

Keming Gao, M.D., Ph.D.

-Curriculum Vitae-

(06/14/2007 Revision)

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Keming.gao@uhhs.com

Date and Place of Birth: November 10, 1959.
Weifang City, Shandong Province, P. R. China.

Nationality: US citizen since 12/2006

Education:

07/04 – 07/2006 Research Fellow
Bipolar Disorder Research Center
Mood Disorders Program, Director, Joseph Calabrese, M.D.
Department of Psychiatry
University Hospitals of Cleveland
Case Western Reserve University School of Medicine
Cleveland, Ohio

07/03 - 06/04 Chief Resident
Department of Psychiatry
MetroHealth Medical Center
Case Western Reserve University School of Medicine
Cleveland, Ohio

07/00 - 06/04 Resident in Psychiatry
Department of Psychiatry
MetroHealth Medical Center
Case Western Reserve University School of Medicine
Cleveland, Ohio

08/94 - 05/96 Postdoctoral Fellow
Department of Pharmacology and Therapeutics

Louisiana State University Medical Center-Shreveport
Shreveport, Louisiana

09/91 - 07/94

Ph.D.
Department of Physiology
Shanghai Medical University
Shanghai, P. R. China

03/94 - 04/94

International Brain Research Organization-
Croucher Foundation Visiting Fellow
Department of Anatomy
The Chinese University of Hong Kong
New Territory, Hong Kong

09/88 - 07/91

Master Degree of Science
Department of Physiology
Shanghai Medical University
Shanghai, P. R. China

09/80 - 07/85

M.D.
Weifang Medical College
Weifang City, Shandong Province, P. R. China.

Professional Experience:

08/06 -

Assistant Professor
Department of Psychiatry
University Hospitals Case Medical Center
Case Western Reserve University School of Medicine
Cleveland, Ohio

05/96 - 05/00

Research Associate
Department of Neurobiology, Pharmacology, and Physiology
The University of Chicago
Chicago, Illinois

06/04 - present

Visiting Professor
Weifang Medical University
Weifang City, Shandong Province, P. R. China

07/91 - 07/94

Instructor
Department of Physiology
Shanghai Medical University
Shanghai, P. R. China

07/85 - 09/88

Instructor
Department of Physiology

Weifang Medical College
Weifang City, Shandong Province, P. R. China.

09/87 - 07/88

Course Director
Department of Physiology
Weifang Medical College
Weifang City, Shandong Province, P. R. China.

Committee Involvement:

04/93

Organizing Committee
First National Conference for the Young Chinese Physiologists.
Chinese Association for Physiological Sciences
Beijing, P. R. China

12/2005 – present

Steering Committee Member
Developing Center for Interventions and Services Research
(DCISR, P20): Bipolar Disorders Across the Life Span
Case Western Reserve University School of Medicine
University Hospitals of Cleveland

12/2006 –

Resident Research Education Committee
Department of Psychiatry
Case Western Reserve University School of Medicine
University Hospitals Case Medical Center

Honors and Awards:

2006

Recipient of the travel award of the Eighth Annual “Future Leaders in Psychiatry” meeting Sponsored by the Department of Psychiatry and Behavioral Sciences at Emory University School of Medicine, May 4-7, 2006, Miami, Florida.

2006

Recipient of American Psychiatric Association Research Colloquium for Junior Investigators, May 21, 2006, Toronto, Ontario Canada

2006

Recipient of the Second Annual Career Development Institute for Bipolar Disorder Award:
A Workshop on Launching and Maintaining a Career in Mental Health Research in Bipolar Disorder
Sponsored by the University of Pittsburgh and the NIMH
April 29 – May 2, 2006, Roca Raton, Florida.

