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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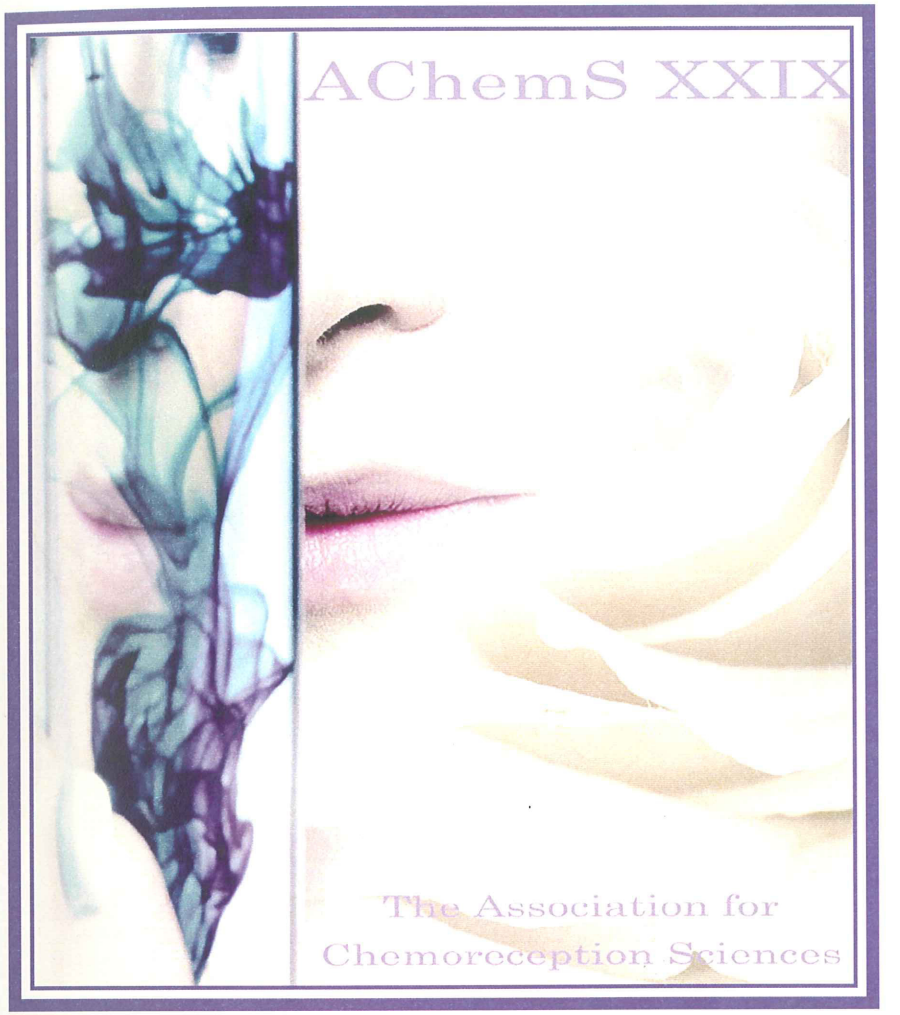

PROGRAM

APRIL 25-29, 2007 • SARASOTA, FLORIDA

AChemS Association for Chemoreception Sciences

AChemS extends special thanks and appreciation for grant support from:

The National Institute on Deafness and Other Communication Disorders and the National Institute on Aging, NIH

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A special thank you to Ghislaine Polak and the late Ernest Polak for support for the Polak Young Investigators Awards and the Junior Scientist Travel Fund.

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2007 Awardees

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

16th Annual Moskowitz 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, Lousiana 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 Aungst, University of Maryland

The Polak awards are funded by the Elsje Werner-Polak Memorial Fund in memory of our niece gassed by the Nazis in 1944 at age 7: Ghislaine 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-Francois 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	Phillip D Magidson	Nicole Kinzeler
Malin Brodin	Jason Nasse	Gregory R. Sturz
Cassandra Jacobs	Christine Pham	Trevor Cessna
Marion Schultheiss	Hanyi Zhuang	Thomas Veitinger
Abigail Milewski	Mary Whitman	Rafi Haddad
April R. Glatt	Patricia Bulsinig	Cecil Saunders
Carey Connelly	Jessica Albrecht	Ningdong Kang
Kaeli Samson	Bridget Sullivan	Clinton Veselis
Klyuchnikova Maria	Pamela Wall	Wilder Doucette
Allison Whalen	Katherine Cygnar	Nicolas Pirez
Marie-Paule Bensoussan	Wen Zhou	Ryan Carey
Naomi Streeter	Julie Boyle	Hyun Jong Lee
Marco Tizzano	Maggie Phan	Majid Ghaninia
Thomas Meusel	Kristin Rudenga	Tom McTavish

AChemS Executive Committee 2006-2007

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	Linda Barlow, PhD	University of Colorado

Program Committee 2006-2007

Trese Leinders-Zufall, PhD (Chair), Richard Doty, Debra Ann Fadool, Robert Lane, Michael Leon, Michael Meredith, Peter Sorensen, Steven St. John, Joel White, Tom Finger, Helen Treloar, Kevin Kelliher, Leslie Vosshall and Alan Nighorn.

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 lectureship is made possible by the generous support of the Givaudan Flavors Corporation.

#100 **Overachievers: What honey bees teach us about genes, brains, and behavior.** Gene Robinson. *Institute for Genomic Biology, Dept. Entomology, University of Illinois*

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*

Thursday, April 26, 2007 Continued

POSTER SESSIONS:

8:00 am – 12:30 pm	1-7:	Olfaction: Genomics, transcription, expression
	8-13:	Olfaction: Development
	14-26	Olfactory bulb circuity: anatomy
	27-30:	Olfactory bulb circuity: 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 am - 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 Michlig, Sami Damak, Johannes le Coutre. *Perception Physiology, Nestlé Research Center, Lausanne 26, Switzerland*

08:30 #104 **TypeIII taste bud cells express GABA-synthetic enzyme, GAD67.** Yumi Nakamura[1], Yuchio Yanagawa[2], Kunihiko Obata[3], Masahito Watanabe[4], Hiroshi Ueno[1]. *[1]Lab. Appl. Microbiol. & Biochem., Nara Women's Univ., Nara, Japan; [2]Grad. Sch. Med. and SORST, Gunma Univ., Gunma, Japan; [3]Brain Sci. Inst., RIKEN, Saitama, Japam; [4]Anatomy, Osaka Med. Col., Takatsuki, Japan*

08:45 #105 **Molecular markers in the developing solitary tract and nucleus.** Olivia L May[1], Goichi Tsukamoto[2], Robert M Bradley[1], Charlotte M Mistretta[1]. *[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 McCaughey[1], John-Paul Baird[2], Michael Tordoff[1]. *[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 Accolla[1,2], Brice Bathellier[1,3], Carl Petersen[2], Alan Carleton[1]. *[1]FPG, BMI, EPFL, Lausanne, Switzerland; [2]LSENS, BMI, EPFL, Lausanne, Switzerland; [3]LCN, BMI, EPFL, Lausanne, Switzerland*

09:30 #108 **Taste receptor polymorphisms in the Old Order Amish: associations with obesity, diabetes and related traits.** C. Shawn Dotson[1], Amanda ET Elson[1], Hillary Shaw[2], Xiaolian Shi[2], Colleen M Damcott[2], Adam Naj[2], Soren Snitker[2], Nanette I Steinle[2], Steven D Munger[1]. *[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.** Hanyi Zhuang*[1], Andreas Keller*[2], Qiuyi Chi[1], Hiroaki Matsunami^[1], Leslie Vosshall^[2]. *[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*

10:30 am: Hanyi Zhuang
10:45 am: Leslie Vosshall

11:00 #111 **Evolution of opsins 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[1], Jay Slack[2], Chris Simons[2], Karen Golan[1], Dennis Drayna[1]. *[1]NIDCD, National Institutes of Health, Rockville, MD, United States; [2]Givaudan Flavors, Cincinnati, OH, United States*

12:00 #113 **Possible genetic basis for human hyperosmia to isovaleric acid.** Doron Lancet[1], Yehudit Hasin[1], Miriam Khen[1], Idan Menashe[1,2]. *[1]Molecular Genetics, Weizmann Institute of Science, Rehovot, Israel; [2]Division of Cancer Epidemiology and Genetics, NCI/NIH, Rockville, MD, United States*

