology* 43:348-51, 1986
55. Kalin NH. ACTH in plasma and CSF in the rhesus monkey. A.E. Bennett Award for Basic Research in *Biological Psychiatry*. *Biological Psychiatry* 21:124-40, 1986
56. Maier SF, Ryan SM, Barksdale CM, Kalin NH. Stressor controllability and the pituitary-adrenal system. *Behavioral Neuroscience* 100:669-74, 1986
57. Sherman JE, Kalin NH. ICV-CRH potently affects behavior without altering antinociceptive responding. *Life Sciences* 39:433-41, 1986
58. Swift WJ, Kalin NH, Wamboldt FS, Kaslow N, Ritholz ML. Depression in bulimia at 2- to 5-year follow-up. *Psychiatry Research* 16:111-22, 1985
59. Tariot P, Kalin NH. Psychiatric disorders in fibromyalgia. (Letter) *American Journal of Psychiatry* 143:812-3, 1986
60. Wamboldt MZ, Kalin NH, Weiler SJ. Response to Dr. Jenike. Dementia and depression. (Letter) *American Journal of Psychiatry* 143:254-5, 1986
61. Carnes M, Barksdale CM, Kalin NH, Brownfield MS, Lent SJ. Effects of dexamethasone on central and peripheral ACTH systems in the rat. *Neuroendocrinology* 45:160-4, 1987
62. Kalin NH, Dawson G, Tariot P, Shelton S, Barksdale C, Weiler S, Thienemann M. Function of the adrenal cortex in patients with major depression. *Psychiatry Research* 22:117-25, 1987
63. Kalin NH, Shelton SE, Barksdale CM, Brownfield MS. A diurnal rhythm in cerebrospinal fluid corticotropin-releasing hormone different from the rhythm of pituitary-adrenal activity. *Brain Research* 426:385-91, 1987
64. Kalin NH, Shelton SE, Barksdale CM. Separation distress in infant rhesus monkeys: Effects of diazepam and Ro 15-1788. *Brain Research* 408:192-8, 1987
65. Robins HI, Kalin NH, Shelton SE, Martin PA, Shecterle LM, Barksdale CM, Neville AJ, Marshall J. Rise in plasma beta-endorphin, ACTH, and cortisol in cancer patients undergoing whole body hyperthermia. *Hormone & Metabolic Research* 19:441-3, 1987

66. Robins HI, Kalin NH, Shelton SE, Shecterle LM, Barksdale CM, Martin PA, Marshall J. Neuroendocrine changes in patients undergoing whole body hyperthermia. *International Journal of Hyperthermia* 3:99-105, 1987
67. Sherman JE, Kalin NH. The effects of ICV-CRH on novelty-induced behavior. *Pharmacology Biochemistry & Behavior* 26:699-703, 1987
68. Swift WJ, Kalin NH. A follow-up study of thirty hospitalized bulimics. *Psychosomatic Medicine* 49:45-55, 1987
69. Brooks BR, Kalin NH, Beaulieu DA, Barksdale CM, Sufit RL, Dills DG. Thyrotropin releasing hormone uptake into serum and cerebrospinal fluid following intravenous or subcutaneous administration. *Neurology Research* 10:236-8, 1988
70. Carnes M, Kalin NH, Lent SJ, Barksdale CM, Brownfield MS. Pulsatile ACTH secretion: Variation with time of day and relationship to cortisol. *Peptides* 9:325-31, 1988
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Editorial Notes

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73. Kalin NH. Participant and Consultant in MacArthur Foundation Network Mini-conference: Risk and Protective Mechanisms in the Development of Psychopathology. May 1989
74. Kalin NH. Participant and Consultant to the NIMH Behavioral Research Branch at the meeting Psychobiological Approaches to the Study of Emotion. September 1989
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107. Kalin NH. Aspects of Emotion Conserved Across Species. MacArthur-McDonnell Affective Neuroscience Meeting. Washington, District of Columbia. November, 1992
108. Kalin NH. Development and Regulation of Fearfulness. Grand Rounds, University of Chicago, Chicago, Illinois. April, 1992
109. Kalin NH. Principles of Diagnosis. Symposium on Bipolar Disorder: Current Progress and Future Directions in Diagnosis and Management. Amelia Island, Florida. September, 1992
110. Kalin NH. Stress and the Development of Psychopathology. Collegium International Neuropsychopharmacologicum Congress. Nice, France. 1992
111. Kalin NH. The Neurobiology of Fear and Anxiety. Grand Rounds, Ohio State University, Columbus, Ohio. December, 1992
112. Marshall JR, Straus AM, Kalin NH, Davidson RJ. Self-Described Social Anxiety and Salivary Cortisol Levels. International Society of Psychoneuroendocrinology. Madison Wisconsin. August, 1992

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116. Swiergiel AH, Kalin NH, Rubin WW, Takahashi LK, Turner J. Brain Norepinephrine Depletion Potentiates Defensive Behavior Induced by Painful Stimuli and Alters Nociception in Rats. International Society of Psychoneuroendocrinology. Madison Wisconsin. August, 1992
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118. Kalin NH. Animal Models Implicating CRH Systems in the Pathophysiology of Depression. American Psychiatric Association . San Francisco, California. May 1993
119. Kalin NH. Anxiety: Neurobiological and Physiological Correlates. Grand Rounds, University of Florida, Gainesville, Florida. March, 1993
120. Kalin NH. Current Treatment of Anxiety Disorders. Grand Rounds, The University of Chicago, Department of Psychiatry, Chicago, Illinois. October 1993
121. Kalin NH. Developmental Studies of the Hypothalamo-Pituitary-Adrenal Axis in Primates. International Congress on Hormones, Brain and Neuropsychopharmacology. Rhodes, Greece. September 1993
122. Kalin NH. Effects of Prenatal Stress on Behavior, Hormones, and Noradrenergic Function in Offspring. International Society of Psychoneuroendocrinology. Taormina, Italy. September 1993
123. Kalin NH. Fear and Anxiety: Neurochemical and Neuroendocrine Regulation. Montags-Colloquium Max Planck Institute, Goettingen, Germany. June 1993
124. Kalin NH. Neurobiological Basis of Anxiety. Grand Rounds, University of Iowa, Iowa City, Iowa. October 1993
125. SE Shelton, NH Kalin. Opiate Regulation of Affiliation Between Primate Mothers and Infants. Society for Neuroscience, Washington, District of Columbia. November 1993
126. Shelton SE, Kalin NH. Parallel changes in brain opiate systems modulate intimate contact between a primate mother and her infant. International Society of Psychoneuroendocrinology. Taormina, Italy. September 1993
127. Wing LL, Shelton SE, Kalin NH, Kulaga H. A Non-human Primate Model of Stress-induced Alterations in Cell Surface Antigens. Society for Neuroscience. Washington, District of Columbia. November 1993.
128. Wing LL, Shelton SE, Kalin NH, Kulage H. A non-human primate model of stress-induced immunologic alterations of cell surface antigens. American Psychiatric Association, San Francisco, California. May 1993
129. Kalin NH, Neurobiology of Fear and Anxiety. Grand Rounds, Topeka VA Hospital, Topeka, Kansas. April 1994
130. Kalin NH. Animal Models to Evaluate the Role of Corticotropin Releasing Factor in Psychopathology. International Society of Psychoneuroendocrinology. Seattle, Washington. August 1994
131. Kalin NH. Brain Receptors Relating to Schizophrenia. Physician Clinic Conference, Marquette, Michigan. September 1994

132. Kalin NH. Depression Complicating Medical Illness. University of Wisconsin, Madison Wisconsin. November 1994
133. Kalin NH. Effects of Steroid and Peptide Hormones on Brain Function Implications for Treatment Development. International Neuropsychopharmacologicum. Washington, District of Columbia. June 1994
134. Kalin NH. Increased Amygdala CRH mRNA is Associated with Conditioned Fear. American College of Neuropsychopharmacology. San Juan, Puerto Rico. December 1994
135. Kalin NH. Management of Depression in the Elderly and Medically Ill Patient. Grand Rounds, Lutheran General Hospital, Chicago, Illinois. June 1994
136. Kalin NH. The Neurobiology of Fear and Anxiety. University of Western Ontario, London, Ontario, Canada. January 1994
137. Kalin NH. The Neurobiology of Fear. Grand Rounds, Medical University of South Carolina. Charleston, South Carolina. October 1994
138. Kalin NH. Understanding Individual Differences in Fearfulness in Monkeys and its Relation to Human Anxiety Disorders. The Psychonomic Society. St. Louis, Missouri. November 1994
139. Kalin NH. Understanding Individual Differences in Fearfulness in Monkeys and its Relation to Human Anxiety Disorders. Society for Neuroscience. Miami, Florida. November 1994
140. Nemeroff CB, Kalin NH, Evans D. Depression Complicating Medical Illness: A Primary Care Update. Conference. Charlotte, North Carolina. May 1994
141. Shelton SE, Kalin NH, Rickman MD. Predictors of Behavioral Inhibition in Infant and Mother Rhesus Monkeys. Society for Neuroscience. November, 1994
142. Kalin NH. Contemporary Management of Uncomplicated Depression. Psychiatry Residents' Symposium, Palm Beach, Florida. October 1995
143. Kalin NH. Diagnosis of Mood and Anxiety Disorders. Residents' Symposium Recent Advances in the Management of Mood and Anxiety Disorders. Orlando, Florida. April 1995
144. Kalin NH. Emotion and Psychopathology. Wisconsin Symposium on Emotion. Madison Wisconsin. April 1995
145. Kalin NH. Neurobiology of Early Trauma: Implications for the Pathophysiology of Mood and Anxiety Disorders. Society for Neuroscience. San Diego, California. November 1995
146. Kalin NH. Neurobiology of Fear. Massachusetts General Hospital Winter Psychopharmacology Conference. Boston, Massachusetts. March 1995
147. Kalin NH. Preclinical Studies Implicating CRF in Mediating Anxiety and Depression. Summer Neuropeptide Conference, Martha's Vineyard, Massachusetts. June 1995
148. Kalin NH. Predictors of Behavioral Inhibition in Infant and Mother Rhesus Monkeys. Psychiatric Research Society. Park City, Utah. February 1995
149. Kalin NH. Recognizing and Treating Depression in the Mid-90's. American College of Physicians, Atlanta, Georgia. March 1995
150. Kalin NH. Role of Corticotrophin Releasing Factor in Depression: Preclinical and Clinical Studies. Neurotransmitter Consensus Meeting. Scottsdale, Arizona. January 1995
151. Kalin NH. The Neurobiology of Depression and its Treatment. Grand Rounds, Wausau Hospital, Wausau, Wisconsin. February 1995
152. Kalin NH. Treatment of Depression in Patients with Bipolar Disorder, Advances in the Diagnosis and Treatment of Manic-Depressive Illness. November 1995

