

CURRICULUM VITA

Barry G. Green

Professor of Surgery (Otolaryngology)

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Education and Training

A.B. (Psychology)	University of California, Riverside	1971
Ph.D. (Sensory Psychology)	Indiana University, Bloomington	1975
Post-doctoral Fellowship	John B. Pierce Laboratory and Yale University School of Medicine	1975-1978
Research Associate	Princeton University	1978-1980

Academic Appointments

Associate Scientist	Indiana University	1980-1983
Assistant Member	Monell Chemical Senses Center	1983-1987
Associate Member	Monell Chemical Senses Center	1987-1991
Member	Monell Chemical Senses Center	1991-1996
Fellow	John B. Pierce Laboratory	1996 Professor
	Department of Surgery	1997
	(Otolaryngology), Yale School of Medicine	
Director (interim)	John B. Pierce Laboratory	1999

Honors, Service and Affiliations

Communicative Disorders and Language Study, NIH (1987-1991)

Treasurer, Association for Chemoreception Sciences (1992-1995)

Editorial Board, *Chemical Senses* (2001-)

Editorial Advisory Board, *Appetite* (1996-)

Editorial Board, *Journal of Texture Studies* (1997-)

National Research Council Committee on Hearing and Bioacoustics, (1976-1984)

Ad hoc Reviewer: National Science Foundation; National Institutes of Health;

journals.

numerous

Affiliated Scientist, Monell Chemical Senses Center (1996-)

Professional Organizations

Psychonomic Society

Association for Chemoreception Sciences

Society for Neuroscience

AAAS

Current Grant Support

Principal Investigator: NIH RO1 NS38463-01: Spatial Properties of Cutaneous Thermal Sensitivity (4/1/03-3/31/08)

Principal Investigator: NIH RO1 DC05002: Oral Somesthesia and Taste (7/1/2001-6/30/2006)

Publications:

Green, B.G., and Craig, J.C. The roles of vibration amplitude and static force in vibrotactile spatial summation. Perception & Psychophysics, 1974, 16, 503-507.

Green, B.G. Vibrotactile temporal summation: Effect of frequency. Sensory Processes, 1976, 1, 138-149.

Green, B.G. Effect of skin temperature on vibrotactile sensitivity. Perception & Psychophysics, 1977, 21, 243-248.

Stevens, J.C., Green, B.G. and Krimsley, A.S. Punctate pressure sensitivity: Effects of skin temperature. Sensory Processes, 1977, 1, 238-243.

Green, B.G. Localization of thermal sensations: An illusion and synthetic heat. Perception & Psychophysics, 1977, 22, 331-337.

Stevens, J.C. and Green, B.G. History of research on feeling. In E.C. Carterette and M.P. Friedman (eds.), Handbook of Perception, Vol. 6. New York: Academic Press, 1978, pp. 3-22.

Stevens, J.C. and Green, B.G. Touch-temperature interaction: Weber's phenomenon revisited. Sensory Processes, 2, 206-219, 1978.

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Green, B.G. Thermo-tactile interactions: Tactile effects on thermal localization. In D. Kenshalo (ed.), Sensory Functions of the Skin of Humans. New York: Plenum Press, 1979, pp. 233-240.

Green, B.G., Lederman, S.J. and Stevens, J.C. The effect of skin temperature on the perception of roughness. Sensory Processes, 1979, 3, 327-333.

Green, B.G. Tactile roughness and the "paper effect." Bulletin of the Psychonomic Society, 1981, 18, 155-158.

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- Green, B.G., Craig, J.C., Wilson, A.M., Pisoni, D.B. and Rhodes, R.P. Vibrotactile identification of vowel spectra. Journal of the Acoustical Society of America, 1983, 73, 1766-1778.
- Green, B.G., Craig, J.C. and Pisoni, D.B. Vibrotactile communication of information about consonants: vowels mask consonants. Perception & Psychophysics, 1983, 33, 507-515.
- Green, B.G. Thermal perception on lingual and labial skin. Perception & Psychophysics, 1984, 36, 209-220.
- Craig, J.C., Green, B.G. and Rhodes, R.P. Ipsilateral versus bilateral placement of a tactile vocoder display. Journal of the Acoustical Society of America, 1985, 77, 1266-1268.
- Green, B.G. Menthol modulates oral sensations of warmth and cold. Physiology & Behavior, 1985, 35, 427-434.
- Green, B.G. Heat pain thresholds in the oral-facial region. Perception & Psychophysics, 1985, 38, 110-114.
- Green, B.G. Sensory interactions between capsaicin and temperature in the oral cavity. Chemical Senses, 1986, 11, 371-382.
- Green, B.G. Menthol inhibits sensations of warmth. Physiology & Behavior, 1986, 38, 833-838.
- Green, B.G. Oral perception of the temperature of liquids. Perception & Psychophysics, 1986, 39, 19-24.
- Green, B.G. and Gelhard, B. Perception of temperature on oral and facial skin. Somatosensory Research, 1987, 4, 191-200.
- Green, B.G. The sensitivity of the tongue to ethanol. In: Olfaction and Taste IX, Vol. 510. New York: New York Academy of Sciences, 1987, 88, 315-317.
- Green, B.G. The effect of cooling on the vibrotactile sensitivity of the tongue. Perception & Psychophysics, 1987, 42, 423-430.
- Green, B.G. and Frankmann, S.P. The effect of cooling the tongue on the perceived intensity of taste. Chemical Senses, 1987, 12, 609-619.
- Green, B.G. and Flammer, L.J. Capsaicin as a cutaneous stimulus: Sensitivity and sensory qualities on hairy skin. Chemical Senses, 1988, 13, 367-384.

