AChemS
Association for
Chemoreception Sciences
Fostering Chemical Senses Research and Understanding Smell and Taste in Health and Disease

NEWSLETTER

Winter 2004-2005

Message from the President

Mimi Halpern (mimi.halpern@downstate.edu)

This year has been a particularly active and exciting one for AChemS. The most exciting development has been the awarding of the Nobel Prize in Physiology and Medicine to two neuroscientists for their work in olfactory research. Drs. Richard Axel and Linda Buck were selected for this award in recognition of their pioneering work on identifying the family of genes that encode olfactory receptors. Their research not only helped to resolve many extant issues in olfactory transduction, it has also led to a revolution in the field and a large influx of new members to the olfactory research community.

After an extensive search, under the leadership of John Scott, a new management team, L&L Management Services, was selected and has been managing our affairs since July 1, 2004. The transition from Panacea, our former long-standing management company, to L&L has been virtually seamless thanks to the hard work of Susan Lampman and Pat Meredith from Panacea, Lori Anderson and Tisha Kehn of L&L and Dr. Debi Fadool, our past Treasurer. Lori Anderson, Executive Director, and Tisha Kehn, Associate Executive Director, have been very helpful in keeping the organization going during the transition and arranging for many of the activities discussed below. As President, I have found both Lori and Tisha to be available and responsive to inquiries whenever I have needed to contact them. I am sure that the membership will find them equally accessible and I encourage you to contact the Executive Office with any questions at **952-646-2035 or achems@llmsi.com**.

In June, we signed a two-year renewal of our abstract service contract for the annual meeting with Community of Science (COS). A committee made up of former, past and future Program Chairs sampled another abstract service that offered additional features. However, the advantages of that abstract service did not outweigh the problems associated with contracting with a new service, particularly in a year when we are transferring to a new management company. Abstract services will be visited again at the end of the current contract.

In anticipation of the Long Range Planning Committee meeting, a survey was sent out to the membership in July to assess the needs and desires of the AChemS community. In general, the membership appears to like things the way they are and have been. If the annual meeting stays on the east coast, there is a preference for staying in Sarasota. However, there was a preference for rotation between east and west coasts. Most people prefer that the annual meeting remain in April and stay the same length, with the same mix of symposia, talks and poster sessions. No major concerns were expressed, but comments were made that several topic areas may be underrepresented at the Annual Meeting. These included, among others, behavioral studies, chemical ecology, human studies and genetics. Program chairs at future meetings will be asked to consider these concerns when planning the program.

A Long Range Planning Committee met in late August to discuss the future of AChemS. The committee was comprised of Drs. Linda Bartoshuk, Christine Byrd, Carol Christensen, Chuck Derby, Mimi Halpern, Rachel Herz, John Hildebrand, Charles Greer, Sue Kinnamon, Mike Michel, Steve Munger and John Scott. Based on the statement of purpose as described in the AChemS Bylaws and the outcome of the Member Needs Assessment Survey, the Long Range Planning Committee discussed the annual meeting program, membership, public relations, corporate relations, clinical relations, governance and finance. See accompanying article for more information on the recommendations made by the Committee. Many thanks to the members of this committee for devoting their time and giving careful consideration and feedback to the issues discussed.

After a considerable amount of work, we have a beautiful, new, highly interactive Web site. We owe the web site committee, John Glendinning, Chair, Christine Byrd, Mike Meredith, Steve Roper and Suzanne Sollars, a well-deserved expression of

President's Message *continued on page 2*

THIS ISSUE INCLUDES

Report of the Long Range Planning Committee Meeting

August 27-28, 2004 at the Chicago Marriott O'Hare
Mimi Halpern (mimi.halpern@downstate.edu)

The meeting was planned by Dr. John Scott with help from Drs. Mimi Halpern and John Hildebrand and L & L Staff, Lori Anderson and Tisha Kehn. Other committee members were Drs. Linda Bartoshuk, Christine Byrd, Carol Christensen, Chuck Derby, Rachel Herz, Charles Greer, Sue Kinnamon, Mike Michel and Steve Munger. All were present at the meeting.

The meeting began with a review of AChemS' statement of purpose as described in the Bylaws and a review of the Member Needs Assessment Survey results. The rest of the meeting addressed the following issues: The Annual Meeting Program, Membership, Public Relations, Corporate Relations, Clinical Relations, Governance and Finance. Two members of the committee were asked to prepare position statements on each of these issues.

The Annual Meeting: Should the location change? Should we keep present composition and tenure of Program Committee? How do we deal with current space limitations? What is the proper balance between symposia and volunteer papers?

1. The Long Range Planning Committee (LRPC) recommended that the ISOT meeting in 2008 be held in the Western US.
2. Based on the results of the member survey, the LRPC also recommended that the annual AChemS meeting alternate between the two coasts (not necessarily on a yearly basis).
3. To make more room for posters, the LRPC recommended spreading the posters out between two rooms at the Hyatt.
4. A new format for the meeting was suggested with symposia replacing slide/oral presentations in the morning. Symposium organizers would be instructed to include "younger" members in the panel of speakers for all symposia. All poster sessions would be held in the evening and there would be no concurrent slide/oral presentations in the evening. *[Note: There was general agreement at the Executive Committee meeting (10/24/04) that this was an idea worthy of pursuit for the 2006 Annual Meeting.]*
5. The LRPC recommended a change in the Bylaws that would establish a standing Program Committee. The chair would be elected by the membership and serve for two years as chair-elect and one year as chair. *[Note: At the Executive Committee Meeting (10/24/04) it was noted that this is already in practice and a Bylaws amendment to this effect is not necessary.]*
6. Satellite meetings should be encouraged, but should be clearly separate from the Annual AChemS Meeting and not be used to extend the length of the Annual Meeting. *[Note: During the 2005 Annual Meeting a full day symposium on Sunday will extend the meeting by a half-day. The attendees will be surveyed after the meeting to determine whether this extension is acceptable for future meetings. At its meeting on 10/24/04, the Executive Committee voted that any event that extends the conference later than Sunday noon or that takes place before the official start of the conference, needs Program Chair approval, if AChemS involvement in planning, etc. is requested.]*
7. The LRPC recommended advertising the Annual Meeting more broadly.

Membership: How do we reach out to more potential members?