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

1 #114 **Activity-dependent expression profiling in the mouse vomeronasal organ: a microarray approach.** Silke Hagendorf[1], Corinna H Engelhardt[1], Ludger Klein-Hitpass[2], Marc Spehr[1]. [1]*Cellular physiology, Ruhr-University Bochum, Bochum, Germany*; [2]*Cellular biology, University of Essen, Essen, Germany*

2 #115 **Striking differences in evolutionary patterns in vomeronasal receptors compared to main olfactory receptors.** Wendy Grus, Peng Shi, 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 Dennis[1], Timothy Smith[2], Thomas Park[3], Edward Morrison[1]. [1]*Anatomy, Physiology, Pharmacology, Auburn University, Auburn University, AL, United States*; [2]*School of Physical Therapy, Slippery Rock University, Slippery Rock, PA, United States;* [3]*Biological Sciences, Univeristy of Illinois at Chicago, Chicago, KY, United States*

4 #117 **Two types of vomeronasal receptor-expressing olfactory sensory neurons in goats.** Yoshihiro Wakabayashi[1,2,3], Satoshi Ohkura[4], Hiroaki Okamura[4], Yuji Mori[2], Masumi Ichikawa[3]. [1]*Cell and Dev Biol, Univ. Colorado Health Sciences Center, Aurora, CO, United States*; [2]*Vet. Ethology, Univ. Tokyo, Tokyo, Japan;* [3]*Lab. Neurobiol., Nat. Inst. Agribiol. Sci., Tsukuba, Japan;* [4]*Neurosci. 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 Veitinger[1], Jeffrey A Riffel[2], Annika Triller[1], Katlen Schwane[1], Richard K Zimmer[3], Marc Spehr[1], Hanns Hatt[1]. [1]*Cellular Physiology, Ruhr-University, Bochum, Germany;* [2]*ARL Division of Neurobiology, University of Arizona, Tucson, AZ, USA;* [3]*Department 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. Greer. *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 Lischka[1], Karen Yee[1], Anthony LaMantia[2], Nancy Rawson[1]. [1]*Monell Chemical Senses Center, Philadelphia, PA, United States*; [2]*Dept. 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*

12 #125 **Vomeronasal Organ Ontogeny in Tamarins.** Timothy Smith[1], John Dennis[2], Kunwar Bhatnagar[3], Christopher Bonar[4], Edward Morrison[2]. [1]*School Phys. Ther., Slippery Rock Univ., Slippery Rock, PA, USA*; [2]*Dept. Anat., Physiol., & Pharmacol., Auburn Univ., Auburn, AL, USA;* [3]*Dept. Anat.Sci. & Neurobiol., Univ. Louisville, Louisville, KY, USA;* [4]*Cleveland Metroparks Zoo, Cleveland, OH, USA*

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. Kiyokage[1], Y. Pan[1], Z. Shao[1], G. Szabo[2], K. Kabayashi[3], A.C. Puche[1], M.T. Shipley[1]. [1]*University of Maryland School of Medicine, Baltimore, USA*; [2]*Institute of Experimental Medicine, Budapest, Hungary;* [3]*Fukushima 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 Glomeruli 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. *Neurophysiology, 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[1], Lynn Shon[1], Andrew Chang[1], Max Fletcher[1], Janna Nawroth[1], Wei Chen[1], Michele Migliore[1,2], Gordon Shepherd[1]. *[1]Neurobiology, Yale University, New Haven, CT, United States; [2]Institute 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[1], Hiroyasu Ito[1], Toshihiro Oikawa[1], Satoshi Soeta[2], Kazumi Taniguchi[3], Yoshio Yamamoto[1]. *[1]Veterinary Anatomy, Iwate University, Morioka, Japan; [2]Veterinary Anatomy, Nippon Veterinary and Life Science University, Musashino, Japan; [3]Veterinary Anatomy, Kitasato 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[1], Shin Nagayama[2], Rixin Wang[1], Max Fletcher[2], Arjun Masurkar[2], Wenhui Xiong[2], Wei Chen[2]. *[1]Center for Medical Informatics, Yale University, New Haven, CT, United States; [2]Department of Neurobiology, Yale University, New Haven, CT, United States*

27 #140 **Interneuron EPSC Bursts are correlated with Tufted Cell Spike Bursts in the Superficial External Plexiform Layer of the Olfactory Bulb.** Kathryn Hamilton[1], Matt Ennis[2], Abdallah Hayar[3]. *[1]Cell Biol & Anat, LSU Hlth Sci Ctr, Shreveport, LA, United States; [2]Anat & Neurobiol, Univ of Tenn Hlth Sci Ctr, Memphis, TN, United States; [3]Neurobiol & Dev Sci, Univ of Ark for Med Sci, Little rock, AR, USA*

28 #141 **Middle tufted and mitral cell synchronization 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 Mwilaria, Chitrita 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[1,2], Michelle Gallagher[2], George Preti[2], Paul Wise[2]. *[1]Flavor System & Technology Laboratory, Ogawa & Co., Ltd., Chiba, Japan; [2]Monell 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[1], Yuki Nakamura[1], Shinya Shirosaki[1], Rie Ohta[1], Kiyoshi Koyano[2], Kazuaki Nonaka[3], Noriatsu Shigemura[1]. *[1]Sect. of Oral Neurosci., Grad. Sch. of Dental Sci., Kyushu Univ., Fukuoka, Japan; [2]Sect. of Pediatric Dent., Grad. Sch. of Dental Sci., Kyushu Univ., Fukuoka, Japan; [3]Sect. of Removable Prothesis., 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[1], Linus Andersson[1], Åke Johansson[2], Eva Millqvist[3], Mats Bende[4]. *[1]Umeå University, Umeå, Sweden; [2]Central Hospital, Skövde, Sweden; [3]Sahlgrenska University Hospital, Gothenburg, Sweden; [4]Central Hospital, Skövde, Sweden*

34 #147 **RETRONASAL OLFACTORY AND TASTE CONTRIBUTIONS TO VEGETABLE LIKING AND INTAKE.** Valerie Duffy[1], JE Hayes[2], G. Napoleone[1], ME Dinehart[1]. [1]*Allied Health Sciences, U. of Connecticut, Storrs, CT, United States*; [2]*Nutritional 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 Gachons[1], Jeffrey Sperry[2], Bruce Bryant[1], Paul Breslin[1], Amos Smith[1,2], Gary Beauchamp[1]. [1]*Monell Chemical Senses Center, Philadelphia, PA, USA*; [2]*Department of Chemistry, University of Pennsylvania, Philadelphia, PA, USA*

37 #150 **Multivariate aproach in the investigation of interactions between texture and ortho- and retronasal olfactory stimuli.** Natacha Roudnitzky[1], Johannes H. F. Bult[2], Rene A. De Wijk[2], Jens Reden[1], Thomas Hummel[1]. [1]*Dept. of ORL, Smell & Taste Clinic, Univ. of Dresden Medical School, Dresden, Germany*; [2]*Dept. 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. Snyder[1,2], Cara J. Clark[2], Frank A. Catalanotto[2], Vicki Mayo[2], Linda M. Bartoshuk[2]. [1]*Neuroscience, Yale University, New Haven, CT, USA*; [2]*Dentistry, University of Florida, Gainesville, FL, USA*

39 #152 **Identification of air-phase fatty acids: both retronasal and orthonasal failure.** Richard Tamburrino[1], Bruce Halpern[2]. [1]*Molecular and Cell Biology, Cornell University, Ithaca, NY, United States*; [2]*Psychology 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 Yu[1], Harry Lawless[1], Terry Acree[2]. [1]*Department of Food Science, Cornell University, Ithaca, NY, United States*; [2]*NYSAES, Cornell University, Geneva, NY, united States*

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

42 #155 **FLAVOR PERCEPTION: RESPONSE TIME MEASURES OF PROCESSING Of GUSTATORY-OLFACTORY MIXTURES.** Kelly Burger[1], Maria G. Veldhuizen[1,2], Miao-Fen Wang[1,2], Lawrence E. Marks[1,2]. [1]*John B. Pierce Laboratory, New Haven, CT, United States*; [2]*Yale 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. Marks[1,2], Kelly Burger[1], Emily M. Chakwin[3]. [1]*John B. Pierce Laboratory, New Haven, CT, United States*; [2]*Yale University School of Medicine, New Haven, CT, United States;* [3]*Psychology, Princeton University, Princeton, NJ, United States*

