

May 17, 2007

PROMOTION RECOMMENDATION
UNIVERSITY OF MICHIGAN MEDICAL SCHOOL
DEPARTMENT OF PSYCHIATRY
DEPARTMENT OF RADIOLOGY

Jon-Kar Zubieta, M.D., Ph.D., Associate Professor of Psychiatry, with tenure, Department of Psychiatry, and Associate Professor of Radiology, without tenure, Department of Radiology, Medical School, is recommended for promotion to Professor of Psychiatry, with tenure, Department of Psychiatry, and Professor of Radiology, without tenure, Department of Radiology, Medical School. [Dr. Zubieta is also being recommended for promotion to Research Professor in the Molecular and Behavioral Neuroscience Institute.]

Academic Degrees:

Ph.D.	1992	Universidad del Pais Vasco, Bilbao, Vizcaya, Spain
M.D.	1986	Universidad del Pais Vasco, Bilbao, Vizcaya, Spain

Professional Record:

2002-Present	Associate Professor of Psychiatry, University of Michigan
2002-Present	Associate Professor of Radiology, University of Michigan
2002-Present	Research Associate Professor, Molecular and Behavioral Neuroscience Institute (formerly the Mental Health Research Institute), University of Michigan
2000-2002	Assistant Professor of Radiology, University of Michigan
1995-2002	Assistant Professor of Psychiatry, University of Michigan
1995-2002	Assistant Research Scientist, Mental Health Research Institute, University of Michigan
1995-2000	Assistant Professor of Internal Medicine, University of Michigan

Summary of Evaluation:

Teaching: Dr. Zubieta has maintained significant teaching and training activities. He lectures to medical students and MD/PhD students, graduate and postgraduate fellows. His role in mentoring graduate students, postdoctoral fellows, and junior faculty has been significant. His commitment to education is exemplified by his active participation in undergraduate, pre-doctoral and post-doctoral training programs, the Neuroscience Graduate Program, and training grants. Currently, three graduate students are conducting their thesis work with Dr. Zubieta as director. Five post-doctoral students are involved in existing projects and starting new protocols. Dr. Zubieta is also a sponsor for four junior faculty in their K-awards and ongoing research.

Research: Dr. Zubieta is a psychiatrist and a neuroscientist with a primary scientific focus on the study of neuronal circuitry and neurochemical systems involved in the regulation of mood and emotional states. He has contributed to the understanding of the neurobiology of stress responses, and the application of this knowledge to mood disorders, affective regulation, and conditions such as substance abuse disorders and pain. His research involves collaborations with investigators at Wayne State University, the NIH Intramural Program (NIMH, NIAAA, NCCAM,

NIDA), Cornell University, Stanford University, University of Maryland, and UCLA. Within the University of Michigan, there are ongoing collaborations with the Departments of Pharmacology, Obstetrics and Gynecology, Neurology, Internal Medicine, Radiology, Anesthesiology, Physical Medicine and Rehabilitation, Human Genetics, and Psychiatry, as well as Psychology, Public Health, Biostatistics, Kinesiology, Chemistry, Biomedical Engineering, and Women's Health. This not only provides a rich environment to develop new initiatives, it also serves as fertile ground to train the next generation of biomedical researchers.

The University's Board of Regents recently approved the appointment of Dr. Zubieta as the first Phil F. Jenkins Research Professor of Depression. The professorship was endowed by a \$2 million gift from Mr. Jenkins, a longstanding member of the Depression Center's National Advisory Board. The new gift supports the professorship and also established a research fund for depression and bipolar disorder studies. The research fund will help in the study of genetics, brain imaging and molecular neuroscience to advance the understanding of the causes of depression and bipolar disorder, and to seek new and more effective treatments.

Dr. Zubieta has a strong track record of outside grant funding. He is currently almost entirely funded with two RO1 awards, an R21 and other funded grants. He is the author of 66 peer-reviewed publications and five book chapters.

Recent and Significant Publications:

Kennedy SM, Koeppe RA, Young EA, Zubieta JK: Dysregulation of endogenous opioid emotion regulation circuitry in major depression in women. *Arch Gen Psychiatry* 63:1199-1208, 2006.

