

aChemS Newsletter

Association
for
Chemoreception
Sciences

*for research in chemical senses
and the advancement of understanding of
chemosensory mechanisms
in health and disease*

Editor: C.A. Greer

Editorial Assistant: H.A. Cameron

Legislative Lobbying

The Executive Committee once again strongly urges all of the membership to write their elected state and federal representatives to voice their endorsement for supporting science with public funds. We have been sadly negligent in presenting our views on this topic. The highly competitive process of obtaining grants is due, in part, to the limited availability of funds. Voicing our desire for increasing public support of science could help to ease the competition. Following are the guidelines published in the previous Newsletter for preparing a letter and appropriate recipients. In order that AChemS can maintain accurate records of our lobbying attempts we request that copies of your letters be forwarded to Dr. Gary Beauchamp, Chair of the AChemS Public Information and Affairs Committee.

Letters need not contain detailed budget recommendations, although they certainly are in order, but could easily recount the difficulties associated with doing quality work when faced with ferocious competition for each available research dollar or the problems associated with the progressive decline in the number of scientists in training. Letters can be of two types. Those which express support for some well defined thing, like increased funding for biomedical research, are often simply counted to arrive at some idea of the amount of support among the voters. The other kind of letter is usually more specific and often includes data, for instance, the authorization budget for NIH needs to be increased from \$X million to \$Y million in order to fund 5,000 new

ROI's this year. These are counted and read, usually by the staff of the representative. These letters are often used to adjust funding priorities. The point is that both kinds of letters are valuable. We should not be embarrassed to ask for support for our research efforts. Sample letters and information about how to communicate your concerns are available from a number of sources including: your institution's public affairs or grant offices, AAAS (1333 H Street, NW, Washington, DC 20005; (202) 326-6500); the Society for Neuroscience, which is particularly active in this regard, (11 Dupont Circle, Suite 500, Washington, DC 20036; (202) 462-6688); Friends of NIDCD (225 Haverford Avenue #1, Narberth, PA 19072; (212) 663-3135); Sigma Xi, The Scientific Research Society, 345 Whitney Avenue, New Haven, CT 06511; (203) 624-9883); and the Society for the Study of Reproduction (J.P. Preslock, Dept of Obstetrics, Gynecology and Reproductive Sciences, Univ. Texas Medical School, Houston, TX 77030; (713-792-5360). If you don't wish to contact these organizations, you can find a colleague who belongs to one or another, or get help from your own institution. For your convenience we include a current list of the members on the appropriate Senate and House Subcommittees. Please remember to send copies of your letters to your own Congressmen and Senators if they are not already on the list of members.

**Senate Appropriations Subcommittee
on Labor, Health and Human
Services, Education.**
186 Dirksen Bldg.,
Washington, DC 20510-6025
Phone: (202) 224-7283

Tom Harkin (IA), Chrmn.
Robert C. Byrd, WV
Ernest F. Hollings, SC
Quentin N. Burdick, ND
Daniel K. Inouye, HI
Dale Bumpers, AR
Harry Reid, NV
Brock Adams, WA
Arlen Specter, PA
Mark O. Hatfield, OR
Ted Stevens, AL
Warren B. Rudman, NH
James A. McClure, ID
Thad Cochran, MS
Phil Gramm, TX

**House Appropriations Subcommittee
on Labor, Health and Human
Services, Education**
23258 Rayburn Building,
Washington, DC 20515-6024
Phone: (202) 225-3508

William H. Natcher (KY), Chrmn.
Neal Smith, IA
David R. Obey, WI
Edward R. Roybal, CA
Louis Stokes, OH
Joseph D. Early, MA
Bernard J. Dwyer, NJ
Steny H. Hoyer, MD
Silvio O. Conte, MA
Carl D. Pursell, MI
John Edward Porter, IL
C. W. Bill Young, FL
Vin Wever, MN

Executive Secretary Position available:

The Division of Research Grants of NIH is currently recruiting for the position of Executive Secretary for the CMS-Sensory Disorders and Language Study Section. Anyone interested in being considered is encouraged to telephone Dr. Samuel C. Rawlings DRG-NIH (301) 496-7072 as soon as possible.