153. Kalin NH. Treatment of Depression in the Medically Ill. Mood Disorders Consultant's Meeting, Turnberry Isle, Florida. September 1995
154. Shelton SE; Kalin NH. Emotional Responses, Stress Hormones, and Monoamines as Trait Variables. International Society of Psychoneuroendocrinology. Munich, Germany. September 1995
155. Kalin NH, Shelton SE. Development of Fear in Primates: Implications for Psychopathology. International Primatological Society. Madison Wisconsin. August 1996
156. Kalin NH. Animal Models examining the role of CRF systems in Mediating Behavior and Psychopathology. DuPont Merck Pharmaceutical Corporation. Delaware. December 1995
157. Kalin NH. Animal Models of Depression and Anxiety: Utility in New Drug Development, International Society of Psychoneuroendocrinology. Cascais, Portugal. August 1996
158. Kalin NH. Animal Studies Implicating Extrahypothalamic CRF Systems in Anxiety and Depression. Canadian College of Neuropsychopharmacology, Toronto, Canada. June 1996
159. Kalin NH. Emotional Regulation and Psychopathology. American College of Neuropsychopharmacology, San Juan, Puerto Rico. December 1995
160. Kalin NH. Factors Modulating the Development of Affective Dysregulation in Non-Human Primates, Silverman Research Conference, University of Michigan Medical Center, Ann Arbor, Michigan. May 1996
161. Kalin NH. Functional Brain Alterations in Depression and Anxiety. World Congress of Psychiatry. Madrid, Spain. August 1996
162. Kalin NH. Nonhuman Primate Model of Fear and Anxiety, Grand Rounds, Yale University, Department of Psychiatry, West Haven, Connecticut. February 1996
163. Kalin NH. Studies in Nonhuman Primates Provide Insights into the Dysregulation of Emotional Responses and Psychopathology. European College of Neuropsychopharmacology, Amsterdam, The Netherlands. September 1996
164. Kalin NH. The Treatment of Severe and Psychotic Depression. American Psychiatric Association. New York, New York. May 1996
165. Lowe MJ, Shelton SE, Davidson RJ, Kalin NH. Effect of ketamine hydrochloride on fMRI signal. Society of Magnetic Resonance Scientific Meeting and Exposition. New York, New York. May 1996
166. Shelton SE, Davidson RJ, Kalin NH. Behavioral and Physiological correlates of temperament in rhesus monkeys. International Society of Psychoneuroendocrinology. Cascais, Portugal. August 1996
167. Shelton SE, Kalin, NH. Individual Differences in the Development of Defensive Behaviors in Rhesus Monkeys: Implications for Psychopathology. Society for Neuroscience. Washington, District of Columbia. November 1996
168. Hsu DT, Chen F-L, Kalin NH. Acute restraint stress increases corticotropin-releasing hormone mRNA levels in the hypothalamic paraventricular nucleus and central nucleus of the amygdala. Society for Neuroscience Abstracts, vol. 23, p. 1076, 1997
169. Irwin W, Mock BJ, Sutton SK, Orendi JL, Sorenson JA, Turski PA, Kalin NH, Davidson RJ. Positive and Negative Affective Responses: Neural Circuitry Revealed Using Functional Magnetic Resonance Imaging. Society for Neuroscience. New Orleans, Louisiana. October 1997
170. Uno H, Franklin M, Kraemer G, Shelton S, Kalin NH. Gender Differences in Brain Volume and Size of Corpus Callosum and Amygdala of Rhesus Monkey Measure from MRI Images. Society for Neuroscience. New Orleans, Louisiana. October 1997
171. Shelton S, Kalin NH, Davidson NH. EEG Frontal Asymmetry Predicts Behavioral and Physiological Responses in Monkeys. Society for Neuroscience. New Orleans, Louisiana. October 1997

172. Kalin NH, Davidson RJ, Irwin W, Orendi J, Warner G. fMRI Studies of the Effects of Venlafaxine in Depressed Patients. New Clinical Drug Evaluation Unit Meeting. Boca Raton, Florida. May 1997
173. Kalin NH, Davidson RJ, Shelton SE. Frontal Asymmetric Brain Activity, Cortisol and Temperament in Rhesus Monkeys. International Society of Psychoneuroendocrinology. San Francisco, California. July 1997
174. Kalin NH, Shelton SE, Zaczek R. The Evaluation of CRF Receptor Antagonists in Animal Models. American College of Neuropsychopharmacology. Waikoloa, Hawaii. December 1997
175. Kalin NH. Brain Imaging. Grand Rounds at the University of Arkansas College of Medicine, Little Rock, Arkansas. October 1997.
176. Kalin NH. fMRI Studies of Emotional Processing in Normal & Depressed Patients: Effects of Antidepressants. American Psychiatric Association. San Diego, California. May 1997
177. Kalin NH. Neurobiology of Stress. Madison Wisconsin. March 1997
178. Kalin NH. Non-human Primate Models of Anxiety and Depression: Biological and Environmental Manipulations. Society of Biological Psychiatry. San Diego, California. May 1997
179. Shelton SE, Berard JD, Kalin NH. Aggression, fear and cortisol in young rhesus monkeys. International Society of Psychoneuroendocrinology. San Francisco, California. July 1997.
180. Kalin NH. Biological Basis of Fear and Anxiety. Grand Rounds, University of Kansas Medical Center, Kansas City, Kansas. October 1998
181. Kalin NH. Course of Illness and Maintenance Treatment. Bipolar Disorder Mini-fellowship. University of Pennsylvania, Department of Psychiatry, Philadelphia, Pennsylvania. September 1998
182. Kalin NH. Early Environmental Factors and Vulnerability in Primates, symposium participant at the Science and Practice of Mind/Body Interactions Conference. Sedona, Arizona. March 1998
183. Kalin NH. Fearful or Fearless: Insights from Nonhuman Primate Studies Grand Rounds, University of Minnesota, Department of Psychiatry, Minneapolis, Minnesota. February 1998
184. Kalin NH. Functional Brain Changes and Depression Grand Rounds, Sinai Hospital, Detroit, Michigan. May 1998
185. Kalin NH. Functional MRI: A Technique to Understand Brain Alteration in Depression, symposium chair and participant, Collegium Internationale Neuro-Psychopharmacologicum. Glasgow, Scotland, July 1998
186. Kalin NH. Individual Differences in Fear-Related Behavior in Primates: Implications for Psychopathology. Grand Rounds, Columbia University Department of Psychiatry, New York, New York. March 1998
187. Kalin NH. Neurobiology of Fear and Anxiety. Wisconsin Symposium on Emotion. Madison Wisconsin. April 1998
188. Kalin NH. Treatment of Severe Unipolar and Bipolar Depression symposium participant, American Psychiatric Association. Toronto, Canada, May 1998
189. Roseboom PH, Urban CM, Chen F-L, Kalin NH. Corticotropin-releasing factor (CRF) - induced homologous down-regulation of CRF receptors in a human neuroblastoma cell line (IMR-32). Society for Neuroscience Abstract 24:590, 1998
190. Shelton SE, Berard JD, Kalin NH. Individual differences in aggression and avoidance are associated with HPA activity. International Society for Psychoneuroendocrinology, Antananarivo, Madagascar, August 1998
191. Shelton SE, Davidson RJ, Kalin NH. Extreme Right Frontal EEG Activity is Associated with Elevated CRH Levels. Society for Neuroscience, Los Angeles, California. November 1998
192. Shelton SE, Kalin NH. Effects of novel small molecule antagonist on monkey heart rate and behavior. International Society for Psychoneuroendocrinology, Trier, Germany, August 1998

193. Zaczek R, Fitzgerald L, McElroy J, Smith M, Gilligan P, He L, Olson R, Robertson D, Kalin N, Shelton S, Hartig P. Novel small molecule CRF receptor antagonists: Identification and pharmacological characterization. Endocrine Society. New Orleans, Louisiana. June 1998
194. Bakshi VP, Smith-Roe S, Yang LW, Kalin NH. Antagonism of CRF Receptors Within the Lateral Septum Decreases Stress-Induced Behavioral Inhibition in Rats. Society for Neuroscience, Miami, Florida. October 1999
195. Kelley AE, Bakshi VP, Smith-Roe S, Kalin NH, Berridge CW. Behavioral Effects of Norepinephrine Infusion Into Nucleus Accumbens Shell. Society for Neuroscience, Miami, Florida. October 1999
196. Irwin W, Anderle MJ, Mock BJ, Sutton SK, Turski PA, Kalin NH, Oakes TR, Davidson RJ. Roles of Amygdala and Frontal and Posterior Cortices in Human Affective Processes: Hemispheric Symmetries and Asymmetries. Society for Neuroscience, Miami, Florida. October 1999
197. Bakshi VP, Smith-Roe SL, Kalin NH. A Selective Reduction in Stress-Induced Defensive Behavior After Infusion of CRF Antagonist into the lateral Septum: A Possible Role for CRF-R2 Receptors. American College of Neuropsychopharmacology. Acapulco, Mexico. December 1999
198. Benca RM, Obermeyer WH, Shelton SE, Droster J, Kalin NH. A Role for the Amygdala in the Sleep of Primates Under Unfamiliar Conditions. Society for Neuroscience, Miami, Florida. October 1999
199. Nelson EE, Shelton SE, Kelley AE, Kalin NH. Innate Snake Fear in Rhesus Monkeys: Role of the Amygdala. Society for Neuroscience, Miami, Florida. October 1999
200. Hsu DT, Chen F-L, Kalin NH. Stress increases corticotropin-releasing hormone mRNA in the rat thalamus. Society for Neuroscience Abstracts, 25:63, 1999
201. Kalin NH, Sackler Foundation Brain Imaging Meeting, panel participant, New York, New York. October 1999
202. Kalin NH. Basic Pharmacology of Antidepressants Stanford University 3rd Biannual Psychopharmacology Review Course. Stanford, California. March 1999
203. Kalin NH. Nonhuman Primate Studies Implicating CRH Systems in Mediating Anxiety, Fear and Depression. International Society for Psychoneuroendocrinology, Orlando, Florida. July 1999
204. Kalin NH. Primate Models of Mood and Anxiety Disorders Emory University Young Faculty Development Program. Atlanta, Georgia. April 1999
205. Kalin NH. Primate Models of Psychopathology: Psychoneuroendocrine Studies symposium. World Congress of Psychiatry. Hamburg, Germany. August 1999
206. Kalin NH. Talking Science to the Media Dana Alliance for Brain Initiatives panelist during Brain Awareness Week on Capitol Hill, Washington, DC, March 1999
207. Kalin NH. The neurobiology of fear and anxiety Grand Rounds at Stanford University Department of Psychiatry. Stanford, California. March 1999
208. Kalin NH. Update on Neuroendocrine Alterations in Psychiatric Illness symposium participant. American Psychiatric Association. Washington, District of Columbia. May 1999
209. Nelson EE, Shelton SE, Kelley AE, Kalin NH. Innate snake fear in rhesus monkeys: the role of the amygdala. Society for Neuroscience, Miami, Florida. October 1999
210. Obermeyer WH, Shelton SE, Benca RM, Kalin NH. The Amygdala and Primate Sleep. Association of Professional Sleep Societies, Orlando, Florida. June 1999
211. Obermeyer WH, Shelton SE, Droster J, Kalin NH, Benca RM. Amygdala Mediated Sleep Disruption. International Congress of the World Federation of Sleep Research Societies, Dresden, Germany. October 1999

