



## ASSOCIATION FOR CHEMORECEPTION SCIENCES NEWSLETTER

VOLUME 2, NUMBER 1

MARCH, 1984

### NEUROSCIENCE RESEARCH AWARDS TO THREE CHEMOSENSORY SCIENTISTS

Special awards in honor of Senator Jacob K. Javits of New York for research in neuroscience were approved by Congress as part of the Fiscal 1984 appropriation to the National Institute of Neurological and Communicative Disorders and Stroke (NINCDS). The National Advisory Council of NINCDS designated such awards for "investigators submitting regular research grant applications for competitive review during Fiscal Year 1984 who have a distinguished record of substantial contribution in some field of neurological or communicative sciences and who can be expected to be highly productive over the next seven years." Out of thirty-nine Javits Neuroscience Investigator Awards, with a commitment of seven years of research support, three were awarded to chemosensory scientists: Drs. Lloyd M. Biedler, Bruce Oakley, and Robert J. O'Connell.

### CHILDCARE AT ACHEMS VI

Anyone interested in knowing the childcare possibilities during the AchemS VI meeting should contact Anna Bradley's mother, Charlotte Mistretta at (313) 763-1080, or Mikey Madowitz's mother, Claire Murphy at (619) 265-5358.

### TUCKER MEMORIAL AWARD

Graduate students who are sole or first author of an abstract to be presented at AchemS VI who wish to be considered for this award should CALL John Caprio at (504) 388-1132 no later than March 15, 1984.

### ACHEMS ELECTION RESULTS

Bruce Halpern, Elections Committee Chair, reports that 335 ballots were sent out for the 1984 election of officers and 181 were cast. The results of the official count that took place March 5, 1984, are as follows:

David Smith, Executive Chair-elect  
John Caprio, Treasurer  
Marion Frank, Membership  
Bernice Wenzel, Councilor  
Gary Beauchamp, Program

Terms of office begin at the end of the annual meeting, April 8, 1984. Not up for re-election this year and continuing to serve for the second year of their two-year terms are:

Janneane Gent, Secretary  
Barry Ache, Councilor

Changing title will be:

Robert Gesteland to Executive Chair  
William Cain to Past Executive Chair

Stepping down will be:

Bruce Halpern as Past Executive Chair  
Charlotte Mistretta as Membership Chair  
Michael Meredith as Councilor  
David Smith as Program Chair

Incumbantly continuing (an AchemS first) will be:

John Caprio, Treasurer



## GORDON CONFERENCE

### July 9-13, 1984

Gordon Research Conference on  
Chemical Senses: Taste and Smell  
ProctorAcademy, Andover, NH  
Bruce Oakley, Conference Chairman  
David C. Heckert, Vice-Chairman

Those wishing to attend should  
apply to the Gordon Research Center  
using the form in the 2 March, 1984  
Issue of SCIENCE.

#### Session I. STRUCTURE AND FUNCTION: RECEPTOR BIOPHYSICS. Steven Price, Discussion Leader.

1. "The role of ion transport in gustatory transduction", John A. DeSimone.
2. "Significance of the phase boundary potential in chemoreceptor potentials", Kenzo Kurihara.
3. "Single ion channel fluctuations in planar lipid membranes containing olfactory epithelium proteins", Randall B. Murphy.

#### Session II. CODING IN NON-CHEMOSENSORY SYSTEMS. Carl Pfaffmann, Discussion Leader.

1. "The representation of acoustic stimuli in across-fiber models", Nelson Y. Kiang.
2. "Parallel processing of visual information in the nervous systems of cats and monkeys", Robert Shapley.
3. "Cell types in the vertebrate retina", Robert W. Rodieck.

#### Session III. BIOLOGICAL PERSPECTIVES ON SENSORY CODING. Robert O'Connell, Discussion Leader.

1. "Functional organization of insect olfactory pathway", John G. Hildebrand.
2. "Olfactory-vomeroneasal interactions", Michael Meredith.
3. "Olfactory communication in mammals", Robert E. Johnston.

