U. S.-CANADIAN ROSTER OF CHEMICAL SENSES SCIENTISTS

This partial listing of scientists engaged in research on chemical senses is intended to facilitate and encourage scientific communications. Research activities and addresses are current as of July, 1974.

Ache, Barry W., Ph.D., Dept. Biol. Sciences, Florida Atlantic Univ., Boca Raton, Fla. 33432. Peripheral modulation (completed) and central projection (in progress) of olfactory afferents in the lobster, Panulirus.


Bardach, John E., Ph.D., Hawaii Institute of Marine Biology, P.O. Ex. 1346, Kaneohe, Hi. 96744.


Brand, Joseph C., PhD., Monell Center, 3500 Market Street, Philadelphia, Pa. 19104. Biochemical interactions between bitter stimuli and bovine taste bud tissue. Initiating study of taste related physical properties of taste bud cells and plasma membranes.


Braun, J. Jay, Ph.D., Dept. of Psychology, Arizona State Univ., Tempe, Arizona 85281. Associative taste-odor interactions in rats. (4 preliminary studies completed) Associative taste properties and the gustatory neocortex (several completed studies, further research underway).


* Cain, William S., Ph.D., John B. Pierce Foundation, 290 Congress Ave., New Haven, Conn. 06519. Olfactory psychophysics.
Fishman, Irving Y., Grinnell College, Grinnell, IA, 50112. Preference behavior of squirrels, bats, and other small mammals. Electrophysiological responses of small mammals, including extra-tongue receptors. All very nearly completed.

Frazier, James L., Ph.D., Dept. of Entomology, Mississippi State Univ., Miss. State, Miss. 39762. Inhibition of olfaction in the moth Heliothis virescens by sulfhydryl reagents (50% complete). The coding of plant chemicals by insect olfactory receptors (10% complete).

Fregly, Melvin J., Ph.D., Dept. Physiology, Univ. Florida, Coll. Medicine, Gainesville, Fla., 32610. Endocrine influences in salt appetites; regulation of fluid and food intakes.

Gaffey, C. T., Ph.D., Lawrence Berkeley Lab., University of California, Berkeley, Ca.

Gesteland, Robert C., Ph.D., Dept. of Biological Sciences, Northwestern Univ., Evanston, Ill., 60201. Intracellular olfaction, taste responses (mudpuppy), single olfactory units (rat). Intensity coding (frog nose), responses of olfactory organs grown in culture.

Graziaedi, Pasquale P.C., MD., Dept. of Biological Science, Unit I, Florida State Univ., Tallahassee, Fla. 32306. Dynamics of olfactory receptors and their central connections in the olfactory bulb glomeruli.

Guth, Lloyd, M.D., Nat. Institutes of Health, Bldg. 9, Rm. 1E125, Bethesda, Md. 20014. Previous research has dealt with the neurotrophic regulation of induction of taste buds on the mammalian tongue. No experiments are currently in progress.

Harper, Kenneth, B.S., M.S. Zoology Department, University of Michigan, Ann Arbor, Mi. 48104. Electrophysiology of kangaroo rat chorda tympani. Central mechanisms of sweet coding.


Cardello, Armand V., M.S., 211 Middlesex House, Dept. of Psychology, Univ. of Massachusetts, Amherst, Mass. 01002. Psychophysical research in taste; scaling of intensity; quality changes as a function of concentration; individual differences in sensitivity.

Cheal, Mary-Lou, Ph.D., Zoology Department, University of Michigan, Ann Arbor, Mi. 48104. Electrophysiology activity associated with young taste receptor cells. Effects in rodents of early exposure to odors.


Davis, Richard G., Ph.D., VA Hospital, 13000 North 30th, Tampa, Fla. 33612. Behavioral identification of selective receptor systems; cognitive processing of olfactory experiences; human brain electrophysiological responses to odors.


Dzendolet, Ernest, Ph.D., Dept. of Psychology, Univ. of Massachusetts, Amherst, Mass. 01002. Gustation: The relationship between stimulus structure, stimulus quality, and the initial receptor events.


Eppe, Gisela, Ph.D., Monell Chemical Senses Center, Univ. of Pennsylvania, Philadelphia, Pa. 19104. Study of the role of scent marking behavior and of body odors in the communicatory system of primates.


Farbman, Albert I., D.M.D., Ph.D., Dept. of Anatomy, Northwestern Univ., 303 E. Chicago Ave., Chicago, Ill. Differentiation of taste buds and olfactory receptors in organ culture, and in vivo.

Fischer, Roland, Ph.D., Maryland Psychiatric Res. Ctr., P.O. Box 3235, Baltimore, Md. 21228. Ongoing research and exploration of pharmacological and personality correlates of taste-sensitivity--using system's approach--for clinical applicability (including biofeedback).

Kutyna, Francis A., Ph.D., Dept. of Physiology, Mich. State Univ., E. Lansing, Mi. 48824. Studies on peripheral modification of sensory input in taste buds and carotid body chemoreceptors utilizing intracellular recording methods. Interpretation of data incomplete.

McDonald, Donald, M.D., Ph.D., Cardiovascular Res. Institute, Rm. 1315-M, Univ. of California, San Francisco, CA 94143. Ultrastructural and neurophysiological studies of vascular chemoreceptors (carotid body). Reciprocal synapses interconnecting sensory nerve endings and glomus cells.


Margolis, Frank L., Roche Institute of Molecular Biology, Nutley, N.J. 07110. Biochemical studies of primary olfactory pathway. Identification of specific macro and micromolecular markers and study of their function.