- 2005 Recipient of the NIMH 45th NCDEU New Investigator Award, June 6-9, 2005, Boca Raton, Florida
- 2005 Recipient of American Psychiatric Association Research Colloquium for Junior Investigators, May 22, 2005, Atlanta, Georgia
- 2005 Recipient of Fellowship Travel Award of the 4th Annual Workshop on Clinical Trials in Psychopharmacology Sponsored by The American Society of Clinical Psychopharmacology, NIMH, and the Zucker Hillside Hospital, April 12-14, 2005, New York City, NY
- 2003 Recipient of APA/Lilly Chief Resident Executive Leadership Program Travel Award, October 29-30, 2003, Boston, MA
- 08/94 - 05/96 Honorary Member
Department of Pharmacology and Therapeutics
Louisiana State University Medical Center-Shreveport
Shreveport, Louisiana
- 09/91 - 07/94 Ph.D. Student Representative, Class 1994
Shanghai Medical University
Shanghai, P. R. China
- 1993 Recipient of "Shu Ping" Scholarship (First Scholarship in the history of modern China)
Shanghai "Shu Ping" Scholarship Foundation
Shanghai, P. R. China
- 1993 Excellent Physiology Academic Paper Award
Third National Conference for Young Chinese Physiologists
Zhang Xijun Foundation of the Chinese Association for Physiological Sciences
Beijing, P. R. China
- 1992 Third Place, Young Teacher Research Award
Shanghai Medical University
Shanghai, P. R. China
- 1992 Recipient of Excellence Scholarship of Chinese Education Ministry
Shanghai Medical University
Shanghai, P. R. China
- 9/88 - 7/91 M.S. Student Representative, Class 91 #1

- Shanghai Medical University
Shanghai, P. R. China.
- 1991 Second Place, Graduate Student Academic Report Award
Shanghai Medical University
Shanghai, P. R. China
- 1990 Recipient of “Guang Hua” Scholarship
Shanghai Medical University
Shanghai, P. R. China
- 9/80 - 7/85 Academic Representative, Class 1985 #5
Weifang Medical College
Weifang City, Shandong Province, P. R. China
- 1985 Excellent Student of the Year
Weifang Medical College
Weifang City, Shandong Province, P. R. China
- 1984 Excellent Student of the Year
Weifang Medical College
Weifang City, Shandong Province, P. R. China
- 1982 Excellent Student of the Year
Weifang Medical College
Weifang City, Shandong Province, P. R. China
- 1981 Excellent Student of the Year
Weifang Medical College
Weifang City, Shandong Province, P. R. China

Professional Affiliations:

Member of American Society of Clinical Psychopharmacology (2005 -)
Regular Member of the Society for Neuroscience (1997-present).
Member of International Brain Research Organization (1997 - present).
Member-in-training, Ohio Psychiatric Association (2001 - 2006).
Regular Member, Ohio Psychiatric Association (2006 -)
Member-in-training, American Psychiatric Association (2001 - 2006).
Regular Member, American Psychiatric Association (2006 -)
Member-in-training, American Medical Association (2003- 2005).
Member of the International Society for Bipolar Disorder (2006 -)

Referee for Journals:

Cochrane Reviews
Depression and Anxiety
Expert Opinion
Expert Review of Pharmacoeconomics and Research Outcomes

Journal of Clinical Psychiatry
Neuropsychiatric Disease and Treatment
Psychiatric Times

Scientific Review of Research Applications

Ad Hoc Reviewer Medical Research Council of the United Kingdom

Teaching Experience:

Weifang Medical College, P. R. China (07/1985 - 09/1988)
Instructor, Department of Physiology

Medical students
Physiological experiments
25 persons x 4 hours x 2 x 20 weeks x 3 years.

Students of Nursing School and Continuous education
Physiological experiments
15 persons x 4 hours x 1 x 20 weeks x 3 years.

Course Director,

Shanghai Medical University, P. R. China (09/1988 - 07/1989).
Graduate student, Department of Physiology

Medical students
Physiological experiments
25 persons x 4 hours x 1 x 20 weeks

Nursing students
Physiological experiments
20 persons x 4 hours x 1 x 20 weeks

Shanghai Medical University, P. R. China (07/1991 - 07/1994)
Instructor, Department of Physiology

Medical students
Lectures on Renal Physiology
100 persons x 2 hours x 1 x 4 weeks x 2 years.