#### Session IV. BEHAVIOR; WHAT IS CODED? Bruce P. Halpern, Discussion Leader.

1. "Olfactory guided behavior and coding mechanisms", Robert J. O'Connell.
2. "Taste discriminability in animals", Marion E. Frank.
3. "Taste reactivity as a measure of the neural control of palatability", Harvey J. Grill.

#### Session V. PSYCHOPHYSICS: WHAT IS CODED? James T. Kuznicki, Discussion Leader.

1. "Sensory properties of oral chemical irritants", Harry T. Lawless.
2. "Coding constraints produced by taste reaction time data", Bruce P. Halpern.
3. "Categorical perception in smell and taste", William S. Cain.

#### Session VI. EVIDENCE FOR NEURON TYPES IN OLFACTION AND TASTE, Maxwell M. Mozell, Discussion Leader.

1. "Two receptor neuron populations defined by biophysical parameters", Robert C. Gesteland.
2. "Is there evidence for a taxonomy of olfactory receptor cells?", Andre Holley.
3. "Gustatory neuron types: converging evidence", David V. Smith.

#### Session VII. QUANTITATIVE APPROACHES TO THE CLASSIFICATION OF SENSORY NEURONS, David V. Smith, Discussion Leader.

1. "The effect of standardization of response data on grouping of neurons", George F. Estabrook.
2. "Cell classification in the vertebrate retina", Robert W. Rodieck.
3. "Multivariate analysis of sensory data: A comparison of methods", Stephen L. Bieber.

#### Session VIII. CENTRAL ANALYSES: IMPLICATIONS FOR CODING, Charlotte M. Mistretta, Discussion Leader.

1. "Receptive field organization of gustatory neurons in the nucleus of the solitary tract", Susan P. Travers.
2. "Cortical representation of taste", Takashi Yamamoto.
3. "Spatial factors in central olfactory organization", John W. Scott.

#### Session IX. RESUME AND APPRAISAL: ROUNDTABLE DISCUSSION, Bruce Oakley, Discussion Leader.



## OTHER NIH NEWS

**GOOD.** (from NINCDS Notes). Richard M. Costanzo, Ph.D., Virginia Commonwealth University, was the chemosensory investigator among nine scientists to receive a Research Career Development Award this year. (See Positions Available, this page.)

**MEDIUM.** SUMMARY STATEMENTS, PRIORITY SCORES SET FOR AUTOMATIC EARLY RELEASE. Investigators who submit grant applications to NIH will automatically receive summary statements containing reviewer's comments and priority scores before final Advisory Council review. Investigators previously received this information after council meetings had taken place. Summary statements without priority scores had also been available prior to council meetings if requested under the Privacy Act. Starting with the current round of grants, which will receive final consideration at Advisory Council meetings in May, the statements and priority scores will be sent to principle investigators and program directors immediately following determination of merit by Initial Review Groups or study sections. Additional information is available in NIH Guide for Grants and Contracts, January 6, 1984.

**NOT SO GOOD.** PRESIDENT'S PROPOSED BUDGET FOR NIH. President Reagan's FY 1985 budget for NIH requests an increase of \$89 million (2%) over FY 1984. This would permit the funding of about 5,000 new and competing grants and the continuation of 12,094 noncompeting grants in FY 1985. The aggregate average cost for research project grants would increase about 5%. The budget provides for full indirect costs on research grants. The budget for NINCDS is:

1983	\$297 million
1984	\$335 million
1985 (President's request)	\$345 million

Additional details on the budget are available from sources such as the NIH Record, 1984, 36(4) and Federation Proceedings, January 1984 (for training data), and the Blue Sheet, Feb. 8, 1984.

