Dates of future AChemS meetings:

2008 (ISOT)
July 21-25, 2008 - Hyatt Embarcadero, San Francisco, CA

2009
April 22-26, 2009 - Hyatt Sarasota, Sarasota, FL

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**2007 Awardees**

29th Annual Givaudan Lectureship • Givaudan Corporation
Gene Robinson, PhD, University of Illinois

16th Annual Mokowitz Jacobs Award for Research in Psychophysics of Taste and Olfaction
Veronica Galindo-Cuspinera, Nestlé Research Center

14th Annual Ajinomoto Award to Promising Young Researcher in the Field of Gustation
Steven Munger, University of Maryland

IFF Award on the Molecular Basis of Taste
Robert Margolskee, Mount Sinai School of Medicine

Max Mozell Award for Outstanding Achievement in the Chemical Senses
John Caprio, Louisiana State University

The AChemS Young Investigator Award for Research in Olfaction
Noam Sobel, Weizmann Institute of Science

AChemS Distinguished Service Award
James Battey, National Institute of Health

The Don Tucker Memorial Award (2006 Awardee)
Jason August, University of Maryland

The Polak awards are funded by the Elsie Werner-Polak Memorial Fund in memory of our niece gassed by the Nazis in 1944 at age 7:

Ghislain Polak and the late Ernest Polak

Polak Young Investigator Award Recipients
Donald Katz, Brandeis University
Minghong Ma, University of Pennsylvania
Nathan Urban, Carnegie Mellon University
Jeffrey Martens, University of Michigan
Shawn Dotson, University of Maryland School of Medicine
Jean-François Cloutier, Montreal Neurological Institute

Junior Scientist Travel Fund Award Recipients
Jessica Brann, Columbia University
Shannon Olsson, University of California – Los Angeles
Wen Li, Northwestern University
Akiko Ishii, INRA

AChemS Minority/Clinical Fellowship Recipients
Funded by a generous grant from the National Institute on Deafness and Other Communication Disorders and the National Institute on Aging, NIH
Valery Audige, Monell Chemical Senses Center
Genevieve Bender, Yale University
Chris Whittle, Monell Chemical Senses Center
Ernesto Salcedo, University of Colorado Health Science Center
Kristina Gonzalez, Clark University
Jessica Lee, University of Michigan
Jasmine Loveland, Smith College
AChemS Student Housing/Travel Award Recipients
Funded by Ghislaine Polak and the late Ernest Polak

Wendy Grus
Malin Brodin
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Kaeli Samson
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Allison Whalen
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Trevor Cessna
Thomas Veitinger
Rafi Haddad
Cecil Saunders
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The meeting evaluation will be available online this year! Please visit www.achems.org to give us your feedback on the meeting. Your input helps AChemS' leadership continue to offer quality annual meetings and member services.

Wednesday, April 25, 2007

10:00 am - 12:00 pm Symposium
Educational Outreach - GWIZ Science Center
Chair/Organizer: G. Nelson
GWIZ Science Center

Every year AChemS sponsors an educational Outreach Program for elementary through high school students in the Sarasota area. This event consists of both demonstrations and brief talks about the chemical senses and the nervous system given by AChemS members. It is held at the GWIZ Science Center. Around 300 students attend the workshop each year. Please join to give demonstrations about the chemical senses.

12:00 pm - 03:30 pm AChemS Executive Committee
Executive Boardroom

04:00 pm - 05:00 pm Long Range Planning Committee
Executive Boardroom

03:30 pm - 07:30 pm REGISTRATION
Prefunction Area

06:30 pm - 08:00 pm OPENING BUFFET (ticketed event)
North Ballroom

08:00 pm - 09:30 pm GIVAUDAN LECTURE
South Ballroom

Dr. Gene E. Robinson from the University of Illinois at Champaign-Urbana will be this year's Givaudan lecturer. His research group studies the regulation of social behavior. The research is integrative, involving perspectives from evolutionary biology, behavior, neuroscience, molecular biology, and genomics. This special lecture is made possible by the generous support of the Givaudan Flavors Corporation.

#100


09:30 pm - 10:30 pm SOCIALS
Social Gathering & Cash Bar
Prefunction Area

09:30 pm - 10:45 pm Organizational Meeting for Students with Travel Awards
North Ballroom
Thursday, April 26, 2007

Registration: 7:00 am – 3:00 pm & 6:00 pm – 7:30 pm
Continental Breakfast: 7:30 – 9:00 am

08:00 am - 10:00 am Slide Session
Taste: Periphery & CNS
Chair/Organizer: S. St.John
South Ballroom

08:00 am - 12:30 pm Poster Session Thur AM
North Ballroom

10:30 am - 12:30 pm Symposium
Connecting genetics & perceptual variations
Chair/Organizer: L. Vosshall
South Ballroom

12:30 pm - 02:00 pm Luncheon: Minority and Clinical Travel Awardees
Chair/Organizer: K. Wekesa
Executive Boardroom

01:00 pm - 03:00 pm Symposium
Human Axillae: Why?
Chair/Organizer: K. Rankin & C. Christensen
South Ballroom

03:00 pm - 05:00 pm NIH Workshop
Chair/Organizer: B. Davis
Ringling

03:00 pm - 05:15 pm Industry Symposium: Recent advances in taste and flavor
Chair/Organizer: M. Meredith
South Ballroom

05:30 pm - 07:00 pm Industry Reception
Florida Room

07:00 pm - 11:00 pm Poster Session Thur PM
North Ballroom

07:30 pm - 10:30 pm Symposium
Olfaction beyond the olfactory bulb: From perception to memory
Chair/Organizer: N. Ravel & D. Wilson
South Ballroom

POSTER SESSIONS:
8:00 am – 12:30 pm
1-7: Olfaction: Genomics, transcription, expression
8-13: Olfaction: Development
14-26: Olfactory bulb circuitry: anatomy
27-30: Olfactory bulb circuitry: physiology
31-51: Multimodal: psychophysics
52-56: Olfaction: Animal psychophysics

7:00 pm – 11:00 pm
1-10: Taste: Peripheral electrophysiology
11-18: Genetic analysis of taste
19-30: Olfaction: Clinical aspects I
31-44: Olfaction: Animal Behavior
45-56: Multimodal and other chemosensory systems
Thursday AM

08:00-10:00 am

SLIDE SESSION

Taste: Periphery & CNS
Chair/ Organizer: S. St John
South Ballroom

08:00
#102

Characterizing the pH-dependent taste-modifying mechanism of neoculin. Ken-ichiro Nakajima, Tomiko Asakura, Yuji Morita, Ayako Koizumi, Keisuke Ito, Jun-ichi Maruyama, Takumi Misaka, Katsuhiko Kitamoto, Keiko Abe. Applied Biological Chemistry, The University of Tokyo, Tokyo, Japan

08:15
#103

Claudin expression in taste tissue. Stéphanie Michilig, Sami Damak, Johannes le Coutre. Perception Physiology, Nestlé Research Center, Lausanne 26, Switzerland

08:30
#104


08:45
#105

Molecular markers in the developing solitary tract and nucleus. Olivia L May, Goichi Tsukamoto, Robert M Bradley, Charlotte M Mistrutta. 1 School of Dentistry, University of Michigan, Ann Arbor, MI, USA; 2 School of Medicine, Dentistry, and Pharm. Sciences, Okayama University, Okayama, Japan

09:00
#106

Firing patterns during spontaneous activity predict taste-evoked responses of central gustatory neurons. Stuart McLaughlin, John-Paul Baird, Michael Tordoff. 1 Monell Center, Philadelphia, PA, United States; 2 Psychology and Neuroscience, Amherst College, Amherst, MA, United States

09:15
#107

Differential Spatial Representation of Taste Modalities in the Rat Gustatory Cortex. Riccardo Accolli, Brice Bathellier, Carl Petersen. 1 FPG, BMJ, EPFL, Lausanne, Switzerland; 2 LSENS, BMJ, EPFL, Lausanne, Switzerland; 3 LCN, BMJ, EPFL, Lausanne, Switzerland

09:30
#108

Taste receptor polymorphisms in the Old Order Amish: associations with obesity, diabetes and related traits. C. Shawn Dotson, Amanda ET Elson, Hillary Shaw, Xiaolian Shi, Colleen M Damcott, Adam Naj, Soren Snitker, Nanette I Stein. 1 Dept Anatomy & Neurobiology, University of Maryland School of Medicine, Baltimore, MD, US; 2 Dept Medicine, Div Endocrinology, University of Maryland School of Medicine, Baltimore, MD, US

09:45
#109

Specific alleles of bitter receptor genes influence human sensitivity to the bitterness of aloin and saccharin. Alexey Pronin, Hong Xu, Huixian Tang, Lan Zhang, Qing Li, Xiaodong Li. Senomyx, Inc., San Diego, CA, United States

10:30 am - 12:30 pm

SYMPOSIUM

Connecting genetics & perceptual variations
Chair/ Organizer: L. Vosshall
South Ballroom

The theme of this meeting is to highlight how information from the human genome project and human genetics is being applied to explain individual human variation in the perception of color, taste, and smell.

10:30
#110

Genetic variation in a human odorant receptor alters perception of sex steroid-derived odours. Hanzi Zhuang, Andreas Keller, Qiuyi Chi, Hiroaki Matsunami, Leslie Vosshall. 1 Department of Molecular Genetics and Microbiology, Duke University, Durham, NC, United States; 2 Laboratory of Neurogenetics & Behavior, The Rockefeller University, New York, NY, United States

11:00
#111

Evolution of opsin and their inter-individual variability in humans. Jay Neitz, Ophthalmology, Medical College of Wisconsin, Milwaukee, WI, United States

11:30
#112

Dissection of human sweet taste variation. Alex Fushan, Jay Slack, Chris Simons, Karen Golan, Dennis Drayna. 1 National Institutes of Health, Rockville, MD, United States; 2 Givaudan Flavors, Cinninatt, OH, United States

12:00
#113

Possible genetic basis for human hyperosmia to isovaleric acid. Doron Lancer, Yehudit Hasin, Miriam Khen, Idan Menashe. 1 Molecular Genetics, Weizmann Institute of Science, Rehovot, Israel; 2 Division of Cancer Epidemiology and Genetics, NCI/NIH, Rockville, MD, United States
1. #114 Activity-dependent expression profiling in the mouse vomeronasal organ: a microarray approach. Silke Hagendorf1, Corinna H Engelhardt1, Ludger Klein-Hitpass2, Marc Spehr1. 1Cellular physiology, Ruhr-University Bochum, Bochum, Germany; 2Cellular biology, University of Essen, Essen, Germany

2. #115 Striking differences in evolutionary patterns in vomeronasal receptors compared to main olfactory receptors. Wendy Grus, Peng Shii, Jianzhi Zhang. Ecology and Evolutionary Biology, University of Michigan, Ann Arbor, MI, United States

3. #116 OMP expression is attenuated in vomeronasal neurons of the naked mole-rat Heterocephalus glaber. John Dennis1, Timothy Smith1, Thomas Park2, Edward Morrison3. 1Anatomy, Physiology, Pharmacology, Auburn University, Auburn University, AL, United States; 2School of Physical Therapy, Slippery Rock University, Slippery Rock, PA, United States; 3Biological Sciences, University of Illinois at Chicago, Chicago, KY, United States

4. #117 Two types of vomeronasal receptor-expressing olfactory sensory neurons in goats. Yoshihiro Wakabayashi1,2, Satoshi Ohkura1, Hiroaki Okamura1, Yuji Mori1, Masumi Ichikawa1. 1Cell and Dev Biol, Univ. Colorado Health Sciences Center, Aurora, CO, United States; 2Vet. Ethology, Univ. Tokyo, Tokyo, Japan; 3Lab. Neurobiol., Nat. Inst. Agribiol. Sci., Tsukuba, Japan; 4Neurosci. Basic Technol., Tokyo Metropol. Inst. Neurosci., Tokyo, Japan

5. #118 A Proteomic Analysis of Olfactory Cilial Membranes. Aaron Stephan, Haiqing Zhao. Biology, The Johns Hopkins University, Baltimore, MD, United States

6. #119 Expression of OR Transgenes with Chimeric Promoters. Carey Connelly, Randall Reed. Johns Hopkins University, Baltimore, MD, United States

7. #120 Odorant receptor expression profiles in human sperm - Part II: from function to behavior. Thomas Veitinger1, Jeffrey A Riffe1, Annika Triller1, Katlen Schwan1, Richard K Zimmer1, Marc Spehr1, Hanns Hart. 1Cellular Physiology, Ruhr-University, Bochum, Germany; 2ARL Division of Neurobiology, University of Arizona, Tucson, AZ, USA; 3Department of Biology, University of California, Los Angeles, CA, USA

8. #121 The role of Fz-1 and Wnt-5a in the mouse olfactory pathway. D.J. Rodriguez, C.A. Grear. Neurosurgery, Yale University, New Haven, CT, US

9. #122 DEVELOPMENT OF ODORANT RECEPTOR EXPRESSION PATTERNS IN THE MOUSE SEPTAL ORGAN. Huikai Tian, Minghong Ma. Neuroscience, University of Pennsylvania School of Medicine, Philadelphia, PA, United States

10. #123 Cell coupling in the developing mouse olfactory placode. Fritz Lischka1, Karen Yee1, Anthony LaMantia2, Nancy Rawn1. 1Monell Chemical Senses Center, Philadelphia, PA, United States; 2Dept. of Cellular and Molecular Physiology, University of North Carolina, Chapel Hill, NC, United States

11. #124 Development of bile salt sensitivity in the zebrafish olfactory system. Yoko Sakata, Ann Greig, James Thomas, Andrew Thomas, William Michel. Physiology, University of Utah, Salt Lake City, UT, United States


13. #126 Notch-Delta signaling promotes proper developmental patterning of the zebrafish olfactory placode. A.C. Morris, M. Meredith, D.A. Fadool, J.M. Fadool. Biological Science, Florida State University, Tallahassee, FL, United States

14. #127 Opg is required for the formation of mitral cell apical dendrites. Ting-Wen Cheng, Qizhi Gong. Cell Biology and Human Anatomy, University of California, Davis, Davis, CA, United States

15. #128 Recovery of the Intrabulbar Map Following Unilateral Naris Closure. Diana Cummings, Carolyn Marks, Leonardo Belluscio. Developmental Neural Plasticity Unit, NIH, Bethesda, MD, US

16. #129 Dopaminergic periglomerular cells form novel multiglomerular circuits. E. Kiyokage1, Y. Pan1, Z. Shao1, G. Szabo2, K. Kabayashi3, A.C. Puche1, M.T. Shipley1. 1University of Maryland School of Medicine, Baltimore, USA; 2Institute of Experimental Medicine, Budapest, Hungary; 3Fukushima Medical University, Fukushima, Japan
17 #130 Evidence for Signaling Megaplexes in the Olfactory Bulb. D. Marks, B. Colley, D. Fadool. Prog. In Neurosci., Florida State University, Tallahassee, FL, United States

18 #131 Activity-dependent Asymmetric Features of P2 Glomerulli in the Mouse Main Olfactory Bulb. Anthony Oliva, Diego Restrepo. Department of Cell and Developmental Biology and Neuroscience Program, UCDHSC, Aurora, CO, United States

19 #132 Expression of connexin 36 in second order neurons of the mouse olfactory bulb. L. Rela, C.A. Greer. Neurosurgery, Yale University, New Haven, CT, US

20 #133 Differential expression of connexin mRNAs in rat olfactory bulb. Elke Weiler. Neuropysiology, Ruhr-University, Bochum, Germany

21 #134 Viral transsynaptic tracing from dual injections in the olfactory system reveals convergent and segregated connectivity patterns in the olfactory bulb. David Willhite, Lynn Shon, Andrew Chang, Max Fletcher, Janna Nawroth, Wei Chen, Michele Migliore, Gordon Shepherd. 1Neurobiology, Yale University, New Haven, CT, United States; 2Institute of Biophysics, National Research Council, Palermo, Italy

22 #135 Cellular and Synaptic Organization of the Human Olfactory Bulb. A. Maresh, C.A. Greer. Department of Neurosurgery, Yale U., New Haven, CT, United States

23 #136 Expression of the Long and Short Isoforms of the Ret Receptor Tyrosine Kinase in the Main Olfactory Bulb. Anne Cunningham, Tala Kaplinovsky. Developmental Neurosciences Program, Faculty of Medicine, UNSW, Sydney, Australia

24 #137 Dual olfactory system without vomeronasal organ in a turtle, Trachemys scripta elegans. Kazuyuki Taniguchi, Hirezasu Ito, Toshihiro Oikawa, Satoshi Soeta, Kazumi Taniguchi, Yoshio Yamamoto. 1Veterinary Anatomy, Iwate University, Morioka, Japan; 2Veterinary Anatomy, Nippon Veterinary and Life Science University, Musashino, Japan; 3Veterinary Anatomy, Kitaasa University, Towada, Japan

25 #138 A three-dimensional representation of the glomerular layer of the adult mouse main olfactory bulb. Ernesto Salcedo, Eugene Kronberg, Beth Welander, Diego Restrepo. Cell and Developmental Biology, UCDHSC, Aurora, CO, United States

26 #139 High-throughput imaging data archiving and retrieval in neurosciences. Nian Liu, Shin Nagayama, Rixin Wang, Max Fletcher, Arjun Masurkar, Wenhui Xiong, Wei Chen. Center for Medical Informatics, Yale University, New Haven, CT, United States; 2Department of Neurobiology, Yale University, New Haven, CT, United States


28 #141 Middle tufted and mitral cell synchronizations in mouse olfactory bulb. Jie Ma, Graeme Lowe. Monell Chemical Senses Center, Philadelphia, PA, United States

29 #142 In vivo whole cell recording of mouse juxtaglomerular cells. Shaolin Liu, Adam Puche, Michael Shipley. University of Maryland School of Medicine, Baltimore, MD, USA

30 #143 The Effect of GABA Blockade on Psychophysical Measures of Odor Detection and Discrimination in the moth Manduca sexta. Esther Mwilara, Chirita Ghatak, Kevin Daly. Biology, West Virginia University, Morgantown, WV, United States

31 #144 Impact of sub-threshold carboxylic acids on human perception of coffee aroma compounds. Toshio Miyazawa, Michelle Gallagher, George Petit, Paul Wise. 1Flavor System & Technology Laboratory, Ogawa & Co. Ltd., Chiba, Japan; 2Monell Chemical Senses Center, Philadelphia, PA, United States

32 #145 Synchronization of diurnal variation in plasma leptin levels and human sweet taste recognition thresholds. Yuzo Ninomiya, Yuki Nakamura, Shinya Shirosaki, Rie Ohta, Kiyoshi Koyano, Kazuaki Nonaka, Noriatsu Shigemura. 1Sect. of Oral Neurosci., Grad. Sch. of Dental Sci., Kyushu Univ., Fukuoka, Japan; 2Sect. of Pediatric Dent., Grad. Sch. of Dental Sci., Kyushu Univ., Fukuoka, Japan; 3Sect. of Removable Prosthesis., Grad. Sch. of Dental Sci., Kyushu Univ., Fukuoka, Japan