Medical students
Physiological experiments
25 persons x 4 hours x 1 x 20 weeks x 2 years.

Students of School of Pharmacy
Lectures on General Physiology
100 persons x 2 hours x 1 x 20 weeks

The University of Chicago (07/1998 - 6/2000)
Research Associate, Department of Neurobiology, Pharmacology, and Physiology

David. O. Chen, undergraduate
Johnathan R. Genzen, MD/PhD student
E. J. Last, undergraduate
Jiwan Lee, undergraduate
Thad S. Brink, graduate student
Malcolm W Nason Jr, graduate student

MetroHealth Medical Center, Cleveland (07/2002 – 2004)
Resident, Department of Psychiatry

Medical students
Clerkship Lectures of Mood Disorders and Treatment and Substance – Related Disorders and treatment
5-6 persons x 1 hour x 2 x 3 months x 2 years

University Hospitals Case Medical Center
Case Western Reserve University School of Medicine (08/2005 - 07/2006)
Bipolar Research Fellow, Department of Psychiatry, Mood Disorders Programs

Residents (8/17/2005)
PGYII lecture series.
Pharmacological Treatment of Bipolar Depression
6 persons x 75 mins x 1.

Residents (10/19/2005)
PGY IV Lecture series.
Evidence-Based Polypsychopharmacotherapy in Bipolar Disorder
5 Persons X 75 mins X 1

Medical Students (10/12/05 – 11/03/05)
Mind Committee Small Group Discussion
General Psychiatry
12 Persons X 60 mins X 5

Residents (7/19/2006)
PGYII lecture series
Pharmacological Treatment of Bipolar Depression (Acute and Maintenance)
5 persons x 75 mins x1

Case Western Reserve University School of Medicine

**University Hospital Case Medical Center/ (08/2006 -
Bipolar Research Fellow, Department of Psychiatry, Mood Disorders
Programs**

08/2006 – 12/2006 Residents (10/18/2006)
PGY IV lecture series
Evidence-Based Polypsychopharmacotherapy in Bipolar Disorder
3 Persons X 75 mins X 1

Residents (10-12/2006)
Interviewing Resident Candidate
30 min X 1 (10/20/2006)
30 min X 1 (11/17/2006)
30 min X 1 (12/8/2006)

PGYIII Resident (12/13/2006)
Oral Clinical Exam (Daniel Keaton, MD)
180 min X 1

Medical students (11/4/2007)
Psychiatry Clerkship Weekend on HP4
3 X 4 hours

1/1/07-12/31/07

Interviewing Resident Candidate
30 min X 1 (1/12/2007).

Supervising Residents (Molly Mcvov, Kuldeep Vaghela, Vikram Kambampati)
at Free Clinic (2/16/2007)
4.5 hours X 1

Mentoring Residents (Kambampati, Vikram)
3/2/2007 1 hour X 1
3/9/2007 1 hour X 1
3/29/2007 1 hour X 1
5/11/2007 1 hour X 1
5/18/2007 1 hour X 1

RESEARCH

National Institute of Mental Health

- 1. Bipolar Disorder Across the Life Span (P20, Developing Center for Intervention and Services Research). PI – Joseph R Calabrese, M.D. and Robert Findling, M. D. Co-PI – Keming Gao, M.D., Ph.D. (10%)**

Source: NIMH P20 MH-66054
Project Dates: 9/1/2003 – 9/30/2008
Total Award: \$2,967,934.

The primary objective of this funding is to build and maintain a network of sites to conduct phenomenologic and clinical trials research that concurrently address the life cycle, including those at community mental health center, children and adolescents, and those currently abusing alcohol and/or drugs.

2. Acute Pharmacotherapy of Late Life Mania. Coordinating Multisite PI: Robert Young, MD. CWRU PI Martha Sajatovic, MD. CWRU Co-IP - Keming Gao, M.D., Ph.D. (5%).

Source: NIMH RO1
Project Dates: 6/1/2003 – 6/2008
Total Award: \$1,382,500.

