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Personal Data

Birthdate: October 29, 1960
Birthplace: Aachen, Germany
Citizenship: U.S.
Address: University of Washington Department of Psychiatry and Behavioral Sciences, 1959 Pacific Ave. NE, Seattle, WA 98195-6560
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Education

1979 – 1986 M.D. University of Aachen Medical School, Germany

Postgraduate Training

1984 – 1985 Research Assistant Institute of Brain Research, University of Zurich, Switzerland
1986 – 1988
1988 – 1992 Psychiatry Residency University of Washington Medical School, Seattle, WA
1991 – 1992 Chief Resident University of Washington Medical Center, Seattle, WA
1992 – 1995 Geriatric Psychiatry Fellowship Geriatric Research, Education and Clinical Center, Veterans Affairs Puget Sound Health Care System, Seattle, WA

Faculty Positions Held

1993 – 1995 Acting Instructor
1995 – 1999 Acting Assistant Professor
1999 – 2005 Lecturer
2005 – 2007 Research Assistant Professor
Since 2007 Assistant Professor
Department of Psychiatry and Behavioral Sciences, University of Washington School of Medicine, Seattle, WA

Hospital Positions Held

1995-2010 Psychiatrist Geriatric Research, Education and Clinical Center, Veterans Affairs Puget Sound Health Care System, Seattle, WA
Since 2010 Psychiatrist University of Washington Medical Center, Seattle, WA

Honors

1979 – 1986 German National Merit Foundation Scholarship
1992 Director's Award, Department of Psychiatry and Behavioral Sciences, University of Washington School of Medicine
1999 Science Magazine *Visions of the Future* Essay Contest Winner

Board Certification

1992 FLEX Examination
1994 Certification in Adult Psychiatry
1995 Certification in Geriatric Psychiatry

License to Practice

1986 Federal Republic of Germany # 555/86
1992 Washington # MD00030073

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Professional Organizations

since 1995 Society for Neuroscience

Local Responsibilities

2004 – 2006 Veterans Affairs Puget Sound Health Care System Animal Care and Use Committee, Member

Research Funding

GRANTS AS PRINCIPAL INVESTIGATOR

Current

NIH, NIMH Clinical Investigator Career Development (K08) Award (5K08MH076098)
Molecular Genetics and Gene Expression in Psychiatric Disorders
Role: PI/Trainee
5/1/2007 – 4/30/2012

Past

Department of Veterans Affairs Associate Investigator Award
Molecular Studies of the 5-HT₆ Serotonin Receptor
Role: PI
10/1/1995 – 9/30/1996

NARSAD Young Investigator Award
Gene Expression Analysis in Animal Models of Depression
Role: PI
7/1/2001 – 6/30/2003

NIH, NIMH R21 Award (5R21MH067641)
Stress Resilience in an Animal Model of Depression
Role: PI
4/01/2003 – 3/31/3006

Alzheimer's Disease Research Center (ADRC) Pilot Study Award
P-Glycoprotein Genotyping in Alzheimer's disease
Role: PI
5/1/2006 – 4/30/2007

Submitted Grants with Pending Review

Serotonin Transporter Gene Re-Sequencing in Patients with Irritable Bowel Syndrome, R21
Proposal submitted to NIH, NINR
Scientific Review Impact/Priority Score 40; Council Review pending; if not funded, resubmission planned for Fall 2010
Role: PI (corresponding PI on multiple PI proposal)
12/1/2010 – 11/30/2012

Psychosocial/Behavioral Intervention in Post-Stroke Depression (PSD): Fatigue and depression gene-environment interactions, competitive revision R01, scientific review pending, NIH, NINR
Role: PI (multiple PI proposal)
12/1/2010 – 11/30/2013

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GRANTS AS CO-INVESTIGATOR

Current

NARSAD Independent Investigator Award (PI: Laura Richardson)
SERT Polymorphisms and Depression Remission under Usual Care Conditions among
Adolescents

Role: Co-investigator
9/15/2009-9/14/2010

NIH R01 Award (2R01NR007755-06; PI: Mitchell/Kirkness)
Psychosocial/Behavioral Intervention in Post-Stroke Depression (PSD)