212. Roseboom PH, Urben CM, Kalin NH. Persistent desensitization of CRF1 receptor-coupled adenylate cyclase in the human neuroblastoma cell line IMR-32. American College of Neuropsychopharmacology Abstracts, 38:266, 1999
213. Roseboom PH, Urben CM, Kalin NH. Persistent downregulation of corticotropin-releasing factor (CRF) receptors following acute CRF treatment of a human neuroblastoma cell line (IMR-32). Soc. Neurosci. Abstr. 25:441, 1999
214. Shelton SE, Davidson RJ, Kalin NH. Increased CSF CRH Concentrations in Monkeys are Associated with Extreme Right Frontal Brain Activity. International Society for Psychoneuroendocrinology Annual Meeting, Orlando, Florida. July 1999
215. Bakshi VP, Smith-Roe SL, Grigoriadis DE, Kalin NH. CRF receptor regulation of stress-induced behavioral inhibition: An important role for R2 receptors in lateral septum and R1 receptors in amygdala. Society for Neuroscience Abstracts, 26:2148, 2000
216. Bakshi VP, Smith-Roe SL, Grigoriadis DE, Kalin NH. Regulation of stress-induced behavior by CRF receptors: Involvement of CRF-R1 in amygdala and CRF-R2 in lateral septum. American College of Neuropsychopharmacology Abstracts, 39:302, 2000
217. Barksdale CM, Durham RA, Emmerling MR, Sacco-Gibson N, Shelton SE, Kalin NH. Daily rhythm in cerebrospinal fluid A β (1-40) and A β (1-42) collected from adult male rhesus monkeys. Tenth Annual Analytical Symposium of the Pfizer Global Research & Development, Ann Arbor, Michigan. October 2000
218. Barksdale CM, Durham RA, Emmerling MR, Sacco-Gibson N, Shelton SE, Kalin NH. Daily rhythm in cerebrospinal fluid A β (1-45) and A β (1-42) collected from adult male rhesus monkeys. Society for Neuroscience, New Orleans, Louisiana. November, 2000.
219. Herringa RJ, Balachandran JS, Kalin NH. Acute restraint stress increases corticotropin-releasing factor binding protein mRNA in rat amygdala and hippocampus, Society for Neuroscience Abstracts, 26:2265, 2000
220. Hsu DT, Kalin NH. Differential CRH mRNA in two thalamic regions of the rat following restraint stress. Society for Neuroscience Abstracts, 26:2265, 2000
221. Kalin NH, Irwin WI, Anderle M, Davidson RJ. Venlafaxine Induces Early and Later Changes in the Neural Circuitry of Emotions that Correlate with Treatment Response Bakshi VP, Smith-Roe SL, Grigoriadis DE, Kalin NH. Regulation of Stress-Induced Behavior by CRF Receptors: Involvement of CRF-R1 in Amygdala and CRF-R2 in Lateral Septum. American College of Neuropsychopharmacology, San Juan, Puerto Rico, November 2000
222. Kalin NH. Animal Models: Genes and Environment, research symposium at the Anxiety Disorders Assn. of America and National Institute of Mental Health Conference, Washington, DC, March 2000
223. Kalin NH. CRH in Nonhuman Primates: Effects on Behavior and Implications for Psychopathology symposium at Collegium Internationale Neuro-Psychopharmacologicum, Brussels, Belgium, July 2000
224. Kalin NH. The Effects of Antidepressants on Brain Function Grand Rounds at Boston Medical Center. Boston, MA, December 2000
225. Lombardo KA, Herringa RJ, Balachandran JS, Bakshi VP, Kalin NH. Repeated restraint stress prevents changes in corticotropin-releasing factor binding protein mRNA induced by acute restraint stress. Society for Neuroscience Abstracts, 26:2266, 2000
226. Rasmussen KLR, Laudenslager ML, Lilly AA, DeVinney BD, English K, Turrio I, Kalin NH, Shelton SE, Suomi SJ. Developmental patterns of viral titers and parasite loads in rhesus macaques on Cayo Santiago. American Society of Primatology, Boulder, CO, June 2000

227. Roseboom PH, Lombardo KA, Herringa RJ, Balachandran JS, Bakshi VP, Kalin NH. Differential effects of acute and repeated restraint on corticotropin-releasing hormone binding protein mRNA in rat basolateral amygdala. American College of Neuropsychopharmacology Abstracts, 39:294, 2000
228. Shelton SE, Davidson RJ, Kalin NH. The role of the primate amygdala in mediating acute fear, HPA, activation, and temperament. International Society of Psychoneuroendocrinology, Melbourne, Australia, October, 2000
229. Shelton SE, Kelley AE, Davidson RJ, Kalin NH. The primate amygdala mediates fear but not the behavioral and physiological components of anxious temperament. Society for Neuroscience, New Orleans, Louisiana. November, 2000 Society for Neuroscience Abstracts, 26: 755.12, 2000
230. Abercrombie HC, Thurow ME, Rosenkranz MA, Kalin, NH, Davidson RJ. The effects of pharmacologically manipulated cortisol levels of memory for emotional and neutral information. Psychophysiology, S38, 2001
231. Bakshi VP, Newman SM, Weinberg LE, Smith-Roe SL, Kalin NH. Urocortin infusion into lateral septum increases grooming and decreases digestive behaviors. Society for Neuroscience Abstracts, 2001
232. Barksdale CM, Durham RA, Conlon KP, Emmerling MR, Sacco-Gibson N, Shelton SE, Kalin NH. Characterization of cerebrospinal fluid A β (1-40) and A β (1-42) collected from adult male rhesus monkeys. Society of Neuroscience, San Diego, California, November 2001
233. Hsu DT, Lombardo KA, Bakshi VP, Balachandran JS, Roseboom PH, Kalin NH. Thalamic CRH mRNA increases following acute but not repeated restraint stress. Society for Neuroscience Abstracts, 2001
234. Kalin NH. Animal Models of Neuropsychiatric Disorders American College of Neuropsychopharmacology Annual Meeting. Waikoloa, Hawaii. December, 2001
235. Kalin NH. Anxious Monkeys: Biological Relevance to Psychopathology. Grand Rounds at Harvard Psychiatry Department. Boston, Massachusetts. January 2001
236. Kalin NH. Functional brain imaging to see how anti-depressants work. Grand Rounds at University of South Dakota School of Medicine Health Science Center. Sioux Falls, South Dakota. June 2001
237. Kalin NH. The Anxious Monkey - Biology and Relevance to Psychobiology. Grand Rounds at Dartmouth-Hitchcock Medical Center. Hanover, New Hampshire. January 2001
238. Kalin NH. The Neurobiology of Fear and Anxiety. Grand Rounds at The University of Texas, Health Science Center. San Antonio, Texas. October, 2001
239. Kalin NH. The Neurobiology of Fear and Anxiety. Grand Rounds at University of Pennsylvania School of Medicine. Philadelphia, Pennsylvania. October 2001
240. Lombardo KA, Bakshi VP, Hsu DT, Herringa RJ, Roseboom PH, Newman SM, Hernandez P, Borisy-Rudin F, Kalin NH. Individual differences in novelty-induced exploration do not predict patterns of stress-induced CRH system gene expression in rats. Society for Neuroscience, San Diego, California. 2001
241. Nanda SA, Roseboom PH, Nash GA, Digre JR, Kalin NH. Regulation of the human corticotropin-releasing hormone₂ receptor promoter activity. Society for Neuroscience, San Diego, California. 2001
242. Roseboom PH, Bakshi VP, Herringa RJ, Kalin NH. Microarray analysis of restraint stress-induced gene expression changes in the rat septum. Society for Neuroscience Abstracts, 2001
243. Shelton SE, Kalin NH. Effects of central nucleus amygdala lesions on the rhesus monkey anxiety and fear responses. International Society of Psychoneuroendocrinology, Quebec, Canada. August, 2001
244. Shelton SE, Kalin NH. Effects of central nucleus amygdala lesions on rhesus monkey anxiety and fear responses. Society for Neuroscience, San Diego, California. November 2001