The first randomized, double-blind, controlled comparison of lithium and divalproex in elders with bipolar I manic, mixed, and hypomanic episodes, designed to test differences in side effects and benefits under dosing conditions relevant to geriatric practice. Hospitalized and ambulatory patients (n=306) aged 60 years or older will be studied for 9 weeks.

3. Combination Therapy in Rapid Cycling Bipolar Disorder (R21). PI - Joseph R. Calabrese, M.D., Co-IP - Keming Gao, M.D., Ph.D. (10%).

Source: R21 (Exploratory/Development Grant) MH62650
Project Dates: 2/1/2002 – 1/31/2005
Total Award: \$573,750.

The primary objective of this study is to compare the efficacy of the tripple regimen lithium/divalproex/blinded lamotrigine to lithium/divalproex placebo in the acute and continuation treatment of patients with rapid cycling bipolar disorder over a six month randomized phase.

4. Double-blind, Longitudinal Evaluation of the Efficacy and Safety of the Combination of Lithium and Divalproex versus Lithium Monotherapy in Rapid Cycling Bipolar Patients Who are Abusing Alcohol, Cannabis, and/or Cocaine (R01-S). PI - Joseph R. Calabrese, M.D. Co-PI - Keming Gao, MD, Ph.D. (10%).

Source: R-01 MH-50165 (Supplement)
Project Dates: 10/1/97 – 12/01
Total Award: \$674,938

The primary objective of this study is to compare the efficacy of the combination of lithium and divalproex as compared to lithium monotherapy in the prevention of episodes in patients with rapid cycling bipolar disorder who are currently abuse alcohol, cannabis, and/or cocaine over a six month randomized phase.

5. Systematic Treatment Enhancement Program (STEP) for Bipolar Disorder – A NIMH multicenter study designed to carry out a series of health effectiveness trials. Site PI - Joseph R. Calabrese, MD. Site Co-PI - Keming Gao, MD, Ph.D.

Source: MH-98-DS-001 (subcontract from Mass. Gen'l Hospital)
Project Dates: 8/99 – 3/2004
Total award: \$874,956

The primary objective of this study is to improve the treatment of bipolar disorder by 1) implementing model practice procedures across a network of clinicians, 2) determine the cost effective somatic and psychosocial intervention strategies for the depressed phase of the illness, 3) determine which interventions most effectively prevent relapse, 4) provide a systematic means of for the translation of novel treatments into clinicians practice, and 5) estimate the costs and quality of life outcomes in both acute and long-term setting.

Foundation

1. A Pragmatic Clinical Effectiveness Trial in Multi-morbid Anxious Patients with Bipolar I or II Depression - Focus on the Development of Novel Treatments –. PI: Keming Gao, M.D, Ph.D.

Source: NARSAD
Project Dates: 7/1/2006 – 6/30/2008
Total Award: \$60,000.

The primary objective of this funding is to study the efficacy and safety of quetiapine in patients with bipolar depression and comorbid anxiety disorder with or without substance used disorder.

2. Combination Therapy in Dual Diagnosis Rapid Cycling Bipolar Disorder (R21S). PI - Joseph R. Calabrese, M.D., Co-PI - Keming Gao, M.D., Ph.D. (10%).

Source: Stanley Medical Research Institute
Project Dates: 7/02-7/05
Total Award: \$805,230.

The primary objective of this study is to compare the efficacy of the tripple regimen lithium/divalproex/blinded lamotrigine to lithium/divalproex placebo in the acute and continuation treatment of patients with rapid cycling bipolar disorder who are currently abusing alcohol, cannabis, and/or cocaine over a six month randomized phase.

Industry – Funded Research

1. A multicenter, Randomized, Double-blind, Parallel-group, Placebo-controlled, Active controlled Study of the Efficacy and Safety of Sustained-release Quetiapine (SEROQUEL) Compared with Placebo in the Treatment of Generalized Anxiety Disorder (Gold Study). Site PI – Keming Gao, MD, PhD (10%). Site Co-PI – David E. Kemp, MD.