1. To attract and retain members interested in behavior, ingestive behavior, etc., it was recommended that we organize symposia targeted to members of societies that have recruited some of our past members and potential members, to bring some of these people back into AChemS.
2. The LRPC recommended preparation of a members' benefits package to be distributed to prospective members.
3. The LRPC recommended development of an education committee to organize short courses that would attract clinical and industrial members to the AChemS Annual Meeting. *[Note: The Executive Committee at its October 24, 2004 meeting agreed to appoint an Ad Hoc Education Committee to explore the educational function of AChemS and to propose a structure and responsibilities of a standing Education Committee and present its recommendations at the April 2005 Executive Committee meeting.]*

President's Message *continued from page 1*

thanks for their diligence. As you open the Web site (http://www.achems.org/) you will be struck by the modern look of the new home page and the information contained therein. Remember that you will need your user name (your last name) and password (your e-mail address), all lower case, to access the Member's Directory. Parts of the website are still under construction, but should be completed shortly. Your comments are always welcome.

This year's annual meeting is shaping up to be very exciting, with a day-long symposium on odorant receptors, a Givaudan Lecture by Dr. Jeffrey Friedman on Leptin Receptors, and symposia on olfactory bulb mapping, taste coding and odor signals from the immune system. To further the theme of Dr. Freidman's lecture, I have organized a Presidential Symposium on "Obesity: Biological Determinants of Ingestive Behavior," which will be held on Saturday evening prior to a reception in honor of our two Nobel Laureates. A new feature of this year's meeting will be a short course entitled, "Applying Molecular Techniques to Chemosensory Studies," organized by Dr. Steve Munger.

I am looking forward to seeing you all at the Annual Meeting. ❖

Public Relations: Is the Newsletter serving its purpose? Can we better educate the public about chemical senses? Is the Chemical Senses journal functioning to present chemical sense research to the scientific community at large?

1. The LRPC was split on the value of the Newsletter. It was recommended that we survey the membership concerning its value. *[Note: At its meeting on October 24, 2004, the Executive Committee decided to continue to publish a Newsletter to be distributed electronically. Readers will also be directed to the AChemS website as portions of the newsletter will be published in various parts of the site.]*
2. There was considerable discussion about the need for a repository for the public to obtain information about clinical aspects of the chemical senses. A consensus conference at NIH on chemical senses was suggested. In addition, it was suggested that AChemS members could write position papers on the chemical senses for inclusion on the AChemS web site or the NIDCD web site. This latter function would be the responsibility of a new Education Committee.
3. A suggestion was made that the website include an "Ask the Expert" section to answer questions related to the chemical senses. *[Note: This suggestion is in the planning stages for the web site.]*
4. The journal, Chemical Senses, does not appear to be fulfilling the role of "premiere journal" for the field of Chemical Senses. Access to the journal is largely restricted to AChemS members, as many libraries do not subscribe to the journal, interlibrary loans are costly, and there is currently no "open access" policy for the journal. The LRPC recommended review of the editorial structure and access policies of the journal. *[Note: We will determine what proportion of subscriptions are from AChemS members and investigate the possibilities of making Chemical Senses an open-access journal.]*

Corporate Relations: Are we serving the needs of our corporate members?

1. The LRPC recommended reinvigorating the Industrial Relations Committee and directing that committee to investigate ways of encouraging corporate members to participate in AChemS activities. Several suggestions were made. *[Note: the Executive Committee, at its October 24, 2004 meeting, agreed to appoint an Ad Hoc Industrial Relations Committee to explore the ways in which AChemS could better serve its corporate members and to propose a structure and responsibilities of a standing Industrial Relations Committee and present its recommendations at the April 2005 Executive Committee meeting.]*
2. A suggestion was made to add a $5,000 level corporate membership that entitles those members to an exhibit booth at the meeting and expanded representation or complimentary registration at the meeting. *[Note: The benefits of this level of membership were not perceived by the Executive Committee to be sufficiently different from the $2,500 level to be attractive to Corporate Members.]*
3. Have AChemS exhibit at the meeting of the Institute of Food Technologists. *[Note: Inquiries will be made about the benefits and costs of such an enterprise.]*

Clinical Relations: Are we doing all we can to attract and advance our clinical members?

1. Modify the clinical luncheon. A proposal to make the luncheon more thematic, e.g., this year related to obesity, could not be implemented because the clinical luncheon had already been organized.
2. Form a Clinical Relations Committee to oversee the planning of the Clinical Luncheon, organize an annual symposium on pressing clinical issues and provide clinically relevant information for the web site. *[Note: The Executive Committee, at its October 24, 2004 meeting, agreed to appoint an Ad Hoc Clinical Relations Committee to explore the ways in which AChemS could better serve its clinical members and to propose a structure and outline the responsibilities of a standing Clinical Relations Committee and report its recommendations to the Executive Committee at the April 2005 meeting.]*

Governance: Is our current structure in need of revision, especially in light of our new management structure?

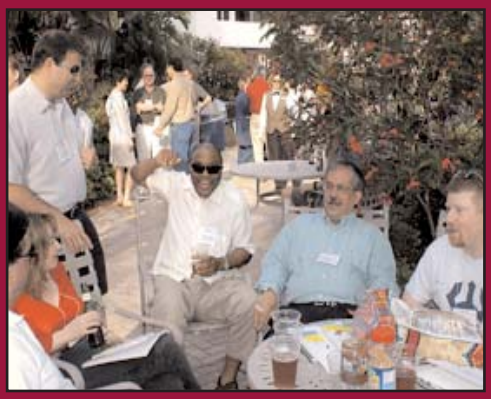
1. The Executive Committee should consider appointing a Governance Committee after one year with L & L to modify the Bylaws to reflect job descriptions of officers in line with L & L's management of the organization.
2. The LRPC should meet annually at the annual meeting of AChemS to assess progress toward goals and to enunciate new goals.
3. The LRPC recommends that the position of Treasurer-elect be created. The Treasurer-elect would be appointed to the Finance Committee as a voting member for one year and then serve a three-year term as Treasurer. *[Note: the Executive Committee did not believe that this was necessary as L & L will be doing the major part of the work that was previously the responsibility of the Treasurer.]*
4. Article 4, section 2 of the Bylaws should be amended as follows: "A quorum of six is necessary including one of the following officers: President, Past president, President Elect." [*Note: This amendment will be proposed to the membership at the 2005 Business Meeting.]*

Finance: Can we improve fund raising?

1. The LRPC recommends that the Industrial Liaison Committee and the Membership Committee Chair collaborate in preparation of a document for the purpose of attracting additional sponsors for AChemS.
2. Target the pharmaceutical industry and suppliers of research laboratories for corporate membership and sponsorship.
3. Consider developing a speaker's bureau.