245. Johnstone T, Whalen PJ, Nitschke JB, Somerville LH, Idhe-Scholl T, Tarleton L, Seman L, Davidson RJ, Kalin NH. Amygdala activation to fearful facial expressions in generalized anxiety disorder (GAD). Society for Neuroscience, Orlando, FL, 2002
246. Kalin NH, Nemeroff CB, Wan G, Panish J, Cantillon M. Improvement in general life functioning with venlafaxine versus fluoxetine in outpatients with major depression. *European Psychiatry*. May 2002
247. Kalin NH. Neurobiology of Mood. Duke University Medical Center Comprehensive Psychiatry Update Meeting. Orlando, Florida. October, 2002
248. Kalin NH. The Biology of Fear: From Basic to Clinical Science. The American College of Psychiatrists. Kona, Hawaii, February, 2002
249. Lombardo KA, Bakshi VP, Roseboom PH, Kalin NH. Differential effects of CRH infusion into the CeA and the BLA. Society for Neuroscience, Orlando, Florida. November, 2002
250. Nanda SA, Jones SG, Kalin NH, Roseboom PH. Regulation of human urocortin II promoter activity. Society for Neuroscience, Orlando, Florida. November, 2002
251. Nitschke JB, Johnstone T, Possin AA, Mackiewicz KL, Somerville LH, Schaefer HS, Whalen PH, Seman L, Kalin NH, Davidson RJ. Altered fMRI responses to the anticipation of and exposure to aversion in generalized anxiety disorder. Society for Neuroscience, Orlando, Florida. November, 2002
252. Rattenborg N, Obermeyer W, Shelton SE, Kalin NH, Benca R. Amygdala lesions decrease sleep disruption in rhesus monkeys. Society for Neuroscience, Orlando, Florida. November, 2002
253. Roberts AD, Shelton SE, Barnhart TE, Oakes TR, Davidson RJ, Kalin NH. Effects of snake exposure on brain glucose metabolism in the rhesus monkey. Society for Neuroscience, Orlando, Florida. November, 2002
254. Shelton SE, Oakes TR, Kalin NH. Assessment of ibotenic acid amygdala lesions in monkeys using MRI. Society for Neuroscience, Orlando, Florida. November, 2002
255. Jochman KA, Bakshi VP, Newman SM, Roseboom PH, Kalin NH. CRF1 receptors in BLA are necessary and sufficient for expression of stress-induced anorexia and grooming. Society for Neuroscience, Washington, District of Columbia. 2003
256. Johnstone T, Somerville LH, Nitschke JB, Alexander AL, Davidson RJ, Kalin NH, Whalen PJ. Stability of amygdala BOLD response to fearful faces over multiple scan sessions. Organization for Human Brain Mapping. New York, New York. 2003
257. Johnstone T, Somerville LH, Nitschke JB, Alexander AL, Davidson RJ, Kalin NH, Whalen PJ. Stability of Amygdala Response to Fearful Faces over Multiple Scan Sessions. Organization for Human Brain Mapping, New York, New York. 2003
258. Kalin NH, The Neurobiology of Fear and Anxiety, Baylor College Grand Rounds, Houston, Texas. February 2003
259. Kalin NH. Roots of mental illness in children, The Neurobiology of Emotion Regulation. New York Academy of Sciences Conference. The Rockefeller University, New York, New York. March 2003
260. Nanda SA, Nash GA, Speers JM, Kalin NH, Roseboom PH. Characterization of human corticotropin-releasing factor2 receptor promoter activity. Society for Neuroscience, Washington, District of Columbia. 2003
261. Roseboom PH, Nanda SA, Nash GA, Speers JM, Kalin NH. Characterization of human urocortin 2 promoter activity. Society for Neuroscience, Washington, District of Columbia. 2003
262. Shelton SE, Kalin NH. Role of the primate central nucleus of the amygdala in regulating fear-related responses. Society for Neurosciences 33rd annual meeting, New Orleans, Louisiana. November 2003
263. Shelton SE, Roberts AD, Barnhart TE, Oakes TR, Davidson RJ, Kalin NH. Effects of fear on brain glucose metabolism in primates. International Society for Psychoneuroendocrinology, Pisa, Italy. March 2003

264. Fox AS, Oakes TR, Shelton SE, Davidson RJ, Kalin NH. Patterns of Brain Activation Associated with Attachment Bond Disruption and Affiliative Vocalizations in Rhesus Monkeys: A FDG MicroPET Study. Society for Neuroscience, Washington, District of Columbia. 2004
265. Herringa RJ, Roseboom PH, Kalin NH. Amygdala CRF-binding protein gene expression: a human post mortem brain study. Society for Neuroscience, Washington, District of Columbia. 2004
266. Kalin NH. The role of CRF R2 receptors in mediating anxiety and behavior. American College of Neuropsychopharmacology. 2004
267. Oakes TR, Fox AS, Converse AK, Barnhart TE, Vandehey NT, Shelton SE, Davidson RJ, Kalin NH. Considerations in the Analysis of microPET FDG Data in Awake Rhesus. Medical Imaging Conference, 2004
268. Roseboom PH, Herringa RJ, Kalin NH. Amygdala CRF-binding protein gene expression: a human post mortem study. American College of Neuropsychopharmacology. 2004
269. Shelton SE, Fox AD, Oakes TR, Davidson RJ, Kalin NH. Neural Correlates of the Anxious Endophenotype: F18-FDG microPET Imaging in Monkeys. International Society for Psychoneuroendocrinology, Glasgow, Scotland. July, 2004
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271. Marucha PT, Engeland CG, Shelton SE, Harraldsson HM, Quan N, Kalin NH. Amygdala Lesions Increase, while Stress Decreases, Chemokine Gene Expression in the Wound Tissue of Rhesus Monkeys. Society for Neuroscience, Washington, District of Columbia. 2005.
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275. Shelton SE, Shelledy W, Rogers J; Kalin NH. Heritability of freezing behavior among rhesus macaques. Program No. 202.13. Washington, DC: Society for Neuroscience, 2005
276. Fox AS, Shelton SE, Oakes TR, Converse AK, Davidson RJ, Kalin NH. Behaviorally inhibited monkeys demonstrate less coo calls and more amygdala activation during separation. Society for Neuroscience, Atlanta, Georgia. 2006
277. Kalin NH, Roseboom PH, Bakshi VP. The regulation of CRF2 expression: implications for stress-related psychopathology. American College of Neuropsychopharmacology. 2006
278. Nanda SA, Roseboom PH, Mackenrodt DB, Kalin NH. A rodent model of extreme behavioral inhibition to investigate mechanisms underlying anxiety disorders. Society of Biological Psychiatry. 2006
279. Roseboom PH, Nanda SA, Bakshi V, Trentani A, Newman SM, Kalin NH. Predator threat induces behavioral inhibition, pituitary – adrenal activation and changes in amygdala corticotrophin-releasing factor (CRF) system gene expression. Society for Neuroscience, Washington, District of Columbia. 2006
280. Roseboom PH, Nanda SA, Bakshi VP, Newman SM, Kalin NH. Acute ferret exposure alters rat behavior, endocrine regulation and amygdalar gene expression. Society of Biological Psychiatry. 2006

281. Shelton SE, Fox AS, Oakes TR, Davidson RJ, Kalin NH. Patterns of brain activity in monkeys that display high and stable levels of behavioral inhibition. Society for Neuroscience, Atlanta, Georgia. 2006
282. Shelton SE, Rogers J, Shelledy W, Kalin NH. Lack of effect of 5-HTT polymorphism on behavioral inhibition and plasma cortisol in Rhesus monkeys. International Society for Psychoneuroendocrinology, Leiden, The Netherlands, August 2006
283. Shelton, SE, Shelledy W, Rogers J, Kalin NH. Heritability of behavioral inhibition in monkeys: a model for understanding risk factor underlying the development of anxiety disorders. Society of Biological Psychiatry, Toronto, Canada. May 2006
284. Smith EM, Hampel JA, Converse AK, Shelton SE, Davidson RJ, Kalin NH, Christian BT. MicroPET MAP reconstruction of PET neurologands: an examination of quantitation. Society of Nuclear Medicine, Washington, District of Columbia, June 2007
285. Abercrombie H, Fox A, Shelton S, Allison J, Kalin N. Activation of subgenual PFC consistently predicts cortisol responses across various contexts in nonhuman primates. International Society for Psychoneuroendocrinology, Madison, Wisconsin. August 2007
286. Burk LR, Essex MJ, Slattery MJ, Kalin NH. Longitudinal child cortisol levels moderate the association of parental alcohol use with later adolescent use. International Society for Psychoneuroendocrinology, Madison, Wisconsin. August 2007
287. Fox AS, Shelton SE, Oakes TR, Converse AK, Davidson RJ, Kalin NH. Exploring the neural substrates for emotion regulation and psychopathology in non-human primates. Cognitive Neuroscience Society, New York, New York. May 2007
288. Fox AS, Shelton SE, Oakes TR, Converse AK, Davidson RJ, Kalin NH. OFC lesions affect monkeys' neural responses to a human intruder. New York Academy of Sciences, New York, New York. March 2007
289. Fox AS, Shelton SE, Oakes TR, Converse AK, Davidson RJ, Rogers J, Kalin NH. Studies in rhesus monkeys reveal that 5-HTT S-carriers have multiple stress associated neural vulnerabilities. Society of Biological Psychiatry, San Diego, Canada. May 2007
290. Jahn AL, Kern S, RJ Davidson, Halverson JL, Kirschbaum C, Kalin NH, Abercrombie HC. Cortisol & Memory: The role of affective state and the amygdale. International Society for Psychoneuroendocrinology, Madison, Wisconsin, August 2007
291. Kalin N, Shelton S, Fox A, Rogers J, Oakes T, Davidson R. The serotonin transporter genotype in rhesus monkeys is associated with different intermediate brain phenotypes in response to the context of an eliciting stressor. World Congress of Psychiatric Genetics, New York, New York. 2007
292. Kelley DJ, Oakes TR, Greischar LL, Chung M, Ollinger J, Alexander A, Shelton S, Kalin N, Davidson RJ. Automated physiological waveform processing for functional MRI studies. Neuroscience Training Program, Madison, Wisconsin. November, 2007
293. Nanda SA, Roseboom PH, Kalin NH. Amygdala gene expression changes induced by predator threat. International Society for Psychoneuroendocrinology, Madison, Wisconsin. August 2007
294. Oathes DJ, Sarinopoulos I, Kalin NH, Nitschke JB. Neural activity in anticipation of and in response to both aversive and neutral pictures in generalized anxiety disorder. Society for Neuroscience, San Diego, California. November, 2007
295. Oathes DJ, Sarinopoulos I, Lor MY, Kalin NH, Nitschke JB. Normalization of amygdala function in generalized anxiety disorder patients following treatment with venlafaxine. Society for Research in Psychopathology, Iowa City, Iowa, October, 2007
296. Oler JA, Johnstone T, Mazzulla EC, Kirkland JZ, Armstrong JM, Whalen PJ, Kalin N, Essex MJ, Davidson RJ. Children exhibiting higher levels of externalizing psychiatric symptoms in childhood demonstrate stronger