Address by Dr. James B. Snow, Jr., M.D., Director, National Institute on Deafness and Other Communication Disorders

During the 1990 AChemS meeting we were privileged to be addressed by the new Director of NIDCD, Dr. James B. Snow. Reprinted here is the text of Dr. Snow's talk:

Thank you, Dr. Getchell. Ladies and Gentlemen, I am delighted to have this opportunity to speak at AChemS about the National Institute on Deafness and Other Communication Disorders (NIDCD). The Institute is now one and a half years old. It was created to support the study of normal and disordered hearing, balance, smell, taste, voice, speech and language.

We are stewards of an unprecedented commitment of the nation's financial resources to the study of these seven significant areas of human life and of human communication. The NIDCD is expanding and intensifying research in these areas, emphasizing the application of molecular biology, especially molecular genetics, in disorders of these functions while continuing to support the development of new knowledge through traditional approaches to these problems.

The vast majority of the Institute's budget is devoted to scientist-initiated research projects. I am encouraging greater interaction between the scientific staff of the Institute and investigators in the field to stimulate and assist in the development of initiatives. We have the opportunity to make great strides in molecular genetics in the disorders of human communication that are clearly hereditary.

We must emphasize research training in this Institute, particularly in molecular biology, and attract molecular biologists to the problems of hearing, balance, smell, taste, voice, speech, and language in greater numbers than in the past. In training, we are going to be innovative with

opportunities at the predoctoral and postdoctoral levels. We are working toward a mentor training program in which distinguished, established investigators, funded by the Institute, can be awarded traineeships in conjunction with their grants. Our training efforts must attract individuals from underrepresented minorities and from the communicatively-impaired community.

The NIDCD's intramural scientists will, also, emphasize molecular biology as an example of excellence to the scientific community. We will develop units in the intramural program representing the field of hearing, balance, smell, taste, voice, speech, and language. The units of excellence will serve as a demonstration of what can be accomplished by applying the state-of-the-art molecular techniques to the problems of our patients and as research training resources where young scientists can come from our universities and research institutions for a year or two or longer for special training and experience.

Among the disciplines relating to the NIDCD, the chemoreception sciences may have greater development in molecular biology. Dr. Jack Pearl, who is the Health Science Administrator (HSA) responsible for the Smell and Taste program, has recently analyzed the research project grants in smell and taste (Table 1) in the R01 and P50, we have our clinical smell and taste centers. I would like to see the chemoreception sciences make better use of career development and training opportunities.

Dr. Pearl has tabulated (Table 2) the scientific disciplines or topics in the smell and taste R01 and career grants. Note the strength in molecular biology, cell biology, and genetics.

As many of you may already know, we are establishing national multi-purpose research and training centers. These centers will support basic and clinical research, research training, continuing professional education and outreach to the public. We also have

plans to implement the exploratory grants program which is an innovative mechanism that will enable institutions with limited experience in multidisciplinary research to initiate and develop such research programs. The exploratory grants program will increase the number of institutions participating in the centers program.

In 1989, the Institute developed its National Strategic Research Plan. Several distinguished members of AChemS served on the Task Force panel for smell, taste, and touch including Linda Bartoshuk, Rich Costanzo, Bob Gesteland, Pasquale Graziadei, Morley Kare, Charlotte Mistretta, and Max Mozell. The responsibility of the Smell and Taste Panel was to identify the research needs and opportunities in the field. They advised that the major basic research opportunities in smell and taste are in plasticity, including development, regeneration, and aging; access of infectious agents and toxins to the brain through the olfactory nerve; as well as receptor mechanisms and signal processing throughout the central systems.

The panel also identified major clinical research opportunities in smell and taste including: epidemiology of smell and taste disorders; development of new diagnostic tests; affective dimensions of taste and smell; associations between chemosensory disorders and altered food intake in aging and in various chronic diseases; effects of environmental agents on chemosensory function; and clinical trials to evaluate potential treatment protocols and rehabilitative strategies.