44 #157 **Relative Impact of Taste vs Smell Dysfunctions on Quality of Life.** Beverly Cowart[1,2], Christopher Klock[1], Aldona Vainius[1], Edmund Pribitkin[2], Paul Breslin[1]. [1]*Monell Chemical Senses Center, Philadelphia, PA, USA*; [2]*Otolaryngology, Head & Neck Surgery, Thomas Jefferson University, Philadelphia, PA, USA*

45 #158 **CONNECTING DIET AND DISEASE RISK VIA FOOD PREFERENCE.** Bridget Sullivan[1], JE Hayes[2], PD Faghri[1], VB Duffy[1,2]. [1]*Allied Health, U. of CT, Storrs, CT, United States*; [2]*Nutrition, U. of CT, Storrs, CT, United States*

46 #159 **The role of attention and sensitization to trigeminal and olfactory exposure in chemical intolerance.** Linus Andersson[1], Mats Bende[2], Eva Millqvist[3], Steven Nordin[1]. [1]*Department of Psychology, Umeå University, Umeå, Sweden*; [2]*Department of Otorhinolaryngology, Central Hospital, Skövde, Sweden;* [3]*Asthma 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. Felizardo[1], C. Simons[1,2], J. Azerad[1], E. Carstens[2], Y. Boucher[1]. [1]*UFR Odontologie, Paris, France*; [2]*NPB, UC 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. Felsted[1], S. O'Malley[2], D. Nachtigal[1], P. Gant[2], D.M. Small[1,2]. [1]*The John B. Pierce Laboratory, New Haven, CT, USA*; [2]*Yale 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. Glendinning[1], Y.-M. Yiin[2], K. Ackroff[2], G.J. Schwartz[3], R.M. Margolskee[4], A. Sclafani[2]. [1]*Biology, Barnard College, New York, NY, USA*; [2]*Psychology, Brooklyn College, Brooklyn, NY, USA;* [3]*Medicine, Albert Einstein College of Medicine, Bronx, NY, USA;* [4]*Neuroscience, Mount Sinai School of Medicine, New York, NY, USA*

51 #164 **Species-specific avoidance of foods containing hydrolyzed protein.** Kristin L. Field[1], Julia A. Figueroa[2], Alexander A. Bachmanov[1], Julie A. Mennella[1], Gary K. Beauchamp[1], Bruce A. Kimball[3]. [1]*Monell Chemical Senses Ctr., Philadelphia, PA, USA*; [2]*Zoology, Colorado State Univ., Ft. Collins, CO, USA;* [3]*USDA-APHIS Nat'l 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 Laska[1], Dipa Joshi[2], Gordon M. Shepherd[2]. [1]*IFM Biology, Linköping University, Sweden*; [2]*Neurobiology, Yale University School of Medicine, New Haven, CT, United States*

53 #166 **Odortypes: Interaction of diet and MHC.** KOICHI MATSUMURA[1], JAE KWAK[1], MARYANNE CURRAN[1], GEORGE PRETI[1], ALAN WILLSE[2], JON WAHL[2], KUNIO YAMAZAKI[1], GARY BEAUCHAMP[1]. [1]*Monell Chemical Senses Center, PA, USA*; [2]*Pacific 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. Coureaud[1], T. Thomas-Danguin[2], E. LeBerre[2], B. Schaal[1]. [1]*Centre Europeen des Sciences du Gout, CNRS/UB/INRA, Dijon, France*; [2]*FLAVIC, INRA/ENESAD/UB, Dijon, France*

56 #169 **Goldfish can be conditioned to respond to a sex pheromone.** Peter Sorensen. *Fisheries, Wildlife & Conservation Biolo, University of Minnesota, St. Paul, MN, United States*

12:30pm-2:00pm **LUNCHEON**: Minority and Clinical Travel Awardees
Chair/Organizer: K. Wekesa
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 AChemS. This luncheon provides a forum where applicants can network among themselves and with established minority scientists.

Thursday PM

1:00pm-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 #171 **Primate chemical communication - an evolutionary perspective.** Eckhard W. Heymann. *Behavioural Ecology & Sociobiology, German Primate Center, Goettingen, Germany*

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

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

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

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

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.

7:30 #177 **Visualizing olfactory memories in Drosophila by optical imaging.** Ron Davis, Dinghui Yu, Akalal David. *Molecular and Cellular Biology, Baylor College of Medicine, Houston, TX, United States*

8:15 #178 **Odor-induced oscillatory dynamics in the rat piriform cortex.** Philippe Litaudon, Nathalie Buonviso, Tristan Cenier, Claire Martin, Julie Chapuis, Nadine Ravel. *Neurosciences Sensorielles, Comportement et Cognition, CNRS UMR 5020, Unversité Lyon 1, Institut Fédératif des Neurosciences, Lyon, France*

9:00 #179 **Biological mechanism underlying olfactory-discrimination learning.** Edi Barkai, Drorit Saar. *Biology & Neurobiology, University of Haifa, Haifa, Israel*

9:45 #180 **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 Hettinger, 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 Stratford[1], Kathleen Curtis[2], Robert Contreras[1]. [1]*Psychology, Florida State University, Tallahassee, FL, U.S.*; [2]*Heath 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. Rhyu[1], A.Y. Song[1], H.Y. Kim[1], S.S. Kim[1], C. Tokunaga[2], T-H. T. Phan[3], G.L. Heck[3], J. A. DeSimone[3], V. Lyall[3]. [1]*Korea Food Research Institute, Seongnam-si, Korea*; [2]*Kyowa Hakko Food Specialties Co. Ltd, Ibaraki, Japan;* [3]*Virginia 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 (TRPV1t).** Tadayoshi Katsumata[1], Chikara Tokunaga[2], Noboru Fujii[2], Makoto Egi[2], Tam-Hao T. Phan[1], Gerard L. Heck[1], John A. DeSimon[1], Vijay Lyall[1]. [1]*Physiology, Virginia Commonwealth University, Richmond, VA, United States*; [2]*Food Research, Kyowa Hakko Food Specialties, Ami, Ibaraki, Japan*

7 #187 **DIETARY SODIUM RESTRICTION AUGMENTS THE LINGUAL NEUTROPHIL 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-1b 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 **QUANTATIVE 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 taster status and the rejection of foods with added tastants.** John Prescott[1], Yun Mi Lee[2], Kwang-Ok Kim[2]. [1]*Psychology, James Cook University, Cairns, Australia*; [2]*Food Science, Ewha Women's University, Seoul, Korea*

13 #193 **Strain-specific asymmetrical taste generalization between quinine and denatonium in mice.** David Blizard[1], Margaret Colby[1], Thomas Hettinger[2], Marion Frank[2]. *[1]Ctr Dev Hlth Genetics, Penn State, University Park, PA, United States; [2]Dept. 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, Fujkio 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 Ishiwatari[1,2], Alexander Bachmanov[1]. *[1]Monell Chemical Senses Center, Philadelphia, PA, United States; [2]Ajinomoto Co., Inc., Kawasaki, Japan*

17 #197 **Polymorphisms of ENaC αsubunit are associated with strain differences in amiloride sensitive NaCl responses in mice.** Noriatsu Shigemura[1], Tadahiro Ohkuri[1], Chiharu Sadamitsu[1], Keiko Yasumatsu[1], Ryusuke Yoshida[1], Gary K Beauchamp[2], Alexander A Bachmanov[2], Yuzo Ninomiya[1]. *[1]Sect. Oral Neurosci., Kyushu Univ., Fukuoka, Japan; [2]Monell Chemical Senses Center, Philadelphia, PA, USA*

18 #198 **Fatty acid taste in obesity-prone and –resistant rats: Strain and sex differences.** D. Pittman[1], K. Smith[1], M. Crawley[1], C. Corbin1, D. Hansen[1], K. Fraiser[1], T. Gilbertson[2]. *[1]Psychology, Wofford College, Spartanburg, SC, US; [2]Biology, Utah State University, Logan, UT, US*