The primary objective is to evaluate the efficacy of quetiapine fumarate (Seroquel) compared to placebo in the treatment of anxiety symptoms in patients with Generalized Anxiety Disorder.

Source: AstraZeneca
Project Dates: 10/06 – 07/07
Total award: \$8,000.00 per patient

- 2. A multicenter, Randomized, Parallel-group, Placebo-controlled, Double-blind, Phase III Study to Compare the Efficacy and Safety of Quetiapine Fumarate (SEROQUEL) versus Placebo as Adjunctive Therapy with Mood Stabilizers (Lithium or Divalproex) for the Treatment of Alcohol Dependence in Patients with Bipolar I Disorder. Site PI – Margaret Kotz, MD. Site Co-PI – Keming Gao, MD, PhD (5%).**

The primary objective of this study is to evaluate the efficacy of quetiapine versus placebo when used as adjunctive therapy with lithium or divalproex in reducing the proportion of heavy drinking days from baseline to week 12 as derived from the Timeline Followback scale.

Source: AstraZeneca
Project Dates: 09/06 – 07/07
Total award: \$8,000.00 per patient

- 3. Double-Blind, Placebo-Controlled Divalproex Sodium-ER in Bipolar I or II Depression. PI - Joseph R. Calabrese, M.D., Co-PI - Keming Gao, MD, PhD. (10%)**

Source: Abbott Laboratories
Project Dates: 07/03 – 07/05
Total award: \$118,625

The primary objective of this study is to evaluate the efficacy and tolerability of Divalproex sodium-ER (Dvpx-ER) vs. placebo in the treatment of major depressive episodes in bipolar I and bipolar II previously misdiagnosed and treated as recurrent major depression. The secondary objectives are to evaluate the anxiolytic efficacy and tolerability of Dvpx-ER vs. placebo in this population of previously undiagnosed bipolar depressives and to better characterize the clinical presentation of the misdiagnosed bipolar patient.

- 4. Double-Blind, Placebo-controlled Adjunctive Lamotrigine Trial with Open-Label Extension in Borderline Personality Disorder: PI - Praveen F. Abraham, D.O., Co-PI - Keming Gao, M.D., Ph.D. (5%).**

Source: GSK
Project Dates: 7/05 - 7/07
Contracted Amount: \$120,000

The primary objective of this study is to compare the efficacy of Lamotrigine adjunctive therapy with placebo in the acute treatment of borderline personality disorder.

- 5. A Multicenter, Randomized, Double-Blind, Placebo Controlled Study of Aripiprazole Monotherapy in the Treatment of Acutely Manic Patients with Bipolar Disorder. Site PI - Joseph R. Calabrese, M.D., CO-PI – Keming Gao, M.D., Ph.D. (5%).**

Source: BMS
Project Dates: 05/05 - 11/05
Contracted Amount: \$279,220

The primary objective of this study is to compare the efficacy and safety of Aripiprazole monotherapy with placebo in the acute treatment of bipolar mania.

6. A Six-Week, Randomized, Double-Blind, Multicenter, Fixed-Flexible Dose, Placebo-Controlled Study Evaluating the Efficacy and Safety of Oral Ziprasidone in Outpatients with Bipolar I Depression. Site PI - Douglas McLaughlin, M.D., Co-PI - Keming Gao, M.D., Ph.D. (10%)

Source: Pfizer
Project Dates: 10/05 – 05/06
Contract Amount: 5813.75 per patient

The primary objective of this study is to evaluate the efficacy and tolerability of Ziprasidone vs. placebo in the acute treatment of bipolar I depression.

7. Olanzapine in Treatment of Refractory Mania. Site PI - Joseph R. Calabrese, M.D., CO-PI – Keming Gao, M.D., Ph.D. (5%).

Source: Lilly
Project Dates: 05/01 - 4/02
Contracted Amount: \$241,000

The primary objective of this study is to assess the efficacy and safety of olanzapine monotherapy in the acute treatment of refractory bipolar mania.

Manuscripts under Preparation:

Gao K, Ganocy SJ, Calabrese JR. Differential presentation of comorbid anxiety disorder in patients with bipolar disorder with or without substance use disorder.