## POSITIONS AVAILABLE

**INSTRUCTOR/ASSISTANT PROFESSOR OF PHYSIOLOGY.** Position (nontenure track) available 1 September 1984 to conduct research on sensory processing of olfactory information. Some teaching required. Preference given to individuals with experience in neurophysiological techniques. Support available for up to 5 years. Salary will depend on experience. Applicants should have an M.D. or Ph.D. degree in Physiology or a related field. Send C.V. and names of 3 references to: Dr. Richard Costanzo, Department of Physiology and Biophysics, Medical College of Virginia, Box 551 MCV Station, Richmond, VA 23298. Equal Opportunity/Affirmative Action Employer. (2/84)

**SR. BEHAVIORAL SCIENTIST.** Immediate opening in Fundamental Research and Development Department. Applicants should have a Ph.D. in experimental psychology or related field with expertise in human chemosensory perception. Candidates with knowledge of the anatomy of human chemosensory systems, organic chemistry and/or pharmacology are preferred. 1-3 years experience is required. Send resume to Ms. Mary Lou Southern, Manager, College Relations, R.J. Reynolds Industries, Inc., 401 N. Main Street, Winston-Salem, NC 27102. (12/83)

**NEUROBIOLOGY RESEARCH ASSOCIATES.** Openings for two Postdoctoral Research Associates are immediately available to study olfactory physiology in vertebrates and invertebrates. The planned research involves a multidisciplinary approach to the anatomical, behavioral, chemical, electrophysiological and hormonal substrates of olfactory communication in several species. Experience in one or more of these areas is a requisite. Send resume, statement of research interests and names of 3 references to: Dr. Robert J. O'Connell, C/O Personnel Office, Worcester Foundation for Experimental Biology, 222 Maple Avenue, Shrewsbury, MA 01545. An Equal Opportunity/Affirmative Action Employer M/F/H. (2/84)





## ACHEMS VI PROGRAM IN BRIEF

## April 4-8, 1984

The Association for Chemoreception Sciences will hold its sixth annual meeting at the Hyatt Hotel in Sarasota, Florida. David Smith, Program Chair, announces that AchemS VI will include the following session titles and session chairpersons:

Glivaudan Lecture. "The chemical basis of obnoxiousness: Survival in animals and plants", Dr. Thomas Eisner.

Session 1. Sensory-Ingestive mechanisms, R.J. Contreras, (Session Chair).

Session 2. Chemosensory Functions in behavior. R. Mankin.

Session 3. The review and post-award process at the NIH. T.B. Getchell. Informal work-shop. Chemosensory transduction at the cellular level-Superstition, speculation, and substantiation. S.D. Roper.

Session 4. Posters I. G.K. Beauchamp

Session 5. Plasticity and development. C.M. Mistretta.

Session 6. Chemical senses and aging. C. Murphy.

Session 7. Human chemosensory function. R.L. Doty.

General Business Meeting. Friday 5 PM.

Session 8. Posters II. J.G. Brand.

Session 9. Receptor and peri-receptor mechanisms. B.W. Ache.

Session 10. Physiology of chemosensory systems. I.J. Miller, Jr.

Session 11. Cellular biological approaches to chemoreception. J.W. Scott.

## MEMBERSHIP REMINDER

AchemS dues for the 1984 calendar year are \$20 (regular); \$10 (student) payable at the AchemS VI meeting. Members in good standing will receive a copy of the 1984 membership directory. After April 8, dues may be sent to the new membership chair:

Dr. Marion Frank  
Department of Oral Biology  
University of Connecticut  
Health Center  
Farmington, CT 06032

## ACHEMS VI GRADUATE STUDENT HOUSING AT THE HYATT

Students without financial support for housing should CALL John Caprio at (504) 388-1132 no later than March 15, 1984.

Session 12. Posters III. R.D. Sweazey. Symposium. Ethological and evolutionary perspectives on chemosensory function in reptiles. M. Halpern. Symposium. Physical chemistry of stimulus access and removal. R.C. Gesteland