- Green, B.G. Spatial and temporal factors in the perception of ethanol irritation on the tongue. Perception & Psychophysics, 1988, 44, 108-116.
- Green, B.G. and Frankmann, S.P. The effect of cooling the tongue on the perception of carbohydrate and intensive sweeteners. Physiology & Behavior, 1988, 43, 515-519.
- Green, B.G. The effects of thermal, mechanical and chemical stimulation on the perception of oral irritants. In: B.G. Green, J.R. Mason and M.R. Kare (eds.), Chemical Senses: Irritation. New York: Marcel-Dekker, Inc., 1990, pp. 171-195.
- Green, B.G. and Flammer, L.J. Methyl salicylate as a cutaneous stimulus: A psychophysical analysis. Somatosensory and Motor Research. 1989, 6, 253-274.
- Green, B.G. and Gelhard, B. Salt as an oral irritant. Chemical Senses, 1989, 14, 259-271.
- Green, B.G. and Flammer, L.J. Localization of chemical stimulation: Capsaicin on hairy skin. Somatosensory and Motor Research, 1989, 6, 553-556.
- Green, B.G. Sensory effects of camphor on the skin. Journal of Investigative Dermatology, 1990, 94, 662-666.
- Green, B.G. Capsaicin sensitization and desensitization on the tongue produced by brief exposures to a low concentration. Neuroscience Letters, 1989, 107, 173-178.
- Green, B.G. Spatial summation of chemical irritation and itch produced by topical application of capsaicin. Perception & Psychophysics, 1990, 48, 12-18.
- Lyman, B.J. and Green, B.G. Oral astringency: Effects of repeated exposure and interactions with sweeteners. Chemical Senses, 1990, 15, 151-164.
- Green, B.G. Oral chemesthesis: The importance of time and temperature for the perception of chemical irritants. In: H.T. Lawless and B.P. Klein (eds.), Advances in Sensory Science. New York: Marcel-Dekker, Inc., 1991, pp. 107-123.
- Green, B.G., and Lawless, H.T. The psychophysics of somatosensory chemoreception in the nose and mouth. In: T.V. Getchell, R.L. Doty, L.M. Bartoshuk, and J.B. Snow (eds.), Smell and taste in Health and Disease. New York: Raven Press, 1991, pp. 235-253.
- Green, B.G. Temporal characteristics of capsaicin sensitization and desensitization on the tongue. Physiology & Behavior, 1991, 49, 501-505.
- Green, B.G. Interactions between chemical and thermal cutaneous stimuli: Inhibition (counterirritation) and

integration. Somatosensory and Motor Research, 1992, 8, 301- 312.

Green, B.G. Capsaicin cross-desensitization on the tongue: Psychophysical evidence that oral chemical irritation is mediated by more than one sensory pathway. Chemical Senses, 16: 675-689.

Green, B.G., and Shaffer, G. Psychophysical assessment of the chemical sensitivity of human skin. Journal of the Society of Cosmetic Chemists, 1992, 43: 131-147.

Green, B.G. Sensory effects of l-menthol on human skin. Somatosensory and Motor Research, 1992, 9: 235-244.

Green, B.G. The effects of temperature and concentration on the perceived intensity and quality of carbonation. Chemical Senses, 1992, 17: 435-450.

Green, B.G. Heat as a factor in the perception of taste, smell and oral sensation. In: B.M. Marriott (ed.), Nutritional Needs in Hot Environments. Washington, D.C.: National Academy of Sciences Press, 1993, pp. 177-187.

Green, B.G. and Shaffer, G.S. The sensory response to capsaicin during repeated topical exposures: Differential effects on sensations of itching and pungency. Pain, 1993 53: 323-334.

Green, B.G. Evidence that removal of capsaicin accelerates desensitization on the tongue. Neuroscience Letters, 1993, 150: 44-48.

Green, B.G. Oral astringency: A tactile component of flavor. Acta Psychologica, 1993 84: 119- 125.

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Cliff, M.A. and Green, B.G. Sensory irritation and coolness produced by menthol: Evidence for selective desensitization of irritation. Physiology & Behavior, 1994, 56: 1021-1029.

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Green, B.G. and Cruz, A. 'Warmth-Insensitive Fields': Evidence of sparse and irregular innervation of human skin by the warmth sense. Somatosensory and Motor Research, **15**, 269-275, 1998.

Cruz, A., and Green, B.G. Thermal stimulation of taste. Nature, **403**, 889-892, 2000

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Green, B.G. Measurement of sensory irritation on the skin. American Journal of Contact Dermatitis **11**: 170-180, 2000.

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- Green, B.G. Psychophysical measurement of oral chemesthesis. In: Simon, S.A. and Nicolelis, M.A.I. (Eds.), Methods in Chemosensory Research. Boca Raton, FL: CRC Press, pp. 3-20, 2001
- Green, B.G., and Zaharchuk, R. Spatial variation in sensitivity as a factor in measurements of spatial summation of warmth and cold. Somatosensory and Motor Research, **18**, 181-190, 2001.
- Green, B.G. Synthetic heat at mild temperatures. Somatosensory and Motor Research, **19**, 130-138, 2002.
- Green, B.G. Studying taste as a cutaneous sense. J. Food Quality and Preference, **14**, 99-109, 2003.
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- Green, B.G. and Pope, J.V. Innocuous cooling can produce nociceptive sensations that are inhibited during dynamic mechanical contact. Experimental Brain Research, **148**, 290-299, 2003.
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- Stevens, J.C., Alvarez-Reeves, M., DiPietro, L., Mack, G.W. and Green, B.G. Decline of tactile acuity in aging: a study of body site, blood flow, and lifetime habits of smoking and physical activity (submitted)

Books:

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