A Look Back at AChemS XXVI

Photos by Charles Badland, Florida State University



An Early Look at AChemS XXVII

Mary Lucero (Mary.Lucero@m.cc.utah.edu)

The 27th annual meeting of the Association for Chemoreception Sciences will be held at the Hyatt Sarasota Hotel in Sarasota, FL, April 13 - 17, 2005. Please note that there will be a special symposium on Chemosensory Receptors that will run until 9:00 pm on Sunday, April 17, 2005 (see related article). This symposium is especially timely in view of the recent Nobel Prize awarded to Drs. Linda Buck and Richard Axel for their work on olfactory receptors. The 2005 AChemS program will include the following:

Symposia

- Coding in the taste system: new perspectives on an old problem
- Mapping odor coding in the olfactory bulb
- Odor signals from the immune system: How the nose detects genetic individuality
- Obesity: Biological determinants of ingestive behavior
- Nobel Symposium: Celebrating Excellence
- Chemosensory Receptors: Choosing Genes, Targeting Axons, and Detecting Chemicals

Workshops

- Applying Molecular Techniques to Chemosensory Studies
- Nasal Chemesthetic Variability - Patterns and Mechanisms
- NIH Workshop: Funding Opportunities for Young Investigators

An Educational Outreach Event at the GWIZ Science Center and much more!

AChemS XXVII Logo Design Contest

$500 Award

Students and postdoctoral fellows who are members of AChemS are eligible to earn $500 for the winning entry in this contest to design the logo for this year's AChemS meeting. The logo will be featured prominently on the program book, the abstract book, and in publicity about the meeting. Design entries are due on February 1, 2005. Please submit designs as files on a compact disc containing your name and contact information to Mary Lucero, AChemS XXVII Program Chair, Dept. of Physiology, University of Utah, 410 Chipeta Way Rm 155, Salt Lake City, UT84108-1297 Mary.Lucero@m.cc.utah.edu

FEATURED EVENT AT AChemS XXVII April 13-17, 2005

Chemosensory Receptors Satellite Conference

Based on the great success of the AChemS 2004 Chemosensory Receptors Satellite Conference, we are happy to announce that this event will return for 2005 as an integral part of AChemS. The event will take place all day on Sunday, April 17, 2005 and will feature 15 platform speakers and an evening social. We plan to feature the latest and most exciting science that bears on the molecular biology and genomics of chemosensory receptors in vertebrates and invertebrates.

To accommodate this event, AChemS XXVII is being extended until Sunday night this year, so please plan your travel and Hyatt hotel reservations accordingly.

Organizers

Tim McClintock: mcclint@uky.edu
Peter Mombaerts: peter@mail.rockefeller.edu
Leslie Vosshall: leslie@mail.rockefeller.edu

ACHEMS EDUCATIONAL OUTREACH

WHEN: Wednesday morning, April 13th, 2005

WHERE: GWIZ Center (across from the Hyatt Hotel)

Come to Sarasota a day early and join in our outreach program to the local Sarasota students on Wednesday morning. In recent years, AChemS members have given demonstrations about the chemical senses to hundreds of elementary students (aged approximately 7-12). If you would like to participate in the outreach by giving a demonstration of your choice contact: Barbara Zielinski, AChemS Councilor at Zielin1@uwindsor.ca (phone: 519-253-3000 ext 2726). This year, one paragraph summaries of presentations will be posted on the AChemS website for teachers to view prior to the GWIZ outreach event.

STUDENT TRAVEL AWARDS FOR AChemS XXVII

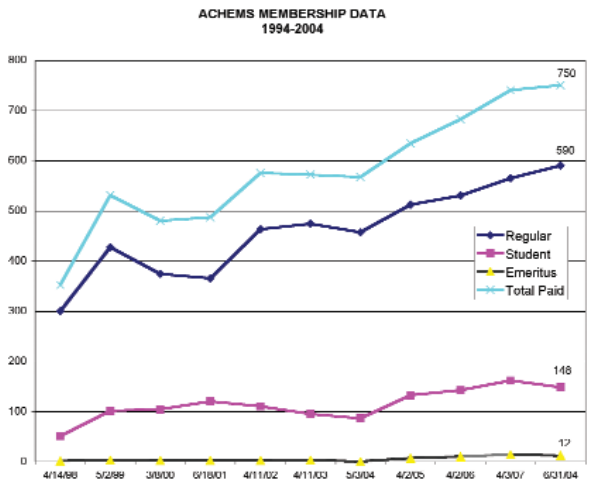
Students who will be making a presentation at AChemS XXVII are encouraged to apply for an AChemS Student Travel Award. This award encompasses either accommodation or travel assistance (some restrictions apply, see the Annual Meeting; Travel Awards link at the AChemS website www.achems.org). We ask that students plan to attend the entire meeting, including the featured event on Chemosensory Receptors, which will take place on Sunday April 17th. Travel accommodation awardees will be housed for this additional day.

Message from the Secretary

Christine Byrd (christine.byrd@wmich.edu)

I hope you have all had the opportunity to look through our new website (www.achems.org). Although we still have some kinks to work out, I think you will find the site to be full of information and relatively easy to navigate. Tisha Kehn from L&L is working very hard to ensure that the site is accurate and up-to-date and that postings are made in a timely fashion. As mentioned in the President's message, the website revision committee consisted of John Glendinning, Steve Roper, Mike Meredith, Suzanne Sollars, and me. I want to extend a special acknowledgement to John Glendinning, who spearheaded the revision process, sorted through the sometimes-disparate views of the committee, and did most of the work!

We now have a formal process for inclusion of items on the AChemS website. It is the duty of the AChemS secretary to monitor all submissions; once approved, Tisha will post the items. If you have an item for the website or any comments or suggestions, please send them to me at the above email address.



Message from the Treasurer

Mike Michel (mike.michel@m.cc.utah.edu)

As incoming Treasurer I received the obligatory Treasurer's legacy of 7 boxes full of files before the annual meeting and a number of additional binders at the meeting. After completing my first task of forwarding these boxes of files to L & L Management for sorting and storage, the task of developing the 2004-2005 budget was initiated. This task might have been impossible were it not for the kind assistance of our past Treasurer, Dr. Debi Fadool, the help of Lori Anderson, Tisha Kehn and Melinda Borton at L & L Management, and the AChemS Finance Committee. Debi Fadool provided the essential institutional memory needed to convert the budget from the format developed by previous society Treasurers into the format used by L & L Management, as well as many specific suggestions regarding budget category names and allocated funding. Her efforts are deeply appreciated. Elimination of some unused budget categories and reorganization of other categories has resulted in a somewhat streamlined budget document (see next page). Perhaps the biggest change to the budget has been the attempt to make it a comprehensive document which now includes all revenues and expenditures. Previously, for example, funds available from the NIH meeting grant and payments made to Oxford Press for Chemical Senses subscriptions were not included in the annual budget. Once L & L, Debi and I had come to an agreement on a draft version of the budget, input was sought from the Finance Committee. The revised budget you see on the next page was approved by the Executive Committee at the Fall Meeting.

