BIOGRAPHICAL SKETCH

Provide the following information for the key personnel in the order listed on Form Page 2.
Photocopy this page or follow this format for each person.

NAME	POSITION TITLE
WILLIAM MAIXNER	ASSOCIATE PROFESSOR

EDUCATION/TRAINING *(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)*

INSTITUTION AND LOCATION	DEGREE *(if applicable)*	YEAR(S)	FIELD OF STUDY
University of Iowa (Iowa City, IA)	B.A.	1970	Zoology/ Biochemistry
University of Iowa (Iowa City, IA)	Ph.D.	1982	Pharmacology
University of Iowa (Iowa City, IA)	DDS	1983	Dentistry

RESEARCH AND PROFESSIONAL EXPERIENCE: Concluding with present position, list, in chronological order, previous employment, experience, and honors. Include present membership on any Federal Government public advisory committee. List, in chronological order, the titles, all authors, and complete references to all publications during the past three years and to representative earlier publications pertinent to this application. If the list of publications in the last three years exceeds two pages, select the most pertinent publications. **DO NOT EXCEED TWO PAGES.**

RESEARCH AND PROFESSIONAL EMPLOYMENT

1974-l979 Department of Surgery, Division of Thoracic and Cardiovascular Surgery, University of Iowa and Veterans Administration Hospitals, Iowa City, IA
1979-1982 NIH Predoctoral Research Fellow, Department of Pharmacology, Univ. of Iowa, Iowa City, IA
1982-1983 NIH Postdoctoral Fellowship, Department of Pharmacology, Univ. of Iowa, Iowa City, IA
1983-1985 Pharmacology Research Associate, National Institute of Dental Research, NIH, Bethesda, MD
1985-1989 Assistant Professor, Dept of Removable Prosthodontics, Univ. of North Carolina at Chapel Hill, NC
1987-1992 Assistant Professor, Dept. of Pharmacology, Univ. of North Carolina at Chapel Hill, NC
1988-1992 Assistant Professor, Curriculum in Neurobiology, Univ. of North Carolina at Chapel Hill, NC
1989-1992 Assistant Professor, Department of Endodontics, Univ. of North Carolina at Chapel Hill, NC
1992- Associate Professor, Department of Endodontics, Univ. of North Carolina at Chapel Hill, NC
1992- Associate Professor, Dept. of Pharmacology, Univ. of North Carolina at Chapel Hill, NC
1992- Associate Professor, Curriculum in Neurobiology, Univ. of North Carolina at Chapel Hill, NC
1995 Co-Director, Oal and Maxillofacial Pain Clinic, Univ. of North Carolina, Chapel Hill, NC
1999 Full Professor, Dept. of Endodontics, Univ. of North Carolina, Chapel Hill, NC

SELECT PUBLICATIONS

Randich, A. and **Maixner, W**.: Interactions between cardiovascular and pain regulator systems. *Neurosci. Biobehav. Rev.* 8: 343-367, 1984.

Bushnell, M.C., Duncan, G.H., Dubner, R., Jones, R.L. and **Maixner, W**.: Attentional influences on noxious and innocuous cutaneous heat detection in humans and monkeys. *J. Neurosci.* 5: 1103-1110, 1985.

Randich, A. and **Maixner, W.**: The role of sinoaortic and cardiopulmonary baroreceptor reflex arcs in nociception and stress-induced analgesia. *Ann. N.Y. Acad. Sci*. 467: 385-401, 1986.

Oliveras, J.L., **Maixner, W**., Dubner, R., Thomas, D.A., Bates, R., Bushnell, M.C., Duncan, G.H. and Kenshalo Jr., D.R.: The medullary dorsal horn: A target for the expression of opiate effects on the perceived intensity of noxious stimuli. *J. Neurosci*. 6: 3086-3093, 1986.

Zamir, N. and **Maixner, W**.: The relationship between cardiovascular and pain regulatory systems. *Ann. N.Y. Acad. Sci. 467:* 371-384, 1986.

Dubner, R., Kenshalo, D.R., Jr., **Maixner, W**., Bushnell, M.C., and Oliveras, J.L.: The correlation of monkey medullary dorsal horn neuronal activity and the perceived intensity of noxious heat stimuli. *J. Neurophysiol*. 62: 450-457, 1989.
Sheps, D.S., Bragdon, E.E., Miller, P.F., **Maixner, W.,** Hinderliter, A.L., and Light, K.C.: The perception of pain in patients with myocardial ischemia. *J. Myocardial Ischemia* 1: 29-38, 1989.

Sheps, D.S., **Maixner, W**., Hinderliter, A.L., Herbst, M.C., Bragdon, E.E., Herdt, J., Kropp, S., Adams, K.F., Kock, G. and Ekelund, L.G. The relationship between systolic blood pressure, ventricular volume and ischemic pain perception in patients with angina pectoris: potential role for baroreceptors. *Isr. J. Med. Sci*., 25: 482-487, 1989.