Smith YR, Stohler CS, Nichols TE, Bueller JA, Xu Y, Koeppe RA, Zubieta JK: Pronociceptive and antinociceptive effects of estradiol through endogenous opioid neurotransmission in women. *J Neurosci* 26:5777-5785, 2006.

Zubieta JK, Bueller JA, Jackson LR, Scott DJ, Xu Y, Koeppe RA, Stohler CS: Placebo effects mediated by endogenous opioid neurotransmission and μ -opioid receptors. *J Neurosci* 25:7754-7762, 2005.

Zubieta JK, Ketter TA, Bueller JA, Xu Y, Kilbourn MR, Meyer CR, Young EA, Koeppe RA: Anterior cingulate and limbic μ -opioid receptors regulate human emotional responses. *Arch Gen Psychiatry* 60:1145-1153, 2003.

Zubieta JK, Heitzeg MM, Smith YR, Bueller JA, Xu K, Xu Y, Koeppe KA, Stohler CS, Goldman D: COMT val¹⁵⁸met genotype affects mu opioid neurotransmitter responses to a pain stressor. *Science* 299:1240-1243, 2003.

Service: Dr. Zubieta served as Section Director of the Depression Programs in the University of Michigan Depression Center. He served as both member and chair of APRAPT (Advisory Committee on Primary Research Appointments, Promotions, and Titles), and is currently on the Department of Psychiatry's Appointments and Promotions Committee. In 2000 he was appointed Director of the Neuroimaging Core in the Department of Psychiatry. Dr. Zubieta chairs the Radiation Drug Research Committee and Subcommittee on Human Use of Radioisotopes, which facilitates the use of radioisotopes for multiple medical purposes. Dr. Zubieta is a regular reviewer for an NIH study section and *ad-hoc* reviewer for others.

External Review:

Reviewer A: “Dr. Zubieta is a creative, highly skilled and accomplished neuroscientist....His studies have set a benchmark for future research....Notable is his superb mentorship of junior faculty who themselves are now developing collaborative but independent academic psychiatry careers....Furthermore, compared to other candidates I have been asked to evaluate for a similar academic promotion, Dr. Zubieta is in the top 1%.”

Reviewer B: “Throughout his career, he has shown great innovation in his research ideas and methods. His studies of the role of forebrain opiates in pain and placebo analgesia have transformed the thinking of the pain community about analgesic mechanisms....In terms of service to the scientific community, again Dr. Zubieta stands out as a leader.”

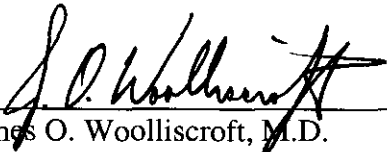
Reviewer C: “Dr. Zubieta has published many excellent papers, with 40 published/in press since 2000, and his trajectory follows an upward curve....I feel that Dr. Zubieta is an excellent researcher, highly productive, with strong track record to obtaining grant funding, and with an outstanding international reputation.”

Reviewer D: “Simply put, I think that he is one of the most innovative clinical neuroscientists in the world. Jon-Kar may not have created the field of opiate receptor neuroimaging, but he has certainly taken it the furthest....Jon-Kar is also an outstanding speaker, teacher, and mentor....He certainly would be on my ‘dream team’ if I were assembling a Department.”

Reviewer E: “He is regarded as a ‘significant’ high impact figure in the imaging community and would be deserving of a professorial title in [my country]. As a ‘clinical imager’, he would rank in the top 10 of active researchers in the field.”

Summary of Recommendation:

Dr. Zubieta is an outstanding clinician scientist and a leader in brain imaging for psychiatry and neuroscience, using PET, fMRI, and SPECT imaging techniques to quantify brain metabolism, blood flow, and the activation of cholinergic, opioid and aminergic receptors. He has published in high impact journals, and has been sought after by other competing programs but has chosen to remain at the University of Michigan. I strongly support the promotion of Jon-Kar Zubieta, M.D., Ph.D., to professor.


James O. Woolliscroft, M.D.
Interim Dean
Lyle C. Roll Professor of Medicine

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