Message from the Membership Chair

Don Wilson (dwilson@ou.edu)

Please remember to renew your membership online (http://www.achems.org/) now! It's easier than ever with our fabulous new website. Please note that given the changes in management and development of new databases, even if you are a renewing member you must fill out the data on research interests and areas of expertise, etc. This will help us track the membership better, and should not be necessary for renewing members next year. As you are renewing your membership, please think about colleagues that may also benefit from joining our organization. YOU are the best source of new members to our community.

Full paid membership, as of July 2004, stands at 750 with 590 regular members, 148 student members and 12 emeritus members. The 750 total is up from 740 last year and is more than double our 352 members in 1994. Student members, a critical component of any healthy society, are nearly triple the level of 1994, but did see a small drop over the past year, down from 161. It should be noted that if everyone who has been a member in the past 2-3 years renews this year, we would top the 1000 mark and sit at 1085 paid members! Let's take advantage of the special visibility of the chemical senses this year and encourage everyone to renew.

Finally, I want to thank Panacea and L&L for making the transition of management and data so smooth over the past year, and look forward to an active and healthy membership over the coming year.

Association for Chemoreception Sciences
2004-2005 BUDGET REPORT

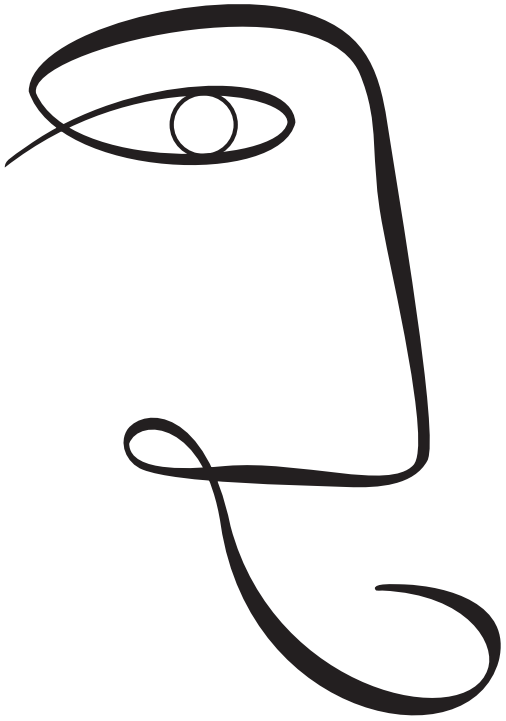
REVENUES

GENERAL	
05101 Membership Dues-Regular	88,000.00
05102 Membership Dues-Student	6,000.00
05103 Membership Dues-Corporate	5,000.00
05104 Interest/Investment Interest	1,650.00
05108 ISOT Contributions	2,000.00
Total General	$102,650.00
ANNUAL MEETING	
05201 Registration Fees	140,750.00
05202 Annual Meeting Sponsorship	8,500.00
05203 Exhibitor Fees	2,000.00
05205 Abstract Fees	16,920.00
05206 T-Shirt Sales	200.00
05207 Clinical Luncheon	1,750.00
05208 Grant	50,000.00
Total Annual Meeting	$220,120.00
TOTAL REVENUES	**$322,770.00**

EXPENSES

ADMINISTRATIVE EXPENSES	
10100 Management Fee	64,266.00
10102 UF Management Fee	2,000.00
10201 Telephone	2,000.00
10202 Office Supplies	500.00
10203 Postage & Broadcast Fax/Email	800.00
10204 Printing	400.00
10205 Copy/Duplicating	400.00
10206 Website	7,650.00
10209 Bank/Credit Card Charges	13,000.00
10210 Insurance	1,500.00
10212 Other	200.00
10218 Professional Fees - Audit & Taxes	1,000.00
10221 ECRO Fellow Award	2,000.00
Total Administrative	$95,716.00
PUBLICATIONS	
Newsletter	
30201 Printing	200.00
Total Newsletter	$200.00
Chemical Senses Journal	
30301 Subscriptions	31,000.00
30304 Symposia Page Charges	4,000.00
Total Chemical Senses Journal	$35,000.00
DUES & CONTRIBUTIONS	---------
COMMITTEES	
Executive Committee	
43001 Staff Travel	1,000.00
43002 Meeting Expenses	800.00
43003 SFN Travel Program Committee	500.00
Total Executive Committee	$2,300.00
Program Committee	
44102 Meeting Expenses	200.00
Total Program Committee	$200.00
Finance Committee	
44402 Meeting Expenses	100.00
Total Finance Committee	$100.00
Fundraising/Industrial Liaison Committee	
44502 Meeting Expenses	100.00
Total Fundraising/Ind'l Liaison Cmte	$100.00
Elections Committee	
44602 Meeting Expenses	100.00
Total Elections Committee	$100.00
Membership Committee	
44702 Meeting Expenses	100.00
Total Membership Committee	$100.00
Long Range Planning Committee	
44801 Executive Committee/Staff TSO	6,100.00
44802 Meeting Expenses	900.00
Total Long Range Planning Committee	$7,000.00
Ad Hoc Committees	
44902 Meeting Expenses	100.00
Total Ad Hoc Committees	$100.00

ANNUAL MEETING	
60102 Supplies/Awards	1,850.00
60103 Poster Board/L&L Shipping	2,500.00
60104 Staff TSO	3,000.00
60107 Additional/Temp Staffing	800.00
60108 Food/Beverage	67,200.00
60109 Government Guests-Registration	900.00
60110 Printing	7,000.00
60111 Photographer	500.00
60112 Postage	200.00
60114 Other	500.00
60115 Presidential Symposium	3,600.00
60116 A/V Support	8,000.00
60117 Abstract Services	16,000.00
60118 Insurance-Event Liability	1,500.00
60119 Gratuity	400.00
60120 Educational Outreach-Food/Beverage	400.00
60121 Clinical Luncheon (A/V & F/B)	2,250.00
60122 Chema Mentoring Program	3,500.00
60123 Student Travel Funds	12,000.00
60124 Future Site Visits	1,000.00
60125 Clinical Travel	3,000.00
60126 Minority Travel	7,000.00
60127 Science Magazine Advertisement	2,000.00
60128 Poster Board Rental	1,000.00
60129 Symposia Speaker TSO	20,000.00
Total Annual Meeting	$166,100.00
AWARDS	
60202 Tucker Award	500.00
60203 Young Investigator Award in Olfaction	2,000.00
60204 Maxmozell Awd/Outstanding Achievement	2,000.00
60205 Student/Postdoc Art Award	500.00
Total Awards	$5,000.00
REPRESENT AT OTHER MEETINGS	---------
TOTAL EXPENSES	**$312,016.00**
TOTAL REVENUES	**$322,770.00**
NET REVENUES/EXPENSES	**$10,754.00**