The Institute wants to receive applications for these and other issues in chemosensation. Let me assure you that the dedicated staff of the Institute and I are committed to doing everything that time and effort will permit to utilize the resources of the Institute to maximize the development of new knowledge in the chemical senses. I invite you to apply for support of your most challenging

research and the training of your most promising students.

In closing, let me say that the membership of AChemS has been of great support to our developing Institute. Particularly, let me mention the efforts of Dr. Max Mozell who serves with distinction on the National Advisory Board of the Institute. Of special interest to this

membership will be an important event at NIDCD this fall. I am pleased to invite all of you to attend our Second Anniversary Lecture to be given by Dr. Thomas V. Getchell. His lecture is entitled, "The Molecular Neurobiology of Olfactory Reception," and it will be on October 26, 1990 on the NIH campus. Dr Getchell's lecture will be followed by

a luncheon in his honor and an open house in the laboratories of the intramural programs and the offices of the extramural program. I am looking forward with great enthusiasm to his lecture. Thank you for this opportunity to meet with you
t h i s m o r n i n g .

Table 1.

Scientific Disciplines or Topics In Funded R01 and Career Grants

| Descriptor | Smell | Taste |
|-------------------------------|-------|-------|
| CNS | 16 | 12 |
| ONS | 5 | 13 |
| Behavior | 5 | 2 |
| Psychophysics | 2 | 4 |
| Neuroanatomy | 12 | 13 |
| Neurophysiology | 16 | 13 |
| Biochem, Pharmacol, Neurochem | 11 | 6 |
| Histo-, Cyto-, Immunochem. | 8 | 6 |
| Chemistry | 1 | 1 |
| Cell biology | 11 | 2 |
| Tissue (cell) culture | 2 | 1 |
| Genetics Smell | 5 | 5 |
| Development | 3 | 4 |
| Regeneration | 5 | 3 |
| Human, clinical | 1 | 3 |
| Nutrition | 0 | 10 |

Table 2.

Grants in Chemoreception by Mechanism

| Mechanism | Smell | Taste | Smell and Taste |
|-----------|-------|-------|-----------------|
| R01 | 34 | 20 | 1 |
| R13 | 0 | 0 | 1 |
| R29 | 2 | 4 | 0 |
| P01 | 1 | 0 | 4 |
| P50 | 0 | 0 | 1 |
| K04 | 0 | 2 | 0 |
| K08 | 2 | 0 | 0 |
| F32 | 3 | 0 | 1 |
| T32 | 0 | 0 | 1, 4 |

1990 Business Meeting Minutes

- I. Meeting called to order at 12:00pm on 4/20/90 by Executive Chairperson Dr. R.J. O'Connell
 - A. Announcement of the death of Professor Rose Marie Pangborn, a long standing member of AChemS and advocate of chemical senses research.
 - B. Announcement that the Executive Committee had voted to provide to members of the Executive Committee and Standing Committees a small budget suitable for covering expenses incurred in fulfilling the positions of the office. For example, costs associated with secretarial services or office supplies will be reimbursed by the AChemS treasury.
- II. Elections Committee Report
 - A. A total of 69 nominations were received for the 4 available positions. A total of 201-210 votes were cast. Congratulations are extended to the following: Dr. Barry Ache (Executive Chair Elect); Dr. Joseph Brand (Program Chair Elect); Dr. Charles Wysocki (Membership Chair); Dr. Sue Kinnamon (Councilor).
- III. Program Committee
 - A. Dr. Claire Murphy thanked the members of her committee (Joe Brand, Carol Christensen, Magdalena Gilmore, Barry Green, John Kauer, and Joseph Price).
 - B. The meeting stayed within budget at approximately \$20,000.
 - C. The hotel sold out requiring participants to locate alternative housing.
 1. In future years alternative housing will be listed on the meeting application forms.
 - D. A total of 266 abstracts were presented (approximately a 17% increase over last year) as well as 2 workshops, 2 symposia, the Givaudan Lecture, a special interest clinical luncheon, and a special interest industry dinner.