33 #146 Prevalence of Chemical Sensitivity and Its Risks Factors in Teenagers: A Population-Based Study. Steven Nordin, Linus Andersson, Alex Johansson, Eva Mållqvist, Mats Berkd. 1Umeå University, Umeå, Sweden; 2Central Hospital, Skövde, Sweden; 3Schools for Hospital, Gothenburg, Sweden; 4Central Hospital, Skövde, Sweden
34 #147 RETRONASAL OLFACTORY AND TASTE CONTRIBUTIONS TO VEGETABLE LIKING AND INTAKE. Valerie Duffy1, JE Hayes2, G. Napoleone3, ME Dinehart1. 1Allied Health Sciences, U. of Connecticut, Storrs, CT, United States; 2Nutritional Sciences, U. of Connecticut, Storrs, CT, United States

35 #148 Oral contact is necessary for the development of retronasal metallic smell. Scott McClure, Harry Lawless. Department of Food Science, Cornell University, Ithaca, NY, United States

36 #149 Olive oil pungency: sensory neuron responses to oleocanthal and related analogs. Catherine Peyrot des Gachons1, Jeffrey Sperry2, Bruce Bryant2, Paul Breslin1, Amos Smith1, Gary Beauchamp1. 1Monell Chemical Senses Center, Philadelphia, PA, USA; 2Department of Chemistry, University of Pennsylvania, Philadelphia, PA, USA

37 #150 Multivariate approach in the investigation of interactions between texture and oral- and retronasal olfactory stimuli. Natacha Roudnitzky1, Johannes H. F. Bult2, Rene A. De Wijk2, Jens Reden1, Thomas Hummel1. 1Dept. of O.R.L., Smell & Taste Clinic, Univ. of Dresden Medical School, Dresden, Germany; 2Dept. of Consumer and Market Insight, A&F and Centre of Food Sciences, Wageningen, The Netherlands

38 #151 ORAL ANESTHESIA SPECIFICALLY IMPAIRS RETRONASAL OLFACTION. Derek J. Snyder1,2, Cara J. Clark2, Frank A. Catalanotto2, Vicki Mayo2, Linda M. Bartoshuk1. 1Neuroscience, Yale University, New Haven, CT, USA; 2Dentistry, University of Florida, Gainesville, FL, USA

39 #152 Identification of air-phase fatty acids: both retronasal and orthonasal failure. Richard Tamburrino1, Bruce Halpern1. 1Molecular and Cell Biology, Cornell University, Ithaca, NY, United States; 2Nutrition and Neurobiology and Behavior, Cornell University, Ithaca, NY, United States

40 #153 Detection and identification of metallic odorants in a model solution of ferrous sulfate and linoleic acid. Kristine Yu1, Harry Lawless2, Terry Acree2. 1Department of Food Science, Cornell University, Ithaca, NY, United States; 2NYSAES, Cornell University, Geneva, NY, United States

41 #154 Investigations on multimodal sensory integration: texture, taste, and oral- and retronasal olfactory stimuli in concert. Rene de Wijk1,2, Harold Bult3, Thomas Hummel1. 1Wageningen Center for Food Sciences, Wageningen, Netherlands; 2Center for Innovative Consumer Studies, Wageningen, Netherlands; 3Department of Otorhinolaryngology, Smell and Taste Clinic, Dresden, Germany

42 #155 FLAVOR PERCEPTION: RESPONSE TIME MEASURES OF PROCESSING OF GUSTATORY-OLFACTORY MIXTURES. Kelly Burger1, Maria G. Veldhuizen1, Miao-Fen Wang1, Lawrence E. Marks2. 1John B. Pierce Laboratory, New Haven, CT, United States; 2Yale University School of Medicine, New Haven, CT, United States

43 #156 FLAVOR PERCEPTION: EFFECTS OF CONTEXT ON PERCEIVED INTENSITY OF GUSTATORY-OLFACTORY MIXTURES. Lawrence E. Marks1, Kelly Burger1, Emily M. Chakwin1, John B. Pierce Laboratory, New Haven, CT, United States; 2Yale University School of Medicine, New Haven, CT, United States; 3Psychology, Princeton University, Princeton, NJ, United States

44 #157 Relative Impact of Taste vs Smell Dysfunctions on Quality of Life. Beverly Cowart1,2, Christopher Klock2, Aldona Vainius2, Edmund Priebitkin2, Paul Breslin2, Monell Chemical Senses Center, Philadelphia, PA, USA; 3Otology, Head & Neck Surgery, Thomas Jefferson University, Philadelphia, PA, USA

45 #158 CONNECTING DIET AND DISEASE RISK VIA FOOD PREFERENCE. Bridget Sullivan1, JE Hayes2, PD Faghih1, VB Duffy1. 1Allied Health, U. of CT, Storrs, CT, United States; 2Nutrition, U. of CT, Storrs, CT, United States

46 #159 The role of attention and sensitization to trigeminal and olfactory exposure in chemical intolerance. Linus Andersson1, Mats Bende2, Eva Millqvist1, Steven Nordin2. 1Department of Psychology, Umeå University, Umeå, Sweden; 2Department of Otorhinolaryngology, Central Hospital, Skövde, Sweden; 3Asthma and Allergy Research Group, Sahlgrenska University Hospital, Göteborg, Sweden

47 #160 Gustatory stimulation inhibits trigeminal caudalis (Vc) neuronal responses to noxious electrical stimulation of the tongue in the rat. R. Felizardo1, C. Simons1, J. Azerad2, E. Carstens2, Y. Bouvier1. 1UFR Odontologie, Paris, France; 2NPF, U.C. Davis, CA, United States
48 #161 withdrawn

49 #162 Relationships between BMI, perceived pleasantness and ad lib consumption of food in smokers and nonsmokers. J. A. Felsted¹, S. O'Malley¹, D. Nachtigal¹, P. Gant², D.M. Small² ¹The John B. Pierce Laboratory, New Haven, CT, USA; ²Yale University School of Medicine, New Haven, CT, USA

50 #163 "Bitter taste" in the gut? Flavor avoidance conditioned by intragastric denatonium in rodents. J.I. Glendinning¹, Y.-M. Yiin², K. Ackroyd³, G.J. Schwartz⁴, R.M. Margolskee⁵, A. Sclafani². ¹Biology, Barnard College, New York, NY, USA; ²Psychology, Brooklyn College, Brooklyn, NY, USA; ³Medicine, Albert Einstein College of Medicine, Bronx, NY, USA; ⁴Neuroscience, Mount Sinai School of Medicine, New York, NY, USA

51 #164 Species-specific avoidance of foods containing hydrolyzed protein. Kristin L. Field¹, Julia A. Figueroa³, Alexander A. Bakhmanov¹, Julie A. Mennella¹, Gary K. Beauchamp¹, Bruce A. Kimball¹. ¹Monell Chemical Senses Ctr., Philadelphia, PA, USA; ³Zoology, Colorado State Univ., Ft. Collins, CO, USA; ²USDA-APHIS Natl Wildlife Research Ctr., Ft. Collins, CO, USA

52 #165 Olfactory discrimination ability of CD-1 mice for aliphatic aldehydes as a function of stimulus concentration. Matthias Laska¹, Dipa Joshi², Gordon M. Shepherd³. ¹IFM Biology, Linkoping University, Sweden; ²Neurobiology, Yale University School of Medicine, New Haven, CT, United States

53 #166 Odortypes: Interaction of diet and MHC. KOICHI MATSUMURA¹, JAE KWAK¹, MARYANNE CURRAN¹, GEORGE PRETI¹, ALAN WILLSE¹, JON WAHL¹, KUNIO YAMAZAKI¹, GARY BEAUCHAMP¹. ¹Monell Chemical Senses Center, PA, USA; ³Pacific Northwest National Laboratory, WA, USA

54 #167 Component concentration influences perceptual quality of binary odor mixtures. AM McNamara, PD Magidson, C. Linster. Neurobiology and Behavior, Cornell University, Ithaca, NY, United States

55 #168 PERCEPTION OF ODOR MIXTURES IN A NEWBORN MAMMAL. G. Couteaud¹, T. Thomas-Danguin², E. LeBerre³, B. Schaal⁴. ¹Centre Europeen des Sciences du Gout, CNRS/UB/INRA, Dijon, France; ²FLAVIC, INRA/ENESAD/UB, Dijon, France
Thursday PM

1:00-3:00pm  SYMPOSIUM
Human Axillae: Why?
Chair/Organizer: K. Rankin & C. Christensen
South Ballroom

This IFF sponsored mini-symposium examines the sources and functions of volatile compounds produced in the human axillae. Because the products of axillary glands are commonly labeled as malodorous and an industry has grown up around neutralizing this malodor, symposium speakers will discuss the concept of malodor and the strategies employed by the fragrance industry and sensory scientists to reduce or eliminate malodor.

1:00  Introduction. Carol Christensen

1:05  Primate chemical communication - an evolutionary perspective.
#171
Eckhard W. Heymann. Behavioural Ecology & Sociobiology, German Primate Center, Goettingen, Germany

1:30  What is the 'Mal' in Malodor? Pamela Dalton. Monell Chemical Senses Center, Philadelphia, PA, United States
#172

1:50  The chemistry and biochemistry of human axilla odors. Andreas Natsch. Bioscience, Givaudan Schweiz AG, Duebendorf, Switzerland
#173

2:10  Fragrance Strategies Used To Mitigate Axillary Odor: A Perfumer And Sensory Perspective. Krystyna Rankin. IFF, Union Beach, NJ, USA
#174

2:35  Biological Significance of Axillary Odors in Humans. Charles Wysocki. Monell Chemical Senses Center, Philadelphia, PA, United States
#175

2:55  Final comments & questions. Carol Christensen

3:00pm-5:00pm  NIH WORKSHOP
Chair/Organizer: B. Davis
Ringling

For 2007, the NIH Workshop will feature a discussion of funding opportunities at the NIDCD for students, postdoctoral fellows, and newly independent investigators in the first hour, followed by a discussion of the changing policies and procedures in the era of the new electronic NIH. The latter discussion will be of interest to all individuals who plan to seek research or training support from the NIH.

3:00pm-5:15pm  INDUSTRY SYMPOSIUM - Recent advances in taste and flavor
Chair/Organizer: M. Meredith
South Ballroom

After last year’s success, there will be again a platform for industry, policy makers as well as academic scientists and graduate students to discuss applications and knowledge gleaned from industry and basic science. This session consists of short talks by four experts in taste research followed by a round table discussion with audience participation. The talks focus on new findings in taste research that may have implications for industry research and development, presented at a level accessible to the knowledgeable non-expert.

Taste receptors: Structure, function, behavior and disease. Steven D. Munger, University of Maryland

Cells in taste buds: Who does what? Stephen D. Roper, University of Miami

TRP channel biology: Novel approaches to mitigation of aversive tastes in pharmaceuticals and other health products. Robert W. Bryant, Redpoint Bio

Genetic aspects of taste perception in humans. Dennis Drayna, NIDCD-NIH

5:30pm-7:00pm  INDUSTRY RECEPTION (ticketed event)
Florida Room

7:30pm-10:30pm  SYMPOSIUM
Olfaction beyond the olfactory bulb: From perception to memory
Chair/Organizer: N. Ravel & D. Wilson
South Ballroom

The basic theme of the symposium is how olfactory bulb output is translated into an integrated olfactory perception. It brings together multidisciplinary, comparative approaches to the basic questions of odor perception and memory.
Visualizing olfactory memories in Drosophila by optical imaging. Ron Davis, Dinhui Yu, Akalai David. Molecular and Cellular Biology, Baylor College of Medicine, Houston, TX, United States

Odor-induced oscillatory dynamics in the rat piriform cortex. Philippe Litaudon, Nathalie Buonviso, Tristan Conier, Claire Martin, Julie Chauquis, Nadine Ravel. Neurosciences Sensorielles, Comportement et Cognition, CNRS UMR 5020, Université Lyon 1, Institut Fédératif des Neurosciences, Lyon, France

Biological mechanism underlying olfactory-discrimination learning. Edi Barkai, Dorit Saar. Biology & Neurobiology, University of Haifa, Haifa, Israel

Learning modifies neural representations of smell in human olfactory cortex. Jay Gottfried. Dept Neurology, Cog Neurology & Alzheimer's Disease Center, Northwestern University, Chicago, IL, United States

7:00pm-11:00pm POSTER SESSION Thur PM

North Ballroom

1 #181 Chorda Tympani Responses to Sucrose-citrate Mixtures. Bradley Formaker, Thomas Hettenger, Marion Frank. Oral Health & Diagnostic Sciences, Univ. of Connecticut Health Center, Farmington, CT, US

2 #182 Proton flux through NADPH oxidase-linked H+ channel (gp91phox) is involved in eliciting chorda tympani (CT) taste nerve responses to strong acids. John A. DeSimone, Tam-Hao T. Phan, Gerard L. Heck, Shobha Mummalaneni, Gregory R. Sturz, Vijay Lyall. Physiology, Virginia Commonwealth University, Richmond, VA, USA

3 #183 Nigericin Shifts The pH Threshold For The Chorda Tympani (CT) Taste Nerve Response From 45 To 65. Vijay Lyall, Gregory R. Sturz, Tam-Hao T. Phan, Gerard L. Heck, Shobha Mummalaneni, John A. DeSimone. Physiology, Virginia Commonwealth University, Richmond, VA, USA

4 #184 LINGUAL CO-APPLICATION OF SODIUM AND LINOLEIC ACID AFFECTS CHORDA TYMPANI NERVE ELECTROPHYSIOLOGICAL RESPONSES. Jennifer Stratford¹, Kathleen Curtis², Robert Contreras¹. ¹Psychology, Florida State University, Tallahassee, FL, U.S.; ²Health Sciences, Oklahoma State University, Tulsa, OK, U.S.

5 #185 Naturally Occurring Peptides in Mature Korean Soy Sauce modulate TRPV1 Variant Salt Taste Receptor. M.R. Rhyu¹, A.Y. Song¹, H.Y. Kim¹, S.S. Kim¹, C. Tokunaga², T-H. T. Phan³, G.L. Heck¹, J. A. DeSimone¹, V. Lyall³. ¹Korea Food Research Institute, Seongnam-si, Korea; ²Kyowa Hakko Food Specialties Co. Ltd, Ibarki, Japan; ³Virginia Commonwealth University, Richmond, VA, USA

6 #186 Evaluation of Maillard reacted peptides (MPs) as novel salt taste enhancers and their effect on TRPV1 variant salt taste receptor (TRPV1). Tadayoshi Katsumata¹, Chikara Tokunaga², Noboru Fujii³, Makoto Egii³, Tam-Hao T. Phan¹, Gerard L. Heck¹, John A. DeSimone¹, Vijay Lyall³. ¹Physiology, Virginia Commonwealth University, Richmond, VA, United States; ²Food Research, Kyowa Hakko Food Specialties, Ami, Ibarki, Japan

7 #187 DIETARY SODIUM RESTRICTION AUGMENTS THE LINGUAL NEUTROPIL RESPONSE TO CHORDA TYMPANI NERVE SECTION. Pamela Wall, Lynnette McCluskey. IMMAG, Medical College of Georgia, Augusta, GA, United States

8 #188 A functional role for IL-1β in the injured peripheral taste system. Lynnette McCluskey, Padma Sarvepalli, Michele Phillips. Institute of Molecular Medicine, Medical College of Georgia, Augusta, GA, United States

9 #189 Effects of Early Chorda Tympani Transection on the Adult Rat Geniculate Ganglion. Kaeli Samson, Suzanne Sollars. Psychology, University of Nebraska Omaha, Omaha, NE, United States

10 #190 NEUROPHYSIOLOGY OF GUSTATORY NEURONS IN THE RAT GENICULATE GANGLION. Joseph Breza, Rob Contreras. Psychology, Florida State University, Tallahassee, FL, USA

11 #191 QUANTITATIVE TRAIT LOCI (QTL) UNDERLYING TASTE BUD NUMBER IN RECOMBINANT INBRED STRAINS OF MICE. David J. Reiner, Taha A. Jan, Cheng Xiang Li, John D. Boughter, Lu Lu, Robert W. Williams, Robert S. Waters. Anatomy and Neurobiology, University of Tennessee Health Science, Memphis, TN, US

12 #192 PROP taste status and the rejection of foods with added tastants. John Prescott¹, Yun Mi Lee², Kwang-Ock Kim³. ¹Psychology, James Cook University, Cairns, Australia; ²Food Science, Ewha Women's University, Seoul, Korea
13 #193 Strain-specific asymmetrical taste generalization between quinine and denatonium in mice. David Blizard¹, Margaret Colby¹, Thomas Hettinger², Marion Frank². ¹Ctr Dev Hlth Genetics, Penn State University Park, PA, United States; ²Dept. of Oral Diagnosis, UCONN Hlth Ctr, Farmington, CT, United States

14 #194 Haplotypes of the bitter receptor TAS2R38 and their relationship to bitter perception of PROP in children, adolescents and adults. Julie A. Mennella, Fujio Duke, M. Yanina Pepino, Emily Perlman, Catherine Forestell, Danielle R. Reed. Monell Chemical Senses Center, Philadelphia, PA, United States

15 #195 Complex genetics of taste responses to saccharin. Natalia Bosak, Cailu Lin, Xia Li, Maria Theodorides, Zakiyyah Smith, Dani Reed, Gary Beauchamp, Alexander Bachmanov. Monell Chemical Senses Center, Philadelphia, PA, United States

16 #196 NaCl taste thresholds in 13 inbred mouse strains. Yutaka Ishiwatari¹,², Alexander Bachmanov¹. ¹Monell Chemical Senses Center, Philadelphia, PA, United States; ²Ajinomoto Co., Inc., Kawasaki, Japan

17 #197 Polymorphisms of ENaC αsubunit are associated with strain differences in amiloride sensitive NaCl responses in mice. Noriatsu Shigemura¹, Tadahiro Ohkuri¹, Chiharu Sadamitsu¹, Keiko Yasumatsu¹, Ryusuke Yoshida¹, Gary K Beauchamp³, Alexander A Bachmanov¹, Yuzo Ninomiya¹. ¹Sect. Oral Neurosci., Kyushu Univ., Fukuoka, Japan; ²Monell Chemical Senses Center, Philadelphia, PA, USA

18 #198 Fatty acid taste in obesity-prone and -resistant rats: Strain and sex differences. D. Pittman¹, K. Smith¹, M. Crawley¹, C. Corbin¹, D. Hansen¹, K. Fraiser¹, T. Gilbertson². ¹Psychology, Wofford College, Spartanburg, SC, US; ²Biology, Utah State University, Logan, UT, US