- fronto-amygdalar functional connectivity in adolescence. Society for Neuroscience, Washington, District of Columbia. 2007
297. Qi C, Roseboom PH, Nanda SA and Kalin NH. Predator stress-induced increase in rat amygdala somatostatin receptor 2 expression. Society for Neuroscience, Washington, District of Columbia. 2007
298. Qi C, Roseboom PH, Nanda SA, Kalin NH. Predator stress-induced increase in rat amygdala somatostatin receptor 2 expression. International Society for Psychoneuroendocrinology, Madison, Wisconsin. August 2007
299. Roseboom PH, Nanda SA, Kalin NH. Amygdala gene expression changes induced by predator stress. Society for Neuroscience, Washington, District of Columbia. 2007
300. Shelton SE, Fox AS, Davidson RJ, Kalin NH. Dysregulation of anxiety-related circuitry is associated with extreme behavioral inhibition. Society for Neuroscience, 2007
301. Shelton SE, Fox AS, Davidson RJ, Kalin NH. Individual differences in subgenual prefrontal cortical activity are linked to stress-induced cortisol. Society of Biological Psychiatry, San Diego, California. 2007
302. Shelton SE, Fox AS, Oler JA, Oakes TR, Christian BT, Davidson RJ, Kalin NH. Individual differences in anxious temperament are predicted by 5-HTT binding in the bed nucleus of the stria terminalis. Society for Neuroscience, Washington, District of Columbia. 2008
303. Shirtcliff EA, Essex MJ, Kalin NH. Longitudinal stability and developmental properties of salivary cortisol levels and diurnal rhythms in early adolescence. International Society for Psychoneuroendocrinology, Madison, Wisconsin, August 2007
304. Slattery MJ, Essex MJ, Kalin NH. Elevated childhood cortisol as a risk factor for the development of comorbid allergies and depression in adolescence. International Society for Psychoneuroendocrinology, Madison, Wisconsin. August 2007
305. Slattery MJ, Essex MJ, Kalin NH. The roles of early stress exposure and child cortisol levels in the association of psychiatric internalizing symptoms and allergies in adolescents. International Society for the Investigation of Stress, Vienna, Austria. 2007
306. Smith EM, Vandehey NT, Hampel JA, Murali D, Converse AK, Shelton SE, Davidson RJ, Kalin NH, Christian BT. Comparison of [C-11]DASB DVR differences for MAP versus FBP reconstruction algorithms. Joint Molecular Imaging, Providence, Rhode Island. 2007
307. Rogers J, Shelton SE, Shelledy W, Garcia IV R, Kalin NH. A rhesus monkey (*Macaca mulatta*) model of behavioral inhibition: heritability but no effect of the serotonin transporter polymorphism. American Society of Primatologists, Winston-Salem, North Carolina. 2007
308. Rogers J, Shelton SE, Shelledy W, Garcia R IV, Kalin NH. Genetics of extreme behavioral inhibition and anxiety in juvenile rhesus monkeys. World Congress of Psychiatric Genetics, New York, New York. 2007
309. Christian BT, Murali D, Vandehey NT, Fox AS, Oakes TR, Nickles RJ, Shelton SE, Davidson RJ, Kalin NH. Database of D2/D3 receptor binding in the adolescent rhesus monkey. Society for Nuclear Medicine, New Orleans, Louisiana, June 2008
310. Christian BT, Vandehey NT, Oler JA, Fox AS, Murali D, Rogers J, Oakes TR, Shelton SE, Davidson RJ, Kalin NH. A PET investigation of 5-HTTLPR gene polymorphisms on serotonin transporter binding in the rhesus monkey. Society for Neuroscience, Washington, District of Columbia. 2008
311. Kirkland JZ, Essex MJ, Slattery MJ, Kalin NH, Davidson RJ. Neural activation during a go/no-go task with face and object stimuli: A comparison of high and low socially-anxious individuals. Society for Research on Adolescence. Chicago, Illinois, 2008
312. Roseboom PH, Nanda SA, Qi C, Kalin NH. Threat-induced behavioral inhibition in rats: A model to examine mechanisms underlying maladaptive behaviors and the risk to develop anxiety and depression. Society of Biological Psychiatry, Washington, District of Columbia. May 2008

313. Shelton S, Fox A, Davidson R, Oakes T, Kalin N. Increased amygdale activity predicts anxious temperament in adolescent primates. Biological Psychiatry, Washington DC, May, 2008
314. Shelton SE, Fox AS, Oler JA, Oakes TR, Christian BT, Davidson RJ, Kalin NH. 5-HTT binding in the bed nucleus of the stria terminalis predicts individual differences in anxious temperament. International Society of Psychoneuroendocrinology, Dresden, Germany. July 2008
315. Fox AS, Shelton SE, Alexander AL, Oakes TR, Shackman AJ, Davidson RJ, Kalin NH. Diffusion tensor imaging (DTI) demonstrates that prefrontal-amygdala relationships relate to anxious temperament and amygdale metabolism. Human Brain Mapping: San Francisco, California. June 2009
316. Lane JC, Qi C, Nanda SA, Speers JM, Roseboom PH and Kalin NH. Developing a rodent model of anxious temperament for mechanistic studies of anxiety-like behaviors in rodents. Society for Neuroscience, Washington, District of Columbia. 2009
317. Shelton SE, Oler JA, Fox AS, Oakes TR, Davidson RJ, Kalin NH. Activity of the primate amygdale central nucleus predicts anxious temperament. Society of Biological Psychiatry, Vancouver, British Colombia, Canada. May 2009
318. Kalin, NH. Developmental Aspects of Anxiety and Depression. Grand Rounds, Stanford University, Palo Alto, California. October 2009
319. Kalin, NH. The Neural Circuit Underlying the Developmental Risk for Anxiety and Depression. Neuroscience Seminar, Emory University, Atlanta, Georgia. January 2010
320. Kalin, NH. Developmental Factors Underlying the Risk to Develop Anxiety and Depression. Grand Rounds, Vanderbilt University, Nashville, Tennessee. September 2009
321. Kalin, NH. Developmental factors underlying the risk to develop anxiety and depression. Grand Rounds, University of Miami, Miami, Florida. October, 2010
322. Kalin, NH. Approaches to Treatment of Autism Spectrum Disorders. Seminar, National Institute of Health, Washington, District of Columbia. November 2010
323. Kalin, NH. Developmental Risk for Anxiety and Depression: A Translational Neuroscience approach. Grand Rounds, University of Minnesota, Minneapolis, Minnesota. December, 2010
324. Kalin, NH. Differential Heritability of Hippocampal and Amygdala Function in Relation to the Development of Anxious Temperament. Panel Session, American College of Neuropsychopharmacology, Miami Beach, Florida. December, 2010
325. Kalin, NH. Using fMRI to Predict Treatment Response In Patients With GAD and Depression, Predictors of disease vulnerability and treatment response: personalized medicine in psychiatry. Symposia, 164th Annual American Psychiatric Association Meeting, Honolulu, HI. May, 2011
326. Roseboom PH, Nanda SA, Fox AS, Oler JA, Shelton SE, Kalin NH. Neuropeptide Y System Gene Expression in the Non-human Primate Amygdala is associated with Anxious Temperament. American College of Neuropsychopharmacology, Waikoloa, Hawaii. December, 2011
327. Kalin NH. Alterations in Gene Expression in the Central Nucleus of the Amygdala Associated with Anxious Temperament in Primates. Symposia, Society of Biological Psychiatry, Philadelphia, Pennsylvania. May, 2012
328. Kalin NH. Using the Nonhuman Primate Developmental Model of Anxious Temperament to Conceptualize New Approaches to Early Interventions. Symposia, 165th American Psychiatric Association Meeting, Philadelphia, Pennsylvania. May, 2012
329. Kalin, NH. Developmental Risk for Anxiety and Depression: A Translational Neuroscience Approach. Distinguished Psychiatrist Lecture, 165th American Psychiatric Association Meeting, Philadelphia, Pennsylvania. May, 2012