Recipients of the 2004 AChemS Awards

Max Mozell Award for Outstanding Achievement in the Chemical Senses

Dr. James C. Smith, Florida State University

Professor James C. Smith studied mathematics, comparative psychology and animal psychophysics during his undergraduate and graduate training. His early interest was in attempting to determine the sensory mechanisms that mediated the perception of ionizing radiation stimuli. The initial approach was with radiation-induced taste aversion with mice, rat and human subjects. Later work led to the development of many animal psychophysical techniques to show that the behaving animal would immediately respond to the onset of ionizing radiation stimuli. His comparative background led him to study X-ray detection in many species from Heliothis Zea to Rhesus monkeys. Since it was shown that X-ray perception was mediated by olfaction and vision, he did considerable basic research in those sensory modalities. After the tragic death of Don Tucker, he received funding from NIH with Lloyd Beidler and turned his attention from olfaction to animal psychophysics work with gustation. He had a strong interest in the behavioral synergies that resulted from the mixture of sweeteners and mixtures of sweet with fat. He developed apparatus and techniques to look at the microstructure of licking behavior with the idea that knowing "how " the animal consumed solutions, in addition to "how much", allowed inferences about what compounds tasted like to the animal subject. When Dr. Tom Houpt joined the faculty at FSU, Smith teamed with Houpt and took advantage of the National High Intensity Magnetic Laboratory's location in Tallahassee to study the animal's detection of high intensity magnet exposure. Professor Smith has gone full circle and is now trying to determine what sensory modalities the rats and mice are using to detect the magnet. As with the earlier ionizing radiation studies, magnet-induced conditioned taste aversion has been the initial tool used in these observations.

Acknowledgements

Professor Smith acknowledges that his work over the years was strongly influenced by collaboration with Drs. Lloyd Beidler and Don Tucker. He also acknowledges the considerable help from Ross Henderson, Paul Hendrick, Don Donaldson and Mike Bigbie, Engineers for the FSU Neuroscience Program. During his career, he was honored to publish research with many colleagues and students associated with AChemS: Beidler, Tucker, Graziadei, Nejad, Rashotte, Contreras, Whitney, Houpt, I.Miller, Bartoshuk, Spector, T.Scott, Sclafani, Rowland, J.Walker, K.Curtis, Passe, Shumake, Glendinning, Krimm, Gannon, Boughter, Thaw, Snyder, P.Smith, Pittman, Markison, Lockwood, Cason, DenBleyker and P.Taylor. Research was supported by Grants from FSU, US Atomic Energy Commission, NSF, NIH and General Foods Corp.

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Levy, C.S., Carroll, M.E., Smith, J.C. and Hofer, K.G. (1974) Antihistamines block radiation induced taste aversions. Science 186:1044-1046.

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International Flavors and Fragrances Award for Innovative Research

Dr. Linda Bartoshuk, Yale University

Linda Bartoshuk's early work was in the neurophysiology of taste, but her current work focuses on taste psychophysics. She is interested in genetic and pathological sources for variation in taste and oral pain. She and her students have shown that a group of individuals (supertasters) experience unusually intense sensations from taste and retronasal olfaction as well as oral burn (chilis) and oral touch (fat). These intensified sensations predict food preferences, and thus diet related chronic diseases (e.g., heart disease, cancer) putting supertasters at increased risk for some disorders and decreased risk for others. She and her students have also studied inhibitory links within taste and between taste and the trigeminal system. Damage to taste can release normal inhibition leading to a variety of symptoms like taste phantoms and oral pain phantoms (i.e., burning mouth syndrome). The impact of this damage may extend much farther than initially believed. Taste may have the general function of inhibiting activities incompatible with eating (e.g., nausea); this suggests new treatment strategies for dealing with symptoms produced by loss of taste inhibition (e.g., use of GABA agonists to simulate the lost inhibition). Interactions between the genetic ability to taste and taste pathology may contribute to understanding yet another group of clinical problems; for example, taste damage in a group of older male supertasters was associated with obesity, possibly through intensifications of the palatability of high fat foods. Most recently Bartoshuk and her students have worked on identifying and correcting a long-standing error in the use of labeled scales to make comparisons of sensory and hedonic experiences across subjects/groups.

Acknowledgements

Bartoshuk considers herself fortunate to have had a superb mentor in Carl Pfaffmann. She credits his guidance and the excitement of the interactions among his students in the1960s at Brown for initiating a lifelong love of taste. The creation of AChemS provided a community of scholars, friends as well as colleagues. The discussions and collaborations with them not only enriched her research but also made the enterprise fun. Bartoshuk's own students have contributed immeasurably to her lab's progress. Yale has provided access to a seemingly unending stream of talented undergraduates, medical students and residents have brought welcome clinical insights, and her PhD and postdoctoral students have been partners in the development and application of psychophysics to taste. She owes special debts of gratitude to Dr. Valerie Duffy, initially a post-doc but now her major collaborator, and Derek Snyder, currently a graduate student who has been in her lab since his undergraduate days.

Bartoshuk, L.M., Duffy, V.B., Fast, K., Green, B.G., Prutkin, J.M., and Snyder,D.J. (2002) Labeled scales (e.g., category, Likert, VAS) and invalid across-group comparisons. What we have learned from genetic variation in taste. Food Quality and Preference 14:125-138.

Bartoshuk, L.M., Duffy, V.B., Fast,K., and Snyder, D.J. (2004) Genetic differences in human oral perception: Advanced methods reveal basic problems in intensity scaling. In: Genetic Variations in Taste Sensitivity: Measurement, Significance and Implications. J. Prescott and B.J. Tepper, Eds., Dekker, New York, 1-42.

Bartoshuk, L.M. and Snyder, D.J. (2004) Psychophysical measurement of Human Taste Experience. In: Handbook of Behavioral Neurobiology, E. Stricker and S. Woods, Eds., Plenum Press, New York.