19 #199 withdrawn

20 #200 Role of cytochrome P450 in the nasal inflammatory process. Karen Yee¹, Beverly Cowart¹, Edmund Pribitkin¹, Hakan Ozdener¹, Nancy Rawson¹. ¹Monell Chemical Senses Center, Philadelphia, PA, United States; ²Otolaryngology, Thomas Jefferson University, Philadelphia, PA, United States

21 #201 Chemosensory function in students exposed to formaldehyde in the veterinary school laboratory. Laurence JACQUOT, Tamika WILSON, Laura SITVARIN, Pamela DALTON. Monell Chemical Senses Center, Philadelphia, PA, United States

22 #202 The influence of pentoxifylline on olfactory function. Volker Guzdiol, Anna Maria Maier, Thomas Zahnert. smell and taste clinic, ORL, Dresden medical school, Dresden, Germany

23 #203 Immune cell profile in the olfactory epithelium of patients with chronic nasal inflammation. P. Feng¹, K.K. Yee⁴, B.I. Cowart¹, E.A. Pribitkin¹, N.E. Rawson¹. ¹Monell Chemical Senses Center, Philadelphia, PA, United States; ²Thomas Jefferson University, Philadelphia, PA, United States

24 #204 Inflammatory Changes Following Repetitive Exposure to Formaldehyde Vapor. Ryan McDermott, Tamika Wilson, Kai Zhao, Pamela Dalton. Monell Chemical Senses Center, Philadelphia, PA, United States

25 #205 Lateralized vs bilateral olfactory testing in clinical settings. Antje Welge-Luessen, Birgit Merz, Markus Wolfensberger. Department of Otorhinolaryngology, University Hospital Basel, Basel, Switzerland

26 #206 Olfactory function and occurrence of olfactory event related potentials in rhinologic clinie. Philippe Rombaix¹, André Mouraux¹, Bernard Bertrand¹. ¹Otorhinolaryngology, Cliniques Saint Luc University Louvain, Brussels, Belgium; ²Neurology, Cliniques Saint Luc, Brussels, Belgium; ³Otorhinolaryngology, Cliniques Saint Luc, Brussels, Belgium

27 #207 The usefulness of olfactory biopsies in patients with olfactory loss. Martin Witt¹, Katja Bormann¹, Volker Guzdiol¹, Heinz Reichmann¹. ¹Otorhinolaryngology, University of Technology, Dresden, United States; ²Anatomy, University of Technology, Dresden, United States; ³Neurology, University of Technology, Dresden, Germany

28 #208 Treatment of post-infectious olfactory disorders with minocycline: a double-blind, placebo-controlled study. Jens Reden¹, Birgit Hering², Robert C. Kern¹, Katja Lil¹. ¹Otorhinolaryngology, University of Dresden Medical School, Dresden, Germany; ²Neurology, University of Dresden Medical School, Dresden, Germany; ³Otorhinolaryngology-HNS, Northwestern University, Chicago, IL, USA
29 #209 Reduced olfactory sensitivity in subjects with depressive symptoms. Olga Pollatos1,2, Albrecht Jessica3, Rainer Kopietz2, Jennifer Linn3, Veronika Schoepf2, Anna Maria Kleemann3, Tatiana Schreder2, Rainer Schandy1, Martin Wiesmann2. 1Psychology, Ludwig-Maximilians-University of Munich, Munich, Germany; 2Neuroradiology, Ludwig-Maximilians-University of Munich, Munich, Germany

30 #210 Olfactory perception of the odorant Bourgeonal by infertile and fertile men. Eva Kemper1, Petra Spornrafl-Ragaller2, Hanns Hatt1, Thomas Hummel1. 1ORL, Smell & Taste Clinic, Univ. of Dresden, Dresden, Germany; 2Dermatology, Univ. of Dresden, Dresden, Germany; 3Cell Physiology, Ruhr-Univ. Bochum, Bochum, Germany

31 #211 Discrimination of odor mixtures: effects of stimulation time, composition and training protocol. Patricia Fernandez, Nicole Rennell, Gregory Deleo, Locatelli Fernando, Brian Smith. Life sciences, ASU, Tempe, AZ, United States

32 #212 PYRIDIMINES AND MICOSPORIN-LIKE AMINO ACIDS FUNCTION AS ALARM CUES IN THE DEFENSIVE SECRETIONS OF THE SEA HARE Aplysia CALIFORNICA. Cynthia Kicklighter1, Michiya Kami2, Markus Germann3, Charles Derby4. 1Goucher College, Baltimore, MD, United States; 2Georgia State University, Atlanta, GA, United States

33 #213 Vertebrate pheromones affect female receptivity in salamanders. Lynne Houck1, Stevan Arnold1, Pamela Feldhoff2, Richard Feldhoff3. 1Zoology, Oregon State University, Corvallis, OR, United States; 2Biochem. & Molec. Biology, Univ. of Louisville, Louisville, KY, United States

34 #214 Sex differences in chemo-investigative behavior in a plethodontid salamander (Plethodon shermani). Stephanie Schubert, Sarah Woodley. Biological Sciences, Duquesne University, Pittsburg, PA, United States

35 #215 Newborn mice prefer odors indicating closer genetic relatedness. Josephine Todrank1, Nicolas Busquet2, Claude Baudoin3, Giorn Heh1. 1Institute of Evolution, University of Haifa, Haifa, Israel; 2Laboratoire d’Ethologie Expérimentale et Comparée, Université Paris Nord, Villete, France

36 #216 The identification of attractive volatiles in the aged male mouse urine. Kazumi Osada, Hiroshi Izumi. Oral Physiology, Health Sciences University of Hokkaido, Ishikari-tobetsu, Japan

37 #217 Scent over-marking: selective targeting of rivals by males and use in mate-choice decisions by females. Robert Johnston1, Rolf Gatterman2, Zhimin Song3, Sabiha Barat1. 1Cornell University, Ithaca, NY, United States; 2University of Halle, Halle, Germany; 3University of Washington, Seattle, WA, United States

38 #218 NKCC1 deletion does not affect olfactory sensitivity in behaviorally-trained mice. D.W. Smith1, S. Thach2, E. Marshall3, M.-G. Mendoza4, E. Rodriguez5, S. Burns6, E. Przybylski7, S. Pradeep7, S.J. Kleene1. 1Center for Smell and Taste, University of Florida, Gainesville, FL, United States; 2Psychology, University of Florida, Gainesville, FL, United States; 3Otolaryngology, University of Florida, Gainesville, DC, United States; 4Anatomy and Cell Biology, University of Cincinnati, Cincinnati, OH, United States

39 #219 The Loss of the CAMP mediated Odor Response: Is 'Clean Air' Responsible? C.C. Taylor-Butts, R.M. Gorman, P. Zhang, R.J. Delay. Biology, University of Vermont, Burlington, VT, United States

40 #220 Noradrenergic modulation in the olfactory bulb influences spontaneous olfactory discrimination in adult rats. Nathalie Mandiron1, Shane Peace1, Alexandra Karnov1, Jane Kim1, Matthew Ennis2, Christiane Linster1. 1NBB, Cornell U., Ithaca, NY, United States; 2Anatomy and Neurobiology, U. Tennessee, Memphis, TN, United States

41 #221 Odor Sample Time: Simple vs Difficult Discrimination Tasks. Burton Slotnick. Psychology, University of South Florida, Tampa, FL, United States

43 #223 Chemosensory Basis for an Ecological Paradigm in the Rocky Intertidal. Graham Ferrier, Steven Kim, Cheryl Ann Zimmer, Richard Zimmer. *Ecology and Evolutionary Biology, University of California, Los Angeles, CA, United States; 1Biochemistry, University of California, Los Angeles, CA, United States*

44 #224 The Role of Vomeronasal Organ in Mediating Responses to Predator Odor. Vera Voznesenskaya, Maria Klyuchnikova, Anna Voznesenskaya. *Comparative Neurobiology of Vertebrates, Institute of Ecology & Evolution, Moscow, Russia*

45 #225 Transgenic mice expressing an inducible cyclic AMP reporter. Joung Woul Kim, Craig Roberts, Stephanie Berg, Stephen Roper, Nirupa Chaudhari. *1Physiology and Biophysics, Univ. of Miami Miller School of Medicine, Miami, FL, USA; 2Program in Neurosciences, Univ. of Miami Miller School of Medicine, Miami, FL, USA*

46 #226 Artificial sweeteners stimulate sensory neurons through activation of TRPV1 receptors. Céline E. Riera, Sidney A. Simon, Johannes le Coutre. *1Perception Physiology, Nestlé Research Center, Lausanne, Switzerland; 2Neurobiology, Duke University, Durham, NC, United States*

47 #227 Recording Chemosensory Responses in Pancreatic Islets from Transgenic Mice Expressing a CAMP Reporter. Craig Roberts, Joung Woul Kim, Stephanie Berg, Stephen Roper, Nirupa Chaudhari. *Department of Physiology and Biophysics, University of Miami Miller School of Medicine, Miami, FL, USA*

48 #228 Functional characterization of odorant receptor mediated signaling mechanisms in prostate cancer cells. Jennifer Spehr, Wei Yi Zhang, Hans Hatt, Eva Neuhaus. *Cellphysiology, Ruhr-University Bochum, Bochum, Germany*

49 #229 The reception of ESP peptides in rodent vomeronasal system. Sachiko Haga, Taichi Yanagawa, Hiroko Kimoto, Koji Sato, Kazushige Touhara. *Department of Integrated Biosciences, The University of Tokyo, Chiba, Japan*

50 #230 Termination of lingual nerve afferents near a small subset of neurons in rostral nucleus of the solitary tract (NTS) that express Fos-like immunoreactivity (FLI) following electrical stimulation of the chorda tympani nerve. Yves Boucher, Rufino Felizardo, Earl Cartens, Fawzia Zerari-Mailly. *1UFR Odontologie, Universite Paris 7, Paris, France; 2NPB, UC Davis, Davis, CA, USA*

51 #231 Microvillar Non-olfactory Cells in the Main Olfactory Epithelium. Weihong Lin, Robert Margolskee, Anne Hanson, Diego Restrepo. *1Biol Sci, Univ of Maryland Baltimore County, Baltimore, MD, United States; 2Neurosci, Mount Sinai School of Medicine, New York, NY, United States; 3Cell & Dev Biol, Univ of Colorado Hlth Sc Ctr, Aurora, CO, United States*

52 #232 Nasal solitary chemoreceptor cells respond to denatonium but not to other classic bitter or trigeminal stimulants. BD Gulbransen, TR Clapp, RF Margolskee, SC Kinnamon, TE Finger. *1Neurosci, Rocky Mt Taste & Smell Ctr, UCDHSC, Aurora, CO, USA; 2Biomed Sci, Colo State Univ, Ft. Collins, CO, USA; 3Neurosci, Mount Sinai School of Med, New York, NY, USA*


54 #234 The Elephant as an Ideal Olfactory Model Organism. David Greenwood, Bets Rasmussen, David HirtResearch. *1Auckland, New Zealand; 2School of Biological Sciences, University of Auckland, Auckland, New Zealand; 3Dept of Environmental & Biomolecular Systems, OGI School of Science & Engineering, OHSU, Beaverton, OR, USA; 4Deceased, September, 2006, United States*

55 #235 DEFENSE THROUGH CHEMORECEPTION: AN L-AMINO ACID OXIDASE IN THE INK OF SEA HARES DEFENDS PREDATORS THROUGH THEIR CHEMICAL SENSES. Michiya Kamio, Cynthia Kicklighter, Ko-Chun Ko, Matt Nusbaum, Juan Aggion, Melissa Hutchins, Charles Derby. *Biology, Georgia State University, Atlanta, GA, United States*

56 #236 Membrane-associated Mitochondria Contribute to Depolarization-mediated Swimming Behavior in Paramecium. Wade Bell, Erik Kamura, Richard Hallworth. *1Biology, Virginia Military Institute, Lexington, VA, United States; 2Biomedical Sciences, Creighton University, Omaha, NE, USA*

12:30 pm – 2:00 pm LUNCHEON: Minority and Clinical Travel Awardees Chair/Organizer: K. Wekeza Executive Boardroom The minority and clinical travel awardee luncheon is designed to honor applicants selected for the travel fellowships. These travel awards are available for minorities and clinicians interested in the chemical senses and are funded by the National Institute on Deafness and Other Communication Disorders (NIDCD). They cover partial costs for clinicians and minority applicants to attend AChE/S. This luncheon provides a forum where applicants can network among themselves and with established scientists.
Friday, April 27, 2007

Registration: 7:30 am – 2:00 pm & 6:00 pm – 7:30 pm
Continental Breakfast: 7:30 – 9:00 am

8:00 am - 10:00 am Symposium
Neural coding in the chemical senses
Chair/ Organizer: C. Lemon
South Ballroom

8:00 am - 12:30 pm Poster Session Fri AM
North Ballroom

10:30 am - 12:30 pm Symposium
Gastrointestinal chemosensation
Chair/ Organizer: S. Damak & R. Margolskee
South Ballroom

12:45 pm - 2:30 pm AChemS Business Meeting
Chair/ Organizer: L. Tolbert
South Ballroom

3:00 pm - 5:00 pm Workshop
Odor signaling in humans
Chair/ Organizer: T. Jacob
South Ballroom

5:00 pm - 7:00 pm ChEMA Social
Chair/ Organizer: S. Sollars
Florida Room

7:00 pm - 8:30 pm Slide Session
Olfaction: CNS
Chair/ Organizer: A. Nighorn
South Ballroom

7:00 pm - 11:00 pm Poster Session Fri PM
North Ballroom

9:00 pm - 10:00 pm IFF Lecture
Chair/ Organizer: D. Restrepo
South Ballroom

10:00 pm - 11:00 pm Social Gathering & Cash Bar
Prefunction Area

POSTER SESSIONS:
8:00 am – 12:30 pm
7:00 pm – 11:00 pm

1-11: Taste: Receptor-ligand interactions
12-21: Taste in the CNS; Brainstem Circuits
22-32: Trigeminal system
33-43: Olfaction: Ligand-receptor interaction
44-49: Olfactory bulb: physiology, pharmacology
50-56: Olfaction: development, injury, recovery

1-9: Taste in the CNS: Higher order systems
10-20: Taste buds: Growth & differentiation
21-36: Olfaction: Human psychophysics I
37-46: Olfaction: Modulators, second messengers etc.
47-56: Olfaction: Technical notes
**XXIXth Annual Meeting**

**Friday, AM**

8:00 am - 10:00 am **SYMPOSIUM**
Neural coding in the chemical senses  
Chair/ Organizer: C. Lemon  
South Ballroom  
This symposium will focus on gustatory and olfactory coding as viewed from a systems/network perspective.

8:00  
**Neural coding in the chemical senses: networks and systems.**  
Christian Lemon. Anatomy & Neurobiology, Univ of Tennessee Health Science Center, Memphis, TN, United States  
#237

8:05  
**Neural Modulation of Central Taste Processing.** Robert Lundy.  
Anatomical Sciences & Neurobiology, University of Louisville, Louisville, KY, United States  
#238

8:30  
**The role of sampling behavior in shaping odor coding in awake animals.** Matt Wachowiak, Justus Verhagen, Daniel Wesson.  
Biology, Boston University, Boston, MA, United States  
#239

9:00  
**Cortical networks and the processing of tastes.** Donald Katz, Lauren Jones, Alfredo Fontanini. Psych/Neurosci, Brandeis University, Waltham, MA, United States  
#240

9:30  
**Encoding Odor Plumes with a Temporally Structured Neural Representation.** Mark Stopfer. NICHD, NIH, Bethesda, MD, United States  
#241

10:00 am - 12:00 pm **SYMPOSIUM**
Gastrointestinal chemosensation  
Chair/Organizer: S. Damak & R. Margolskee  
South Ballroom  
This is a newly arising field that is based on the observation that elements of the taste transduction pathway are present in the gastrointestinal tract and in specialized endocrine cells. The questions addressed by this symposium are what role these chemosensory signaling elements play in appetite regulation, specific satiety, gut motility and glucose homeostasis.

10:30  
**Gene expression analysis shows that intestinal taste receptor-like cells regulate multiple physiological processes.** Sami Damak, Johannes le Coutre, Carole Bezençon, Andreas Fürholz, Frederic Raymon, Robert Mansourian. Nestlé Research Center, Lausanne, Switzerland  
#242

10:50  
**Glutamate Receptors in the Gastrointestinal Tract.** Ana San Gabriel, Takami Mackawa, Hisayuki Uneyama, Sumio Yoshie, Kanio Torii. Institute of Life Sciences, Ajinomoto Co., Inc., Kawasaki-shi, Japan; Anatomy, Nippon Dental University, Niigata, Japan  
#243

11:10  
**Taste receptor signaling in enteroendocrine cells of the mammalian gut.** Enrique Rozengurt. Medicine, UCLA School of Medicine, Los Angeles, CA, United States  
#244

11:30  
**Glucose sensing and regulation of intestinal glucose absorption.** Soraya Shirazi-Beechey. Veterinary Preclinical Sciences, University of Liverpool, Liverpool, United Kingdom  
#245

11:50  
**Taste receptors and gustducin in gut regulate GLP-1 secretion.** Z. Kokrashvili, H.J. Jang, M.J. Theodorakis, O.D. Carlson, B.J. Kim, J. Zhou, H.H. Kim, X. Xu, S.L. Chan, M. Juhaszoa, M. Bernier, B. Mosinger, J.M. Egan, R.F. Margolskee. Neuroscience, Box 1065, Mount Sinai School of Medicine, New York, NY, United States; National Institute on Aging, NIH, Baltimore, MD, United States  
#246

12:10  
**FLAVOR PREFERENCES MODIFIED BY THE POST-ORAL ACTIONS OF TASTANTS.** A. Scelfani. Psychology, Brooklyn College-CUNY, Brooklyn, NY, USA  
#247

**POSTER SESSION FRI AM**

8:00 am - 12:30 pm  
North Ballroom

1  
**Ligand binding to the N-terminal domain of mouse T1R1.** Stephan Vignes, Graeme L Conn, Steven D Mungen. Dept Anatomy & Neurobiology, Univ Maryland School of Medicine, Baltimore, MD, USA; Manchester Interdisciplinary Biocentre, Faculty of Life Sciences, Univ Manchester, Manchester, UK  
#248
2 #249 Sweet taste associated with mGluR4 agonist L-AP4 in rats. Benjamin Eschle, Meghan Eddy, Jessica Longobardo, Eugene Delany. *Biology, University of Vermont, Burlington, VT, United States*

3 #250 Cyclamate inhibits the mouse sweet taste receptor. Peihua Jiang, Marianna Max, Robert F. Margolskee. *Neuroscience, Mount Sinai, New York, NY, United States*