IV. Councilor's Report (Student Travel and Support)

- A. Dr. R. Costanzo and Dr. S. Roper reported that 59 students applied for travel awards.
1. 38 of 45 room requests were granted in addition to the ECRO student representative.
 2. 39 of 48 airfare requests were granted for a total of \$4,962.
 3. A total of \$7,000 was used for Student Travel Awards.

V. Treasurer's Report (Final Treasurer's Report for 1989 and Revised AChemS Budget 1990 – submitted April 10, 1990 by Thomas Finger, Treasurer)

| | 1990 | Actual 1989 |
|----------------------------|---------------|------------------|
| A. Operations: | | |
| B. Income: | | |
| 1. Dues | 12,500 | 12,373.67 |
| 2. Corp. Members | 18,000 | 18,070.00 |
| 3. Registration | 13,000 | 12,007.80 |
| 4. Other | | 312.89 |
| 5. Interest | <u>2,500</u> | <u>2,839.54</u> |
| 6. TOTAL | 46,000 | 45,603.90 |
| C. Expenses: | | |
| 1. Membership Comm. | 4,300 | 4,238.80 |
| 2. Program Comm. | 20,000 | 17,074.54 |
| 3. Secretary | 1,300 | 828.16 |
| 4. Awards | 10,500 | 9,741.04 |
| 5. Student Travel | 7,000 | 4,071.00 |
| 6. ISOT | 0 | 1,025.00 |
| 7. Bank/Corp. Fees | 200 | 155.00 |
| 8. AV Equipment | 0 | 2,449.56 |
| 9. Other (Acct., Art, etc) | 900 | 2,390.00 |
| 10. Woods Hole Course | 1,000 | |
| 11. Vinikov | 800 | |
| 12. TOTAL: | <u>46,000</u> | <u>42,018.10</u> |
| 13. Net Income | | 3,585.80 |

D. Notes:

1. Significant increases are budgeted for Student Travel and Program Comm. for 1990.

VI. Next AChemS meeting is scheduled for April 17 - 21 in Sarasota.

- A. The 1991 Program Chair (Dr. John Kauer) is happy to receive inquiries and suggestions.

VII. ISOT is scheduled for the summer of 1993 in Japan.

VIII. The Executive Committee announced that they had voted to join NABR (The National Association for Biomedical Research). NABR acts as an advocate for institutions and associations involved in biomedical research. Through our membership in NABR we are expressing support of animal research.

- A. A committee has been appointed (Drs. T. Scott, D. Smith, and J. Smith) to develop a policy that AChemS could adopt regarding animal research. As a general guideline, this committee will utilize the standards published by the Society for Neuroscience.

IX. Dr. R. O'Connell turned over to Dr. T. Getchell the mantle of office for Executive Chairperson.

- A. Dr. Getchell reminded the membership of our strong growth and requested that everyone begin to consider the question of what AChemS should aspire to over the course of the coming decade.

X. New Business

- A. Both undergraduate and graduate students are eligible for travel assistance providing they are presenting an abstract.
- B. The Chair of the Public Information and Affairs Committee (Dr. G. Beauchamp) admonished the membership for not actively writing to their elected officials to voice their support for additional commitments to biomedical research in general and chemical senses in particular.

XI. The meeting was adjourned at 12:40pm.

The Newsletter is pleased to include the following announcement from NIDCD:

NIDCD Second Anniversary Lecture

October 26, 1990

The National Institute on Deafness and Other Communication Disorders will sponsor its second anniversary lecture on October 26, 1990. The speaker will be the noted chemosensory neuroscientist, Dr. Thomas V. Getchell. The title of his lecture will be: "The Molecular Neurobiology of Olfactory Receptor."

Dr. Getchell received his Ph.D. in neuroscience from Northwestern University in 1969. He obtained postdoctoral training in olfactory neurobiology in the Department of Physiology at the University of Pennsylvania School of Medicine, as a University of Pennsylvania Plan Scholar to Develop Scientists in Medical Research, and at the internationally renowned Monell Chemical Senses Center. Dr. Getchell continued his training in synaptic neurophysiology as a NIH Special Research Fellow in the Department of Physiology at Yale University in 1973. He went to Wayne State University in 1978 as Professor of Anatomy and Cell Biology and Associate Dean of the Graduate School. More recently, during a sabbatical year, he obtained "hands on" training in molecular biology as a NIH Senior Fellow in the Department of Neuroscience at the Roche Institute of Molecular Biology. Dr. Getchell joined the University of Kentucky College of Medicine in 1989 as Professor of Physiology and Biophysics and Associate Dean for Research and Basic Science.