Application for and Renewal of Membership

Questions concerning membership should be addressed to Tisha Kehn
5841 Cedar Lake Road, Suite 204
Minneapolis, MN 55416
Phone: 952-646-2022
Fax: 952-545-6073

A membership application form and a dues renewal for 2005 are available at the AChemS website (http://www.achems.org).
Other Information. Hotel accommodations are available at the Hyatt Sarasota at special conference rates. Reservations must be made by March 1, 2005, but we encourage you to make them as early as possible. Several rooms will be made available to graduate students selected for a housing award. Your reservations at the Hyatt will help finance student attendance. There is a link to the Sarasota Hyatt web site on the meeting web site. You can call the Hyatt directly at 941-953-1234. Identify yourself as an AChemS meeting participant. Other important notices on the meeting web site include a Call for Nominations for Officers and a Call for Nominations for AChemS Awards. Please take the time to participate in these important functions. Students and their mentors should note that the Don Tucker Memorial Award requires a separate letter of nomination. Details and applications for Minority Travel Fellowships and Clinical Travel Fellowships are available at the web site. In addition, information concerning meeting related activities will also be available at this site.

Ajinomoto Award for Young Investigator in Gustation

Dr. Donald Brian Katz, Duke University

An animal with potential food on its tongue must quickly recognize whether that substance will poison or nourish, and must react accordingly. The neural structures underlying these behaviors, including (among others) the parabrachial nuclei, primary gustatory (insular) cortex, and the amygdalar complex, are reciprocally interconnected. Such connectivity, and the function of the gustatory system, implies that tastant-induced neural activity should be dynamic both within and between trials. The researchers in my lab study these taste dynamics, using a combination of multi-site electrophysiology, behavior, and pharmacology. We ask how taste-related information 'moves' through the system, how this 'movement' differs for different tastants, and how experience- and learning-related plasticity changes tastant processing. By focusing on neural populations instead of individual neurons, and on the interactions between neural structures instead of activity within single structures, we hope to provide a novel view of the taste system in action.

Acknowledgements
Whatever becomes of me, I owe many great researchers a debt of gratitude for getting me this far. I'd like to offer a special thanks to the droll Sid Simon, who is an under-appreciated treasure of chemosensory science. Sid, you taught me to be a professional scientist, but I forgive you. And to the AChemS community (both taste and smell!), from which this newcomer learns constantly, I say thanks. There are a lot of great young investigators here, and a lot of great mentors; I'm proud to be a part of it all.

Katz, D.B., Simon, S.A., Moody, A. and Nicolelis, M.A.L. (1999) Simultaneous reorganization in thalamocortical ensembles evolves over several hours following perioral capsaicin injection. J. Neurophysiol.82:963-977.
Katz, D.B., Simon, S.A. and Nicolelis, M.A.L. (2001) Dynamic and multimodal responses of gustatory cortical neurons in awake rats. J. Neurosci. 21:4478-4489.
Katz, D.B., Simon, S.A. and Nicolelis, M.A.L. (2002) Taste-specific neuronal ensembles from the gustatory cortex of awake rats. J. Neurosci. 22:1850-1857. Katz, D.B., Rogers, R.F. and Steinmetz, J.E. (2002) Novel factors contributing to the expression of latent inhibition. Behav. Neurosci.116:824-836.

Moskowitz Jacobs Award for Excellence in the Psychophysics of Taste and Smell

Dr. Jay Gottfried, University College, London

Research in our laboratory focuses on the cognitive neuroscience of human olfaction, with particular emphasis on learning, memory, and cross-modal integration. Three primary goals are: 1) to define the systems-level organization of olfactory cortex in the human brain; 2) to clarify the role of motivation, food, and smells in emotional learning; and 3) to characterize the behavioral and neural interactions between chemosensory and non-chemosensory stimuli. To achieve these aims, we are using a variety of olfactory psychophysical methods in combination with physiological measurements and functional magnetic resonance imaging (fMRI). In studies of classical (Pavlovian) conditioning, we have investigated how subjects learn to associate pictures with either pleasant or unpleasant smells, and how appetite states modulate these linkages. One finding to emerge is that human piriform cortex is not a mere sensory relay, but contains spatially distinct subregions and can be modulated by hunger, satiety, and predictive reward value. Another focus of our research stems from the observation that human olfactory perception is notoriously unreliable. We have shown that subjects detect an odor more easily when it is accompanied by a semantically similar (vs.dissimilar) picture. This effect is accompanied by enhanced neural activity in orbitofrontal cortex and hippocampus,suggesting that these structures help resolve the ambiguity of odor perception. At the present time we are exploring the influence of olfactory-visual interactions on the neural substrates of cross-modal episodic memory.

Acknowledgements
This work was conducted in the laboratory of Prof. Raymond J. Dolan at the Wellcome Dept. of Imaging Neuroscience, London, with generous support from the Wellcome Trust and a Howard Hughes Medical Institute Physician-Postdoctoral Fellowship. Essential collaborators include Peter Aston, Ralf Deichmann, John O'Doherty, Mick Rugg, Adam Smith, and Joel Winston.

1. Gottfried, J.A., Deichmann, R., Winston, J.S., and Dolan, R.J. (2002) Functional heterogeneity in human olfactory cortex: an event-related functional magnetic resonance imaging study. J. Neurosci. 22:10819-10828.
2. Gottfried, J.A., O'Doherty, J., and Dolan, R.J. (2002) Appetitive and aversive olfactory learning in humans studied using event-related functional magnetic resonance imaging. J. Neurosci. 22:10829-10837.
3. Gottfried, J.A., O'Doherty, J., and Dolan, R.J. (2003) Encoding predictive reward value in human amygdala and orbitofrontal cortex. Science 301:1104-1107.
4. Gottfried, J.A. and Dolan, R.J. (2003) The nose smells what the eye sees: crossmodal visual facilitation of human olfactory perception. Neuron 39:375-386.

AChemS Award for Young Investigator in Olfactory Research

Dr. Adam Puche, University of Maryland

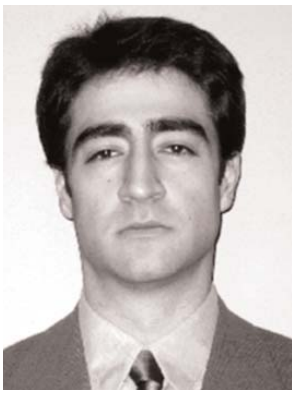
Dr. Puche has developed a series of imaginative and highly productive physiology slice models for studying olfaction in mammals over the years. These include slice models of the main and vomeronasal olfactory epithelium in which individual ORN and VRNs can be visualized while preserving the local microenvironment of the cell (Nature, 2000, 405:792-796). Recently, two additional slice preparations were developed to demonstrate interglomerular circuits in the main olfactory bulb (Nature, 2003, 426:623-629). The first of these is a surface slice containing the entire sheet of glomeruli from the medial wall, allowing for voltage dye imaging of the propagation of excitatory activity between glomeruli. The second, a microsurgically modified olfactory bulb slice, physically isolates the interglomerular circuit allowing for the function of that circuit in center-surround inhibition to be studied (Nature, 2003, 426:623-629). Dr. Puche has also devised forebrain organotypic slices to visualize individual migrating subventricular projections as they move into the bulb (J. Neurobiol., 2001, 49:326-338). As well as physiology slice models, Dr. Puche has developed imaging techniques that have addressed some fundamental questions of neuronal circuitry in the bulb. Novel delivery methods for tiny iontophoretic injections were used to show that some mitral cells in the accessory olfactory bulb specifically link glomeruli of the same receptor type (Neuron 2002, 35:1057-1066). This approach was also used to discover the presence of an interglomerular network that extends over distances previously unrecognized (Nature, 2003, 426:623-629), and the specializations of individual radial glia cell in the embryonic olfactory bulb (J. Comp. Neurol., 1999, 434:1-12).