Gao K, Ganocy SJ, Calabrese JR. Comparison of Rates of Comorbid Substance Use Disorder in 564 Patients with Rapid Cycling Bipolar I or II Disorder with or without Anxiety Disorder.

Kemp DE, **Gao K**, Calabrese JR. Anticonvulsants as agents for unmet need: focus on bipolar depression and rapid cycling. In Antiepileptic Drugs in Psychiatry, eds. McElroy, Keck, and Post.

Manuscripts under Review:

Kemp DE, Muzina DJ, **Gao K**, Calabrese JR. Atypical Antipsychotics in Bipolar Depression: Quetiapine, Olanzapine, and the State of the Evidence (Essential Psychopharmacology).

Gao K, Kemp DE, Gajwani P, Xia G, Ganocy SJ, Calabrese JR. Antipsychotic-induced extrapyramidal side effects in bipolar disorder and schizophrenia (submitted to J Clinical Psychopharmacology, 5/7/07).

Manuscripts under Revision:

Gao K, Kemp DE, Ganocy SJ, Findling R, Calabrese JR. Greater Severity of substance use disorder in patients with rapid cycling bipolar type I than those with type II disorder (in revision).

Oral Presentations:

1. Effect of excitation of raphe nucleus obscurus on the changes of 5-HIAA in PGL. Presented at the Second Applied Physiology Symposium, Tanjin, P.R. China, 1990.
2. Effect of serotonin in the rostral ventrolateral medulla on the cardiovascular activities. Presented at the meeting required for Master Degree study, Department of Physiology, Shanghai Medical University, Shanghai, P. R. China, 1990.
3. Inhibitory effects of serotonin in the rostral ventrolateral medulla on pressor response and ventricular extrasystoles induced by hypothalamic stimulation. Presented at the dissertation for Master Degree, Department of Physiology, Shanghai Medical University, Shanghai, P. R. China, 1991.
4. Properties of the rostral ventrolateral medullary neurons. Presented at the meeting required for Ph.D. training, Department of Physiology, Shanghai Medical University, Shanghai, P. R. China, 1992.
5. Intracellular recording of defense-reaction-related neurons in the PGL and effect of somatic inputs on intracellular recording of defense-reaction-related neurons in PGL. Presented at the First National Congress of Neuroscience, Shanghai, P. R. China, 1992.
6. Changes of the responsiveness of the neurons in the PGL during blood pressure altered. Presented at the First National Conference of the Young Chinese Physiologists, Beijing, P. R. China, 1993.

7. Inhibitory effect of 5-HT in the rostral ventrolateral medulla on pressure and ventricular extrasystoles induced by hypothalamic stimulation. Presented at the Third National Conference of the Published Excellent Papers of the Young Chinese Physiologist Sponsored by the Zhang Xijun Foundation of Chinese Association for Physiological Sciences, Beijing, P. R. China, 1993.
8. Factors influencing the excitability of neurons in PGL in anesthetized rats. Presented at the Symposium on Neurobiology for the neurobiologists from Mainland China, Taiwan, and Hong Kong, Shanghai, 1993.
9. In vivo neuronal electrical activity recording techniques. Presented at a series of seminars of National Key Lab, Department of Neurobiology, Shanghai Medical University, Shanghai, P. R. China, 1994.
10. Integrated responses of the rostral ventrolateral medullary neurons of the rat. Presented at the dissertation for Ph.D., Department of Physiology, Shanghai Medical University, Shanghai, P. R. China, 1994.
11. Raphe magnus serotonergic neurons do not mediate the analgesic effect induced by PAG stimulation. Presented at the Academic Meetings of Chinese Scholars at the University of Chicago, Chicago, IL, 1997.
12. Endogenous pain modulation systems: Basis and clinical implications. Presented at the Grand Rounds of the Department of Psychiatry at MetroHealth Medical Center, Cleveland, OH, 2004
13. Pain pathways, neurotransmitters, and receptors: From pain research to understand the tools for modern neuroscience. Visiting Professor Lecture at Weifang Medical University, China, 2004.
14. Endogenous pain modulation: Basis and clinical practice. Visiting Professor Lecture at Weifang Medical University, China, 2004.
15. Typical and atypical antipsychotics in bipolar depression: Grand Rounds in the Department of Psychiatry at MetroHealth Medical Center, Cleveland, OH, 2005.
16. Typical and atypical antipsychotics in bipolar depression: Grand Rounds at the Northcoast Behavioral Health Systems, Northfield, OH, 2005.
17. Typical and atypical antipsychotics in bipolar depression: Grand Rounds in the Department of Psychiatry, University Hospitals of Cleveland/Case School of Medicine, OH, 2005.
18. Typical and atypical antipsychotics in bipolar depression: Grand Rounds in the Department of Psychiatry, Louis Stokes VA Medical Center, Brecksville, OH, 2005.