Role: Co-Investigator
9/29/09-07/31/2014

NIH R01 Award (R01HL093146-01A1; PI: Fan/Nguyen)
Depression and functional outcomes in COPD: Impact of genetics and inflammation

Role: Co-Investigator
2/1/2010 – 1/31/2015

UW School of Medicine, Alcohol and Drug Abuse Institute Small Grant (PI: Dimitry Davydow)
Substance Abuse and Psychiatric Disorders in Intensive Care Unit Survivors

Role: Co-Investigator
6/15/2010 – 6/14/2011

Past

NIH, NIA Geriatric Academic Program Training Award (AG0-0503)
The Role of the 5-HT₇ Serotonin Receptor in the Decay of Circadian Rhythms in Aging and
Alzheimer's Disease

Role: Trainee
9/1/1996 – 8/30/2001

Department of Veterans Affairs Merit Review Award (PI: Fred Petty)
Learned Helplessness Model of Stress

Role: Co-Investigator
10/1/2002 – 9/30/2004

NIH, NINR R01 Award (3R01NR04142-06S1; PI: Margaret Heitkemper)
Supplement to: Nursing Management of IBS: Improving Outcomes

Role: Co-Investigator
9/30/2003 – 1/31/2007

NIH, NINR R01 Award (3R01NR007755-04S2; PI: Pamela Mitchell)
Supplement to: Psychosocial/Behavioral Intervention in Post-Stroke Depression

Role: Co-Investigator
9/27/2005 – 2/28/2007

Publications

Manuscripts in Peer-Reviewed Journals

1. Szot, P., Ashleigh, E.A., **Kohen, R.**, Petrie, P., Dorsa, D.M., Veith, R. Norepinephrine transporter mRNA is elevated in the locus coeruleus following short- and long-term desipramine treatment. *Brain Research* 618: 308-312, 1993
2. **Kohen, R.**, Metcalf, M. A., Khan, N., Druck T., Huebner, K., Lachowicz, J. E., Sibley, D. R., Meltzer, H. Y., Roth, B. L. and Hamblin, M. W. Cloning, characterization and

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- chromosomal localization of a human 5-HT₆ serotonin receptor. *Journal of Neurochemistry*, 66:47-56, 1996.
3. Heidmann, D. E. A., Metcalf, M. A., **Kohen, R.**, Hamblin, M. W. Four 5-hydroxytryptamine₇ (5-HT₇) receptor isoforms in human and rat produced by alternative splicing: species differences due to altered intron-exon organization. *Journal of Neurochemistry*, 68: 1372-1381, 1997.
 4. Hamblin, M. W., **Kohen, R.**, Guthrie, C. and Heidmann, D.E.A. Gs protein-coupled serotonin receptors: receptor isoforms & functional differences. *Annals of the New York Academy of Sciences*, 861:31-7, 1998.
 5. Heidmann, D.E.A., Szot, P., **Kohen, R.** and Hamblin, M.W. Function and distribution of three rat 5-hydroxytryptamine₇ (5-HT₇) receptor isoforms produced by alternative splicing. *Neuropharmacology*, 37:1621-32, 1998.
 6. **Kohen, R.**, Heidmann, D. E. A., Anthony, J., White, S. S., Hamblin, M. W., Szot, P. Changes in 5-HT₇ serotonin receptor mRNA expression with aging in rat brain. *Molecular Brain Research*, 79, 163-168, 2000
 7. **Kohen, R.**, Fashingbauer, L. A., Heidmann, D. E. A., Guthrie, C. R., Hamblin, M. W. Cloning of the mouse 5-HT₆ serotonin receptor and mutagenesis studies of the third cytoplasmic loop. *Molecular Brain Research*, 90, 110-117, 2001
 8. Clark, M.S., Sexton, T.J., McClain, M., Root, D.C., **Kohen, R.**, Neumaier, J.F. Overexpression of 5-HT_{1B} receptor in dorsal raphe nucleus using HSV gene transfer increases anxiety behavior following inescapable stress. *J. Neuroscience*, 22, 4550-4562, 2002
 9. **Kohen, R.**, Neumaier, J.F., Hamblin, M. W., Edwards, E. Congenitally learned helpless rats show abnormalities in intracellular signaling. *Biological Psychiatry*, 53, 520-529, 2003
 10. **Kohen, R.**, Kirov, S., Navaja, G.P., Happe, H.K., Hamblin, M.W., Snoddy, J.R., Neumaier, J.F., Petty, F. Gene Expression Profiling in the Hippocampus of Learned Helpless and Non-helpless Rats. *Pharmacogenomics Journal* 2005; 5: 278-291
 11. Jarrett, M.E., **Kohen, R.**, Cain, K.C., Burr, R.L., Poppe, A., Navaja G.P., Heitkemper, M.M. Relationship of SERT Polymorphisms to Depressive and Anxiety Symptoms in Irritable Bowel Syndrome. *Biological Research for Nursing*, 2007; 9:161-169
 12. Mitchell P.H., Teri L., Veith R., Buzaitis A., Tirschwell D., Becker K., Fruin M., **Kohen R.**, Cain K.C. Living well with stroke: design and methods for a randomized controlled trial of a psychosocial behavioral intervention for poststroke depression. *Journal of Stroke & Cerebrovascular Diseases*, 2008; 17:109-115
 13. **Kohen, R.**, Cain, K.C., Mitchell, P.H., Becker, K., Buzaitis, A., Millard, S.P., Navaja, G.P., Teri, L., Tirschwell, D., Veith, R. Association of Serotonin Transporter Gene Polymorphisms with Post-Stroke Depression. *Archives of General Psychiatry*, 2008; 65:1296-1302.
 14. **Kohen, R.**, Jarrett, M.E., Cain K.C., Jun, S-E., Navaja, G.P., Symonds, S, Heitkemper, M.M. The Serotonin Transporter Polymorphism rs25531 is Associated with Irritable Bowel Syndrome. *Digestive Diseases and Sciences*, 2009; 54: 2663-2670.
 15. Corwin, E.J., **Kohen, R.**, Jarrett, M., Stafford, B. The heritability of postpartum depression. *Biological Research for Nursing*, in press