Acknowledgements
I would like to thank Michael Shipley for advice and encouragement over the years, all my colleagues at the University of Maryland for an excellent working environment, and collaborators on the studies described above whose expertise make anything possible. I'd also like to thank the AChemS society for their continued support of the Young Investigator award, and all the friends and members of the society who make olfactory research and the AChemS meeting such fun.

Puche, A.C. and Key, B. (1995) Identification of cells expressing Galectin-1, a glactose-binding receptor, in the rat olfactory system. J. Comp. Neurol. 357:513-523.
Puche, A.C. and Key B. (1996) N-acetyl-lactosamine in the rat olfactory system: Expression and potential role in neurite growth. J. Comp. Neurol. 364:267-278.
Puche, A.C. and Shipley, M.T. (1999) Odor-induced, activity-dependent transneuronal gene induction in vitro: Mediation by NMDA receptors. J. Neurosci.19:1359-1370.
Puche, A.C. and Shipley, M.T. (2001) Radial glia development in the olfactory bulb: A role in glomerular formation? J. Comp. Neurol. 434:1-12.
Del Punta, K., Puche, A.C., Adams, N., Rodriguez, I., and Mombaerts, P.(2002) A divergent pattern of sensory axonal projections is rendered convergent by second-order neurons in the accessory olfactory bulb. Neuron 35:1057-1066.

2003 Don Tucker Award for Outstanding Graduate Student Presentation

Hessamedin Alimohammadi, Wake Forest University



Contribution of vanilloid receptor-expressing fibers to overall trigeminal nerve chemosensitivity. Alimohammadi, H. and Silver, W.L. Department of Biology, Wake Forest University, Winston-Salem, North Carolina.

Capsaicin-sensitive, vanilloid receptor (VR1) expressing trigeminal ganglion neurons form a major subgroup of nociceptive fibers innervating the nasal mucosa. In rats, elimination of these fibers through neonatal capsaicin treatment has been shown to produce adults with decreased trigeminal sensitivity. To investigate further the contribution of VR1-expressive nociceptors to overall nasal trigeminal chemosensitivity, adult Sprague-Dawley rats injected with capsaicin as neonates were subjected to a series of behavioral and electrophysiological experiments. Capsaicin-treated rats were found to display significantly decreased aversion reactions to amyl acetate, cyclohexanone, ethanol, and nicotine, all of which are non-acidic. In contrast, acetic acid produced strong reflex rejection movements in both control and capsaicin-treated animals. Following behavioral experiments, multi-unit recordings were obtained from the ethmoid nerves of the same rats in response to a series of irritants presented via an air-dilution olfactometer. In accord with the results of the behavioral experiments, capsaicin-treated rats displayed significant nerve responses only to acetic acid and carbon dioxide. While the present results do not rule out acid-sensitivity of VR 1-expressing fibers, they do indicate that a significant portion of trigeminal nerve sensitivity to the acidic stimuli tested is mediated by fibers not expressing the vanilloid receptor. These data also indicate that the same group of capsaicin-sensitive fibers mediates nasal trigeminal sensitivity to the non-acidic stimuli tested.

2004 Don Tucker Award for Outstanding Graduate Student Presentation

Jessica Brann, Florida State University

Protein interactions with the TRPC2 ion channel in the vomeronasal organ (VNO). J. H. Brann1 and D. A. Fadool. 1Programs in Neuroscience and Molecular Biophysics, Department of Biological Science, Florida State University, Tallahassee, FL 32306.

The role of the inositol 1,4,5-trisphosphate (IP3) second messenger system in vomeronasal sensory neurons (VSN)s of the vomeronasal organ (VNO) is unclear. Furthermore, how the functional connections between the type 3 IP3 receptor (IP3R3) and transient receptor potential channel type 2 (TRPC2) may influence the cationic receptor potential is also unknown. We have previously demonstrated that IP3R3 and TRPC2 have an overlapping expression pattern in rodent VNO and participate in a protein-protein interaction. Here we sought to demonstrate a functional role for the IP3R3/TRPC2 protein complex. Pheromone-evoked whole-cell currents were blocked in 4 of 5 VSNs when a peptide, directed against the interaction domain between IP3R3/TRPC2, was included in the recording pipette held (Vh) at –60 mV. Under our recording conditions, pipette dialysis of 240 mM IP3 failed to evoke whole-cell current in 20 of 20 VSNs tested. Typical antagonists of the IP3R (ruthenium red, 2-APB) also failed to block pheromone-evoked currents. SDS-PAGE and Western analysis of male and female VNO tissue reveals expression of one or more of the long isoforms of the adaptor protein Homer (1b, 1c, 2a, 2b, and 3; 45 kDa) as well as neuronal Shc (66, 53, and 46 kDa), an adaptor protein known to communicate G protein-coupled receptor (GPCR) and receptor tyrosine kinase (RTK) activation. The IP3R3/TRPC2 protein complex may be associated with a larger protein scaffold whereby IP3 and/or adaptor proteins could subserve regulatory functions of the primary transduction current. Supported by F31 DC06153.

Additional Awards Granted to AChemS Members

Dr. Linda Buck

Dr. Richard Axel

The 2004 Nobel Prize for Physiology or Medicine was awarded to AChemS member **Dr. Linda Buck** (Fred Hutchison Cancer Research Center) and **Dr. Richard Axel** (Columbia University) for their work on odorant receptors and the organization of the olfactory system. They were noted for their 1991 paper in which they described the family of odorant receptors and for their independent studies on the olfactory system, from the molecular level to cellular organization.

Dr. Stuart Firestein (Columbia University) was selected as the **2004 winner of the Frank Allison Linville's R.H. Wright Award in Olfactory Research**. The $30,000 award is made annually to an individual with outstanding research achievement in olfaction. Dr. Firestein was noted for his studies in the mechanisms underlying odor perception.