Maixner, W. Gracely, R.H., Zuniga, J.R., Humphrey, C.B., and Bloodworth, G.R.: Cardiovascular and somato-sensory

responses to forearm ischemia and dynamic hand exercise. *Am. J. Physiol.* 259: R1156-R1163, 1990.

Maixner, W.: Interactions between cardiovascular and pain modulatory systems: Physiological and pathophysiological implications. *J. Cardiovasc. Electrophysiol.* (Suppl.) 2: S3-S12, 1991.

Sena, A.C., **Maixner, W**., Ballenger, M.N., Herbst, M.C., Koch, G., and Sheps, D.S. The relationship between plasma beta-endorphin, opioid receptor activity, and silent myocardial ischemia. Clin. J. Pain 8: 307-316, 1992.

Suarez-Roca, H. and **Maixner, W.** Morphine produces a multiphasic effect on the release of substance P from trigeminal nucleus slices by activating different opioid receptor subtypes. *Brain Res*. 579: 195-203, 1992.

Maixner, W. and Humphrey, C. Gender differences in pain and cardiovascular responses to forearm ischemia. *Clin. J. Pain* 9: 16-25, 1993.

Miller, P.F., **Light, K.C.**, Bragdon, E.E., Ballenger, M.N., Herbst, M.C., **Maixner, W**., Hinderliter, A.L., Atkinson, S.S., Koch, G.G., and Sheps, D.S. Beta-endorphin response to exercise and mental stress in patients with ischemic heart disease. *J. Psychosomatic Res*. 37: 455-465, 1993.

Sigurdsson, A. and **Maixner, W.** Effects of experimental and clinical noxious counterirritants on pain perception. *Pain* 57: 265-276, 1994.

Maixner, W., Sigurdsson, A., Fillingim, R., Lundeen T. and Booker, D. Regulation of acute and chronic orofacial pain. In Advances in Pain Research: Orofacial Pain and Temporomandibular Disorders. J.R. Fricton & R. Dubner, editors, Raven Press, pp 85-102, 1995.

Suarez-Roca, H. and **Maixner, W.** Morphine produces a biphasic modulation of Substance P release from cultured dorsal root ganglion neurons. *Neuroscience Letters*, 194:41-44, 1995.

Fillingim, R.B., Girdler, S.S., Booker, D.K., **Light, K.C.**, Harris, M.B. and **Maixner, W.** Pain sensitivity in females with premenstrual dysphoric disorder: A preliminary report, *Journal of Women's Health*, 4:367-374, 1995.

Maixner W., Fillingim, R., Booker, D. and Sigurdsson, A. Sensitivity of patients with painful temporo-mandibular disorders to experimently evoked pain. *Pain*, 63: 341-351, 1995.

Fillingim, R.B. and **Maixner, W.** Gender differences in response to noxious stimuli. *Pain Forum*, 4: 209-221, 1995.

Sheps, D.S., Ballenger, M.N., De Gent, G.E., Krittayaphong, R., Ditterman, E., **Maixner, W.,** McCartney, W., Golden, R., Koch, G., and **Light, K.**: Psychophysiological responses to a speech stressor: Correlation of plasma Beta-endorphin levels at rest and post psychological stress with thermally measured pain threshold in patients with coronary artery disease. *Journal of the American College of Cardiology*, 25:1499-1503, 1995.

Fillingim, R.B., Keefe, F.J., **Light, K.C**., Booker, D. K. and **Maixner, W.** The influence of gender and psychological factors on pain perception. *Journal of Gender, Culture and Health*, 1:21-36, 1996.

Bossut, D.F. and **Maixner, W.** Effects of cardiac vagal afferent electrostimulation on the responses of trigeminal and trigeminothalamic neurons to noxious orofacial stimulation. *Pain*, 65:101-109, 1996.

Fillingim, R.B. and **Maixner, W.** The influence of resting blood pressure and gender on pain responses. *Psychosomatic Medicine*, 58:326-332, 1996.

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Keefe, F.J., Lefebvre, J.C., **Maixner, W.**, Salley, A.N. and Caldwell, D.S.: Self efficacy for arthritis pain: relationship to perception of thermal laboratory pain stimuli. *Arthritis Care and Research*, 10:177-184, 1997.

Bragdon, E.E., **Light, K.C.**, Girdler, S.G. and M**aixner, W**.: Blood pressure, gender and parental hypertension are factors in baseline and post stress pain sensitivity in normotensive adults. *Intl. J. Behav. Med.*, 4: 17-38, 1997.

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Doutova, E.A., Chaisin, S., McNaughton, K., Light, A.R., Goy, M. and Maixner, W. Expression of Prodynorphin mRNA in the ferret trigeminal nuclear complex following noxious thermal tooth stimulation. *Soc. Neuroscience Abstracts*, 24: 394, 1998.

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