330. Kalin, NH. Developmental Risk for Anxiety and Depression: A Translational Neuroscience Approach. Grand Rounds, Stanford University, Palo Alto, California. June, 2012
331. Kalin, NH. Developmental Risk for Anxiety and Depression: A Translational Neuroscience Approach. Grand Rounds, Wright State University, Dayton, Ohio. September 2012
332. Tromp DTM, Fox AS, Oler J, Adluru N, Davidson RJ, Alexander A, and Kalin NH. Cortisol Predicts Increased Internal Capsule Integrity in a Large Sample of Non-Human Primates. 42nd International Society of Psychoneuroendocrinology Conference, New York, New York. September, 2012
333. Fox AS, Oler J, Tromp DTM, Shackman A, Alexander A, Davidson RJ, Kalin NH. Cortisol predicts decreased cerebral cortical volume in 592 young non-human primates. International Society of Psychoneuroendocrinology Conference, New York, New York. September, 2012
334. Tromp DTM, Oler J, Fox AS, Shackman A, Davidson RJ, Birn R, Alexander A, and Kalin NH. Structural and Functional Connectivity of the Extended Amygdala in Newborn Monkeys. Society for Neuroscience, Neuroscience 2012, New Orleans, Louisiana. October, 2012
335. Kalin, NH. Anxiety Disorders: New Evidence for Structural and Functional Connectivity Abnormalities. American College of Neuropsychopharmacology, Hollywood, Florida. December, 2012
336. Kalin, NH. Affective Neuroscience of Young Monkeys to Developing Population: Translational Studies of Brain Function Informing Interventions. American College of Neuropsychopharmacology, Hollywood, Florida. December, 2012
337. Kalin, NH. Developmental Risk for Anxiety and Depression: A Translational Neuroscience Approach. Grand Rounds, University of Arkansas, Fayetteville, Arkansas. February, 2013
338. Kalin, NH. Developmental Risk For Anxiety: Recent Developments in Genetic and Neuroimaging Studies. Anxiety and Depression Association of America, La Jolla, California. April, 2013
339. Kalin, NH. Role of the BNST in Mediating the Childhood Risk to Develop Anxiety and Depression. Society of Biological Psychiatry, San Francisco, California. May, 2013
340. Kalin, NH. CRH-R1 and CRH-R2 Genetic Variation in Anxious Young Rhesus Monkeys. Society of Biological Psychiatry, San Francisco, California. May, 2013
341. Tromp DTM, Fox AS, Oler J, Shelton S, Rogers J, Blangero J, Adluru N, Alexander A, Davidson RJ, and Kalin NH. Anxious Temperament in 534 Young Rhesus Monkeys Predicts Increased Integrity of a Significantly Heritable Region within the Internal Capsule. Society of Biological Psychiatry, San Francisco, California. May, 2013
342. Williams LE, Oler J, McFarlin D, Birn R, Rogers J, Taft W, Jesson M, Pine D, and Kalin NH. Amygdala-Prefrontal Connectivity is Altered in Childhood Anxiety. Society of Biological Psychiatry, San Francisco, California. May, 2013
343. Fox AS, Shackman A, Tromp DTM, Birn R, Oler J, Adluru N, Nanda S, Shelton S, Alexander A, Davidson RJ, Roseboom P, and Kalin NH. Amygdala-Prefrontal Connectivity Predicts Anxious Temperament and Gene Expression in the Primate Dorsal Amygdala. Society of Biological Psychiatry, San Francisco, California. May, 2013
344. Tromp DTM, Destiche D, Burghy C, Fox AS, Armstrong J, Ruttle P, Davidson RJ, Slattery MJ, Alexander A, Essex MJ, and Kalin NH. White-matter integrity in the anterior parahippocampal cingulum predicts reactive cortisol in response to an acute psychosocial stressor. International Society of Psychoneuroendocrinology, Leiden, The Netherlands, August, 2013
345. Kalin, NH. Stress and Mental Illness: From Genomics to Imaging. CRH-R1 and CRH-R2 Genetic Variation in Anxious Young Rhesus Monkeys. Neuroscience School of Advanced Studies, Cortona, Italy. August, 2013
346. Kalin, NH. Anxiety Diagnosis and Management. Chair Summit. Tampa, Florida. September, 2013

347. Kalin, NH. Perspectives in the Management of Anxiety Disorders. Chair Summit. Tampa, Florida. September, 2013
348. Kalin, NH. Understanding Neurodevelopmental Risk Factors leading to Anxiety and Depression to Inform Novel Early Interventions in Vulnerable Children. American College of Neuropsychopharmacology, Hollywood, Florida. December, 2013
349. Kalin, NH. Primate Models of Depression. Qatar Clinical Neuroscience Conference, Doha, Qatar. March, 2014
350. Kalin, NH. Neurodevelopmental Risk Factors leading to Anxiety and Depression. Grand Rounds, Loyola. March, 2014
351. Kalin, NH. The Neurobiology of Early-Life Anxiety. Anxiety and Depression Association of America, Chicago, IL. March, 2014
352. Rogers G, Williams LE, Oler J, McFarlin DR, Taft WB, Jesson ML, Pine DS, Kalin NH. Heightened Sensitivity to Uncertainty in Children with Anxiety Disorders. Anxiety and Depression Association of America, Chicago, IL. March, 2014
353. Do P. M. Tromp, Andrew S. Fox, Jonathan A. Oler, Patrick H. Roseboom, Andrew L. Alexander, Ned H. Kalin. Early Life Adversity Leads to Aberrant Structural Development of Amygdala-prefrontal Network in Non-human Primates. Society of Biological Psychiatry, New York, NY. May, 2014
354. Patrick H. Roseboom, Jonathan A. Oler, Andrew S. Fox, Ned H. Kalin. Mifepristone Decreases Anxiety-like Behaviors in a Non-human Primate Model of Anxious Temperament. Society of Biological Psychiatry, New York, NY. May, 2014
355. Brendon M. Nacewicz, Andrew L. Alexander, Ned H. Kalin, Richard J. Davidson. The Neurochemical Underpinnings of Human Amygdala Volume Including Subregional Contributions. Society of Biological Psychiatry, New York, NY. May, 2014
356. Mitzy Kennis, Sanne J. H. van Rooij, Do P. M. Tromp, Arthur R. Rademaker, René S. Kahn, Ned H. Kalin, Elbert Geuze. Alterations in White Matter Tracts in Veterans with PTSD versus without PTSD and Healthy Controls. Society of Biological Psychiatry, New York, NY. May, 2014
357. Kalin, NH. The Neural Substrates of Anxiety Vulnerability. Society of Biological Psychiatry, New York, NY. May, 2014
358. Kalin, NH. The Neurobiology of Pervasive Anxiety: The Role of Circuits Centered on the Extended Amygdala. Society of Biological Psychiatry, New York, NY. May, 2014
359. Kalin, NH. Perspectives in the Management of Anxiety Disorders. Chair Summit. Tampa, Florida. September, 2014
360. Kalin, NH. Update on the Neurobiology of Depression, University of Wisconsin 2nd Annual Update and Advances in Psychiatry, Madison, Wisconsin. October, 2014
361. Kalin, NH. Neurodevelopmental Risk Factors leading to Anxiety and Depression. Grand Rounds, University of Miami, Miami, Florida. October, 2014
362. Kalin, NH. Developing Methods for Cross-species Research on Impaired Irritability in Children, American College of Neuropsychopharmacology, Phoenix, Arizona. December, 2014
363. Kalin, NH. Neurodevelopmental risk factors leading to anxiety and depression. Biobehavioral Health Colloquium, Penn State College of Health and Human Development, University Park, Pennsylvania. February, 2015

364. Kalin, NH. Altered Neural Circuitry Underlying the Risk to Develop Anxiety and Depression: Nonhuman Primate Translational Studies. British Neuroscience Association, BNA2015: Festival of Neuroscience, Edinburgh, Scotland. April, 2015
365. Kalin, NH. Neurodevelopmental risk factors leading to anxiety and depression. Grand Rounds, University of Texas Medical Branch, Galveston TX. May, 2015
366. Kalin, NH. Altered Neural Circuitry Underlying the Risk to Develop Anxiety and Depression: Nonhuman Primate Translational Approach. Society of Biological Psychiatry, Toronto, Canada. May, 2015.
367. Andrew S. Fox, Tade Souzaiaia, Jonathan A. Oler, Jae Mun Kim, Joseph Nguyen, Patrick H. Roseboom, James A. Knowles, Ned H. Kalin. Anxious Temperament Related Gene Expression in the Primate Central Nucleus of the Amygdala Revealed with RNA-Seq. Society of Biological Psychiatry, Toronto, Canada. May, 2015
368. Alexander J. Shackman, Andrew S. Fox, Jonathan A. Oler, Jennifer S. Weinstein, Ramon Martinez-Cancino, Terrence R. Oakes, Steven E. Shelton, Jason F. Smith, Luiz Pessoa, Matthias Gamer, Richard J. Davidson, Ned H. Kalin. The Extended Amygdala is a Key Substrate for Sustained Anxiety. Society of Biological Psychiatry, Toronto, Canada. May, 2015
369. Jonathan A. Oler, Andrew S. Fox, Do P. M. Tromp, Patrick H. Roseboom, Andrew L. Alexander, Richard J. Davidson, Ned H. Kalin. Behavioral, Neural and Endocrine Changes Associated with Nursery/Peer Rearing in Rhesus Monkeys. Society of Biological Psychiatry, Toronto, Canada. May, 2015.
370. Rothem Kovner, Patrick H. Roseboom, Delores A. French, Jonathan A. Oler, Andrew S. Fox, Julie L. Fudge, Ned H. Kalin. Characterization of Somatostatin Expressing Neurons in the Primate Central Extended Amygdala. Society of Biological Psychiatry, Toronto, Canada. May, 2015
371. Kalin, NH. Allelic Variation in CRH-R1 SNP's as Biomarkers for Depression and Anxiety. Society of Biological Psychiatry, Toronto, Canada. May, 2015
372. Lisa E. Williams, Jonathan A. Oler, Andrew S. Fox, Daniel R. McFarlin, Gregory M. Rogers, Maria A. L. Jesson, Richard J. Davidson, Daniel S. Pine, Ned H. Kalin. Fear of the Unknown: Increased Neural Activation During Uncertain Anticipation in Childhood Anxiety Disorders. Society of Biological Psychiatry, Toronto, Canada. May, 2015
373. Mitzy Kennis, Sanne J. H. van Rooij, Do P. M. Tromp, Andrew S. Fox, Arthur R. Rademaker, Rene S. Kahn, Ned H. Kalin, Elbert Geuze. Increased Dorsal Cingulum Fractional Anisotropy in Persistent Posttraumatic Stress Disorder. Society of Biological Psychiatry, Toronto, Canada. May, 2015
374. Patrick H. Roseboom, Andrew S. Fox, Jonathan A. Oler, Daniel R. McFarlin, Benjamin P. Grabow, Miles E. Olsen, Ethan K. Brodsky, Rothem Kovner, Marissa K. Riedel, Eva M. Fekete, Do PM Tromp, Rasmus M. Birn, Andrew L. Alexander, Marina E. Emborg, Walter F. Block, Ned H. Kalin. Overexpression of Corticotropin-releasing Hormone (CRH) in the Dorsal Amygdala Alters Anxious Temperament and Brain Metabolic Activity. Society of Biological Psychiatry, Toronto, Canada. May, 2015
375. Do P. M. Tromp, Lisa E. Williams, Andrew S. Fox, Jonathan A. Oler, Gregory R. Rogers, Daniel S. Pine, Ned H. Kalin. White Matter Alterations in Pre-Adolescent Children with Anxiety Disorders. Society of Biological Psychiatry, Toronto, Canada. May, 2015
376. Kalin, NH. Insights into Novel Early Interventions from Nonhuman Primate Translational Studies of Anxious Temperament. American Psychiatric Association, Toronto, Canada. May, 2015.
377. Kalin, NH. Developmental Risk for Anxiety and Depression. University of California - Davis, Mind Institute Distinguished Lecture Series, Sacramento, CA. June, 2015
378. Fox AS, Shackman AJ, Oler JA, Birn RM, Alexander AA, Shelton SE, Davidson RJ, Kalin NH, The Neural Substrates of Anxious Temperament in Young Rhesus Monkeys. Nanosymposium, Society for Neuroscience Annual Meeting, Chicago, October, 2015