19. Can I diagnose depression by myself? Health education seminars at Chinese School of the Cleveland Chinese Contemporary Cultural Association, Solon, OH 2005.
20. Typical and atypical antipsychotics in bipolar depression. Clinical Report for the 158th Annual Meeting of the American Psychiatric Association; May 21-26, 2005; Atlanta, GA.
21. Thyroid response to lithium in bipolar rapid cyclers with or without a current substance use disorder. Presented at the American Psychiatric Association Research Colloquium for Junior Investigators, May 22, 2005, Atlanta, Georgia.
22. Comorbid anxiety in bipolar disorder: phenomenology and treatment strategy. Presented at the Second Annual Career Development Institute for Bipolar Disorder. April 29 – May 2, 2006, Boca Raton, Florida.
23. Associations of Comorbid Anxiety Disorder and Substance Use Disorder in Patients with Rapid Cycling Bipolar Disorder. Presented at the American Psychiatric Association Research Colloquium for Junior Investigators, May 21, 2006, Toronto, Ontario Canada.
24. Efficacy of the Antipsychotics in Anxiety Symptoms/Disorders with or without Bipolar disorder. Presented at the 159th Annual Meeting of the American Psychiatric Association; May 20-25, 2006; Toronto, Canada. No. 48.
25. New Development in Diagnosis and Treatment of Bipolar Disorder. Presented at the 8th All-Ohio Institute on Community Psychiatry; March 16, 2007; Beachwood, Ohio. No. S-9a.
26. Achieving Wellness in Patients with Bipolar Disorder and Comorbid Anxiety: Guiding adult patients to wellness with comorbid mood and anxiety disorders (CME Outfitters Continuing Medical Education). Presented at the 27th Annual Meeting of Anxiety Disorders Association of America, March 29-April 1, 2007, St. Louis, MO.
27. In direct comparison of the safety and tolerability of antipsychotics in patients with bipolar disorder and schizophrenia. Presented at the 160th Annual Meeting of the American Psychiatric Association; May 19-24; 2007; San Diego, California

PUBLICATIONS

Peer-Reviewed Papers:

1. Guo X, Gao K, Zhu D. Effect of microinjection of 5-HT into the rostral ventrolateral medulla on ventricular extrasystoles induced by hypothalamic stimulation in the rabbit. Chinese Journal of Physiological Sciences 1990; 6:129-137.