19 #199 withdrawn

20 #200 **Role of cytochrome P450 in the nasal inflammatory process.** Karen Yee[1], Beverly Cowart[1], Edmund Pribitkin[2], Hakan Ozdener[1], Nancy Rawson[1]. *[1]Monell Chemical Senses Center, Philadelphia, PA, United States; [2]Otolaryngology, 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 Gudziol, 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. Feng[1], K.K. Yee[1], B.J. Cowart[1], E.A. Pribitkin[2], N.E. Rawson[1]. *[1]Monell Chemical Senses Center, Philadelphia, PA, United States; [2]Thomas 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 occurence of olfactory event related potentials in rhinologic clinic.** Philippe Rombaux[1], André Mouraux[2], Bernard Bertrand[3]. *[1]Otorhinolaryngology, Cliniques Saint Luc University Louvain, Brussels, Belgium; [2]Neurology, Cliniques Saint Luc, Brussels, Belgium; [3]Otorhinolaryngology, Cliniques Saint Luc, Brussels, Belgium*

27 #207 **The usefulness of olfactory biopsies in patients with olfactory loss.** Martin Witt[1], Katja Bormann[2], Volker Gudziol[1], Heinz Reichmann[3]. *[1]Otorhinolaryngology, University of Technology, Dresden, United States; [2]Anatomy, University of Technology, Dresden, United States; [3]Neurology, University of Technology, Dresden, Germany*

28 #208 **Treatment of post-infectious olfactory disorders with minocycline: a double-blind, placebo-controlled study.** Jens Reden[1], Birgit Herting[2], Robert C. Kern[3], Katja Lill[1]. *[1]Otorhinolaryngology, University of Dresden Medical School, Dresden, Germany; [2]Neurology, University of Dresden Medical School, Dresden, Germany; [3]Otolaryngology-HNS, Northwestern University, Chicago, IL, USA*

29 #209 **Reduced olfactory sensitivity in subjects with depressive symptoms.** Olga Pollatos[1,2], Albrecht Jessica[2], Rainer Kopietz[2], Jennifer Linn[2], Veronika Schoepf[2], Anna Maria Kleemann[2], Tatjana Schreder[2], Rainer Schandry[1], Martin Wiesmann[2]. *[1]Psychology, Ludwig-Maximilians-University of Munich, Munich, Germany; [2]Neuroradiology, Ludwig-Maximilians-University of Munich, Munich, Germany*

30 #210 **Olfactory perception of the odorant Bourgeonal by infertile and fertile men .** Eva Kemper[1], Petra Spornraft-Ragaller[2], Hanns Hatt[3], Thomas Hummel[1]. *[1]ORL, Smell & Taste Clinic, Univ. of Dresden, Dresden, Germany; [2]Dermatology, Univ. of Dresden, Dresden, Germany; [3]Cell 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 **PYRIMIDINES AND MICOSPORIN-LIKE AMINO ACIDS FUNCTION AS ALARM CUES IN THE DEFENSIVE SECRETIONS OF THE SEA HARE APLYSIA CALIFORNICA.** Cynthia Kicklighter[1], Michiya Kamio[2], Markus Germann[2], Charles Derby[2]. *[1]Goucher College, Baltimore, MD, United States; [2]Georgia State University, Atlanta, GA, United States*

33 #213 **Vertebrate pheromones affect female receptivity in salamanders.** Lynne Houck[1], Stevan Arnold[1], Pamela Feldhoff[2], Richard Feldhoff[2]. *[1]Zoology, Oregon State University, Corvallis, OR, United States; [2]Biochem. & Molec. Biology, Univ. of Louisville, Louisville, KY, Unites States*

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

35 #215 **Newborn mice prefer odors indicating closer genetic relatedness.** Josephine Todrank[1], Nicolas Busquet[2], Claude Baudoin[2], Giora Heth[1]. *[1]Institute of Evolution, University of Haifa, Haifa, Israel; [2]1Laboratoire d'Ethologie Expérimentale et Comparée, Université Paris Nord, Villetaneuse, 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 Johnston[1], Rolf Gattermann[2], Zhimin Song[1], Sabiha Barot[3]. *[1]Cornell University, Ithaca, NY, United States; [2]University of Halle, Halle, Germany; [3]University of Washington, Seattle, WA, United States*

38 #218 **NKCC1 deletion does not affect olfactory sensitivity in behaviorally-trained mice.** D.W. Smith[1,2,3], S. Thach[2], E. Marshall[2], M.-G. Mendoza[2], E. Rodriguez[2], S. Burns[2], E. Przybylinski[2], S. Pradeep[2], S.J. Kleene[4]. *[1]Center for Smell and Taste, University of Florida, Gainesville, FL, United States; [2]Psychology, University of Florida, Gainesville, FL, United States; [3]Otolaryngology, University of Florida, Gainesville, DC, United States; [4]Anatomy 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-Burds, 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 Mandairon[1], Shane Peace[1], Alexandra Karnov[1], Jane Kim[1], Matthew Ennis[2], Christiane Linster[1]. *[1]NBB, Cornell U., Ithaca, NY, United States; [2]Anatomy 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*

42 #222 **BACE1 is necessary for normal olfactory behavior in mice.** Jurgen Ziesmann, Sharon R Gracey, Emily M Maarschalk, Loren A Martin, Dipti D Patel, Jennifer Somers, Robyn J Sumpter, Anthony S Walls. *Dept. Biology and Chemistry, Dept. Psychology, Azusa Pacific University, Azusa, CA, United States*

43 #223 **Chemosensory Basis for an Ecological Paradigm in the Rocky Intertidal.** Graham Ferrier[1], Steven Kim[2], Cheryl Ann Zimmer[1], Richard Zimmer[1]. *[1]Ecology and Evolutionary Biology, University of California, Los Angeles, CA, United States; [2]Biochemistry, University of California, Los Angeles, CA, United States*

44 #224 **The Role of Vomeronasal Organ in Mediating Responses to Predator Odor .** Vera Voznessenskaya, 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[1], Craig Roberts[2], Stephanie Berg[1], Stephen Roper[1,2], Nirupa Chaudhari[1,2]. *[1]Physiology and Biophysics, Univ. of Miami Miller School of Medicine, Miami, FL, USA; [2]Program 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[1], Sidney A. Simon[2], Johannes le Coutre[1]. *[1]Perception Physiology, Nestlé Research Center, lausanne, Switzerland; [2]Neurobiology, 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, United States*

48 #228 **Functional characterization of odorant receptor mediated signaling mechanisms in prostate cancer cells.** Jennifer Spehr, Weiyi Zhang, Hanns 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[1], Rufino Felizardo[1], Earl Cartens[2], Fawzia Zerari-Mailly[1]. *[1]UFR Odontologie, Universite Paris 7, Paris, France; [2]NPB, UC Davis, Davis, CA, USA*

51 #231 **Microvillar Non-Olfactory Cells in the Main Olfactory Epithelium.** Weihong Lin[1], Robert Margolskee[2], Anne Hanson[3], Diego Restrepo[3]. *[1]Biol Sci, Univ of Maryland Baltimore County, Baltimore, MD, United States; [2]Neurosci, Mount Sinai School of Medicine,, New York, NY, United States; [3]Cell & Dev Biol, Univ of Colorado Hlth Sci 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[1], TR Clapp[2], RF Margolskee[3], SC Kinnamon[2], TE Finger[1]. *[1]Neurosci, Rocky Mtn Taste & Smell Ctr, UCDHSC, Aurora, CO, USA; [2]Biomed Sci, Colo State Univ, Ft. Collins, CO, USA; [3]Neurosci, Mount Sinai School of Med, New York, NY, USA*

53 #233 **Chemically-mediated Gamete Interactions in a Sea Urchin: A Model Organism for Studies of Fertilization and Embryogenesis.** Shannon Olsson, Cheryl Ann Zimmer, Richard Zimmer. *Ecology and Evolutionary Biology, University of California, Los Angeles, CA, US*

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

55 #235 **DEFENSE THROUGH CHEMORECEPTION: AN L-AMINO ACID OXIDASE IN THE INK OF SEA HARES DETERS PREDATORS THROUGH THEIR CHEMICAL SENSES.** Michiya Kamio, Cynthia Kicklighter, Ko-Chun Ko, Matt Nusnbaum, Juan Aggio, 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[1], Eri Kamura[1], Richard Hallworth[2]. *[1]Biology, Virginia Military Institute, Lexington, VA, United States; [2]Biomedical Sciences, Creighton University, Omaha, NE, US*

12:30 pm – 2:00 pm LUNCHEON: Minority and Clinical Travel Awardees
Chair/Organizer: K. Wekesa
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 Communications Disorders (NIDCD). They cover partial costs for clinicians and minority applicants to attend AchemS. This luncheon provides a forum where apllicants 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*

Friday, April 27, 2007 Continued

POSTER SESSIONS:

8:00 am – 12:30 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
7:00 pm – 11:00 pm	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

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

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

8:30 #239 **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*

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

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

10:30 am - 12:30 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 enteroendocrine cells. The questions addressed by this symposium are what role these chemosensory signaling elements play in appetite regulation, specific satieties, gut motility and glucose homeostasis.