379. Kovner R, Fox AS, Roseboom PH, French DA, Oler JA, Fudge JL, Kalin NH. Characterizing Neuropeptide Expression in the Primate Central Extended Amygdala: Providing a Basis for Understanding Mechanisms Underlying Anxiety. Society of Biological Psychiatry, Atlanta, GA. May, 2016
380. Tromp DPM, Fox AS, Oler JA, Alexander AL, Kalin NH. Evolutionarily Conserved Role for Prefrontal-Amygdalar White Matter in Anxious Temperament in 539 Young Rhesus Monkeys. Society of Biological Psychiatry, Atlanta, GA. May, 2016.
381. Fox AS, Birn RM, Shackman AJ, Raveendran M, Alexander AL, Davidson RJ, Rogers J, Kalin NH. Heritability of Functional Connectivity Between Components of the Extended Amygdala in Young Non-human Primates. Society of Biological Psychiatry, Atlanta, GA. May, 2016
382. Nacewicz BM, Oler JA, Roseboom PH, Riedel MK, Fekete EM, Fox AS, Kalin NH. Resolving Viral Vector-Mediated Changes in Discrete Neural Circuits Subserving Anxious Temperament with In Vivo Magnetic Resonance Spectroscopy. Society of Biological Psychiatry, Atlanta, GA. May, 2016
383. Kalin NH. Translational Research Approaches to Understanding Psychiatric Illness. Society of Biological Psychiatry, Atlanta, GA. May, 2016
384. Kalin, NH. Translating Molecular Models in Non-Human Primates to Human Anxiety Disorders. Cold Spring Harbor Laboratory, Cold Spring Harbor, NY. August, 2016
385. Kalin, NH. A nonhuman primate model facilitates the development of neuroplasticity-related treatment targets for anxiety disorders. International Society of Psychoneuroendocrinology, Miami, FL. September, 2016
386. Kalin, NH. Sleep and Anxiety Disorders in Veterans. Chair Summit, Coral Gables, FL. September, 2016
387. Kalin, NH. Threat-Related Response: Tipping the Balance Between Appetitive and Defensive Behaviors. Chair Summit, Coral Gables, FL. September, 2016
388. Oler JA, Fox AS, Tromp DPM, Riedel MK, Fekete EM, Roseboom PH, Murray EA, Kalin NH. Effects of caudal orbitofrontal cortex lesions on threat-related behavior and brain metabolism in young female rhesus monkeys. Program No. 634.26. *2016 Abstract Viewer/Itinerary Planner*. Washington, DC: Society for Neuroscience, 2016 Online.
389. Roseboom PH, Fox AS, Oler JA, Olsen ME, Brodksy EK, Kovner R, Riedel MK, Fekete EM, Block WF, Kash TL, Jin J, Kalin NH. Designer receptors exclusively activated by designer drugs (DREADDs) to investigate the molecular underpinnings of anxious temperament in non-human primates. Program No. 634.27. *2016 Abstract Viewer/Itinerary Planner*. Washington, DC: Society for Neuroscience, 2016 Online.
390. Kalin, NH. The Childhood Risk to Develop Anxiety and Depression: A Translational Neuroscience Approach. Charles L. Ravaris, MD Memorial Lecture, Dartmouth-Hitchcock Medical Center, Lebanon, NH. November, 2016
391. Kenwood MM, Oler JO, Fox AS, Tromp DPM, Zhou X, Riedel MK, Fekete EM, Roseboom PH, Murray EA, Kalin NH. Consequences of altering prefrontal-temporal lobe connectivity in young nonhuman primates. *Biological Psychiatry*, 81 (10):S338, 2017.
392. Roseboom PH, Oler JA, Fox AS, Kovner R, Saul ML, Riedel MK, Fekete EM, Fudge JL, Kalin NH. Hippocampal neurogenesis in primates and its relation to *in vivo* and postmortem measures of hippocampal volume. *Biological Psychiatry*, 81 (10):S343, 2017.
393. Kalin, NH. Update on Neurobiology of Anxiety Disorders. International Conference on Neurobiology of Mood and Anxiety Disorders: Focus on Psychoneuroendocrinology and Psychopharmacology, Buenos Aires, Argentina. January, 2017

394. Kalin, NH. Current Approaches to Psychopharmacological Treatment of Anxiety Disorders. International Conference on Neurobiology of Mood and Anxiety Disorders: Focus on Psychoneuroendocrinology and Psychopharmacology, Buenos Aires, Argentina. January, 2017
395. Kalin, NH. Neurobiology of Anxiety and Depression. Presidential Keynote Address, American Society for Neural Therapy and Repair, Clearwater Beach, FL. April, 2017
396. Kalin, NH. Translating Molecular Models in Nonhuman Primates to Human Anxiety Disorders. National Institute on Drug Abuse Intramural Research Program Seminar Series, Baltimore, MD. May, 2017
397. Kalin, NH. Mechanistic Studies in Primates Implicating Altered Amygdala CRH Systems in Pathological Anxiety. Society of Biological Psychiatry Annual Meeting, San Diego, CA. May, 2017
398. Kalin, NH. Altered Neuroplasticity Mechanisms Underlying the Risk to Develop Psychopathology: Converging Evidence from Rodent and Primate Studies, discussant. Society of Biological Psychiatry Annual Meeting, San Diego, CA. May, 2017
399. Kalin, NH. Translating molecular models in nonhuman primates to human anxiety disorders. National Institute of Mental Health Neural Circuits Workshop, North Bethesda, MD. September, 2017
400. Kalin, NH. Translational research approaches focused on mechanisms underlying the risk to develop stress-related psychopathology. World Psychiatry Association XVII World Congress of Psychiatry, Berlin, Germany. October, 2017
401. Kalin, NH. Using a nonhuman primate model of anxiety to inform the development of personalized treatments. World Psychiatry Association XVII World Congress of Psychiatry, Berlin, Germany. October, 2017
402. Oler JA, Roseboom PH, Kovner R, Riedel MK, Fekete EM, Rabska M, Elam VR, Kulick S, Lao PJ, Zammit MD, Christian BT, Kalin NH. Visualizing DREADDs receptor expression *in vivo* with C-labeled clozapine PET imaging in the nonhuman primate. Program No. 279.06. *2017 Abstract Viewer/Itinerary Planner*. Washington CD: Society for Neuroscience, 2017 Online.
403. Fox AS, Souzaiaia T, Oler JA, Kovner R, Kim J, Riedel MK, Fekete EM, Roseboom PH, Knowles JA, Kalin NH. Neurotrophin-3 signaling in the dorsal amygdala decreases early-life anxious temperament in non-human primates. Program No. 196.04. *2017 Abstract Viewer/Itinerary Planner*. Washington DC: Society for Neuroscience, 2017 Online.
404. Shackman AL, Fox AS, Oler JA, Shelton A, Oakes T, Davidson RJ, Kalin NH. Heightened extended amygdala metabolism following threat characterizes the early phenotype risk to develop anxiety related psychopathology. *Molecular Psychiatry*, 22(5):724-32, 2017.
405. Kovner R, Fox AS, Souzaiaia T, Roseboom P, French D, Oler J, Fudge J, Knowles J, Kalin NH. Characterizing extended amygdala neuron populations in primates as a basis for exploring altered Ce and BST function in anxiety. *Biological Psychiatry*, 81 (10):S343-S344, 2017.
406. Kalin, NH. Translational studies of the extended amygdala circuitry in early-life anxiety. Anxiety and Depression Association of America Conference, Washington D.C. April, 2018
407. Kalin NH, Nemeroff CB, Widge AS, Rodriguez C, Liston C. Biomarkers in Psychiatry: Current Status and Development. American Psychiatry Association Annual Meeting, New York City, NY. May 2018
408. Kalin, NH. HPA and Amygdala CRH Alterations Associated with Primate Anxiety. Society of Biological Psychiatry Annual Meeting, New York City, NY. May, 2018
409. Kalin, NH. Altered Amygdala Neuroplasticity Systems in Mediating Early Life Anxiety. Society of Biological Psychiatry Annual Meeting, New York City, NY. May, 2018
410. Kenwood M, Oler J, Fox A, Tromp D, Zhou X, Riedel M, Fekete E, Roseboom P, Murray E, Fudge J, Kalin N. Prefrontal regulatory pathways in young non-human primates that modulate the function of the

neural circuitry underlying anxious temperament. *Biological Psychiatry*, 83 (9):S133, 2018.