2. **Gao K**, Lin Y. Guo X. Changes of 5-hydroxyindoleacetic acid in the nucleus paragigantocellularis lateralis detected with *in vivo* voltammetry. Chinese J Physiol Sci 1991; 7:27-33.
3. **Gao K**, Guo X. Serotonergic mechanism in the rostral ventrolateral medulla plays a role in the inhibitory effect of somatic inputs on the experimental ventricular extrasystoles. Chinese J of Physiol Sci 1991; 7 300-308.
4. **Gao K**, Li P. Post-synaptic activity evoked in the rostral ventrolateral medullary neurons by stimulation of the defense areas of hypothalamus and midbrain in the rat. Neurosci Lett 1993; 161:153-156.
5. **Gao K**, Li P. Convergent inputs to the rostral ventrolateral medullary neurons of the rat. Chinese J Physiol Sci 1993; 9:372-376.
6. **Gao K**, Li P. Effects of baroreceptor inputs on the activity of rostral ventrolateral medullary neurons evoked by stimulation of defense areas and somatic nerves. Chinese J Physiol Sci 1994; 10:283-288.
7. **Gao K**, Li P. Responses of neurons in the nucleus paragigantocellularis lateralis to somatic nerve stimulation, Neurosci Lett 1994; 178:15-18.
8. **Gao K**, Li P. Integrated responses of the rostral ventrolateral medullary neurons to the stimulation of the defense area of hypothalamus or midbrain and somatic nerves, Acta Academiae Medicinae Shanghai 1994; 21 (Suppl):20-25.
9. **Gao K**, Kim YH, Mason P. Serotonergic pontomedullary neurons are not activated by antinociceptive stimulation in the periaqueductal gray. J Neurosci 1997; 17: 3285-3292.
10. **Gao K**, Mason P. Somatodendritic and axonal anatomy of intracellularly labeled serotonergic neurons in the rat medulla. J Comp Neurol 1997; 389:309-328.
11. **Gao K**, Chen DO, Genzen JR, Mason P. Activation of serotonergic neurons in the raphe magnus is not necessary for morphine analgesia. J Neurosci 1998; 18:1860-1864.
12. Mason P, **Gao K**. Raphe magnus serotonergic neurons tonically modulate nociceptive transmission. Pain Forum 1998; 7:143-150.
13. Mason P, **Gao K**. The identification of serotonergic neurons: *in vivo* versus *in vitro*, Pain Forum 1998; 7:163-166.
14. **Gao K**, Mason P. Serotonergic raphe magnus cells that respond to noxious tail heat are not ON or OFF cells. J Neurophysiol 2000; 84:1719 -1725.

15. **Gao K**, Mason P. The discharge of a subset of serotonergic raphe magnucells is influenced by baroreceptor input. *Brain Res* 2001; 900:306 - 313.
16. **Gao K**, Mason P. Physiological and anatomical evidence for functional subclasses of serotonergic raphe magnus cells. *J Comp Neurol* 2001; 439:426 - 439.

Published Letters and Abstracts/Posters

17. **Gao K**, Lin Y, Guo X. Effect of excitation of raphe nucleus obscurus on the changes of 5-hydroxyindoleacetic acid (5-HIAA) in nucleus paragigantocellularis lateralis. *Chinese Association for Physiological Sciences (CAPS) News Communication* 1990; Suppl 1: 84-85 (in Chinese).
18. **Gao K**, Lin Y, Guo X., 5-hydroxyindoleacetic acid (5-HIAA) in nucleus paragigantocellularis lateralis detected with differential pulse voltammetry *in vivo*. *CAPS New Communication* 1991; 10 (Suppl 6):26 (in Chinese with English title).
19. **Gao K**, Li P. Intracellular recording of defense-reaction-related neurons in nucleus paragigantocellularis lateralis. *CAPS News Communication* 1992; 3 (Suppl 11):152 (in Chinese with English title).
20. **Gao K**, Li P. Effect of somatic inputs on intracellular recording of the defense-reaction-related neurones in the nucleus paragigantocellularis lateralis, *CAPS News Communication* 1992; 3 (Suppl 11):152 (in Chinese with English title).
21. **Gao K**, Li P. Changes of the responsiveness of the neurons in the nucleus paragigantocellularis lateralis during blood pressure altered. *CAPS News Communication* 1993; 12 (Suppl 2):39 (in Chinese).
22. **Gao K**. Inhibitory effect of 5-HT in the rostral ventrolateral medulla on pressor response and ventricular extrasystoles induced by hypothalamic stimulation, *CAPS News Communication* 1993; 12 (Suppl 2):66-67 (in Chinese).
23. **Gao K**, Li P. Summated responses of the rostral ventrolateral medullary neurons to the stimulation of VAF and dPAG. *CAPS News Communication* 1993; Suppl:92-93 (in Chinese).
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