4 #251 BRAZEEIN VARIANTS AND THE BRAZEEIN-TASTE RECEPTOR INTERACTION. Eric Walters¹, Tiffany Otto², Zheynan Jin³, Jon Rumley⁴, Goran Hellekant⁵. *Biochemistry and Molecular Biology, Rosalind Franklin University of Medicine and Science, North Chicago, IL, United States; Physiology and Pharmacology, University of Minnesota Medical School, Duluth, MN, United States; Chemistry and Biochemistry, University of Minnesota Medical School, Duluth, MN, United States*

5 #252 Probing the Sweet Receptor’s Transmembrane Domain Ligand Binding Pocket with Cyclamate Analogs. Y. Xia¹, P. Jiang¹, E. F. Thompson², W. J. Spillane³, R. F. Margolskee⁴, M. Max⁵. *Neuroscience, Mount Sinai School of Medicine, New York, NY, USA; Chemistry, National University of Ireland, Galway, Ireland*

6 #253 HISTIDINE RESIDUES PLAY A CRUCIAL ROLE IN TASTE-MODIFYING ACTIVITY OF MIRACULIN: VERIFICATION BY SITE-DIRECTED MUTAGENESIS. Keisuke Ito, Yuji Morita, Ken-ichihiro Nakajima, Tomoko Asakura, Akiko Shimizu-Ibuka, Katsuyoshi Masuda, Masaji Ishiguro, Tohru Terada, Jun-ichi Maruyama, Katsuhiko Kitamoto, Takumi Misaka, Keiko Abe. *Department of Applied Biological Chemistry, The University of Tokyo, Tokyo, Japan*

7 #254 Structure-function studies on MNEI: What makes monellin sweet? Jeanette Hobbs¹, Steve Munger², Graeme Conn³. *Manchester Interdisciplinary Biocentre, Faculty of Life Sciences, Manchester, United Kingdom; Dept of Anatomy & Neurobiology, University of Maryland School of Medicine, Baltimore, MD, USA*

8 #255 GYMNEMIC ACID INTERACTIONS WITH SWEET TASTE RECEPTORS. Alexey Kopysov¹, Eric Walters², Xia Li³, Göran Hellekant⁴. *Dept Physiology&Pharmacology, University of Minnesota Medical School, Duluth, MN, United States; Biochemistry and Molecular Biology, Rosalind Franklin University of Medicine and Science, North Chicago, IL, United States; Monell Chemical Senses Center, Philadelphia, PA, United States*

9 #256 X-RAY CRYSTAL STRUCTURE ANALYSIS AND MOLECULAR DYNAMICS SIMULATION WITH NEOCULIN: INSIGHTS INTO ITS SWEETNESS AND TASTE-MODIFYING ACTIVITY. Yuji Morita, Akiko Shimizu-Ibuka, Tohru Terada, Tomiko Asakura, Ken-ichihiro Nakajima, Keisuke Ito, So Iwata, Takumi Misaka, Keiko Abe. *Applied Biological Chemistry, The University of Tokyo, Tokyo, Japan*

10 #257 Analysis of Sweet Taste Receptor Gene (Tas1r1) in Species of Feliformia. Xia Li¹, Dieter Glaser², Peihua Li³, Gary Beauchamp¹, Joseph Brand¹, Monell Chemical Senses Center, Philadelphia, PA, United States; Anthropological Institute and Museum, University of Zürich, Zürich, Switzerland; University of Pennsylvania, Philadelphia, PA, United States

11 #258 Polymorphisms in the Tas1r3 gene alter taste responses to sweeteners: evidence from 129B6-Tas1r3 congenic mice. M. Inoue¹, J.I. Glendinning², S. Harkness², X. Li², N.P. Bosak³, M.L. Theodorides⁴, G.K. Beauchamp⁵, A.A. Bachmanov⁶. *Life Sciences, Tokyo University of Life Science and Pharmacy, Tokyo, Japan; Biological Sciences, Barnard College, New York, NY, USA; Monell Chemical Senses Center, Philadelphia, PA, USA*

12 #259 SUCRROSE TASTE-RESPONSIVE NEURONS ARE LOCATED IN THE DORSAL ROSTRAL PART OF HAMSTER SOLITARY NUCLEUS, BUT RECEIVE PREDOMINATELY CONVERGENT INPUT FROM TWO OR MORE TASTANTS: AN IN-VIVO INTRACELLULAR STUDY. Robert Waters¹, Cheng-Shu Li², Nie Xie¹, David Smith¹, Cheng Xiang Li². *Anatomy and Neurobiology, University of Tennessee Health Science, Memphis, TN, United States; Anatomy, Southern Illinois School of Medicine, Carbondale, IL, United States*

13 #260 Responses to taste mixtures in the nucleus of the solitary tract of the rat. Jen-Yung Chen, Patricia Di Lorenzo. *Psychology, Binghamton University, Binghamton, NY, United States*

14 #261 EFFECTS OF MICROSTIMULATION AT DIFFERENT NST LOCATIONS. Nicole Kinzeler, Susan Travers. *Behavioral Neuroscience & College of Dentistry, Ohio State University, Columbus, OH, United States*

15 #262 Convergent Excitatory and Inhibitory Inputs to the Reticular Formation from the Rostral Nucleus of the Solitary Tract. Jason Nasse¹, Richard Rogers², Zhixiong Chen³, Ken Herman¹, Joseph Travers¹. *Ohio State University, Columbus, OH, United States; Pennington Biomedical Research Center, Baton Rouge, LA, US*

17 #264 The involvement of delta-opioid receptors in the mediation of synaptic transmission between the fiber terminals of the solitary tract and the neurons in the rostral portion of the NST that project to the gustatory PhN. Mingyan Zhu, Cheng-Shu Li. Anatomy, Southern Illinois University Sch of Med, Carbondale, IL, United States

18 #265 Membrane properties of rostral NST neurons projecting to the parabrachial nucleus in rats. Takeshi Suwabe, Robert Bradley. School of Dentistry, University of Michigan, Ann Arbor, MI, United States

19 #266 REVERSE MICRODIALYSIS OF IONOTROPIC GLUTAMATE RECEPTOR BLOCKERS INTO THE PARABRACHIAL NUCLEUS REDUCES TASTE REACTIVITY BEHAVIORS IN CONSCIOUS RATS. Michael King, Tricia Dorne. Biology, Stetson University, DeLand, FL, United States

20 #267 Parabrachial Responses to Bitter Taste Stimuli. Laura Geran, Susan Travers. Oral Biology, Ohio State University, Columbus, OH, United States

21 #268 Altered pontine gustatory coding of sucrose concentrations in a rat model of obesity. PETER KOVACS, ANDRAS HAJNAL. Neural & Behavioral Sciences, PennState Univ., Coll. Med., Hershey, PA, USA

22 #269 Tactile Effects on Taste Localization. Juyun Lim, Barry Green. The John B. Pierce Laboratory, New Haven, CT, United States

23 #270 The effect of intraoral trigeminal stimulation on orthonasal olfaction. Johannes Fraselli, Carina Oehm, Marilyn Jones-Gotman. MNI, Montreal, QC, Canada

24 #271 Responsiveness of the human nasal epithelium to trigeminal stimuli. Thomas Meusel, Mandy Scheibe. Dep. of ORL, Smell & Taste Clinic, Dresden, Germany


26 #273 The neural correlates of capsaicin vs pure taste in humans. Kristin J Rudenga1, Barry Green2, Danielle Nachtigal3, Jennifer A Felsted4, Dana M Small1,2. 1Interdepartmental Neuroscience Program, Yale Univ, New Haven, CT, United States; 2John B Pierce Laboratory, New Haven, CT, United States; 3Dept. of Psychology, Yale Univ, New Haven, CT, United States

27 #274 Odor and Ocular Detection of t-Butyl Acetate and n-Butyl Acetate: Implications for Environmental Regulation and Chemosensory Science. Roland Schmidt, William S. Cain. Chemosensory Perception Lab, Surgery, University of California, San Diego, La Jolla, CA, U.S.A.

28 #275 Gustatory stimulation inhibits trigeminal caudalis (Vc) neuronal responses to noxious electrical stimulation of the tongue in the rat. Rufino Fizardo1, Simons Christopher1, Jean Aézard1, Earl Carstens2, Yves Boucher1. 1UFR Odontologie, Universite Paris 7, Paris, France; 2NPB, UC Davis, Davis, CA, USA

29 #276 Capsaicin avoidance following chorda tympani transection. Earl Carstens1, Mirela Carstens2, Yves Boucher2. 1NPB, UC Davis, Davis, CA, United States; 2Odontologie, Univ Paris 7, Paris, France

30 #277 Peripheral Trigeminal Nerve Responses to Artificial Sweeteners, KCl, AND NaCl. Vajini Atukorale, Matthew Greene, Wayne Silver. Biology, Wake Forest University, Winston-Salem, NC, United States

31 #278 Viral "live-cell" tracing of the trigeminal system - Comparative analysis of different Pseudorabies Virus strains. Markus Rothermel, Nils Daman, Nicole Schoibel, Barbara G. Klupp, Thomas C. Mettenleiter, Christian H. Wetzl, Hanns Hatt. 1Dept. of Cellophysiology, Ruhr-University, Bochum, Germany; 2Federal Research Institute for Animal Health, Friedrich-Loeffler-Institut, Insel Riems, Germany. 3Graduiertenkolleg "Development and Plasticity of the Nervous System: Molecular, synaptic and cellular mechanisms", Bochum, Germany

32 #279 Temporal integration in nasal lateralization of homologous volatile organic compounds. Paul Wise, Sean Toczydlowski, Charles Wysocki. Monell Chemical Senses Center, Philadelphia, PA, United States

33 #280 Olfactory Coding in Anopheles gambiae. Allison Carey1, Guang Wang2, Zina Berman3, Laurence Zwiebel4, John Carlson5. 1MCDB, Yale University, New Haven, CT, United States; 2Department of Biological Sciences, Vanderbilt Univeristy, Nashville, TN, United States
34 #281 Functional Characterization of an Anopheles Specific Component of the Odorant Receptor Repertoire in the Malaria Vector Mosquito Anopheles gambiae. Guirong Wang1, Allison Carey2, John Carlson3, Laurence J. Zwiebel4. 1Department of Biological Sciences, Vanderbilt University, Nashville, TN, United States; 2Department of Molecular, Cellular and Developmental Biology, Yale University, New Haven, CT, United States

35 #282 Novel ligands for physiologically characterized olfactory receptor neurons of female Aedes aegypti. Majid Ghaninia1,2, Mattias Larsson1, Joceline Mejerink3, T. Bill Hansson4, Kilian Igelman1. 1Chemical Ecology, SU, Alnarp, Sweden; 2Entomology, Gorgan Univ. of Agric. Sci., Gorgan, Iran; 3Wageningen University, Wageningen, Netherlands; 4Evolutionary Neuroethology, Max Planck Institute for Chemical Ecology, Jena, Germany

36 #283 A Pheromone Receptor Mediates VA-Induced Responses in Drosophila. Dean Smith, Tal Soo Ha. Pharmacology, UT Southwestern Medical Center, Dallas, TX, United States

37 #284 The Role of Vomeronasal Organ in Reception of Androstenone. Maria Klyuchnikova1, Charles Wysocki2, Vera Voznesenskaya1. 1Institute of Ecology & Evolution, Moscow, Russia; 2Monell Chemical Senses Center, Philadelphia, PA, USA

38 #285 response STRUCTURE of single olfactory receptor neurons correlates with its odorant specificity. Alexandre Nikonov, John Caprio. LSU, PhD, Baton Rouge, LA, United States

39 #286 Odorant response properties of septal organ neurons: broad tuning and high sensitivity. Xavier Grosmaire, Minghong Ma. Department of Neuroscience, University of Pennsylvania, Philadelphia, PA, United States

40 #287 Molecular basis for ligand specificity in a mouse olfactory receptor. Tatjana Abaffy, Charles Luetje. Department of Cellular and Molecular Pharmacology, University of Miami, Miami, FL, United States

41 #288 MAPPING THE BINDING POCKET OF A MOUSE ODORANT RECEPTOR USING THE SUBSTITUTED CYSTEINE ACCESSIBILITY METHOD. Sarah Repicky, Tatjana Abaffy, Charles Luetje. Molecular and Cellular Pharmacology, University of Miami, Miami, FL, United States

42 #289 Odorant receptor expression profiles in human sperm - Part 1: from gene to function. Annika Triller1, Jeffrey A Riffel1, Thomas Veitinger1, Katlen Schwane1, Richard K Zimmer1, Marc Spehr1, Hanns HaTT1. 1Department of Cell Physiology, Ruhr-University, Bochum, Germany; 2ARL Division of Neurobiology, University of Arizona, Tucson, AZ, USA; 3Department of Biology, University of California, Davis, CA, USA

43 #290 Functional Analysis of an Insect Odorant Receptor Using Xenopus Oocytes And Robotic Electrophysiology. A.S. Nichols1, K.W. Wanneter2, H.M. Robertson3, C.W. Luetje4. 1Cellular and Molecular Pharmacology, University of Miami, Miami, FL, United States; 2Entomology, University of Illinois at Urbana-Champaign, Urbana, IL, United States

44 #291 Participation of kainate receptors in synaptic and extrasynaptic transmission. Laura J. Blakenore, Paul Q. Trombley. Biological Science, Florida State University, Tallahassee, FL, United States


46 #293 L/T-type calcium channel regulation of ET cell bursting. S. Liu, M. Shipley. Anatomy and Neurobiology, University of Maryland School of Medicine, Baltimore, MD, USA

47 #294 Activation of postsynaptic GABAB receptors directly modulates the bursting pattern and synaptic activity of olfactory bulb juxtaglomerular neurons. Abdallah Hayar, Nikolay Karpuk. Dept. of Neurobiology and Developmental Sciences, Univ. of Arkansas for Medical Sciences, Little Rock, AR, U.S.

48 #295 Characterization of inhibitory gates in mitral cell pairs. Tom McTavish, Nathan Schoppa, Larry Hunter, Diego Restrepo. University of Colorado at Denver and Health Sciences Center, Denver, CO, United States

49 #296 The effect of sniff frequency on presynaptic inhibition of receptor input to the olfactory bulb. N. Pirez, R. Carey, M. Wachowiak. Biology, Boston University, Boston, MA, USA
Friday PM

12:45pm-2:30pm  AChemS Business Meeting
Chair/Organizer: L. Tolbert
South Ballroom

3:00-5:00pm  WORKSHOP
Odor signaling in humans
Chair/Organizer: T. Jacob
South Ballroom

Candidate compounds for human signaling molecules present in human secretions have been proposed to signal identity, emotion, gender and reproductive state. The intention of this workshop is to review and discuss the current state of the field. There is still much controversy about the whole issue of human pheromones and disagreement about the behavioral consequences of exposure to these compounds.

Part I: Ethological, behavioral aspects (Discussion moderator: C. Wysocki)
Part II: Psychophysiological aspects (Discussion moderator: T. Hummel)

3:00
Introduction. Tim Jacob

3:05
Human pheromones and behavior. Karl Grammer. Urban Ethology, Ludwig-Boltzmann-Institute, Vienna, Austria

3:20
The Identification of Compounds in Human Sweat - Signals of Individuality, Gender and Genes. Elisabeth Oberzaucher1, Karl Grammer1, Katharina Zimmer1, Gottfried Fischer2, Helena A. Soini3, Milos V. Novotny3, Sarah J. Dixon4, Yun Xu5, Simeone Zomer5, Richard G. Brereton5, Dustin J. Penn6. 1LBI for Urban Ethology, Dept. of Anthropology, Vienna, Austria; 2Clinical Department for Blood Group Serology, General Hospital of Vienna, Vienna, Austria; 3Institute for Pheromone Research, Indiana University, Bloomington, IN, United States; 4Centre for Chemometrics, University of Bristol, Bristol, UK; 5Konrad Lorenz Institute for Ethology, Vienna, Austria

3:35
ODOR-INDEPENDENT EFFECTS OF HUMAN CHEMOSIGNALS AND PHEROMONES ON OVULATION, SEXUALITY AND COGNITION. Martha McClintock. Dept. Psychology, University of Chicago, Chicago, IL, USA, United States

Discussion. Charles Wysocki
PERCEPTION OF CHEMOSENSORY ANXIETY SIGNALS IN SOCIALLY ANXIOUS SUBJECTS. Bettina Pause1, Dirk Adolph1, Alexander Prehn1, Anne Ohr1, Joachim Laudien1, Bernfried Sojka2, Roman Herbst2. 1Dept. Exp. Psychology, University of Duesseldorf, FRG, United States; 2Dept. Psychology, University of Kiel, FRG, United States

Changes in olfactory threshold, hedonics and brain activity in response to repetitive exposure to androstadienone. Tim Jacob1, Liwei Wang2,3, Nassima Boukroune3, Amy March4, Natalie Walker4. 1School of Biosciences, Cardiff University, Cardiff, UK; 2Medical College, Jinn University, Guangzhou, China; 3Department of Psychology, Liverpool University, Liverpool, UK

BRAIN RESPONSE TO PUTATIVE PHEROMONES IN HUMANS. Ivanka Savic. Dept. Clinical Neuroscience, Karolinska Institute, Stockholm, S, United States

Discussion. Thomas Hummel

5:00 pm - 7:00 pm ChEMA Social Chair/Organizer: S. Sollars Florida Room

Join us for this social event! AChemS members who have achieved an advanced degree (Ph.D., M.D., D.V.M., D.D.S., terminal Master's, etc.) within the past 10 years are automatically members of the ChEMA (Chemosensory Enterprise and Mentorship Alliance) subgroup.

The social is open to all AChemS members and is designed for junior and senior AChemS members to get to know each other, network, and talk about issues important to junior chemosensory scientists.

7:00 pm - 8:30 pm SLIDE SESSION Olfaction: CNS Chair/Organizer: A. Nighorn South Ballroom

Slit-Robo signaling is required for zonal segregation of olfactory sensory neuron axons in the main olfactory bulb. Jean-Francois Cloutier, Manon Lepine, Jin Hyung Cho. Neurology and Neurosurgery, Montreal Neurological Institute and McGill University, Montreal, QC, Canada

Regulation of olfactory bulb laminar organization and periglomerular interneuron phenotypes by ER81. John Cave1,2, Yosuke Akiba1, Rose Ann Berinish, Harriet Becker1,2. 1Well Medical College of Cornell Univer, New York, NY, United States; 2Burke Medical Research Institute, White Plains, NY, United States

Disruption of voltage-gated activity in mitral cell neurons causes supernumerary and heterogeneous glomeruli while decreasing the number of OSNs peripherally. DA Fadool, DR Marks, KC Bijon. Biological Science, Prog. in Neurosci & Mol Biophys, Florida State University, Tallahassee, FL, United States

7:45 pm #316


8:00 pm #317


8:15 pm #318

Olfactory bulb gamma oscillations are dynamically altered to adjust to task demands. J. Beshel, L.M. Kay. Psychology, University of Chicago, Chicago, IL, United States

9:00 pm - 10:00 pm IFF Lecture Chair/Organizer: D. Restrepo South Ballroom

The IFF Award is made possible by the generous support of International Flavors and Fragrances Inc, and is awarded for pioneering research that has had a major impact on the understanding of "Molecular Systems of Taste".