Mistretta, Charlotte M., Ph.D., Dept. of Oral Biology, School of Dentistry, Univ. of Michigan, Ann Arbor, Mi. 48104. Development of the sense of taste in fetal sheep using histological, electrophysiological, and behavioral techniques.


Murray, Raymond G., Ph.D., Myers Hall 263, Indiana University, Bloomington, Ind. 47401. Fine structure and histochemistry of rabbit foliate taste buds. Other mammalian, fish, and amphibian taste organs examined and compared.

Norgren, Ralph, Ph.D., The Rockefeller University, New York, N.Y. 10021. Central projections of taste system in relation to consummatory behavior.

Oakley, Bruce, Ph.D., Zoology Department, University of Michigan, Ann Arbor, Mi. 48104. Development of taste and olfaction. Salmon homing. Current: Function of young taste receptor cells, comparative taste physiology of desert rodents.


Pfaffmann, Carl, Ph.D. Rockefeller University, New York, N.Y. 10021.

Price, Steven, Ph.D., Dept. of Physiology, Medical College of Virginia, Richmond, Va., 23298. Taste receptor proteins. Molecular genetic approach to olfactory receptors.
Rieke, Garl Kalman, Ph.D., Dept. of Anatomy, Hahnemann Med. College, 235 N. 15th St.,
system—structurally and functionally.

Samann, David W., M.S., Dept. Physiology, Michigan State University, East Lansing, Mi.
48823. Peripheral whole nerve and single fiber electrophysiology, and TEM, SEM
and light microscopy of the taste system of Necturus (mudpuppy).

Sanchez, Thomas, B.A. Department of Zoology, University of Michigan, Ann Arbor, Mi.

Schafer, Rollie, Ph.D., Department of Zoology, University of Michigan, Ann Arbor, Mi.
48104. Developmental neurobiology of pheromone receptors in insects; functional
chemistry of odorant-acceptor site interaction. Research well along.

Schiffman, Susan, Ph.D., c/o Dept. of Psychology, Duke University, Durham, N.C. 27706.
Physico-chemical and psychological dimensions of taste and olfaction, employing
psychophysical methods and multidimensional scaling methods for analysis; also
interested in problems of neural coding.

Seabrook, W. D., Ph.D., Dept. Biology, Univ. of New Brunswick, Fredericton, N.B. CANADA.

Shallenberger, R. S., Ph.D., Cornell University, Geneva, N.Y. 14450. Deducing the
stereochemistry of the initial interaction between a compound and receptor sites for
taste and smell. Elucidation of the chemical basis of taste and odor.

Slifer, Eleanor H., Ph.D., 308 Lismore Ave., Glenside, Pa. 19038. Fine structure
of insect chemoreceptors. Results published for all major orders; work in progress
on remaining orders.

Smith, David V. Ph.D., Dept. Psychology, Box 3415, Univ. Sta., Univ. of Wyoming,
Laramie, Wyo. 82071. Electrophysiological studies of the process of adaptation
in rat chorda tympani nerve; use of cross adaptation procedures to investigate
nature of taste quality coding in hamsters.

Stone, Herbert, Ph.D., Stanford Res. Institute, 333 Ravenswood Ave., Menlo Park,
CA 94025. Olfactometric techniques, odor perception, adaptation-recovery in man;
taste-structure relationships also in man.

Stuerckow, Brunhild, Ph.D., Dept. of Biology, Assoc. Prof., Northeastern University,
Boston, Ma. 02115. Resistance measurements of taste hair tips of flies under
different physiological and stimulative conditions.

Thiessen, Delbert D., Ph.D., Dept. Psychology, University of Texas, Austin, Tex. 78712.
Hormonal, brain and social control of territorial scent marking in the Mongolian
gerbil.

Tucker, Don., Ph.D., Biol Sci. Unit I, Florida State University, Tallahassee, Fla. 32306.

Turk, Amos, Ph.D., Dept. of Chemistry, The City College, N.Y., N.Y. 10031. Studies
of gas and vapor dilution; applications of gas tracing.
Wang, Michael, Ph.D., Temple University School of Medicine, Philadelphia, PA 19140.
Single and multiple papilla stimulation. Recording from single chorda tympani fibers. Study of interaction between stimuli presented in combinations.

Weiffenbach, James M., Ph.D., NIH Bldg., 10 Rm. 5N210, Bethesda, Maryland 20014.
Lingual sensitivity of the neonate human to tastants evaluated by reflex tongue movements. Glucose solution - water discrimination complete other tantant discriminations in progress.

Wenzel, Bernice M., Ph.D., Dept. of Physiology, School of Medicine, University of California, Los Angeles, CA 90024. Mapping olfactory pathway in pigeon by electro-physiological and neuroanatomical methods; bulbar outflow almost completed. Limbic functions of olfactory system; in progress.

Wright, R. H., Ph.D., D.Sc., 6822 Blenheim St., Vancouver, Canada, V6N 1R7. Consulting ophresiologist, specializing in the molecular basis of olfactory specificity, and development of selectively effective insect attractants, anti-attractants and repellents.

Yahr, Pauline Ph.D., Dept. of Psychobiology, University of California, Irvine, CA 92664. Studies of mammalian social behavior influenced by olfactory signals emphasizing hormonal control of pheromone production and of responses odors elicit.

Zalewski, Andrew A., M.D. NIH, Bethesda, Md. 20014. Development of taste receptors.
Immunology.