The NIDCD will emphasize the use of molecular biological techniques to investigate sensory processing and communication disorders. Dr. Getchell ranks among the leaders who have contributed to our current understanding of the molecular neurobiology of chemosensory systems. He is an acknowledged expert on the integrated cellular and molecular neurobiological activity of the olfactory sensory mucosa and olfactory

receptor neurons. He together with the members of his laboratory and collaborators have made significant contributions leading to an understanding of: the sequence of membrane events underlying the odorant activation of olfactory receptor neurons, the regenerative cycle of olfactory mucosa, the odorant and neuropharmacological regulation of secretion in the olfactory mucosa, and the role of perireceptor events in olfactory transduction. Among his most recent interests are the peptidergic regulation of receptor cell activity and the secretory cycle in the olfactory mucosa, and the *in ovo* translation and expression of olfactory-specific gene products in *Xenopus* oocytes.

Dr. Getchell's publications include seminal findings on the fundamental neurobiology of the degenerative and recovery cycles of the olfactory mucosa following axotomy of olfactory receptor neurons and on the role of secretion and secretory events on olfactory transduction. Since 1973, he has authored forty research articles in refereed journals, fourteen symposium and book chapters, three invited review articles, and has coedited a book entitled *Molecular Neurobiology of the Olfactory System*.

Dr. Getchell's professional accomplishments include membership in prestigious societies, including current service as the Executive Chairperson of the Association for Chemoreception Sciences. He has held several editorial positions, including Executive Editor of *Chemical Senses*, and is an active member on several national and international boards and committees. He also served as a program director in the Biological, Behavioral and Social Sciences Division of the National Science Foundation and as Chairperson of the Sensory Disorders and Language Study Section at the National Institutes of Health. Dr.

Getchell is the recipient of numerous honors and awards, including the Board of Governor's Faculty Recognition Award at Wayne State University, a Senator Jacob K. Javits Neuroscience Investigator Award from the NINCDS and a Claude Pepper Award from the NIDCD in recognition of his research creativity, scholarly activity and substantial productivity.

Dr. Getchell's research associates include his wife, Dr. Marilyn L. Getchell, Dr. John DeSimone at the Medical College of Virginia and Dr. Frank Margolis at the Roche Institute.

In October 1988, the National Institute on Deafness and Other Communication Disorders became the thirteenth Institute mandated by Congress within the National Institutes of Health. The NIDCD conducts and supports research and training on normal mechanisms as well as disorders of hearing and other communication processes, including diseases affecting hearing, balance, smell, taste, voice, speech and language. The Director of NIDCD is James B. Snow, Jr., M.D., a noted otorhinolaryngologist-head and neck surgeon who is also an expert in the communication sciences.

Famous Quotations Overheard at AChemS Meeting

"But I do believe in receptors -
really I do." R. Anholt

"Insects smell GOOD" anonymous

"In contrast to trilobites, taste
cells have no backward
currents." T. Cummings

"Can we adjourn now and go to the
beach?" T. Finger

Recently Published Books

The Vertebrate Olfactory System by Norbert Halász was recently published by the Akadémiai Kiadó in Hungary. This book is an attempt to summarize a selection of the knowledge gained about the vertebrate olfactory system from fish to man and from macroscopic observation to molecular events. The main emphasis is on the obvious link between morphological findings and functional events. The structure and neurochemistry of the olfactory bulb constitutes the most voluminous and richly illustrated part of this monograph. In addition, an account is given about the accessory nasal chemosensory systems; developmental aspects are correlated with morphology, and the significance of olfaction in the vertebrate - including human - behavior is also illustrated.