#101

Molecular Mechanisms Underlying Taste Perception and Gastrointestinal Chemosensation. Robert Margolskee. Dept. Neuroscience, Mount Sinai School of Medicine, New York, NY, US

10:00 pm - 11:00 pm Social Gathering & Cash Bar Prefunction Area

7:00 pm - 11:00 pm POSTER SESSION FRI PM North Ballroom
1. **Hindbrain Orexin-A Increases Licking for Sucrose but not Water.**
   Angela Choe, Jasmine Loveland, John-Paul Baird. Psychology & Neuroscience, Amherst College, Amherst, MA, United States

2. **Neural Circuits Mediating Nursing Analgesia in Neonatal Rats.**
   Teresa Bell, Matthew Ennis, Yi-Hong Zhang. Anat & Neurobiol, Univ Tenn Hlth Sci Ctr, Memphis, TN, United States

3. **Hippocampal Coding of the Behavioral Relevance of Taste Stimuli.**
   Bethany Revill, Donald Katz. 1Dept. of Biology, Volen Center for Complex Systems, Brandeis University, Waltham, MA, United States; 2Dept. of Psychology, Volen Center for Complex Systems, Brandeis University, Waltham, MA, United States

4. **Amygdalar and cortical processing of taste and conditioned taste aversion.**
   Stephen Grossman, Donald Katz. Biology Dept., Volen Center for Complex Systems, Brandeis University, Waltham, MA, United States

5. **Gustatory cortex response dynamics and tastant concentration.**
   Brian Sadacca, Donald Katz. 1Neuroscience Program, Brandeis University, Waltham, MA, United States; 2Department of Psychology, Brandeis University, Waltham, MA, United States

6. **Effects of age on the association between hunger and fMRI hypothalamic and orbitofrontal activity in response to a taste stimulus.**
   Erin Green, Lori Haase, Aaron Jacobson, Barbara Cerf-Ducastel, Nobuko Kemmotsu, Claire Murphy. 1San Diego State University, United States; 2UCSD, United States

7. **Correlations between BMI and BOLD in medial and lateral orbitofrontal cortex during selective attention to taste.**
   Danielle Nachtigal, MG Veldhuizen, DM Small. 1The John B. Pierce Laboratory, New Haven, CT, US; 2Yale University School of Medicine, New Haven, CT, US

8. **Neural correlates of umami and salt qualities during hunger and satiety.**
   Lori Haase, Barbara Cerf-Ducastel, Nobuko Kemmotsu, Erin Green, Aaron Jacobson, Claire Murphy. 1Psychology, San Diego State University, San Diego, CA, USA; 2Medicine, University of California, San Diego, CA, USA

9. **Trying to taste in the absence of taste: neural correlates of selective attention to taste.**
   Maria Veldhuizen, Dana Small. 1Affective Sensory Neuroscience, The John B. Pierce Laboratory, New Haven, CT, United States; 2School of Medicine, Yale University, New Haven, CT, United States

10. **p27Kip1 and cyclin D2 in taste cell turnover in mice.**
    T.A. Harrison, L.B.S. Adams, C. Spaulding, M. Harr, M. Lazenka, D. Defoe. Anatomy & Cell Biology, ETSU College of Medicine, Johnson City, TN, United States

11. **Apoptosis in rat circumvallate papillae: New theory for cell lineage.**
    Katsura Ueda, Yasuo Ichimori, Satoshi Wakisaka. Oral Anat. and Dev. Biol., Osaka Univ. Grad. sch. of Dent., Suita, Japan

12. **Identification of Taste Cell Progenitors and Lineage Analysis in the Adult Tongue.**
    Kristina Mathews, Nirupa Chaudhari. 1Department of Physiology and Biophysics, University of Miami, Miami, FL, United States; 2Program in Neurosciences, University of Miami, Miami, FL, United States

13. **BMP4 expression differs in circumvallate and fungiform taste bud cells of mice.**
    Ha Manh Nguyen, Linda Barlow. Cell & Dev Biol, Univ of Colorado Denver & Health Sci Ctr, Aurora, CO, United States

14. **Epithelial BDNF is required for initial gustatory targeting but not for long-term fungiform or palatal taste bud maintenance.**
    Liqun Ma, Robin Krimm. University of Louisville Medical Center, Louisville, KY, USA

15. **BDNF Regulates Taste Bud Development at Late Embryonic Ages.**
    Amanda Driskell, Robin Krimm. 1Ballard High School, Louisville, KY, USA; 2University of Louisville Medical Center, Louisville, KY, USA

16. **Identification of the source of BDNF in human saliva.**
    Abigail Milewski, Daniel Malamud, Virginia Utermohlen. 1Nutritional Sciences, Cornell University, Ithaca, NY, United States; 2College of Dentistry, New York University, New York, NY, United States

17. **Perinatal Development of Taste Buds and von Ebner's and Weber's Glands in the Rat.**
    Kazumi Taniguchi, Joseph Brand, Kazuyuki Taniguchi, Pongsawat Sothibhandhu, Masashi Tsuji, Yoshie Watahiki, Kazuki Yoshioka, Ken-ichiro Mutoh. 1Laboratory of Veterinary Anatomy, Kitasato University, Toshaka, Japan; 2Monell Chemical Senses Center, Philadelphia, PA, USA; 3Laboratory of Veterinary Anatomy, Iwate University, Morioka, Japan
18  #336  BDNF is mildly trophic and tropic for postnatal geniculate neurites. Natalia Hoshino, M William Rochlin. Biology, Loyola U. Chicago, Chicago, IL, United States

19  #337  Apoptosis in embryonic geniculate and trigeminal neurons cultured with BMP4 and noggin. Charlotte Mistretta, Olivia May. School of Dentistry, University of Michigan, Ann Arbor, MI, USA

20  #338  BDNF DEPENDENT GENICULATE GANGLION NEURONS ARE RESCUED IN BAX KNOCKOUT MICE. Araj Patel¹, David Katz², Robin Krimm¹. ¹University of Louisville, Louisville, KY, USA; ²Case Western Reserve University, Cleveland, OH, USA

21  #339  Are we mixing odorants or odors? Malin Brodin¹, Per Moeller¹, Mats Olsson¹. ¹Dept. of Psychology, Uppsala University, Uppsala, Sweden; ²Dept. of Food Science, Copenhagen University, Copenhagen, Denmark

22  #340  Evidence for blending in odor mixtures. Thierry THOMAS-DANGUIN¹, Elodie LE BERRE¹, Samy BARKAT², Gerard COUREAUD³, Gilles SICARD². ¹FLAVIC, INRA-ENESAD-UB, DIJON, France; ²Neurosciences et Systemes Sensoriels, CNRS-UCB Lyon 1, LYON, France; ³Centre European des Sciences du Gout, CNRS-UB-INRA, DIJON, France

23  #341  Adaptation Study of 2-Methylisoborneol odors. Anne Kurtz¹, Harry Lawless², Terry Acre³. ¹Food Science & Technology, Cornell University, Geneva, NY, United States; ²Food Science, Cornell University, Ithaca, NY, United States

24  #342  Continuous intensity evaluation for odorants and quantitative characterization of adaptation. TOMOKO MATSUBASA¹, YASUSHIRO GOMI¹, SACHIHO SAITO¹, TATSU KOBAYAKAWA². ¹Technology Research Institute, TOKYO GAS CO., LTD, YOKOHAMA, Japan; ²Institute for Human Science and Biomedical Engineering, National Institute of Advanced Industrial Science and Technology (AIST), TSUKUBA, Japan

25  #343  Proper times for odor detections. Hiroko Mochizuki-Kawai¹, Hideki Toda¹, Nao Goto¹, Tatsuru Kobayakawa¹. ¹National Institute of Advanced Industrial Science and Technology (AIST), Institute for Human Science and Biomedical Engineering, Tsukuba, Japan; ²National Institute of Floricultural Sciences (NIFS), National Agriculture and Food Research Organization (NARO), Tsukuba, Japan


27  #345  Optimal one odorant choice method and its application to the simple version of the odor stick identification test (OSIT). Hideki Toda¹, Nao Goto¹, Tateki Miwa¹, Sachiko Saito¹, Tatsu Kobayakawa¹. ¹Institute for Human Science and Biomedical Engineering, National Institute of Advanced Industrial Science and Technology, Tsukuba, Japan; ²Department of Otorhinolaryngology, Kanazawa University Graduate School of Medical Science, Kanazawa, Japan

28  #346  Working memory across nostrils. Yaara Yeshurun, Rehan Khan, Yadin Dudai, Noam Sobel. Neurobiology, Weizmann Institute of Science, Rehovot, Israel

29  #347  Are we mixing odorants or odors? Mats Olsson. Dept. of Psychology, Uppsala University, Uppsala, Sweden

30  #348  Hormonal Changes Induced By Smelling The Human Chemosignal ANDROSTADIONONE. Claire Wyart¹, Sarah Wilson¹, Jonathan Chen¹, Rehan Khan¹, Noam Sobel¹². ¹Helen Wills Neuroscience Institute, UC Berkeley, Berkeley, CA, United States; ²Neurobiology, Weizmann Institute, Rehovot, Israel

31  #349  withdrawn

32  #350  Inhibitors of nasal enzymes influence the perceived quality of odorants. Boris Schilling¹, Hans Gfeller¹, Heinz Koch¹, Thierry Granier¹, Xinlin Ding², Esther Locher¹. ¹Fragranz Res. Givaudan Schweiz AG, Duebendorf, Switzerland; ²NYSDOH, Wadsworth Center, Albany, NY, US.

33  #351  The psychophysical assessment of odor valence: Does an anchor-stimulus influence the hedonic evaluation of odors? Marion Schulteis, Andrea Gossler, Udo Reutlisch, Norbert Thuerau. Psychiatry and Psychotherapy, University of Erlangen-Nuremberg, Erlangen, Germany

34  #352  MRI of OLFACTORY WORKING-MEMORY IN PRIMARY OLFACTORY CORTEX. Christina Zelano¹, Jessica Montag¹, Rehan Khan¹, Noam Sobel¹². ¹Biophysics, UC Berkeley, Berkeley, CA, United States; ²Neurobiology, Weizmann Institute of Science, Rehovot, Israel
37 #353 A Study on Olfactory Lateralization: The Perception of Olfactory Intensity but not the Hedonic Estimation is Highly Lateralized. Norbert Thurauf, Udo Reitbächer, Agabi Vassiliadis, Jens Lunkenheimer, Birgit Lunkenheimer, Katrin Markovic. Psychiatry and Psychotherapy, University of Erlangen-Nuremberg, Erlangen, Germany

38 #354 OMP Deletion Alters Odorant Transduction Currents of Single Olfactory Sensory Neurons Revealed by Patch Clamp Recordings. Anderson Lee, Minghong Ma. Neuroscience, University of Pennsylvania, Philadelphia, PA, United States

39 #355 OMP controls the kinetics of the odor-induced response in mouse olfactory sensory neurons. Johannes Reisert, King-Wai Yau, Frank L. Margolis. 1 Monell Chemical Senses Center, Philadelphia, PA, United States; 2 Department of Neuroscience, Johns Hopkins University School of Medicine, Baltimore, MD, United States; 3 Department of Anatomy and Neurobiology, University of Maryland School of Medicine, Baltimore, MD, United States

40 #356 Regulation of olfactory transduction in lobster olfactory receptor neurons by phosphoinositides. Yuriy Bobkov, David Price, Barry Ache. Whitney Laboratory for Marine Bioscience, Center for Smell and Taste, and McKnight Brain Institute, University of Florida, Gainesville, FL, USA

41 #357 The Role of Phosphodiesterase 1C in Shaping Olfactory Sensory Neuron Responses. Katherine Cygnar, Haiqing Zhao. Dept. of Biology, Johns Hopkins University, Baltimore, MD, United States

42 #358 The Role of Calcium/Calmodulin-mediated CNG Channel Inhibition in Regulation of Olfactory Neuron Response. Yijun Song, Katherine Cygnar, Johannes Reisert, Haiqing Zhao. 1 Biology, Johns Hopkins University, Baltimore, MD, United States; 2 Monell Chemical Senses Center, Philadelphia, PA, United States

43 #359 Individual Olfactory Sensory Neurons Exhibit Mechanical Sensitivity. Lindsey Ciali-Santarceli, Xavier Grosmaire, Minghong Ma. Neuroscience, University of Pennsylvania, Philadelphia, PA, United States

44 #360 Physiological fingerprints of genetically-labeled vomeronasal neurons: Maintained firing requires interplay between BKCa and L-type Cav channels. Kyrikk Ukhavov, Tresle Leinfield-Zafall, Frank Zafall. 1 Whitney Laboratory, University of Florida, St. Augustine, FL, United States; 2 Institute of Physiology, University of Saarland, Homburg, Germany

45 #361 Activity-dependent regulation of connexin expression in the olfactory epithelium. Chunbo Zhang, Thomas Finger, Diego Restrepo. 1 Biology Division, BCPS, and CINNAR, Illinois Institute of Technology, Chicago, IL, USA; 2 Department of Cellular and Developmental Biology, Neuroscience Program and the Rocky Mountain Smell and Taste Center, University of Colorado Health Sciences Center, Aurora, CO, USA

46 #362 Olfactory epithelial and bulb recordings in the rat indicate that retrotratal olfaction is influenced by odorant solubility. John Scott, Lisa Sherrill, Maggie Phan. 1 Cell Biology, Emory University School of Medicine, Atlanta, GA, United States; 2 Nutrition and Health Sciences Program Division of Biological and Biomedical Science, Emory University, Atlanta, GA, United States

47 #363 Movement of pheromone into insect olfactory sensilla. Thomas Dykstra, Brandon O'Hara. Dykstra Laboratories, Inc., Gainesville, FL, United States

48 #364 In vivo Study of Anosmia Rat Models using Manganese Enhanced MRI. Hyun Jong Lee, Yoo Jeong Yim, Hun-Jong Dhoong, Jung Hee Lee. 1 Otorhinolaryngology, Samsung Medical Center, Seoul, Korea, Seoul, Korea; 2 Radiology, Samsung Medical Center, Seoul, Korea

49 #365 Use of sudan black to block lipofuchsin autofluorescence in olfactory epithelium immunofluorescent preparations. Virginia Carr, Isabelle Comte, Alan Robinson. 1 Otolaryngology - Head and Neck Surgery, Northwestern Univ., Chicago, IL, United States; 2 Children's Medical Institute for Education and Research, Chicago, IL, United States

50 #366 Establishing a toolkit to unravel odorant receptor-mediated signaling in male germ cells. Katharina Klase, Thomas Vetinger, Christian Wetzel, Marc. Spehr, Hanns Hatt. Cell Physiology, Ruhr University Bochum, 44780 Bochum, Germany

51 #367 Spatial Distribution of Transduction System with Nano-scale Resolution in Living Olfactory Cilia. Hiroko Takeuchi, Takashi Kurahashi. Frontier Biosciences, Osaka University, Osaka, Japan

52 #368 Optical recorded responses from the human nasal mucosa to chemosensory stimuli. Tadashi Ishimaru, Mandy Scheibe, Volker Guzioz, Jens Reden, Simona Negoiu, Thomas Hummel. 1 Otorhinolaryngology, University of Dresden Medical School, Dresden, Germany; 2 Otorhinolaryngology, Hoyster-machi ENT Clinic, Kanazawa, Japan
53  #369  Administration of drugs to the olfactory cleft. Mandy Scheibe, Christoph Bethge.

54  #370  Representation of the nose in the human somatosensory cortex: a functional magnetic resonance imaging study. Veronika Schoepf, Johanna May, Rainer Kopietz, Jessica Albrecht, Anna Maria Kleemann, Andrea Anzinger, Tatjana Schreder, Maria Demmel, Gunther Fesl, Martin Wiesmann. Dept. of Neuroradiology, University of Munich, Munich, Germany

55  #371  A physico-chemical metric for olfaction. Rafi Haddad, Rehan Khan, David Harel, Noam Sobel. Dept. of Computer Science and Applied Math, The Weizmann Institute of Science, Rehovot, Israel

56  #372  Discrimination of Carvone and Terpinen-4-ol Enantiomers Indexed by Odor Sample Time. Burton Slotnick. Psychology, University of South Florida, Tampa, FL, United States
Saturday, April 28, 2007

Registration: 7:30 am - 2:00 pm & 6:00 pm - 7:30 pm
Continental Breakfast: 7:30 - 9:00 am

8:00 am - 10:00 am  Slide Session
    Olfaction: Periphery
    South Ballroom

8:00 am - 12:30 pm  Poster Session Sat AM
    North Ballroom

10:30 am - 12:35 pm  Symposium
    Contact chemosensory perception: From receptor to behavior
    Chair/ Organizer: H. Amrein
    South Ballroom

12:30 pm - 02:30 pm  Clinical Luncheon with special guest: Dr. L. Chin from NIDCD
    Chair/ Organizer: C. Murphy
    The Keys

3:00 pm - 05:00 pm  Workshop
    Genomics approaches to study chemosensory receptors
    Chair/ Organizer: Y. Gilad
    South Ballroom

7:00 pm - 11:00 pm  Poster Session Sat PM
    North Ballroom

8:00 pm - 10:30 pm  PRESIDENTIAL SYMPOSIUM
    Chair/ Organizer: L. Tolbert
    South Ballroom

POSTER SESSIONS:
8:00 am - 12:30 pm
1-11:  Taste transduction
13-23: Taste and ingestive behavior
24-34: Olfaction: OB/AL coding/activity mapping
35-41: Olfaction: Beyond the olfactory bulb
42-44: Olfactory-based diagnostics and e-noses
45-51: Modulation of olfactory function

7:00 pm - 11:00 pm
1-14:  Taste Buds: Structure and function
15-24: Taste: Human psychophysical
25-28: Olfaction: Regeneration
29-36: OB/AL: Development, plasticity
37-43: ERPs: perception and disorders
44-51: Olfaction: Cognitive effects

9:30 #379

Functional evolution of odorant binding proteins in Drosophila melanogaster. Ping Wang1, Shanshan Zhou2, Richard Lyman1, Svetlana Shabalina1, Trudy Mackay1, Robert Anholt1, 2, Genetics, North Carolina State University, Raleigh, NC, USA; 2W. M. Keck Center for Behavioral Biology, North Carolina State University Raleigh, NC, USA; Zoology, North Carolina State University, Raleigh, NC, USA; National Center for Biotechnology Information, National Institutes of Health, Bethesda, MD, USA

10:30 #380
Taste reception in Drosophila. Anupama Dahanukar, Jae Young Kwon, Linnea A. Weiss, Jennifer Perry, John R. Carlson. MCD Biology, Yale University, New Haven, CT, United States