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

10:50 #243 **Glutamate Receptors in the Gastrointestinal Tract.** ana san gabriel[1], Takami Maekawa[1], Hisayuki Uneyama[1], Sumio Yoshie[2], Kunio Torii[1]. [1]*Institute of Life Sciences, Ajinomoto Co., Inc., Kawasaki-shi, Japan*; [2]*Anatomy, Nippon Dental University, Niigata, Japan*

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

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

11:50 #246 **Taste receptors and gustducin in gut regulate GLP-1 secretion.** Z. Kokrashvili[1], H.J. Jang[2], M.J. Theodorakis[2], O.D. Carlson[2], B.J. Kim[2], J. Zhou[2], H.H. Kim[2], X. Xu[2], S.L. Chan[2], M. Juhaszova[2], M. Bernier[2], B. Mosinger[1], J.M. Egan[2], R.F. Margolskee[1]. [1]*Neuroscience, Box 1065, Mount Sinai School of Medicine, New York, NY, United States*; [2]*National Institute on Aging, NIH, Baltimore, MD, United States*

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

8:00 am - 12:30 pm **POSTER SESSION FRI AM**
North Ballroom

1 #248 **Ligand binding to the N-terminal domain of mouse T1R1.** Stephan Vigues[1], Graeme L Conn[2], Steven D Munger[1]. [1]*Dept Anatomy & Neurobiology, Univ Maryland School of Medicine, Baltimore, MD, USA*; [2]*Manchester Interdisciplinary Biocentre, Faculty of Life Sciences, Univ Manchester, Manchester, UK*

2 #249 **Sweet taste associated with mGluR4 agonist L-AP4 in rats.** Benjamin Eschle, Meghan Eddy, Jessica Longobardo, Eugene Delay. *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 **BRAZZEIN VARIANTS AND THE BRAZZEIN-TASTE RECEPTOR INTERACTION.** Eric Walters[1], Tiffany Otto[2], Zheyuan Jin[2], Jon Rumbley[3], Göran Hellekant[2]. [1]*Biochemistry and Molecular Biology, Rosalind Franklin University of Medicine and Science, North Chicago, IL, United States*; [2]*Physiology and Pharmacology, University of Minnesota Medical School, Duluth, MN, United States;* [3]*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. Xia[1], P. Jiang[1], E. F. Thompson[2], W. J. Spillane[2], R. F. Margolskee[1], M. Max[1]. [1]*Neuroscience, Mount Sinai School of Medicine, New York, NY, USA*; [2]*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-ichiro Nakajima, Tomiko 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 Hobbs[1], Steve Munger[2], Graeme Conn[1]. [1]*Manchester Interdisciplinary Biocentre, Faculty of Life Sciences, Manchester, United Kingdom*; [2]*Dept of Anatomy & Neurobiology, University of Maryland School of Medicine, Baltimore, MD, USA*

8 #255 **GYMNEMIC ACID INTERACTIONS WITH SWEET TASTE RECEPTORS.** Alexey Koposov[1], Eric Walters[2], Xia Li[3], Göran Hellekant[1]. [1]*Dept Physiology&Pharmacology, University of Minnesota Medical School, Duluth, MN, United States*; [2]*Biochemistry and Molecular Biology, Rosalind Franklin University of Medicine and Science, North Chicago, IL, United States;* [3]*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-ichiro 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 (Tas1r2) in Species of Feliformia.** Xia Li[1], Dieter Glaser[2], Weihua Li[1], Gary Beauchamp[1,3], Joseph Brand[1,3]. [1]*Monell Chemical Senses Center, Philadelphia, PA, United States*; [2]*Anthropological Institute and Museum, University of Zürich, Zürich, Switzerland;* [3]*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. Inoue[1], J.I. Glendinning[2], S. Harkness[2], X. Li[3], N.P. Bosak[3], M.L. Theodorides[3], G.K. Beauchamp[3], A.A. Bachmanov[3]. [1]*Life Sciences, Tokyo University of Life Science and Pharmacy, Tokyo, Japan*; [2]*Biological Sciences, Barnard College, New York, NY, USA;* [3]*Monell Chemical Senses Center, Philadelphia, PA, USA*

12 #259 **SUCROSE 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 Waters[1], Cheng-Shu Li[2], Nie Xie[1], David Smith[1], Cheng Xiang Li[1]. [1]*Anatomy and Neurobiology, University of Tennessee Health Science, Memphis, TN, United States*; [2]*Anatomy, Souther 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 Nasse[1], Richard Rogers[2], Zhixiong Chen[1], Ken Herman[1], Joseph Travers[1]. [1]*Ohio State University, Columbus, OH, United States*; [2]*Pennington Biomedical Research Center, Baton Rouge, LA, US*

16 #263 **Neurotransmitters in brainstem gustatory reflex circuitry.** Takanori Ikenaga, Tatsuya Ogura, Thomas Finger. *Rocky Mtn. Taste and Smell Ctr., Univ. Colorado Med Sch., Aurora, CO, United States*

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 PbN.** 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 Frasnelli, Carina Oehrn, 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*

25 #272 **RETRONASAL AND ORAL-CAVITY IDENTIFICATION OF TRIGEMINAL ODORANTS.** Vijal Parikh[1], Ai Ping Lee-Lim[2], Bruce Halpern[3]. *[1]Neurobiology and Behavior, Cornell University, Ithaca, NY, US; [2]Biochemistry, Vassar College, Poughkeepsie, NY, US; [3]Psychology and Neurobiology and Behavior, Cornell University, Ithaca, NY, US*

26 #273 **The neural correlates of capsaicin vs pure taste in humans.** Kristin J Rudenga[1], Barry Green[2], Danielle Nachtigal[2], Jennifer A Felsted[2], Dana M Small[2,3]. *[1]Interdepartmental Neuroscience Program, Yale Univ, New Haven, CT, United States; [2]John B Pierce Laboratory, New Haven, CT, United States; [3]Dept. 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 Felizardo[1], Simons Christopher[1,2], Jean Azérad[1], Earl Carstens[2], Yves Boucher[1]. *[1]UFR Odontologie, Universite Paris 7, Paris, France; [2]NPB, UC Davis, Davis, CA, USA*

29 #276 **Capsaicin avoidance following chorda tympani transection.** Earl Carstens[1], Mirela Carstens[1], Yves Boucher[2]. *[1]NPB, UC Davis, Davis, CA, United States; [2]Odontologie, 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[1,3], Nils Damann[1], Nicole Schöbel[1], Barbara G. Klupp[2], Thomas C. Mettenleiter[2], Christian H. Wetzel[1], Hanns Hatt[1]. *[1]Dept. of Cellphysiology, Ruhr-University, Bochum, Germany; [2]Federal Research Institute for Animal Health, Friedrich-Loeffler-Institut, Insel Riems, Germany; [3]Graduiertenkolleg "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 Carey[1], Guirong Wang[2], Zina Berman[1], Laurence Zwiebel[2], John Carlson[1]. *[1]MCDB, Yale University, New Haven, CT, United States; [2]Department of Biological Sciences, Vanderbilt Unisversity, Nashville, TN, United States*