411. Roseboom PH, Kovner R, Souzaiaia T, Lu J, Dong Y, Fathi A, Tao Y, French D, Fox AS, Oler JA, Bhattacharyya A, Zhang SC, Knowles JA, Kalin NH. Characterizing neurotrophic systems in the primate amygdala that are relevant to mediating and treating anxiety disorder. *Biological Psychiatry*, 83 (9):S242, 2018.
412. Kalin, NH. Translational Neuroscience: Innovative Approaches and Clinical Perspectives. Meeting the Minds Scientific Program, Sao Paulo, Brazil. August, 2018
413. Kalin, NH. The heavy hand of genetics in anxiety: Brain structure, metabolism and the transmission of anxiety from one generation to the next. Meeting the Minds Scientific Program, Sao Paulo, Brazil. August, 2018.
414. Kalin, NH. The Childhood Risk to Develop Anxiety and Depression: A Translational Neuroscience Approach. Grand Rounds, University of Illinois at Chicago, Chicago, IL. November, 2018
415. Kovner R, Souzaiaia T, Fox A, Roseboom P, Frence D, Oler J, Knowles J, Kalin NH. Protein kinase C delta in neurons of the central nucleus of the amygdala is associated with early life anxious temperament in young rhesus monkeys. Late Breaking Abstract Program No. S282. *2018 Abstract Viewer/Itinerary Planner*. Society of Biological Psychiatry, 2018 Online.
416. Kalin NH. Early Life Predictors for Developing Anxiety and Depression. CME Outfitters 11th Annual Chair Summit: Master Class for Neuroscience Professional Development, Fort Lauderdale, FL. February, 2019
417. Kalin NH, Nemeroff CB. Treatment Resistant Mood and Anxiety Disorders, Part I. The American College of Psychiatrists 2019 Annual Meeting, Honolulu, Hawaii. February, 2019
418. Kalin NH, Nemeroff CB. Treatment Resistant Mood and Anxiety Disorders, Part II. The American College of Psychiatrists 2019 Annual Meeting, Honolulu, Hawaii. February, 2019
419. Oler JA, Dean 3rd DC, Riedel MK, Fekete EM, Elam VR, Nacewicz BM, Roseboom PH, Zhou X, Fox AS, Tromp DP, Birn RM, Alexander AL, Davidson RJ, Kalin NH. Multimodal brain imaging in infant primates predicts the later development of anxious temperament. Society for Research in Child Development meeting, Baltimore, MD, March, 2019
420. Kalin, NH. The Childhood Risk to Develop Anxiety and Depression: A Translational Neuroscience Approach. The Ken Altshuler MD Grand Rounds in Psychiatry Series, University of Texas Southwestern Medical Center, Dallas, TX. May, 2019
421. Moody JF, Kecskemeti SR, Dean III D, Oler JA, Tromp D, Alexander AL, Kalin, NH. A time-averaged MRI brain template for the infant rhesus macaque. Neuroanatomy: Seeing is Believing, Digital Poster, Neuro. *2019 Abstract Viewer/Itinerary Planner*. International Society for Magnetic Resonance in Medicine, 2019 Online.
422. Kalin NH. The Complexity and Importance of the Central Nucleus of the Amygdala in Anxiety and Addiction. Session Chair. Society of Biological Psychiatry Annual Meeting, Chicago, IL. May, 2019
423. Crux J, Williams L, McFarlin D, Aggarwal N, Kalin NH. Coorugator supercilii activity during negative anticipation is enhanced in preadolescent girls with anxiety disorders. Late Breaking Abstract Program No. T259. *2019 Abstract Viewer/Itinerary Planner*. Society of Biological Psychiatry, 2019 Online.
424. Mueller SAL, Oler JA, Riedel M, Fekete E, Elam V, Olson M, Galvan A, Michaelides M, Roseboom PH, Kalin NH. Chemogenetic inhibition of the amygdala alters anxiety-related behavior in young monkeys. Late Breaking Abstract Program No. T233. *2019 Abstract Viewer/Itinerary Planner*. Society of Biological Psychiatry, 2019 Online.
425. Kalin NH. Interactions between Neurobiological, Genetic and Environmental Factors of Vulnerability in the Development of Depression and Anxiety Disorders. American Psychiatric Association Annual Meeting, San Francisco. May, 2019

426. Kalin, NH. The Neural Circuitry Underlying the Childhood Risk to Develop Anxiety and Depression. The 19th World Psychiatric Association's World Congress of Psychiatry, Lisbon, Portugal. August, 2019
427. Kalin NH. The Childhood Risk to Develop Anxiety and Depression: A Translational Neuroscience Approach. Grand Rounds Presentation, MAYO Clinic, Rochester, MN. October, 2019
428. Kalin, NH. Using Non-Human Primates to Develop Novel Intervention Strategies for the Treatment of Anxiety. American Academy of Child & Adolescent Psychiatry's 65th Annual Meeting, Chicago, IL. October, 2019
429. Kalin, NH. Biological Bases of Depression. International Congress, Depression and Schizophrenia: from Mechanisms to the Clinic, Bari, Italy. November, 2019
430. Kalin, NH. Studies in Young Children and Young Nonhuman Primates Focused on Mechanisms Underlying the Risk to Develop Anxiety and Depression. 58th Annual Meeting of The American College of Neuropsychopharmacology, Orlando, FL. December, 2019
431. Kalin, NH. The Childhood Risk to Develop Anxiety and Depression: A Translational Neuroscience Approach. Grand Rounds Presentation, Stony Brook University, Stony Brook, NY. February, 2020
432. Kalin, NH. The Neurobiology of Depression with a Focus on Ketamine. CME Outfitters 12th Annual Chair Summit, Las Vegas, NV. February, 2020
433. Kalin, NH. Managing Stress and Staying Resilient. University of Wisconsin, Department of Medicine Town Hall, Madison, WI. April, 2020
434. Kalin, NH. Managing Stress and Staying Resilient. Grand Rounds Presentation, University of Wisconsin, Department of Anesthesiology, Madison, WI. April, 2020
435. Kalin, NH. Managing Stress and Staying Resilient. University of Wisconsin, Department of Dermatology Town Hall, Madison, WI. May, 2020
436. Kalin, NH. Webinar talk about previous published paper: Novel Insights Into Pathological Anxiety and Anxiety-Related Disorders. Maudsley Hospital and King's College, London, England. May, 2020
437. Kalin, NH. Managing Stress and Staying Resilient. University of Wisconsin, Department of Population Health Sciences, Madison, WI. July, 2020
438. Kalin, NH. The Childhood Risk to Develop Anxiety and Depression: A Translational Neuroscience Approach. Grand Rounds Presentation, Columbia University, New York, NY. September, 2020
439. Kalin, NH. The Childhood Risk to Develop Anxiety and Depression: A Translational Neuroscience Approach. Psychiatry & Behavioral Sciences Grand Rounds WebEx, Rush University Medical Center, Chicago, IL, October, 2020
440. Kalin, NH. Early Life Factors Associated with the Development of Anxiety and Depression. International Conference of the Section of Psychoneuroendocrinology of the World Psychiatric Association Webinar, Buenos Aires, Argentina. October, 2020
441. Kalin, NH. The Childhood Risk to Develop Anxiety and Depression: A Translational Neuroscience Approach. Stanford University Department of Psychiatry and Behavioral Sciences Grand Rounds, Stanford, CA. November, 2020
442. Kalin, NH. The Childhood Risk to Develop Anxiety and Depression: A Translational Neuroscience Approach. The Zucker Hillside Hospital, Department of Psychiatry Regularly Scheduled Series, Glen Oaks, New York. January, 2021
443. Kalin, NH. The Childhood Risk to Develop Anxiety and Depression: A Translational Neuroscience Approach. William K. Warren Jr. "Frontiers in Neuroscience" Lecture Series, Laureate Institute for Brain Research, Tulsa, OK. February, 2021

444. Kalin, NH. The Childhood Risk to Develop Anxiety and Depression: A Translational Neuroscience Approach. Grand Rounds Lecture, Department of Psychiatry, Westchester Medical Center, Valhalla, New York. March, 2021
445. Kalin, NH. The Childhood Risk to Develop Anxiety and Depression: A Translational Neuroscience Approach. McLean Hospital Virtual Neuroscience Seminar, Harvard Medical School Affiliate, Boston, MA. April, 2021
446. Kalin, NH. The Childhood Risk to Develop Anxiety and Depression: A Translational Neuroscience Approach. University of Pittsburgh School of Medicine, Department of Psychiatry Distinguished Scientist Lecturer, Pittsburgh, PA. April, 2021
447. Kalin, NH. The Childhood Risk to Develop Anxiety and Depression: A Translational Neuroscience Approach. C. Charles Burlingame Awardee for 2020, Hartford Hospital/Institute of Living, Hartford, Connecticut. May, 2021
448. Kalin, NH. Translational Studies Identifying Circuits and Molecules Underlying the Childhood Risk to Develop Stress-Related Psychopathology. Bruce McEwen Lifetime Achievement Award of the International Society of Psychoneuroendocrinology, ISPNE 2021 Virtual Conference, Chicago, IL. September, 2021
449. Kalin, NH. Understanding the Early Life Risk to Develop Pathological Anxiety. Brain & Behavior Research Foundation, 2021 Meet The Scientist Webinar Series, New York, NY. October, 2021
450. Kalin, NH. The Childhood Risk to Develop Anxiety and Depression: A Translational Neuroscience Approach. Icahn School of Medicine at Mount Sinai Grand Rounds, New York, NY. October, 2021
451. Kalin, NH. The Childhood Risk to Develop Anxiety and Depression: A Translational Neuroscience Approach. Jersey Shore University Medical Center, Department of Psychiatry and the associated Hackensack Meridian Medical Centers, Neptune, NJ. October, 2021
452. Kalin, NH. The Childhood Risk to Develop Anxiety and Depression: A Translational Neuroscience Approach. Tufts Medical Center Grand Rounds, Department of Psychiatry, Boston, MA. February, 2022
453. Kalin, NH. Translational Neuroscience Studies Identifying Circuits and Molecules Underlying the Childhood Risk to Develop Anxiety and Depression. Uppsala University, The Goran Gustafsson Foundation Guest of Honour Lecturer of Scientific Symposium: Mental Health - *One of the greatest challenges of our time*, Uppsala, Sweden. March, 2022
454. Kalin, NH. The Childhood Risk to Develop Anxiety and Depression: A Translational Neuroscience Approach focused on developing new treatments. National Primate Research Centers 60th Anniversary Scientific Seminar Series, virtual presentations. May, 2022
455. Kalin, NH. Early Life Risk for the Development of Pathological Anxiety: A Translational Neuroscience Approach. Award for Research in Psychiatry, APA 2022 Annual Meeting, New Orleans, LA. May, 2022
456. Kalin, NH. Early Life Risk for the Development of Pathological Anxiety: A Translational Neuroscience Approach. McLean Hospital/Harvard Medical School Center for Depression, Anxiety, and Stress Research's (CDASR) 2022-2023 Speaker Series, virtual presentation. November, 2022
457. Kalin, NH. Early Life Risk for the Development of Pathological Anxiety: A Translational Neuroscience Approach. Wisconsin National Primate Research Center Neuroscience Seminar, Madison, WI. January, 2023
458. Kalin, NH. The Childhood Risk to Develop Anxiety and Depression: A Translational Neuroscience Approach. Uniformed Services University Center for the Study of Traumatic Stress, 2023 Brain, Behavior and Mind Lecture, virtual presentation. September 2023
459. Kalin, NH. The Childhood Risk to Develop Anxiety and Depression: A Translational Neuroscience Approach. Washington University in St. Louis, Department of Psychiatry Samuel Guze Guest Lecture, St. Louis, MO. October 2023

460. Kalin, NH. The Childhood Risk to Develop Anxiety and Depression: A Translational Neuroscience Approach. University of Utah, Huntsville Mental Health Institute, Department of Psychiatry Grand Rounds, Salt Lake City, UT. November 2023