10:55 #381
Sex pheromone discrimination and taste receptor neurons in Drosophila males. Jean-Francois Ferveur, Fabien Lacaille, Claude Everaerts. Developpement et Communication Chimique, CNRS-Universite de Bourgogne, Dijon, France

11:20 #382
Gr genes and their role in taste and pheromone perception of Drosophila melanogaster. Hubert Amrein, Tetsuya Miyamoto. Molecular Genetics and Microbiology, Duke University, Durham, NC, United States

12:10 #384
Identification of candidate sour taste receptors in mammals. Hiroaki Matsunami. Molecular Genetics and Microbiology, Duke University Medical Center, Durham, NC, United States

Identification of the pheromone ligands and sensory neurons that mediate male-male aggression in the mouse. Lisa Stowers, Pablo Chamorro, Toby Martin, Kelly Flanagan, Darren Logan. Cell Biology, The Scripps Research Institute, La Jolla, CA, United States
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<th>#</th>
<th>Title</th>
<th>Authors</th>
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<tr>
<td>1</td>
<td>L-alanine CTA and threshold studies with T1R3 knockout mice.</td>
<td>Meghan Eddy, Clinton Veselis, Benjamin Eschle, Eugene Delay</td>
<td>Biology, University of Vermont, Burlington, VT, United States</td>
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<td>2</td>
<td>Laryngeal taste buds and airway chemoreceptors express little T1R3.</td>
<td>Marco Tizzano, Andrea Sbarbati, Francesco Osculati, Sami Damak, Robert F. Margolskee, Thomas E. Finger</td>
<td>Dept. Morpho-Biomed Sci, Univ. Verona, Verona, Italy; Dept. of Neuroscience, Mt Sinai Sch Med, NY, NY, USA; Current Addr., Nestle Res Ctr, Lausanne, Switzerland; Rocky Mt. Taste &amp; Smell Ctr., Univ. Colo Med Sch., Aurora, CO, USA</td>
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<td>3</td>
<td>TAS2R38 GENOTYPE, FUNDIFORM PAPILLAE AND SUPRATHRESHOLD TASTE RESPONSE</td>
<td>JE Hayes, LM Bartoshuk, JR Kidd, VD Duffy</td>
<td>Nutritional Sciences, U. of Connecticut, Storrs, CT, United States; Dentistry, U. of Florida, Gainesville, FL, United States; Genetics, Yale Univ, New Haven, CT, United States; Allied Health, U. of Connecticut, Storrs, CT, United States</td>
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<td>4</td>
<td>Interactions of bitter tastants with their TAS2R receptors.</td>
<td>Anne Brockhoff, Maik Behrens, Giovanni Appendino, Christina Kuhn, Bernd Buhe, Wolfgang Meyerhof</td>
<td>Molecular Genetics, German Institute for Human Nutrition, Nuthetal, Germany; DISCAFF, University of Eastern Piedmont, Novara, Italy</td>
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<td>5</td>
<td>Derivatives of Denatonium Benzoate - bitter taste of humans vs monkeys.</td>
<td>Tiffany Otto, Alexey Kopsos, Yiwen Wang, Viktoria Danilova, Göran Hellekant.</td>
<td>Dept Physiology&amp;Pharmacology, University of Minnesota Medical School, Duluth, MN, MN, United States</td>
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<td>6</td>
<td>Glycosylation of human bitter taste receptors.</td>
<td>Maik Behrens, Claudia Reichling, Wolfgang Meyerhof</td>
<td>Molecular Genetics, German Institute of Human Nutrition, Nuthetal, Germany</td>
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<td>7</td>
<td>Response characteristics of the rat chorda tympani nerve to static and dynamic lingual thermal stimulation.</td>
<td>Jessica Lee, Robert Bradley.</td>
<td>Dept. Biologic &amp; Materials Sciences, School of Dentistry, University of Michigan, Ann Arbor, MI, United States</td>
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<td>8</td>
<td>Single fiber responses of the chorda tympani nerve to umami taste compounds in wild type, T1R3-KO and TRPM5-KO mice.</td>
<td>Keiko Yasumatsu, Ryusuke Yoshida, Yoshihiro Murata, Sami Damak, Robert F. Margolskee, Yuzo Ninomiya</td>
<td>Dept. Morpho-Biomed Sci, Univ. Verona, Verona, Italy; Dept. of Neuroscience, Mt Sinai Sch Med, NY, NY, USA; Current Addr., Nestle Res Ctr, Lausanne, Switzerland; Department of Neuroscience, Mount Sinai School of Medicine, New York, NY, USA</td>
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<td>9</td>
<td>Triphenylphosphine oxide (TPPO) is a potent, selective inhibitor of the human transient receptor potential M5 (hTRPM5) monovalent cation channel.</td>
<td>Robert Bryant, Paul Lee, Tulu Buber, Karnail Atwal, Ivana Bakj, Heather Devantier, Cynthia Hendrix, Dennis Sprouls, Rok Cerne, Rosa Cortes, Kyle Palmer.</td>
<td>Redpoint Bio, Cranbury, NJ, United States</td>
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<td>POLYCOSE AND STARCH PREFERENCES IN TRPM5, GUSTDUCIN AND P2X KNOCKOUT MICE.</td>
<td>A. Scalamiti, J.I. Glendenning, R.M. Margolskee.</td>
<td>Psychology, Brooklyn College of CUNY, Brooklyn, NY, United States; Biological Sciences, Barnard College, New York, NY, United States; Neuroscience, Mount Sinai School of Medicine, New York, NY, USA</td>
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<td>12</td>
<td>Thymol and related phenols are potent activators of the transient receptor potential channel, TRPA1.</td>
<td>S. Paul Lee, Tulu Buber, Heather Devantier, Daniel Long, R. Kyle Palmer, Rosa Cortes, Rok Cerne, Ray Salemme, Robert Bryant.</td>
<td>Discovery Research, Redpoint Bio, eRANBY, NJ, United States</td>
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<td>13</td>
<td>Preferences for basic tastes in 6- and 12-month-old infants.</td>
<td>C. Schwartz, S. Issanchou, S. Nicklaus. UMR1129 FLAVIC, INRA, Dijon, France</td>
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<td>14</td>
<td>Early milk-feeding history influences infants' taste preferences.</td>
<td>Catherine Forestell, Lindsay Morgan, Lauren Yourshaw, Gary Beauchamp, Julie Menella.</td>
<td>Monell Chemical Senses Center, Philadelphia, PA, United States</td>
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<td>15</td>
<td>Smoking and Breastfeeding.</td>
<td>Julie Menella, Lauren Yourshaw, Lindsay Morgan.</td>
<td>Monell Chemical Senses Center, Philadelphia, PA</td>
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16  #400  Cigarette Smoking, Family History of Alcoholism and Sweet Taste in Women. M. Yanina Pepino. Monell Chemical Senses Center, Philadelphia, PA, United States

17  #401  Correlations among Superstasters - A possible link to the Freshman 15. Chrissie Faust. Psychology, Millsaps College, Jackson, MO, United States

18  #402  DAMAGE TO TASTE (OTITIS MEDIA) IS ASSOCIATED WITH DYSGEUSIA, INTENSIFIED PAIN EXPERIENCE AND INCREASED BODY MASS INDEX. Linda Bartoshuk¹, Frank Catalanotto¹, Valerie Duffy¹, Howard Hoffman¹, Henrietta Logan¹, Vicki Mayo¹, Derek Snyder¹, ¹Commun Dent & Behav Sci, Smell & Taste Center, U Florida, Gainesville, FL, United States; ¹Allied Health, U Connecticut, Storrs, CT, United States; ¹NIDCD, NIH, Bethesda, MD, United States; ¹Neuroscience, Yale U Sch Med, New Haven, CT, United States

19  #403  Assessment of taste changes in human patients and rats following weight-reduction surgery. A. Rebecca Glatt¹, David Tichansky¹, Atul Madan¹, Jason Harper¹, John Boughter¹. ¹Anatomy & Neurobiology, University of Tenn. Health Sci. Center, Memphis, TN, United States; ²Surgery, University of Tenn., Memphis, TN, United States

20  #404  EFFECTS OF CHOCOLATE CONSUMPTION ON COGNITION, MOOD AND WORKLOAD. Rosanna Drake, Daniel Felbaum, Chris Huntley, Alex Reed, Lauren Matthews, Bryan Radowenbush. Psychology, Wheeling Jesuit University, Wheeling, WV, United States

21  #405  Hunger ratings among restrained eaters with high and low disinhibition. Nobuko Kemmotsu¹,², Lori Haase¹,², Marla Yidonoy¹, Margaret Chen¹, Erin Green¹, Aaron Jacobson¹, Claire Murphy¹. ¹Department of Psychology, San Diego State University, San Diego, CA, USA; ²University of California, San Diego, CA, USA

22  #406  Experience induced increases in discrimination for the familiar taste of a sugar require very brief experience and reverse within 22 - 34 days. K.M. Gonzalez, C. Peo, A. Whalen, V. Mike, T.P. Livdahl, L.M. Kennedy. Lasry Bioscience Center, Clark Univ., Worcester, MA, USA

23  #407  EFFECTS OF VIDEO GAME PLAY ON SNACKING BEHAVIOR. Trevor Cessna, Alex Reed, Ryan hunker, Bryan Radowenbush. Psychology, Wheeling Jesuit University, Wheeling, WV, United States

24  #408  Mitral/Tufted Cell Odor Responses in Freely Moving Mice. Wilder Doucette, Diego Restrepo. Neuroscience, UCDHSC, Aurora, CO, United States

25  #409  Optical imaging of postsynaptic odorant representations in the olfactory bulb. Max Fletcher¹, Arjun Masurkar¹, Junling Xing¹, Wenlui Xiong¹, Shin Nagayama¹, Hiroki Mutoh², Riota Homma², Lawrence Cohen¹, Thomas Knopfel¹, Wei Chen¹. ¹Neurobiology, Yale University School of Medicine, New Haven, USA; ²Laboratory for Neuronal Circuit Dynamics, RIKEN Brain Science, Wako-shi, Japan; ²Cellular and Molecular Physiology, Yale University School of Medicine, New Haven, CT, USA

26  #410  Glomular Response Mapping Using Virtual Projection Neuron Populations: A Step Towards Representing Whole Antennal Lobe Activity in Realtime. E. M. Staudacher¹, W. Huetteroth², H. L. Parsons¹, J. Schachtner², K. C. Daly¹. ¹Biology, West Virginia University, Morgantown, WV, USA; ²Biologie, Philippus-Universität Marburg, Marburg, Germany

27  #411  Dynamic odor perception and neural code in an insect. Iori Ito¹, Chik-ying Ong¹,², Banabidum Ramani¹,², Mark Stopfer¹. ¹NICHD, NIH, Bethesda, MD, USA; ²Biochemistry, Chinese Univ. of Hong Kong, Hong Kong, China; ³NIST, Gaithersburg, MD, USA

28  #412  Enantiomers and their neuronal activation patterns in the olfactory bulb. Raimund Apfelbach, Swetlana Deutsch. Zoology, University of Tuebingen, Tuebingen, Germany

29  #413  Temporal dynamics of receptor neuron input to the olfactory bulb of behaving rats. Ryan M. Carey, Justus V. Verhagen, Daniel W. Wesson, Matt Wachowiak. Depts. of Biomedical Engineering and Biology, Boston University, Boston, MA, United States

30  #414  Toward an Estimate of the Number of Receptor Neuron Spikes Needed for Odorant Identification. LB Cohen¹, Ryota Homma¹, EK Kosmidis¹, Steve Youngentob². ¹Physiology, Yale University, New Haven, CT, US; ²Neuroscience & Physiology, SUNY Upstate Medical University, Syracuse, NY, US
1Biology, University of Virginia, Charlottesville, VA, United States;  
2Mechanical and Aerospace Engineering, University of Virginia, Charlottesville, VA, United States

1Physiology, Yale, New Haven, CT, US;  
2Neurobiology, TUM, Munich, Germany

1NBCB, Cornell University, Ithaca, NY, USA;  
2Psychiatry, Weill Cornell Med. Coll., New York, NY, USA

34 Neural basis of latent inhibition to odors in honeybees. Fernando Locatelli, Giovanni Galizia, Brian Smith.  
1School of Life Sciences, ASU, Tempe, AZ, United States;  
2Lehrstuhl für Neurobiologie, Universität Konstanz, Konstanz, Germany

Psychology, University of Virginia, Charlottesville, VA, United States

36 Spatial organization of activity in the anterior olfactory nucleus. Elizabeth Meyer, Rachel Kay, Kurt Illig, Peter Brunjes.  
1Department of Psychology, University of Virginia, Charlottesville, VA, United States;  
2Department of Biology, University of Virginia, Charlottesville, VA, United States

37 The medial amygdala receives a direct input from ventrally located mitral cells in the main olfactory bulb of mice. Ningdong Kang, Alice Wey, James Cherry, Michael Baum.  
1Biology, Boston University, Boston, MA, United States;  
2Psychology, Boston University, Boston, MA, United States

38 Medial Amygdala Response to Territorial, Reproductive and Predator Stimuli. Chad Samuelsens, C. Blake, M. Meredith.  
Biology, Florida State University, Tallahassee, FL, United States

Neuroscience Program, UCDHSC, Aurora, CO, United States

40 Pattern completion and separation in anterior piriform cortex. Donald Wilson.  
Zoology, Univ Oklahoma, Norman, OK, US

41 Prirform to orbitofrontal transthalamic pathway involved in olfactory attentional processing. Jane Plailey, James Howard, Jay Gottfried.  
CNADC, Northwestern University, chicago, IL, United States

42 A nanotube-based electronic nose. Reza Naima, Rehan Khan, Brad Johnson, Jean-Christophe Gabrieli, Ying-Lan Chang, Qian Wang, Noam Sobel.  
1Bioengineering, UC Berkeley, Berkeley, CA, USA;  
2Nanox Inc., Emeryville, CA, USA;  
3Neurobiology, Weizmann Institute of Science, Rehovot, Israel

43 The dog can detect the expiration-odor of cancer patient. Yuji Satou, Kekiichi Tonosaki.  
1Dog Center, OJPC, Tateyamash, Japan;  
2Dept of oral Physiology, Meikai univ., Sch of dentistry .. Sakatashi, Japan

Monell Chemical Senses Center, Philadelphia, PA, United States

45 Folate Chemoreceptor and Lipid Rafts in Paramecium. Y. Pan, S.D. Weeraratne, J. Yano, J.L. Van Houten.  
Biology, University of Vermont, Burlington, VT, United States

Biology, University of Vermont, Burlington, VT, United States

47 The Effect of Periodic Input on Antennal and Antennal lobe responses in the Moth Manduca sexta. Shrejoy Tripathy, Oakland Peters, Kevin Daly.  
1Biomedical Engineering, Johns Hopkins, Baltimore, MD, United States;  
2Biology, West Virginia University, Morgantown, WV, United States

48 OMP MECHANISM OF ACTION: A MODEL. Frank L. Margolis, Steven Youngentob, Joyce Margolis, Paul Kent, Jae Hyung Koo.  
1Anat. and Neurobiol., Univ. of MD Sch. of Med., Baltimore, MD, United States;  
2Neurosci. and Physiol., Upstate Med. Sch., Syracuse, NY, United States;  
3Neural., Upstate Med. Sch., Syracuse, NY, United States
49  #433  IP3 receptors play a critical role in the secretion of olfactory mucosal proteins. Nanaho Fukuda, Katsuhiko Mikoshiba. RIKEN Brain Science Institute, Saitama, Japan

50  #434  withdrawn


Saturday, PM

1230pm–230pm  Clinical Luncheon
Chair/Organizer: C. Murphy
The Keys
Special Lecturer: Dr. L. Chin from NIDCD will give a presentation entitled “Translational and clinical research program (including clinical trials) at NIDCD”.

3:00pm–5:00pm  WORKSHOP
Genomics approaches to study chemosensory receptors
Chair/Organizer: Y. Gilad
South Ballroom
In studying the genetics of chemosensory perception, tools such as bioinformatics analysis, comparative genomics, and gene expression shed light on the evolution of the chemical senses and species-specific selective pressures that shaped the repertoire of chemosensory receptor genes. This workshop will discuss these types of analysis and its usefulness in inferring the function of orphan receptors and identifying novel protein structure domains.