1990. Approx. 300 pages. Numerous photos and figures. 17x25 cm. Hardbound. Approx. \$44.00 ISBN 963 05 5634 0

Available from:

Kultura

Hungarian Foreign Trading Company

P.O. Box 149, H-1389 Budapest

Sole Distributors in the United States:

H. Stillman Publishers, Inc.
21405 Woodchuck Lane
Boca Raton, FL. 33428

Human Olfaction by Sadayuki F. Takagi was recently published by the University of Tokyo Press (1989). This is an excellent text that examines all aspects of not only human olfaction but lower animals as well. Ten comprehensive chapters cover topics ranging from the anatomy, biochemistry and physiology of olfaction to psychophysical testing and an intriguing postscript on the Japanese Cult of Incense, Kudo. The book is highly recommended for researchers and anyone interested in olfaction. Available from Columbia University Press, ISBN 4-13-068148-6, ISBN 0-86008-434-5, \$144.50.

Marcel Dekker Inc. is publishing as a series the proceedings of 4 conferences held to celebrate the twentieth anniversary of the Monell Chemical Senses Center. The series, entitled **The Chemical Senses**, includes four volumes: **Receptor Events and Transduction in Taste and Olfaction**, edited by J.G. Brand, J.H. Teeter, R.H. Cagan and M.R. Kare;

Irritation, edited by B.G. Green, R. Mason and M.R. Kare; **Genetics of Perception and Communication**, edited by C.J. Wysocki and M.R. Kare; and **Appetite and Nutrition**, edited by M.I. Friedman, M.G. Tordoff and M.R. Kare. All 4 volumes include timely contributions by leaders in the field. The series will undoubtedly be a valuable resource for both researchers and scholars of the chemical senses.

Volumes 1 and 2 appeared in late 1989 and early 1990, respectively, and through the generosity of Marcel Dekker Inc. are available to the members of AChemS at a 25% discount. Volume 1, **Receptor Events and Transduction in Taste and Olfaction**, 560 pages with illustrations, is normally \$135. Volume 2, **Irritation**, 384 pages with illustrations, is normally \$99.75. Members of AChemS wishing to acquire these excellent resources should write directly to: Eridania Perez, Executive Director of Marketing and Promotion, Marcel Dekker, Inc., 270 Madison Avenue, New York, NY 10016. Mention this column to obtain the 25% discount.

Special Birthday

It is with great pleasure that the Newsletter marks the occasion of the 80th birthday of Professor Jakob A. Vinnikov on September 12, 1990. Professor Vinnikov is an internationally honored scientist of the Sechenov Institute of Evolutionary Physiology and Biochemistry in Leningrad. Professor Vinnikov was a distinguished participant in the 1990 AChemS meeting where he presented a provocative lecture on the evolutionary aspects of chemoreception. The seminal nature of Professor Vinnikov's many contributions is clearly evident from the titles of two papers he published in the early 1940's: "Transformation

of Olfactory Receptors in Tissue Cultures" and "Explanation of Embryonic Tissues and Anlages." We wish him continued success and productivity as he begins his 9th decade.

AChemS Honorees

During the 1990 annual meeting two members of AChemS were honored for their accomplishments. Dr John A. DeSimone of Virginia Commonwealth University received the Frito Lay Award for research excellence in the field of taste. Dr. Peter Brunjes of the University of Virginia received the Kenjii Nakamishi Award, sponsored by the Takasago Corporation, for research excellence in the field of olfaction.

NIDCD Awards

Several members of AChemS have recently been recipients of awards from NIDCD that acknowledge their excellence in research and contributions to the chemical senses. Dr. Robert Bradley of the University of Michigan, Dr. Judith Van Houten of the University of Vermont, and Dr. Gayle Whitney of Florida State University have all received "Awards of Excellence" from NIDCD. These are equivalent to the Javitt's Awards from NINDS. In addition, Dr. Charles Derby of Georgia State University has been awarded a Research Career Development Award.