Other Publications

1. **Kohen, R.**, Technology Transfer. *Science*, 1999; 286:2296-2298

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Manuscripts Submitted

1. Korvatska, O., Estes, A., Munson, J., Dawson, G., Bekris, L.M., **Kohen, R.**, Yu, C-E., Schellenberg, G.D., Raskind, W.H. Mutations in the TSGA14 gene in families with autism spectrum disorders. Submitted to American Journal of Medical Genetics Part B.
2. **Kohen, R.**, Symonds, S., Petrie, E.C., Wang, L.Y., Schellenberg, G.D., Peskind, E.R., Wilkinson, C.W. ABCB1 genotype and CSF β -amyloid in Alzheimer's disease. Submitted to Journal of Geriatric Psychiatry and Neurology.
3. Jun, S-E., **Kohen, R.**, Cain, K.C., Jarrett, M.E., Heitkemper, M.M. Tryptophan Hydroxylase Gene Polymorphisms are Associated with IBS. Submitted to Neurogastroenterology and Motility.

Abstracts (past 10 years only)

1. Neumaier, J. F.; **Kohen, R.**; Barrett, T.; Donovan, D.; Becker, K.; Hamblin, M. W. The viral mediated gene transfer of 5-HT1B receptors in rat dorsal raphe nucleus mimics stress induced changes in gene expression. Society for Neuroscience 2000 #145.2
2. **Kohen, R.**; Barrett, T.; Donovan, D. M.; Becker, K. G.; Hamblin, M. W.; Edwards, E. Gene expression profiling by cDNA neuroarray in congenitally learned helpless rats. Society for Neuroscience 2000 # 573.8
3. Rioult, M. G.; **Kohen, R.**; Barrett, T.; Donovan, D. M.; Becker, K. G.; Hamblin, M. W.; Donoghue, J. P.; Rioult-Pedotti, M. S. Learning induces widespread changes in gene expression in neocortex. Society for Neuroscience 2000 #652.8
4. **Kohen, R.**; Barrett, T.; Donovan, D. M.; Becker, K. G.; Hamblin, M. W.; Edwards, E. Expression of N-ras is increased in the prefrontal cortex of congenitally non-Learned Helpless rats. Society for Neuroscience 2001 #986.6
5. **Kohen, R.**; Neumaier, J. F.; Hamblin, M. W.; Edwards, E. Congenitally Learned Helpless Rats Have Elevated bcl-2 mRNA Expression in Prefrontal Cortex and Hypothalamus. Society for Neuroscience 2002 #102.16
6. Clark, M. S.; Sexton, T. J.; **Kohen, R.**; Neumaier, J. F. Overexpression of 5-HT1B receptor in dorsal raphe nucleus using HSV gene transfer increases anxiety behavior following inescapable stress. Society for Neuroscience 2002 #398.15
7. **Kohen, R.**; Neumaier, J. F.; Hamblin, M. W.; Happe, K.; Petty, F. Animals resilient to learned helplessness are characterized by gene expression changes in the hippocampus. Society for Neuroscience 2003 #756.3
8. **Kohen, R.**; Navaja, G. P.; Hamblin, M. W. Automated analysis of rat behavior in the forced swim test. Society for Neuroscience 2004 #570.6
9. Jarrett ME, **Kohen R**, Cain KC, Poppe A, Navaja GP, Heitkemper MM. Association of SERT polymorphisms with depression and anxiety disorders in persons with irritable bowel syndrome. State of the Science, Washington, DC, 2006.