3:00  #436  Evolution of vertebrate T1R and T2R taste receptor genes.
Jianzhi Zhang. Dept. Ecology & Evol. Biol, University of Michigan, USA, United States

3:30  #437  Olfactory receptor genomics: ancient roots and recent demise.
Idan Menashe1, Ronny Aloni1, Tsvia Glendler1, Doron Lancet1.
1Department of Molecular Genetics, Weizmann Institute of Science, Rehovot, Israel; 2Division of Cancer Epidemiology and Genetics, NCI/NIH, Rockville, MD, United States

4:00  #438  Inter-species differences in olfactory and vomeronasal receptor gene families. Janet Young1, Hillary Massa1, Leo Goodstadt1, Chris Ponting2, Barbara Trask1. 1 Div. Human Biology, Fred Hutchinson Cancer Research Center, Seattle, WA, United States; 2Dept. Human Anatomy and Genetics, University of Oxford, Oxford, UK

4:30  #439  Characterizing the expression of human olfactory receptor genes using a novel DNA microarray. Yoav Gilad. Human Genetics, University of Chicago, Chicago, IL, USA
800pm—1030pm  PRESIDENTIAL SYMPOSIUM
21st-century methods for visualizing, monitoring, and activating neurons in vivo.
Chair/Organizer: L. Tolbert
South Ballroom

8:00  Introduction. Leslie Tolbert

8:15  Watching neurons in fluorescent mice. Joshua Sanes, Jean Livet, Jeff Lichtman. Dept. Mol. Cell Biol. Center for Brain Science, Harvard University, USA, United States

8:50  Multimodal fast optical interrogation of neural circuits. Karl Deisseroth. Dept. Bioengineering, Stanford University, USA, United States

9:25  Seeing what the nose tells the brain: using optical probes in olfaction. Matt Wachowiak. Dept. Biology, Boston University, USA, United States

10:00  Discussion. Leslie Tolbert

7:00pm—11:00pm  POSTER SESSION SAT PM
North Ballroom

1  #445  Effects of Mitochondrial Ca2+ Transport on Ca2+ Responses in Taste Cells. Kyle Hacker, Kathryn Medler. Dept. of Bio. Sci., University at Buffalo, Buffalo, NY, USA

2  #446  Are Type III taste cells normal in P2X2/P2X3 double knockout mice? Leslie Stone-Roy, Tod Clapp, Sue Kinnamon. Biomedical Sciences, Colorado State University, Fort Collins, CO, United States

3  #447  The sour taste receptor, PKD2L1, is expressed by type III taste cells in the mouse. Shinji Kataoka1, Anne Hansen1, Yoshiro Ishimaru2, Hiroaki Matsunami3, Thomas Finger1. 1Rocky Mtn. Taste & Smell Ctr., Univ. Colo Med Sch., Aurora, CO, United States; 2Molecular Genetics and Microbiology, Duke University Medical Center, Durham, NC, United States

4  #448  Responses of mouse fungiform taste cells with action potentials to glutamate. Yoshihiro Murata, Ryusuke Yoshida, Toshiaki Yasuo, Keiko Yasumatsu, Noriatsu Shigemura, Yuzo Ninomiya. Sect. of Oral Neurosci., Grad. Sch. of Dental Sci., Kyushu Univ., Fukuoka, Japan

5  #449  Responses of taste receptor cells and presynaptic taste cells to taste stimuli. Seth M Tomchik, Craig D Roberts, Elizabeth Pereira, Robert Stimac, Stephen D Roper. Physiology & Biophysics, University of Miami Miller School of Medicine, Miami, FL, United States

6  #450  Response properties of mouse taste receptor cells within a single taste bud of fungiform papillae. Ryusuke Yoshida, Yoshihiro Murata, Keiko Yasumatsu, Noriatsu Shigemura, Yuzo Ninomiya. Grad. Sch. of Dental Sci., Kyushu University, Fukuoka, Japan

7  #451  Voltage-dependent potassium channels expressed in taste buds. Makoto Ohnomo, Ichiro Matsumoto, Takumi Misaka, Keiko Abe. Department of Applied Biological Chemistry, The University of Tokyo, Tokyo, Japan

8  #452  Arachidonic acid influences electrical excitability of taste receptor cells. Fang-li Zhao, Scott Herness. College of Dentistry, The Ohio State University, Columbus, OH, United States

9  #453  Norepinephrine uptake but not synthesis in mouse taste buds. Gennady Dvoryanchikov, Seth M Tomchik, Nirupa Chaudhari. Physiology & Biophysics, University of Miami Miller School of Medicine, Miami, FL, United States

10  #454  Inflammation-Stimulated Signal Transduction Pathways in Taste Bud Cells. Hong Wang, Minliang Zhou, Joseph Brand, Lijuan Huang. Monell Chemical Senses Center, Philadelphia, PA, United States

11  #455  Taste cells secrete ATP via Pannexin 1 hemichannels. Yutaka Maruyama1, Yi-Jen Huang1, Elizabeth Pereira1, Nirupa Chaudhari1,2, Stephen D. Roper1,2. 1Department of Physiology & Biophysics, University of Miami, Miami, FL, USA; 2Program in Neuroscience, University of Miami, Miami, FL, USA

12  #456  THE ROLE OF PANNEXIN 1 HEMICHANNELS IN ATP RELEASE FROM MOUSE TASTE RECEPTOR CELLS. Y. Anthony Huang1, Yutaka Maruyama1, Guennadi Dvoryanchikov1, Elizabeth Pereira1, Nirupa Chaudhari1,2, Stephen Roper1,2. Physiology & Biophysics, Miller School of Medicine. University of Miami, Miami, FL, US; 2Program in Neuroscience, Miller School of Medicine, University of Miami, Miami, FL, US
Co-expression patterns of SNAP-25 with neuropeptides, GAD, and NCAM suggest its expression in multiple cell types. Scott Herness, Paul El Dahdah, Tamara Kolli, Yu Cao. College of Dentistry, The Ohio State University, Columbus, OH, United States

Concentration-dependent effects of Shh and agonist on taste papilla formation. Hong-Xiang Liu, Charlotte Mistretta. School of Dentistry, Univ. Mich., Ann Arbor, MI, USA

Bitterness of iso-alpha-acids is localized to posterior oral cavity and is enhanced by the addition of NaGlucinate. Paul Breslin, Suzanne Alarcón, Catherine Peyrot Des Gachons. Monochem Sens Ctr, Phila, PA, United States

Spatial summation of taste revisited. Barry Green, Lenka Urban, Juyun Lim. The John B. Pierce Laboratory, New Haven, CT, USA

ADAPTATION TO SUCROSE AND NACl TRACKED DISCRETELY OR CONTINUOUSLY. Marion Frank1, Kelly Burger2, Miao-Fen Wang2, Lawrence Marks2. 1Oral Health & Diagnostic Sciences, University of Connecticut Health Center, Farmington, CT, United States; 2John B. Pierce Laboratory, New Haven, CT, United States

Chlorhexidine induced salt-taste distortions and stimulus cation valency. Aiman Johar1, Marion Frank1, Janenee Gent2. 1Neurosciences, Oral Health & Diagnostic Sciences, University of Connecticut School of Dental Medicine, Farmington, CT, United States; 2Epidemiology and Public Health, Yale University School of Medicine, New Haven, CT, United States

Detection and Recognition Thresholds For Sucrose and Quinine HCI for Moderate Dry Mouth Sufferers (MDMS) and Sjögren's Syndrome Sufferers (SS). Marie Richardson1, Shireen Uppal1, Steve Alexander1, Phil Stern2. 1CH R&D, GlaxoSmithKline, Weybridge, UK; 2CH R&D, GlaxoSmithKline, Parsippany, NJ, US

Examination of Taste Recognition Thresholds with Edible Taste Strips. Si Lam1, Nabil Sayed1, Susan Georgekutty1, M. Andrew Yanaka1, and Gregory S. Smutzer1,2. 1Biology Department, Temple University, Philadelphia, PA, USA; and Smell and Taste Center, University of Pennsylvania School of Medicine, Philadelphia, PA, USA

A Test for Gustatory Function. Gregory Smutzer1,2, Lloyd Hastings3, Tu-Quyen Hoang1, Jennifer X. Yao1, Laura K. Pham1, and My Vinh Cong1. 1Biology Dept., Temple University, Philadelphia, PA, USA; 2Smell and Taste Center, University of Pennsylvania School of Medicine, Philadelphia, PA, USA; 3Osmic Enterprises Inc., Cincinnati, OH, USA

MODIFYING BITTERNESS DEPENDS ON VEGETABLE TYPE AND PROP TASTING. G. Napoleon1, JE Hayes2, BS Sullivan1, VB Duffy1,2. 1Allied Health Sciences, University of Connecticut, Storrs, CT, United States; 2Nutritional Sciences, University of Connecticut, Storrs, CT, United States

The relationship between caffeine, taste and anxiety. Lucy Donaldson1, Tom Heath1, Emma Richardson1, Charlotte Kenyon1, Victoria Smith1, David Nutt2, Jan Melichar2. 1Physiology, University of Bristol, Bristol, United Kingdom; 2Psychopharmacology, University of Bristol, Bristol, United Kingdom

SENSORY PERCEPTION AND CHARACTERIZATION OF NOVEL SENSORY EVOKING FLAVOR INGREDIENTS. Beverly J. Tepper1, Yvonne Koeliker1, Carter Green1. 1Food Science, Rutgers University, New Brunswick, NJ, United States; 2Takasago Intl Corp, Rockleigh, NJ, United States

Transsynaptic effects and topographic re-innervation of olfactory bulb after binge alcohol. Maria Ukhanova, Frank L. Margolis. Dept of Anatomy and Neurobiology, University of Maryland Sch of Med, Baltimore, MD, United States

Impact of apo-E deficiency on regeneration of olfactory receptor neurons post injury in mice. Britto Nathan1, Ikemefuna Nwosu1, Salina Gaibre1, Sreenivas Namapaneni1, Robert Struble2. 1Biological Sciences, Eastern Illinois University, Charleston, IL, United States; 2School of Medicine, Southern Illinois University, Springfield, IL, United States

Regeneration of the olfactory nerves following mild and severe injury and efficacy of dexamethasone treatment. Masayoshi Kobayashi1,2, Yuichi Majima1, Richard Costanzo1. 1Physiology, Virginia Commonwealth University School of Medicine, Richmond, VA, USA; 2Otoralnaryrgology-Head & Neck Surgery, Mie University Graduate Sch. of Medicine, Tsu, Mie, Japan

29  #473  INTEGRATION OF ADULT-GENERATED GRANULE CELLS INTO SYNAPTIC CIRCUITS. Mary C. Whitman, Charles A. Greer. Neurosurgery and Neurobiology, Yale, New Haven, CT, United States

30  #474  GABA modulates ventral migration of subventricular zone progenitors in neonatal mice. Y.C. Hsieh, S. Bovetti, A.C. Puche. University of Maryland School of Medicine, Baltimore, MD, USA

31  #475  BDNF immunoreactive periglomerular cells may modulate survival and plasticity of neurons in the olfactory bulb. T. Mast, K C Bija, D A Fadool. Biological Sciences, Programs in Neuroscience and Molecular Biophysics, Florida State University, Tallahassee, FL, U.S.A.

32  #476  Canonical Wnt Signaling Defines A Novel Cell Population in the Mouse Olfactory Bulb. Tiara Booker-Dwyer, Sarah Hirsh, Haiping Zhao. Biology, Johns Hopkins University, Baltimore, MD, USA

33  #477  DEVELOPMENT OF THE GLIAL INVESTMENT OF GLOMERULI IN THE DROSOPHILA OLFATORY LOBE. Lynne Oland, John Biebelhausen, Leslie Tolbert. A.R.L. Division of Neurobiology, University of Arizona, Tucson, AZ, United States

34  #478  GLIAL IDENTITY OF NEURONAL STEM CELL NICHES IN THE OLFATORY MIDBRAIN OF ADULT SPINY LOBSTERS, PANULIRUS ARGUS. Manfred Schmidt, Charles Derby. Biology, Georgia State University, Atlanta, GA, United States

35  #479  Does acetylcholine play a role in olfactory bulb synaptogenesis and morphogenesis? Anamarie Ghatpande, Alan Gelperin. Monell Chemical Senses Center, Philadelphia, PA, United States

36  #480  Visualization and Manipulation of Mitral Cell Dentritic Maturation in vivo by Lentivirus. Dennis Hawisher, Ting-Wen Cheng, Qizi Gong. Cell Biology and Human Anatomy, University of California at Davis, Davis, CA, United States

37  #481  EXPECTANCIES ABOUT HARMFULNESS INFLUENCE EARLY ODOR SENSATIONS. Patricia Bulsing1, Monique Smeets1, Thomas Hummel1, Marcel Van den Hout1. 1Clinical and Health Psychology, Utrecht University, Utrecht, Netherlands; 2Smell and Taste Clinic, Dresden University, Dresden, Germany

38  #482  THRESHOLDS AND CHEMOSENSORY EVENT-RELATED POTENTIALS TO MALODORS: DIFFERENCES RELATED TO SEX AND AGE. Anita Chopra1, Arianne Baur2, Thomas Hummel2. 1Perception & Behaviour, Unilever Research and Development, Merseyside, UK; 2Otrolinolaryngology, University of Dresden Medical School, Dresden, Germany

39  #483  More precise measurements of olfactory event related potentials and magnetic fields. Tatsuko Kobayakawa1, Hideki Toda1, Nao Goto1, Sachio Akiyama2. 1Institute for Human Science and Biomedical Engineering, Advanced industrial science and technology (AIST), Tsukuba, Japan; 2National Agency for the Advancement of Sports and Health, Tokyo, Japan

40  #484  Olfactory sensitivity in euthymic bipolar patients. Simona Negoias1, Johannes Frasnelli1, Johannes Gerber2, Peter Braeunig1, Stephanie Krueger1. 1Smell and Taste Clinic, University of Dresden Medical School, Dresden, Germany; 2Dep. of Neuroradiology, University of Dresden Medical School, Dresden, Germany; 1Dep. of Psychiatry, Chemnitz Clinic, Chemnitz, Germany; 2Dep. of Psychiatry, University of Dresden Medical School, Dresden, Germany

41  #485  Orthonasal and retronasal perception of binary odor mixtures. Akiko ISHI1, Natacha ROUDNITZKY1, Moustafa BENSATI1, Thomas HUMMEL1, Catherine ROUBY2, Thierry THOMAS-DANGUIN1. 1FLAVIC, INRA, DJON, France; 2University of Dresden, Smell & Taste Clinic, DRESDEN, Germany; 2CNRS-UCB Lyon 1, Neurosciences et Systèmes Sensoriels, LYON, France

42  #486  Olfactory evaluation with olfactory event-related potentials and MRI in patients with olfactory dysfunction. Daofeng NI, Jianfeng Liu. Otolaryngology, Olfactory Research Lab, Beijing, China

43  #487  ADAPTATION/COMPENSATION IN TRIGEMINAL PROCESSING IN SUBJECTS WITH ACQUIRED ANOSMIA. B. Schuster, J. Frasnelli. Smell and Taste Clinic, Univ. of Dresden Medical School, Dresden, Germany
44 #488 COMPARISON OF VISUAL VS OLFACTORY DISTRACTIONS ON PAIN THRESHOLD AND TOLERANCE. Robert Bayley, Peter D'Amore, Lindsay Coyne, Kathryn Repicky, Daniel Felaubam, Bryan Raudenbush. Psychology, Wheeling Jesuit University, Wheeling, WV, United States

45 #489 DIFFERENTIAL EFFECTS OF CHOCOLATE AND COFFEE SCENTS ON ENHANCING COGNITIVE ABILITY AND CLERICAL OFFICE WORK PERFORMANCE. Daniel Felaubam, Justin Schmitt, Kristen Koval, Bryan Raudenbush. Psychology, Wheeling Jesuit University, Wheeling, WV, United States

46 #490 Dream and Recent Memory Narratives Reveal Differential Effects of Floral Odors. Patricia Wilson¹, Caroline Coffield², Estelle Mayhew², Jeannette Haviland-Jones². ¹Psychology, La Salle University, Philadelphia, PA, United States; ²Psychology, Rutgers, The State University of New Jersey, New Brunswick, NJ, United States

47 #491 Investigation of breathing parameters during odor perception and during olfactory imagery. Anna Maria Kleemann, Jessica Albrecht, Veronika Schöpf, Rainer Kopietz, Maria Demmel, Andrea Anzinger, Tatjana Schröder, Johanna May, Jennifer Linn, Martin Wiesmann. Neuroradiology, Ludwig-Maximilians-University, Munich, Germany

48 #492 Androstenol/andosterone may condition a human hormonal effect/behavioral affect. Linda Kelahan¹, Heather Hoffmann¹, James V. Kohl², Amber Shea². ¹Psychology, Knox College, Galesburg, IL, United States; ²Independent Researcher, Epworth, GA, United States; ²Applied Pheromone Research, LLC, Laguna Niguel, CA, United States

49 #493 Increase in anhedonia level in menopausal women is accompanied by a shift of olfactory function. C. Rouby, F. Bourgeat, M. Bensafi. Neurosciences et systemes Sensoriels, Universite Lyon I, Lyon, France

50 #494 Individual differences in processing olfactory information: comparing behavioral measures to self-report. Monique Smets¹, Hendrik Schifferstein², Sarai Boelema³. ¹Dept of Clinical and Health Psychology, Utrecht University, Utrecht, Netherlands; ²Dept of Industrial Design, Delft University of Technology, Delft, Netherlands

51 #495 Effect of Contextual Information on Short-Term Olfactory Memory. Naomi Streeter, Theresa White. Psychology, Le Moyne College, Syracuse, NY, United States

52 #496 Role of innate information in learning in the moth Manduca sexta. Chik-ying Ong¹², Mark Stopfer¹. ¹NICH, NIH, Bethesda, MD, USA; ²Biochemistry, Chinese University of Hong Kong, Hong Kong, China

53 #497 Behavioral and pharmacological evidence for two different mechanisms of habituation learning in the olfactory system. P.D. Magidson¹, A.M. McNamara¹, T.A. Cleland¹, D.A. Wilson², C. Linster¹. ¹Neurobio & Behav, Cornell University, Ithaca, NY, United States; ²Zoology, Univ of Oklahoma, Norman, OK, United States

54 #498 Is there a simple relationship between odour discrimination and odour memory. Per Moeller, Christian Wulff. Copenhagen University, Frederiksberg, Denmark
Sunday, April 29, 2007

Registration: 7:00 am – 3:00 pm & 6:00 pm – 8:30 pm
Continental Breakfast: 7:30 – 9:00 am

08:00 am - 10:00 am  Slide Session
Olfaction & Taste: Human & animal behavior
Chair/Organizer: K. Kelliher
South Ballroom

08:00 am - 12:30 pm  Poster Session Sun AM
North Ballroom

10:30 am - 12:35 pm  Symposium
Parallel processing by multiple olfactory subsystems
Chair/Organizer: M. Ma
South Ballroom

POSTER SESSIONS:
8:00 am – 12:30 pm
1-10: Taste in the CNS: The first synapse
11-18: Peripheral mechanisms and taste-based behavior
19-39: Olfaction: Human psychophysics II
40-46: Olfaction: Clinical aspects II
47-55: Olfaction: Imaging (fMRI etc.)

8:00 am - 10:00 am  SLIDE SESSION
Olfaction & Taste: Human & animal behavior
Chair/Organizer: K. Kelliher
South Ballroom

8:00
#499


8:15
#500

Wild type zebrafish that were selected due to their ability to discriminate structurally related odorants pass this ability on to their offspring. Nika Fon Leben, Tine Valentincic. Biology, University of Ljubljana, Ljubljana, Slovenia

8:30
#501

Entrainment of the Circadian System of the Newborn Rabbit by Pheromonal Cues. Robyn Hudson1, Estrella Chévez1, Hans Distel2, Ivette Caldelas1. 1Biologia Celular y Fisiologia, Universidad Nacional Autónoma de México, Instituto de Investigaciones Biomédicas, Mexico; 2Institut für Medizinische Psychologie, Universität München, Germany

8:45
#502

Pharmacologic antagonism of the oral aversive taste-directed response to capsaicin in a mouse brief access taste aversion (BATA) assay. Kyle Palmer, Daniel Long, Heather Devantier, Raymond Salemme, Robert Bryant. Redpoint Bio, Cranbury, NJ, United States

9:00
#503

Construction of a quantitative taste-preference assay system and investigation on abnormal feeding behaviors of transgenic taste-blind medaka fish. Yoshiko Aiho1, Akihiro Yasuoka2, Yuki Yoshida2, Takumi Misaka2, Satoshi Iwamoto2, Michiko Watanabe2, Keiko Abe1. 1University of Tokyo, Japan; 2Maebashi Institute of Technology, United States; 2Gifu University, United States
Odor Detection of Ozone and d-Limonene: Reactants in Indoor Spaces. William Cain¹, Roland Schmidt¹, Wolkoff Peder². ¹Chemosensory Perception Lab - Surgery, University of California - San Diego, La Jolla, CA, United States; ²Indoor Environment Group, National Institute of Occupational Health, Copenhagen, Denmark

Older Adults with the APOE4 Risk Factor for Alzheimer's Disease Show Altered Topographical Brain Response in an Odor Recognition Memory Task. Claire Murphy¹,2, Andrew Bender¹. ¹San Diego State University, San Diego, CA, USA; ²University of California, San Diego, CA, USA

Pleasantness of binary mixtures. Hadas Lapid¹,2, Rehan Khan¹, David Harel¹, Noam Sobel¹. ¹Neurobiology, Weizmann Institute of Science, Rehovot, Israel; ²CS and Applied Math, Weizmann Institute of Science, Rehovot, Israel

10:30am-12:35pm SYMPOSIUM
Parallel processing by multiple olfactory subsystems
Chair/Organizer: M. Ma
South Ballroom

In addition to the two major chemosensory systems (main olfactory epithelium and vomeronasal organ), there are reports of several subtypes of chemosensory neurons or epithelial cells using distinct signal transduction cascades. This symposium will focus on these newly reported olfactory subsystems.