34 #281 **Functional Characterization of an Anopheline Specific Component of the Odorant Receptor Repertoire in the Malaria Vector Mosquito Anopheles gambiae.** Guirong Wang[1], Allison Carey[2], John Carlson[2], Laurence J. Zwiebel[1]. *[1]Department of Biological Sciences, Vanderbilt University, Nashville, TN, United States; [2]Department 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 Ghaninia[1,2], Mattias Larsson[1], Jocelijn Meijerink[1,3], Bill Hansson[1,4], Rickard Ignell[1]. *[1]Chemical Ecology, SLU, Alnarp, Sweden; [2]Entomology, Gorgan Univ. of Agric. Sci., Gorgan, Iran; [3]Wageningen University, Wageningen, Netherlands; [4]Evolutionary 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 Klyuchnikova[1], Charles Wysocki[2], Vera Voznessenskaya[1]. *[1]Institute of Ecology & Evolution, Moscow, Russia; [2]Monell 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 Grosmaitre, 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 I: from gene to function.** Annika Triller[1], Jeffrey A Riffel[2], Thomas Veitinger[1], Katlen Schwane[1], Richard K Zimmer[3], Marc Spehr[1], Hanns Hatt[1]. *[1]Department of Cell Physiology, Ruhr-University, Bochum, Germany; [2]ARL Division of Neurobiology, University of Arizona, Tucson, AZ, USA; [3]Department of Biology, University of California, Los Angeles, CA, USA*

43 #290 **Functional Analysis of an Insect Odorant Receptor Using Xenopus Oocytes And Robotic Electrophysiology.** A.S. Nichols[1], K.W. Wanner[2], H.M. Robertson[2], C.W. Luetje[1]. *[1]Cellular and Molecular Pharmacology, University of Miami, Miami, FL, United States; [2]Entomology, University of Illinois at Ubana-Champaign, Urbana, IL, United States*

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

45 #292 **mGluR1 Activation Enhances Nonselective Cation Currents and Rhythmic Bursting in External Tufted (ET) Cells.** Hongwei Dong[1], Abdallah Hayar[2], Matthew Ennis[1]. *[1]Anat. & Neurobiol., Univ. Tenn. Hlth. Sci. Ctr., Memphis, TN, United States; [2]Dept. Neurobiol. & Developmental Sciences, Univ. Ark. for Med. Sci., Little Rock, AR, 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*

50 #297 **Matrix Metalloproteinases in olfactory development.** Lu Anne Dinglasan, Helen Treloar. *Neurosurgery, Yale University School of Medicine, New Haven, CT, United States*

51 #298 **MODULATION OF OLFACTORY RECEPTOR AXON SORTING AND TARGETING BY LIPID RAFT-ASSOCIATED SIGNALING MOLECULES.** Nicholas Gibson, Lynne Oland, Mark Higgins, Leslie Tolbert. *Division of Neurobiology, University of Arizona, Tucson, AZ, United States*

52 #299 **Knockdown of olfactory axon guidance molecules in Manduca sexta.** Mark Higgins, Christine Pham, Maris Jameson, Alan Nighorn. *ARL Division of Neurobiology, University of Arizona, Tucson, AZ, United States*

53 #300 **Extracellular Matrix gene profiling in the developing mouse olfactory system.** Arundhati Ray, Helen Treloar. *Neurosurgery, Yale University, New Haven, CT, United States*

54 #301 **Phagocytosis-dependent labeling of presumptive microglial cells in the deafferented olfactory bulb of zebrafish.** Christine Byrd, Jamie Johnson. *Biological Sciences, Western Michigan University, Kalamazoo, MI, United States*

55 #302 **DIFFERENCES IN MMP-2 AND MMP-9 EXPRESSION IN RESPONSE TO OLFACTORY NERVE INJURY.** Richard Costanzo, Lisa Perrino. *Physiology, VCU School of Medicine, Richmond, VA, United States*

56 #303 **Proliferation in the VNE decreases with age but response to injury does not.** Jessica H. Brann[1], Stuart Firestein[1,2]. *[1]Columbia University, Department of Biological Science, New York, NY, United States; [2]Columbia University, Program in Neurobiology and Behavior, New York, NY, United States*

Friday PM

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

3:00pm-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 #305 **Human pheromones and behavior.** Karl Grammer. *Urban Ethology, Ludwig-Boltzmann-Institute, Vienna, Austria*

3:20 #306 **The Identification of Compounds in Human Sweat - Signals of Individuality, Gender and Genes.** Elisabeth Oberzaucher[1], Karl Grammer[1], Katharina Zimmer[1], Gottfried Fischer[2], Helena A. Soini[3], Milos V. Novotny[3], Sarah J. Dixon[4], Yun Xu[4], Simeone Zomer[4], Richard G. Brereton[4], Dustin J. Penn[5]. *[1]LBI for Urban Ethology, Dept. of Anthropology, Vienna, Austria; [2]Clinical Department for Blood Group Serology, General Hospital of Vienna, Vienna, Austria; [3]Institute for Pheromone Research, Indiana University, Bloomington, IN, United States; [4]Centre for Chemometrics, University of Bristol, Bristol, UK; [5]Konrad Lorenz Institute for Ethology, Vienna, Austria*

3:35 #307 **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*

3:50 **Discussion.** Charles Wysocki

4:05
#309

PERCEPTION OF CHEMOSENSORY ANXIETY SIGNALS IN SOCIALLY ANXIOUS SUBJECTS. Bettina Pause[1], Dirk Adolph[1], Alexander Prehn[1], Anne Ohrt[1], Joachim Laudien[2], Bernfried Sojka[2], Roman Ferstl[2]. [1]*Dept. Exp. Psychology, University of Duesseldorf, FRG, United States*; [2]*Dept. Psychology, University of Kiel, FRG, United States*

04:20
#310

Changes in olfactory threshold, hedonics and brain activity in response to repetitive exposure to androstadienone. Tim Jacob[1], Liwei Wang[1,2], Nassima Boulkroune[3], Amy March[1], Natalie Walker[1]. [1]*School of Biosciences, Cardiff University, Cardiff, UK*; [2]*Medical College, Jinan University, Guangzhou, China;* [3]*Department of Psychology, Liverpool University, Liverpool, UK*

4:35
#311

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

4:50

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

7:00
#313

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

7:15
#314

Regulation of olfactory bulb laminar organization and periglomerular interneuron phenotypes by ER81. John Cave[1,2], Yosuke Akiba[2], RoseAnn Berlin[2], Harriet Baker[1,2]. [1]*Weill Medical College of Cornell Univ, New York, NY, United States*; [2]*Burke Medical Research Institute, White Plains, NY, United States*

7:30
#315

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 Biju. *Biological Science, Prog. in Neurosci & Mol Biophys, Florida State University, Tallahassee, FL, United States*

7:45
#316

Olfactory bulb odor response dynamics enhanced by odor enrichment. Christiane Linster[1], Nathalie Mandairon[1], Emily Wyatt[2], Leslie Kay[2]. [1]*Neurbiology and Behavior, Cornell U., Ithaca, NY, US*; [2]*Psychology, U. of Chicago, Chicago, IL, US*

8:00
#317

Timing of granule cell activity in the main olfactory bulb. Nathaniel Urban, Vikrant Kapoor. *Department of Biological Sciences, Carnegie Mellon University, Pittsburgh, PA, US*

8:15
#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*

9:00pm - 10:00pm **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*

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

7:00pm – 11:00pm **POSTER SESSION FRI PM**
North Ballroom

1 #319 **Hindbrain Orexin-A Increases Licking for Sucrose but not Water.** Angela Choe, Jasmine Loveland, John-Paul Baird. *Psychology & Neruoscience, Amherst College, Amherst, MA, United States*

2 #320 **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 #321 **Hippocampal Coding of the Behavioral Relevance of Taste Stimuli.** Bethany Revill[1], Donald Katz[2]. [1]*Dept. of Biology, Volen Center for Complex Systems, Brandeis University, Waltham, MA, United States*; [2]*Dept. of Psychology, Volen Center for Complex Systems, Brandeis University, Waltham, MA, United States*

4 #322 **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 #323 **Gustatory cortex response dynamics and tastant concentration.** Brian Sadacca[1], Donald Katz[1,2]. [1]*Neuroscience Program, Brandeis University, Waltham, MA, United States*; [2]*Department of Psychology, Brandeis University, Waltham, MA, United States*

6 #324 **Effects of age on the association between hunger and fMRI hypothalamic and orbitofrontal activity in response to a taste stimulus.** Erin Green[1], Lori Haase[1,2], Aaron Jacobson[1], Barbara Cerf-Ducastel[1], Nobuko Kemmotsu[1,2], Claire Murphy[1,2]. [1]*San Diego State University, United States*; [2]*UCSD, United States*