10. **Kohen R**, Jarrett ME, Cain KC, Burr RL, and Heitkemper MM. Polymorphisms of the serotonin transporter are associated with irritable bowel syndrome in a population-specific manner. Neurogastroenterology & Motility, Lucerne, Switzerland, 2008.
11. Jarrett ME, Cain KC, **Kohen R**, Burr RL, and Heitkemper MM. Influence of Sert Polymorphisms on the Effectiveness of a Comprehensive Symptom Management Intervention in Adults with Irritable Bowel Syndrome. Council for the Advancement of Nursing Science, Washington, DC, 2008.
12. Mitchell, P.H.; Becker, K.J.; Buzaitis, A.; Cain, K.C.; Fruin, M.; **Kohen, R.**; Teri, L.; Tirschwell, D.; Veith, R. Brief Psychosocial/Behavioral Intervention With Antidepressant Reduces Post-Stroke Depression Significantly More Than Antidepressant Alone. International Stroke Conference 2008 #62

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13. **Kohen, R.**; Millard, S.P.; Becker, K.J.; Buzaitis, A.; Cain, K.C.; Teri, L.; Tirschwell, D.; Veith, R.C.; Mitchell, P.H. Polymorphisms of The Serotonin Transporter Are Associated With Increased Risk For Post-Stroke Depression. International Stroke Conference 2008 #P286
14. Mitchell, P.H.; Becker, K.J.; Buzaitis, A.; Cain, K.C.; Johnson, V.; **Kohen, R.**; Teri, L.; Tirschwell, D.; Veith, R.C. Factors Associated With Treatment Response to Combined Psychosocial and Antidepressant Treatment of Post-Stroke Depression (PSD). International Stroke Conference 2010 #125

Invited Presentations

1. "Microarrays on the Mind – Gene Expression Analysis is Depression." UW Department of Psychiatry and Behavioral Sciences, Division of Psychiatric Neurosciences Seminar. September 11, 2002
2. "What Helpless Rats Can Teach Us About Depressed Humans." UW Department of Psychiatry and Behavioral Sciences, Grand Rounds. January 27, 2005
3. "What Helpless Rats Can Teach Us About Depressed Humans." VAPSHCS Seattle, Geriatric Research Education and Clinical Center Research Seminar Series. June 20, 2005
4. "Serotonin Transporter Polymorphisms." Geriatric Research Education and Clinical Center Research Seminar Series. October 23, 2006
5. "Serotonin Transporter Polymorphisms in Post-Stroke Depression." UW School of Nursing, Biobehavioral Health Seminar. February 8, 2008
6. "Serotonin Transporter Polymorphisms in Post-Stroke Depression." UW Department of Psychiatry and Behavioral Sciences, Division of Psychiatric Neurosciences Seminar. April 8, 2008
7. "Serotonin Transporter Polymorphisms in Psychiatric Illness." UW Department of Psychiatry and Behavioral Sciences, Grand Rounds. January 22, 2010
8. "Depression: Do Genes Matter?" National Alliance for Research in Schizophrenia and Depression (NARSAD) Healthy Minds Across America Lecture Series. May 1, 2010