Positions Available

Research Associate. A Research Associate position in Department of Psychology, University of Delaware, to study the neural coding of the taste system in alert nonhuman primates. Qualifications required include M.D. and/or Ph.D. in neurophysiology with at least two years of post-doctoral research experience. Work experience in taste neurophysiology involving nonhuman primates preferable. Position available June 1, 1990. Salary \$26,000/year. An Equal Opportunity/Affirmative Action Employer.

Send curriculum vitae and names and addresses of at least three references by April 15 to:

Attention: Job order DE 804075
David A. Lann
3301 Lancaster Avenue
P.O. Box 2168
Wilmington, DE 19805.

Pre- and Postdoctoral Fellowships and Short-term Internships. Through a grant from the Howard Heinz Endowment, the Monell Chemical Senses Center offers pre- and postdoctoral fellowships and short-term internships for specialized basic research training. This multidisciplinary program deals with the relationship of nutrition and the chemical senses (taste and smell) in humans and animals with and emphasis on biomedical and clinical research.

The predoctoral fellowships support graduate students enrolled in an accredited doctoral program who wish to conduct their dissertation research at the Center. Arrangements are made with the sponsoring institution to satisfy requirements for the degree. The fellowship includes a stipend, research supplies, and travel to a scientific meeting and the home institution.

Postdoctoral fellowships are available for new doctoral level scientists, although more established investigators seeking specialized training are also encouraged to apply. Support includes a stipend, research supplies and travel to a scientific meeting.

Internships for 2-3 months are intended primarily for graduate students to participate in ongoing research during the summer or for laboratory rotations. Support includes travel to Philadelphia and return, and an allowance for lodging and meals.

Dr. Mark I. Friedman
Monell Chemical Senses Center
3500 Market Street
Philadelphia, PA 19104
Tel: 215-898-6666.

Postdoctoral Research Associate. A postdoctoral research associate is sought to aid in intracellular analysis of local circuits mechanisms in rat olfactory bulb odor responses.

Preference will go to those candidates with a good background in chemical senses will be considered. Emory University is an Affirmative Action, Equal Opportunity Employer.

For further information, contact:

Dr. John W. Scott
Department of Anatomy and Cell Biology
Emory University School of Medicine
Atlanta, GA 30322
(404) 727-6247
BITNET MEDJWS@EMUVM1
FAX (404) 727-6256

Postdoctoral Fellowship. "Analysis of Sensory Irritation in Selected Avian Species" Combines studies in sensory psychology, neurobiology, chemical ecology and analytical chemistry, emphasizing avian species with focus on development of new strategies for wildlife management and animal damage control. Salary range: \$24,705-\$42,601. Requirements: PhD-Biol.

Address correspondence to:

Russell Mason, PhD
USDA/APHIS/Science and Technology
c/o Monell Chemical Senses Center
3500 Market Street
Philadelphia, PA 19104-3308
(215) 898-4999

Don Tucker Memorial Award

The Don Tucker Memorial Award is presented every year to the outstanding presentation, oral or poster, given by a graduate student. The awardee's name is added to a plaque which hangs permanently in the Don Tucker Memorial Conference Room at Florida State University. In addition there is a cash award. During the 1990 AChemS annual meeting, 23 presentations by students were evaluated by seven judges. The

committee is pleased to announce that Ms. Monika Stengl has received the Don Tucker Memorial Award for her work entitled "Olfactory Receptor Neurons from Developing Male *Manduca sexta* Antennae Respond to Species-specific Sex Pheromone in Vitro." Ms. Stengl is a graduate student in the laboratory of Dr. John G. Hildebrand, University of Arizona.

The committee evaluating the 1991 competition will be chaired by Dr. Wayne L. Silver. Inquiries regarding eligibility can be addressed to him at the Department of Biology, Wake Forest University, Winston-Salem, NC 27109 (E-mail: WLS@WFU.EDU).

Members on the Move

Dr. Norman L. Betz, a charter member of AChemS and a 20+ year industrialist, has been named to the Gil Parker Chair of Excellence in Food & Fiber Industries at the University of Tennessee at Martin. The Chair is endowed by the estate of Western Tennessee businessman and congressman Gil Parker. Dr. Betz can be reached at 114 Brehm Hall, UTM, Martin, TN 38238; (901) 587-7211.