7 #325 **Correlations between BMI and BOLD in medial and lateral orbitofrontal cortex during selective attention to taste.** Danielle Nachtigal[1], MG Veldhuizen[1,2], DM Small[1,2]. [1]*The John B. Pierce Laboratory, New Haven, CT, US*; [2]*Yale University School of Medicine, New Haven, CT, US*

8 #326 **Neural correlates of umami and salt qualities during hunger and satiety.** Lori Haase[1,2], Barbara Cerf-Ducastel[1], Nobuko Kemmotsu[1,2], Erin Green[1], Aaron Jacobson[1], Claire Murphy[1,2]. [1]*Psychology, San Diego State University, San Diego, CA, USA*; [2]*Medicine, University of California, San Diego, CA, USA*

9 #327 **Trying to taste in the absence of taste: neural correlates of selective attention to taste.** Maria Veldhuizen[1,2], Dana Small[1,2]. [1]*Affective Sensory Neuroscience, The John B. Pierce Laboratory, New Haven, CT, United States*; [2]*School of Medicine, Yale University, New Haven, CT, United States*

10 #328 **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 #329 **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 #330 **Idenification of Taste Cell Progenitors and Lineage Analysis in the Adult Tongue.** Kristina Mathews[1], Nirupa Chaudhari[1,2]. [1]*Department of Physiology and Biophysics, University of Miami, Miami, FL, United States*; [2]*Program in Neurosciences, University of Miami, Miami, FL, United States*

13 #331 **BMP4 expression differs in circumvallate and fungiform taste buds of mice.** Ha Manh Nguyen, Linda Barlow. *Cell & Dev Biol, Univ of Colorado Denver & Health Sci Ctr, Aurora, CO, United States*

14 #332 **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 #333 **BDNF Regulates Taste Bud Development at Late Embryonic Ages.** Amanda Driskell[1], Robin Krimm[2]. [1]*Ballard High School, Louisville, KY, USA*; [2]*University of Louisville Medical Center, Louisville, KY, USA*

16 #334 **Identification of the source of BDNF in human saliva.** Abigail Milewski[1], Daniel Malamud[2], Virginia Utermohlen[1]. [1]*Nutritional Sciences, Cornell University, Ithaca, NY, United States*; [2]*College of Dentistry, New York University, New York, NY, United States*

17 #335 **Perinatal Development of Taste Buds and von Ebner's and Weber's Glands in the Rat.** Kazumi Taniguchi[1], Joseph Brand[2], Kazuyuki Taniguchi[3], Pongsiwa Sotthibandhu[1], Masashi Tsujio[1], Yoshie Watahiki[1], Kazuki Yoshioka[1], Ken-ichiro Mutoh[1]. [1]*Laboratory of Veterinary Anatomy, Kitasato University, Towada, Japan*; [2]*Monell Chemical Senses Center, Philadelphia, PA, USA*; [3]*Laboratory 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.** Ami Patel[1], David Katz[2], Robin Krimm[1]. [1]*University of Louisville, Louisville, KY, USA*; [2]*Case Western Reserve University, Cleveland, OH, USA*

21 #339 **Are we mixing odorants or odors?** Malin Brodin[1], Per Moeller[2], Mats Olsson[1]. [1]*Dept. of Psychology, Uppsala University, Uppsala, Sweden*; [2]*Dept. of Food Science, Copenhagen University, Copenhagen, Denmark*

22 #340 **Evidence for blending in odor mixtures.** Thierry THOMAS-DANGUIN[1], Elodie LE BERRE[1], Samy BARKAT[2], Gerard COUREAUD[3], Gilles SICARD[3]. [1]*FLAVIC, INRA-ENESAD-UB, DIJON, France*; [2]*Neurosciences et Systèmes Sensoriels, CNRS-UCB Lyon 1, LYON, France;* [3]*Centre Europeen des Sciences du Gout, CNRS-UB-INRA, DIJON, France*

23 #341 **Adapation Study of 2-Methylisoborneol odors.** Anne Kurtz[1], Harry Lawless[2], Terry Acree[1]. [1]*Food Science & Technology, Cornell University, Geneva, NY, United States*; [2]*Food Science, Cornell University, Ithaca, NY, United States*

24 #342 **Continuous intensity evaluation for odorants and quantitative characterization of adaptation.** TOMOKO MATSUBASA[1], YASUSHIRO GOMI[1], SACHIKO SAITO[2], TATSU KOBAYAKAWA[2]. [1]*Technology Research Institute, TOKYO GAS CO., LTD, YOKOHAMA, Japan*; [2]*Institute 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-Kawai[1,2], Hideki Toda[1], Nao Goto[1], Tatsuru Kobayakawa[1]. [1]*National Institute of Advanced Industrial Science and Technology (AIST), Institute for Human Science and Biomedical Engineering, Tsukuba, Japan*; [2]*National Institute of Floricultural Sciences (NIFS), National Agriculture and Food Research Organization (NARO), Tsukuba, Japan*

26 #344 **Human similarity judgments predict rodent olfactory performance.** Jessica Porter, Christina Zelano, Rehan Khan, Noam Sobel. *Helen Wills Neuroscience Institute, UC, Berkeley, CA, US*

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

29 #346 **Working memory across nostrils.** Yaara Yeshurun, Rehan Khan, Yadin Dudai, Noam Sobel. *Neurobiology, Weizmann Institute of Science, Rehovot, Israel*

30 #347 **Are we mixing odorants or odors?** Mats Olsson. *Dept. of Psychology, Uppsala University, Uppsala, Sweden*

31 #348 **Hormonal Changes Induced By Smelling The Human Chemosignal ANDROSTADIENONE.** Claire Wyart[1], Sarah Wilson[1], Jonathan Chen[1], Rehan Khan[1], Noam Sobel[1,2]. [1]*Helen Wills Neuroscience Institute, UC Berkeley, Berkeley, CA, United States*; [2]*Neurobiology, Weizmann Institute, Rehovot, Israel*

33 withdrawn

34 #350 **Inhibitors of nasal enzymes influence the perceived quality of odorants.** Boris Schilling[1], Hans Gfeller[1], Heinz Koch[1], Thierry Granier[1], Xinxin Ding[2], Esther Locher[1]. [1]*Fragrance Res., Givaudan Schweiz AG, Duebendorf, Switzerland*; [2]*NYSDOH, Wadsworth Center, Albany, NY, U.S.*

35 #351 **The psychophysical assessment of odor valence: Does an anchor-stimulus influence the hedonic evaluation of odors?** Marion Schultheiss, Andrea Gossler, Udo Reulbach, Norbert Thuerauf. *Psychiatry and Psychotherapy, University of Erlangen-Nuremberg, Erlangen, Germany*

36 #352 **fMRI of OLFACTORY WORKING-MEMORY IN PRIMARY OLFACTORY CORTEX.** christina zelano[1], Jessica Montag[1], Rehan Khan[1], Noam Sobel[1,2]. [1]*Biophysics, UC Berkeley, Berkeley, CA, United States*; [2]*Neurobiology, 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 Thuerauf, Udo Reulbach, Agabi Vassiliadu, 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[1], King-Wai Yau[2], Frank L. Margolis[3]. [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[1], Katherine Cygnar[1], Johannes Reisert[2], Haiqing Zhao[1]. [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-Santarelli, Xavier Grosmaitre, 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.** Kyrill Ukhanov[1], Trese Leinders-Zufall[2], Frank Zufall[2]. [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[1], Thomas Finger[2], Diego Restrepo[2]. [1]*Biology Division, BCPS, and CINNR, 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 retronasal olfaction is influenced by odorant solubility.** John Scott[1], Lisa Sherrill[1], Maggie Phan[2]. [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 sensillae.** 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[1], Yoo Jeong Yim[2], Hun-Jong Dhong[1], Jung Hee Lee[2]. [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[1], Isabelle Comte[2], Alan Robinson[1]. [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 Klasen, Thomas Veitinger, 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[1,2], Mandy Scheibe[1], Volker Gudziol[1], Jens Reden[1], Simona Negoias[1], Thomas Hummel[1]. [1]*Otorhinolaryngology, University of Dresden Medical School, Dresden, Germany*; [2]*Otorhinolaryngology, Hyotan-machi ENT Clinic, Kanazawa, Japan*

53 #369 **Administration of drugs to the olfactory cleft .** mandy scheibe[1], christoph bethge[2]. *[1]ent, University of Dresden Medical School, Dresden, Germany; [2]ent, University of Dresden Medical School, Dresden, Germany*

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 psychophysics
25-28:	Olfaction: Regeneration
29-36:	OB/AL: Development, plasticity
37-43:	ERPs: perception and disorders
44-51:	Olfaction: Cognitive effects
52-54:	Learning

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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 Wang[1,2], Shanshan Zhou[2,3], Richard Lyman[1,2], Svetlana Shabalina[4], Trudy Mackay[1,2], Robert Anholt[1,2,3]. *[1]Genetics, North Carolina State University, Raleigh, NC, USA; [2]W. M. Keck Center for Behavioral Biology, North Carolina State University, Raleigh, NC, USA; [3]Zoology, North Carolina State University, Raleigh, NC, USA; [4]National Center for Biotechnology Information, National Institutes of Health, Bethesda, MD, USA*

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

This symposium will present progress especially in functional characterization of specific receptors or receptor families in taste and pheromone perception. The focus will be on genetically tractable systems, mainly Drosophila and mouse, with a specific emphasis of the role of receptors, on various social and sexual behaviors.