Dr. Peter Mombaerts (Rockefeller University) was selected as the **2003 winner of the Frank Allison Linville's R.H. Wright Award in Olfactory Research**. The $30,000 award is made annually to an individual with outstanding research achievement in olfaction. Dr. Mombaerts was noted for his studies on the mechanisms underlying odorant receptor gene regulation and axon targeting in the olfactory bulb.

Drs. Steve Munger (University of Maryland) and **Leo Belluscio** (NINDS) were two of the twelve recipients of the **2003 Presidential Early Career Award for Science and Engineers**, the nation's highest honor for professionals at the outset of their independent research careers. ❖

Dr. Steve Munger (top), Dr. Leo Belluscio (far left)

Positions at Illinois Institute of Technology

We are seeking qualified Ph.D. students, postdoctoral fellow and research associate to join a newly established research lab in Chicago. Individuals with interests in the chemical senses, sensory physiology and neurobiology are encouraged to apply. Our immediate project is to understand the role of gap junctions in the olfactory system using a combination of molecular biology, immunohistochemistry, calcium imaging, electrophysiology, and behavior approaches. Individuals with background in one or more of the above areas are encouraged to apply. Experience in working with mouse is a plus. Please send your application with contact information of three references to Zhangc@iit.edu. Information and application package of graduate programs can be found at: http://www.grad.iit.edu/admission/index.html.

Postdoctoral position at the University of Utah

Postdoctoral Research position to study the role of pituitary adenylate cyclase activating peptide (PACAP) in the regulation of cell turnover and response to injury in the mouse olfactory epithelium (OE). The OE is a powerful model for neuroregeneration because olfactory neurons are continually undergoing division, maturation, and apoptosis in adult animals. By combining PACAP knockout mice and surgical ablations with physiological, immunocytochemical and molecular techniques, the project will provide important insights for PACAP's role in the OE as well as the therapeutic potential of PACAP for CNS injury and neurodegenerative diseases. Electrophysiology, confocal imaging or molecular biology expertise is preferred but not required. Salary will be based on NIH standards for level of experience. Prospective candidates should submit a CV and contact information for 3 references to Dr. Mary Lucero, University of Utah, 410 Chipeta Way Rm 155, Salt Lake City, UT 84108-1297, Mary.Lucero@m.cc.utah.edu. The University of Utah is an equal opportunity employer and women and minorities are encouraged to apply. For information about the University of Utah, visit this site: http://neuroscience.med.utah.edu/Utah.html.

Job Postings and Funding Opportunities

Faculty Position in Cognitive Neuroscience at Brandeis University

The Department of Psychology, the Program in Neuroscience and the Volen National Center for Complex Systems at Brandeis University invite applications for a tenure-track position in Cognitive Neuroscience to begin August 2005. We seek a well-trained, creative neuroscientist with research and teaching interests in one or more areas of cognition. Candidates should employ behavioral and/or neuroimaging techniques to study learning, memory, perception, attention, motor control, emotion, language, or decision making. Our search will focus on candidates at the Assistant Professor or beginning Associate Professor level, who would flourish in Brandeis' strongly interdisciplinary environment. Successful candidates should be able to mount a vigorous independent research program and have a strong commitment to both undergraduate and graduate education, with teaching interests in such areas as computational modeling, behavioral neuroscience, or other areas of cognitive psychology within a neuroscience context. Applicants should submit their vitae, research statement, and copies of relevant papers, and arrange to have three letters of reference sent to:

The Cognitive Search Committee
Department of Psychology, MS 062
Brandeis University
Waltham, MA 02454-9110
OR
Send via email: Sekuler@Brandeis.Edu

First consideration will be given to candidates whose applications are received by October 15, 2004. Brandeis University is an equal opportunity employer, committed to building a culturally diverse community, and welcomes applications from women and minorities.

Meeting Announcements

AACSS at Heron Island 2005

We are again holding our annual meeting on Heron Island by popular demand, after the venue, a tiny coral island off the Queensland coast of Australia, proved a great success in 2002. This is a meeting to treat yourself to. It will have a full program of scientific and industrial talks and symposia, on the broad range of chemosensory topics. Sessions will be scheduled to allow maximum use of this unique coral island's attractions: snorkeling, scuba diving and communing with turtles, sea and bird life. An accommodation booking is essential prior to registration. Stays are extendable at discount conference rates. **Organize a group and symposium session NOW.** Book early to avoid disappointment. Book by 1 January 2005 for AACSS on Heron Island (Australian Great Barrier Reef), Australasian Association for ChemoSensory Science 8th Annual Meeting. 2-6 December 2005

Accommodation: Wendy.Burchmore@tq.com.au
Conference info: g.bell@atp.com.au
Program info: john.prescott@jcu.edu.au

Conference on Chemosensory Modulation Announcement:

Our understanding of processes involved in chemosensory modulation has not kept pace with the rapid advances in the structural and molecular aspects of chemosensory processing. To focus attention on this important topic a Conference on Chemosensory Modulation has been organized. The meeting will be held in Jackson, WY from January 21-24, 2005. Individuals interested in attending the meeting are directed to the meeting website for details: **http://bioweb.usu.edu/taste/MCS/MCS.htm**

Funding Opportunity at NIDCD

NIDCD P30 Grants for Translational Research (NOT-DC-05-001)
National Institute on Deafness and Other Communication Disorders
http://grants.nih.gov/grants/guide/notice-files/NOT-DC-05-001.html

The NIH has expanded its policy on the sharing of model organisms. Effective October 2004, a formal sharing plan is required as a part of the application submitted to the NIH. The goal of the sharing plan is to foster more rapid scientific progress by avoiding the use of limited resources and PI time to reproduce previously developed model organisms. Model organisms include genetically engineered mature animals, sperm, eggs, embryos, stem cells, cell lines, vectors, probes and other reagents. For more details, see the links below for Frequently Asked Questions and for the actual policy statement. Although a formal sharing plan is required as of October 2004, sharing is expected for all currently active grants and includes all funding mechanisms except NRSA fellowships and institutional training grants. .

The NIH POLICY ON SHARING OF MODEL ORGANISMS FOR BIOMEDICAL RESEARCH was published in the NIH Guide on May 7, 2004 . This is an extension of NIH policy on sharing research resources, and reaffirms NIH support for the concept of sharing. The new policy becomes effective with the October 1, 2004 receipt date for applications or proposals to NIH. For additional information about the NIH Policy on sharing model organisms for biomedical research, please visit this URL: **http://grants.nih.gov/grants/policy/model_organism/index.htm**