10:30 #507 Olfactory Neurons Expressing TRPM5 are Involved in Sensing Semiochemicals. Diego Restrepo¹, Robert Margoluske², Gerald Donner³, Stefan W. Hell³, Anne Hansen³, Weihong Lin⁴. ¹Cell and Dev. Biology, UCDHSC, Aurora, CO, USA; ²Neuroscience, Mount Sinai School of Medicine, New York, NY, USA; ³Biophotonics, Max Planck Institute for Biophysical Chemistry, Göttingen, Germany; ⁴Biological Sciences, University of Maryland Baltimore County, Baltimore, MD, USA

10:55 #508 Detection of Carbon Dioxide at near Atmospheric Level by a Specialized Mammalian Olfactory Subsystem. Ji Hu¹, Chun Zhong¹, Cheng Ding¹, Quyi Chi¹, Hiroaki Matsunami¹, Minmin Luo¹. ¹National Institute of Biological Science, Beijing, China; ²Department of Genetics and Microbiology, Duke University Medical Center, Durham, NC, USA

11:20 #509

The Grueneberg ganglion — a novel chemosensory organ in the nose? Joerg Fleischer, Karin Schwarzenbacher, Nicole Hass, Stefanie Besser, Heinz Breer. Institute of Physiology, University of Hohenheim, Stuttgart, Germany

08:00 am - 12:30 pm POSTER SESSION SUN AM
North Ballroom

1 #512 THE MOUSE NST: A CYTOARCHITECTONIC ATLAS. Donald Ganekrow¹, Judith Ganekrow², Nicholas Warner¹, Mark Whitehead³. ¹Anatomy/Anthropology, Tel-Aviv University, Tel-Aviv, Israel; ²Dental Sciences, Hebrew University, Jerusalem, Israel; ³Surgery/Anatomy, UCSD, La Jolla CA, United States

2 #513 Immunohistological map of the Nucleus of the Solitary Tract (NTS) in Mice. Dianna L Bartel¹, Mark C Whitehead², Thomas E Finger¹. ¹Rocky Mtn Taste & Smell Ctr, Neurosci Prog, UCHSC, Aurora, CO, USA; ²Dept Surgery/Anatomy, UCSD, La Jolla, CA, USA

3 #514 Juxtaglomerular labeling as a technique for studying structure-function relationships in the nucleus of the solitary tract. Andre Roussin¹, Patricia Di Lorenzo¹, Andrew Rosen³, Laura Schweitzer². ¹Psychology, Binghamton University, Binghamton, NY, United States; ²Bassett Healthcare, Cooperstown, NY, United States

4 #515 Ultrastructural analysis of synaptic organization of chorda tympani nerve in normal developmental rats. Siting Wang, Alev Erisir, David Hill. Psychology, University of Virginia, Charlottesville, VA, United States

5 #516 PERSISTENT INJURY INDUCED DECREASE OF THE CHORDA TYMPANI TERMINAL FIELD IN THE NTS OF ADULT RATS. Rebecca Reddaway, David Hill. Psychology, University of Virginia, Charlottesville, VA, United States
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<th>Item Description</th>
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<td>Taste information from both sides of the tongue converge on the neurons in the nucleus of the solitary tract. Young K Cho, Cheng-Shu Li. Physiology and Neuroscience, Kangnung National University, Kangnung, Republic of Korea; Anatomy, Southern Illinois University, Carbondale, IL, USA</td>
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<td>9</td>
<td>Effects of paired pulse electrical stimulation of the chorda tympani nerve on taste-responsive cells in the nucleus of the solitary tract of the rat. Andrew M. Rosen, Patricia M. Di Lorenzo. Psychology, Binghamton University, Binghamton, NY, United States</td>
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<td>10</td>
<td>The role of Group III metabotropic glutamate receptors in transmission of gustatory inputs to the brainstem. R.M. Hallock, T.F. Finger. Rocky Mtn. Taste &amp; Smell Ctr. U Colo Med Sch, CO, United States</td>
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<td>11</td>
<td>Contribution of the T1R3 taste receptor to the response properties of central gustatory neurons in mice. Christian Lemon, David Smith, Robert Margolskee. Anatomy &amp; Neurobiology, Univ Tennessee, Memphis, TN, United States; Neuroscience, Mount Sinai School of Medicine, New York, NY, United States</td>
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<td>12</td>
<td>Gustatory cortex neurons respond to the reward value of sucrose independently of taste signaling. Ivan de Araujo, Albino Oliveira-Main, Tatiana Sotnikova, Raul Gainetdinov, Miguel Nicolelis, Sidney Simon. Neurobiology, Duke University, Durham, NC, USA; Cell Biology, Duke University, Durham, NC, USA</td>
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<td>13</td>
<td>RESPONSES OF THE CHORDA TYMPANI NERVE TO NACL FOLLOWING BRIEF DIETARY NA+ DEPRIVATION WITH NACL REPLITION. Joanne Vaughn, Robert Contreras. Psychology and Program in Neuroscience, Florida State University, Tallahassee, FL, United States</td>
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<td>14</td>
<td>Potassium deprivation produces a chloride appetite in the rat. Casey Guenthner, Stuart McCaughhey, Mike Tordoff, John-Paul Baird. Psychology, Amherst College, Amherst, MA, United States; Monell Chemical Senses Center, Philadelphia, PA, United States</td>
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<td>Amiloril Blunts the Saltiness of NaCl After Adaptation to NaCl. George Feldman, Gerard Heck. Internal Medicine, VCU, Richmond, VA, USA; Medical, VAMC, Richmond, VA, USA; Physiology, VCU, Richmond, VA, USA</td>
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<td>16</td>
<td>Oral factors mediating equimolar NaCl and LiCl taste discrimination in rats. Rebecca Dailey, John-Paul Baird. Psychology &amp; Neuroscience, Amherst College, Amherst, MA, United States</td>
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<td>17</td>
<td>After chorda tympani nerve transection, rats relearn a presurgically trained NaCl vs KCl taste discrimination using remaining gustatory input. Ginger Blonde, Mircea Gace, Enshe Jiang, Alan Specter. Dept. of Psychology and Ctr. for Smell and Taste, Univ. of Florida, Gainesville, FL, USA</td>
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<td>18</td>
<td>Differential effects of fructose and glucose on intake behavior in rats. Keichi Tonosaki. Dept of oral Physiology, Meitai univ., Sch of dentistry,. Sakatashi, Japan</td>
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<td>20</td>
<td>Effect of IMP on behavioral response to D-alanine in mice. Yuko Muruta, Alexander Bachmanov, Gary Beauchamp. NRIFS, Fisheries Research Agency, Yokohama, Japan; Monell Chemical Senses Center, Philadelphia, PA, USA</td>
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<td>21</td>
<td>The Nature of Fragrance Preferences in Young Women. Marie-Paule Bensoussan, Robin Freyberg. Psychology, Yeshiva University, New York, NY, United States</td>
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<td>22</td>
<td>The influence of fragrance on facial attractiveness and attraction. David Reynolds, Paraskevi Antonopoulou. Dept. of Psychology, University of Chester, UK</td>
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23 #534 Concentration-detection functions for odor from homologous n-alcohols. 1. Enrique Cometto-Muniz, William Cain, Michael Abraham, Ricardo Sanchez-Moreno. 1Chemosensory Perception Laboratory, Surgery (Otolaryngology), University of California, San Diego, La Jolla, CA, United States; 2Chemistry, University College London, London, United Kingdom

24 #535 Time-Intensity Tracking of Retronasal Smelling. Jennifer Lee, Bruce Halpem. 1Microbiology and Economics, Cornell University, Ithaca, NY, United States; 2Psychology and Neurobiotogy and Behavior, Cornell University, Ithaca, NY, United States

25 #536 Quantification of Stimuli and Perceived Changes in Odor Stimulus Intensity. Jason Bailie, Konstantin Rybaltsky, Robert Frank, Lloyd Hastings. 1Psychology, University of Cincinnati, Cincinnati, OH, United States; 2Osmic Enterprises, Inc., Cincinnati, OH, United States

26 #537 Sensory and Analytical Evaluations of Complex Mixtures: Effects of Prior Knowledge. Michelle Gallagher, Laura Sitvarin, George Preti, Pamela Dalton. 1Monell Chemical Senses Center, Philadelphia, PA, United States; 2Department of Dermatology, Philadelphia, PA, United States

27 #538 Flavor Adaptation: Effects of Ortho- vs Retro-Nasal Delivery. Dennis Coleman, Christopher Maute, Ryan McDermott, Pamela Dalton. 1Monell Chemical Senses Center, Philadelphia, PA, United States

28 #539 Odor Memory: The Importance of Verbal Labeling. Jason Bailie, Konstantin Rybaltsky, Lloyd Hastings, Blair Knauf, Sara Shollenbarger, Erica Mannia, Robert Gesteland, Robert Frank. 1Psychology, University of Cincinnati, Cincinnati, OH, United States; 2Osmic Enterprises, Inc., Cincinnati, OH, United States; 3Compusniff LLC, Cincinnati, OH, United States

29 #540 Taste is Abnormal in Parkinson's Disease and Suggests Cortical Spread. Mossadig Shah, Jacquie Deeb, Marina Fernando, Alastair Noyce, Leslie Findley, Elisa Visentin, Christopher Hawkes. 1Essex Neuroscience Centre, Queen's Hospital, Romford, United Kingdom

30 #541 characterization of odor-active and volatile organic compounds (VOC's) in human milk, vaginal secretion, and saliva. Andrea Buettner. 1Product safety and analytics, Fraunhofer IVW, Freising, Germany

31 #542 Relationship between Olfactory and Emotional Competencies. Denise Chen, Wen Zhou. Psychology, Rice University, Houston, TX, United States

32 #543 IF YOU DO NOT LIKE IT NOW, YOU WILL NOT LIKE IT LATER: SELF-ADAPTATION DOES NOT HAVE AN EFFECT ON Hedonic Valence of Some Odors. Claudia Damhuis, Charles J. Wysocki. 1Monell Chemical Senses Center, Philadelphia, PA, United States

33 #544 Parkinson's Disease and aging: same or different process? Christopher Hawkes. Essex Neuroscience Centre, Queen's Hospital, Romford, United Kingdom

34 #545 Predicting odour pleasantness from odourant structure: Cross-cultural validation. Rehan Khan, Chung-Hay Luk, Adeen Flinker, Amit Aggarwal, Hadas Lapid, Rafe Haddad, noam sobel. 1Neurobiology, Weizmann Institute of Science, Rehovot, Israel; 2Neuroscience, UC Berkeley, Berkeley, CA, USA

35 #546 Genetic contribution to androstene anosmia. Antti Knaapila, Hely Tuorila, Kaarina Silventoinen, Kaisu Keskitalo, Lynn F. Cherkas, Tim D Spector, Jaakko Kaprio, Markus Perola. 1University of Helsinki, Helsinki, Finland; 2National Public Health Institute, Helsinki, Finland; 3St Thomas' Hospital, Kings College London, London, The United Kingdom

36 #547 nasal airflow and odorant transport modeling in patients with chronic rhinosinusitis. Kai Zhao, Beverly J Cowart, Edmund A Pribitkin, Nancy E Rawson, David Rosen, Chris Klock, Aldona Vainius, Peter W Scherer, Pamela Dalton. 1Monell Chemical Senses Center, United States; 2Otolaryngology, Thomas Jefferson University, United States; 3Bioengineering, University of Pennsylvania, Philadelphia, PA, United States

37 #548 ABILITY OF GUM FLAVORS TO DISTRACT PARTICIPANTS FROM PAINFUL STIMULUS: DIFFERENTIAL EFFECTS OF RETRONASAL VS ORTHONASAL SCENT ADMINISTRATION. Robert Bayley, Lauren Matthews, Erin Street, Jude Almeida, Bryan Raudenbush. Psychology, Wheeling Jesuit University, Wheeling, WV, United States
38 #549 Relationship Between Striatal Dopamine Transporter Density and Olfactory Sensitivity. Maria Larsson¹, Lars Farde², Thomas Hummel³, Nina Erixon-Lindroth², Lars Bäckman³. ¹Department of Psychology, Stockholm University, Stockholm, Sweden; ²Department of Psychiatry, Karolinska Institutet, Stockholm, Sweden; ³Department of Otorhinolaryngology, Dresden Medical School, Dresden, Germany; ⁴Aging Research Center, Karolinska Institutet, Stockholm, Sweden

39 #550 Upright or supine: Body position matters for weak odors. Johan Lundstrom, Julie Boyle, Giulia de Prohetis, Marilyn Jones-Gotman. Montreal Neurological Institute, McGill University, Montreal, QC, Canada

40 #551 Effects of peppermint scent on diminishing smoking cravings and withdrawal symptoms. Daniel Felbaum, Jared Bloom, Trevor Cessna, Rosanna Drake, Bryan Raudenbush. Psychology, Wheeling Jesuit University, Wheeling, WV, United States


42 #553 Olfactory functions in first episode and chronic schizophrenia patients. Claudia I Rupp, Wolfgang W Fleischhacker, Georg Kemmler, Thomas Walch, Arne W Scholtz, Theresa Lechner, Hartmann Hinterhuber. Department of Psychiatry, Innsbruck Medical University, Innsbruck, Austria

43 #554 Olfactory deficits predict donepezil response in depressed MCI patients. Matthias Tabert, Gregory Pelton, D. P. Devanand. Geriatric Psychiatry, Columbia University/NYSPI, New York, NY, United States

44 #555 Recovery from salivary habitation is similar following presentation of a novel odor via the same route and the same odor via a novel route. Genevieve Bender¹,², Dana Small¹,², Simona Negoias³, Thomas Hummel³. ¹JB Pierce Laboratory, United States; ²Yale University School of Medicine, New Haven, CT, United States; ³Dresden Medical School, Dresden, Germany

46 #557 Central Presentation of Postviral Olfactory Disorder Evaluated by FDG PET. Jeong-Wun Kim¹, Yu Kyeung Kim². ¹Otorhinolaryngology, Seoul National University, Seongnam, South Korea; ²Nuclear Medicine, Seoul National University, Seongnam, South Korea

47 #558 Effect of diet on volatile profiles of urines and sweat in humans. Jae Kwak¹, Weiguang Yi¹, Alan Willse², George Preti¹, Julie Mennella¹, Allison Steinmeyer¹, Jon Wahl², Kunio Yamazaki¹, Gary Beauchamp¹. ¹Monell Chemical Senses Center, Philadelphia, PA, United States; ²Pacific Northwest National Laboratory, Richland, WA, United States

48 #559 An epidemiological study on the frequency of smell and taste impairment. Thomas Hummel¹, Mechthild Vennemann², Klaus Berger¹. ¹Smell & Taste Clinic, Dept. of O.R.L, Univ. of Dresden Medical School, Dresden, Germany; ²Dept. of Epidemiology and Social Medicine, Univ. of Münster, Münster, Germany; ³Dept. of Legal Medicine, Univ. of Münster, Münster, Germany

49 #560 Comparison of Block vs Event-Related Design in Olfactory fMRI Studies. Vishwadeep Ahiwalla, Greg Harrington, Birgit Kettenmann. Radiology, Virginia Commonwealth University, Richmond, VA, United States

50 #561 Sex differences in neuronal processing based on odor type. Julie Boyle¹, Johan Lundstrom¹, Bettina Pause¹, Robert Zatorre¹, Marilyn Jones-Gotman¹. ¹Montreal Neurological Institute, McGill University, Montreal, QC, Canada; ²Psychology, Heinrich-Heine-University, Duesseldorf, Germany

51 #562 Multivariate pattern analysis of odor quality in human piriform cortex. James Howard¹, John-Dylan Haynes¹, Jane Plaill¹, Todd Parrish², Jay Gottfried¹. ¹CNADC, Northwestern University, Chicago, IL, United States; ²Radiology, Northwestern University, Chicago, IL, United States; ³Human Cognitive and Brain Sciences, Max Planck Institute, Leipzig, Germany

52 #563 A Shock to the Senses: Enhanced Discrimination between Odor Enantiomers via Aversive Learning in an fMRI Paradigm. Wen Li¹, James Howard¹, Mark Benton¹, Emil Davchev¹, Vess Djové¹, Todd Parrish², Jay Gottfried¹,². ¹CNADC, Northwestern University, Chicago, IL, United States; ²Radiology, Northwestern University, Chicago, IL, United States; ³Neurology, Northwestern University, Chicago, IL, United States
53  #564 Olfactory discrimination acuity and thallium transport in the olfactory nerve of traumatic olfactory disturbance mice model. Hideaki Shiga1, Yayoi Kinoshita1, Koshin Washiyama1, Daisuke Ogawa2, Ryohei Amano2, Toshiaki Tsukatani1, Takaki Miwa1, Mitsuru Furukawa1. 1Otorhinolaryngology, Kanazawa University, Kanazawa, Japan; 2Forefront Medical Technology, Kanazawa University, Kanazawa, Japan

54  #565 fMRI Investigation of Central Olfactory Deficit in Early Alzheimer's Disease. Erin Zimmerman1, Paul Eslinger1,2, Robert Grunfeld1, Jeffrey Vesik1, Mark Meadowcroft1,3, Jianli Wang1, James Connor1, Michael Smith1, Qing Yang1. 1Radiology, Penn State University, Hershey, PA, United States; 2Neurology, Penn State University, Hershey, PA, United States; 3Neural & Behavioral Sciences, Penn State University, Hershey, PA, United States; 4Neurosurgery, Penn State University, Hershey, PA, United States; 5Novartis Institutes for Biomedical Research, Inc, Cambridge, MA, United States

55  #566 Brain activation of olfactory and trigeminal cortical areas is independent from perceptual strength - a fMRI study using nicotine vapor as chemosensory stimulus. J. Albrecht1, R. Kopietz1, A.M. Kleemann1, V. Schöpf1, G. Fesl1, A. Anzinger1, T. Schreder1, G. Kobal2, M. Wiesmann1. 1Dept. of Neuroradiology, Ludwig Maximilian University, Munich, Germany; 2Sensory Research R&T, Philip Morris USA Inc., Richmond, VA, USA