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*

11:45 #383 **Identification of candidate sour taste receptors in mammals.** Hiroaki Matsunami. *Molecular Genetics and Microbiology, Duke University Medical Center, Durham, NC, United States*

12:10 #384 **Identification of the pheromone ligands and sensory neurons that mediate male-male aggression in the mouse.** Lisa Stowers, Pablo Chamero, Toby Martin, Kelly Flanagan, Darren Logan. *Cell Biology, The Scripps Research Institute, La Jolla, CA, United States*

8:00am-12:30pm **POSTER SESSION SAT AM**
North Ballroom

1 #385 **L-alanine CTA and threshold studies with T1R3 knockout mice.** Meghan Eddy, Clinton Veselis, Benjamin Eschle, Eugene Delay. *Biology, University of Vermont, Burlington, VT, United States*

2 #386 **Laryngeal taste buds and airway chemoreceptors express little T1R3.** Marco Tizzano[1], Andrea Sbarbati[1], Francesco Osculati[1], Sami Damak[2,3], Robert F. Margolskee[2], Thomas E. Finger[4]. *[1]Dept. Morph-Biomed Sci, Univ. Verona, Verona, Italy; [2]Dept. of Neurosci, Mt Sinai Sch Med, NY, NY, USA; [3]Current Addr:, Nestle Res Ctr, Lausanne, Switzerland; [4]Rocky Mtn. Taste & Smell Ctr., Univ. Colo Med Sch., Aurora, CO, USA*

3 #387 **TAS2R38 GENOTYPE, FUNGIFORM PAPILLAE AND SUPRATHRESHOLD TASTE RESPONSE.** JE Hayes[1], LM Bartoshuk[2], JR Kidd[3], VD Duffy[1,4]. *[1]Nutritional Sciences, U. of Connecticut, Storrs, CT, United States; [2]Dentistry, U. of Florida, Gainesville, FL, United States; [3]Genetics, Yale Univ, New Haven, CT, United States; [4]Allied Health, U. of Connecticut, Storrs, CT, United States*

4 #388 **Interactions of bitter tastants with their TAS2R receptors.** Anne Brockhoff[1], Maik Behrens[1], Giovanni Appendino[2], Christina Kuhn[1], Bernd Bufe[1], Wolfgang Meyerhof[1]. *[1]Molecular Genetics, German Institute for Human Nutrition, Nuthetal, Germany; [2]DISCAFF, University of Eastern Piedmont, Novara, Italy*

5 #389 **Derivatives of Denatonuim Benzoate - bitter taste of humans vs monkeys.** Tiffany Otto, Alexey Koposov, Yiwen Wang, Viktoria Danilova, Göran Hellekant. *Dept Physiology&Pharmacology, University of Minnesota Medical School, Duluth, MN, MN, United States*

6 #390 **Glycosylation of human bitter taste receptors.** Maik Behrens, Claudia Reichling, Wolfgang Meyerhof. *Molecular Genetics, German Institute of Human Nutrition, Nuthetal, Germany*

7 #391 **Response characteristics of the rat chorda tympani nerve to static and dynamic lingual thermal stimulation.** Jessica Lee, Robert Bradley. *Dept. Biologic & Materials Sciences, School of Dentistry, University of Michigan, Ann Arbor, MI, United States*

8 #392 **Single fiber responses of the chorda tympani nerve to umami taste compounds in wild type, T1R3-KO and TRPM5-KO mice.** Keiko Yasumatsu[1], Ryusuke Yoshida[1], Yoshihiro Murata[1], Sami Damak[2], Robert F. Margolskee[3], Yuzo Ninomiya[1]. *[1]Sect. Oralneuroscience, Grad. Sch. Kyushu university, Fukuoka, Japan; [2] Nestlé Research Center, Lausanne, Switzerland; [3]Department of Neuroscience, Mount Sinai School of Medicine, New York, NY, USA*

9 #393 **Triphenylphosphine oxide (TPPO) is a potent, selective inhibitor of the human transient receptor potential M5 (hTRPM5) monovalent cation channel.** Robert Bryant, Paul Lee, Tulu Buber, Karnail Atwal, Ivana Bakaj, Heather Devantier, Cynthia Hendrix, Dennis Sprous, Rok Cerne, Rosa Cortes, Kyle Palmer. *Redpoint Bio, Cranbury, NJ, United States*

10 #394 **Gurmarin inhibition of the chorda tympani nerve responses to sweeteners and its temperature dependency in mice.** Tadahiro Ohkuri, Keiko Yasumatsu, Ryusuke Yoshida, Noriatsu Shigemura, Yuzo Ninomiya. *Sect. of Oral Neurosci.Grad. Sch. of Den, Kyushu Univ, Fukuoka, Japan*

11 #395 **POLYCOSE AND STARCH PREFERENCES IN TRPM5, GUSTDUCIN AND P2X KNOCKOUT MICE.** A. Sclafani[1], J.I. Glendinning[2], R.M. Margolskee[3]. *[1]Psychology, Brooklyn College of CUNY, Brooklyn, NY, United States; [2]Biological Sciences, Barnard College, New York, NY, United States; [3]Neuroscience, Mount Sinai School of Medicine, New York, NY, USA*

12 #396 **Thymol and related phenols are potent activators of the transient receptor potential channel, TRPA1.** S. Paul Lee, Tulu Buber, Heather Devantier, Daniel Long, R. Kyle Palmer, Rosa Cortes, Rok Cerne, Ray Salemme, Robert Bryant. *Discovery Research, Redpoint Bio, cRANBURY, NJ, United States*

13 #397 **Preferences for basic tastes in 6- and 12-month-old infants.** C. Schwartz, S. Issanchou, S. Nicklaus. *UMR1129 FLAVIC, INRA, Dijon, France*

14 #398 **Early milk-feeding history influences infants' taste preferences.** Catherine Forestell, Lindsay Morgan, Lauren Yourshaw, Gary Beauchamp, Julie Mennella. *Monell Chemical Senses Center, Philadelphia, PA, United States*

15 #399 **Smoking and Breastfeeding.** Julie Mennella, Lauren Yourshaw, Lindsay Morgan. *Monell Chemical Senses Center, Philadelphia, PA*

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 Supertasters - 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 Bartoshuk[1], Frank Catalanotto[1], Valerie Duffy[2], Howard Hoffman[3], Henrietta Logan[1], Vicki Mayo[1], Derek Snyder[1,4]. [1]*Commun Dent & Behav Sci, Smell & Taste Center, U Florida, Gainesville, FL, United States*; [2]*Allied Health, U Connecticut, Storrs, CT, United States;* [3]*NIDCD, NIH, Bethesda, MD, United States;* [4]*Neuroscience, 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 Glatt[1], David Tichansky[2], Atul Madan[2], Jason Harper[2], John Boughter[1]. [1]*Anatomy & Neurobiology, University of Tenn. Health Sci. Center, Memphis, TN, United States*; [2]*Surgery, 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 Raudenbush. *Psychology, Wheeling Jesuit University, Wheeling, WV, United States*

21 #405 **Hunger ratings among restrained eaters with high and low disinhibition.** Nobuko Kemmotsu[1,2], Lori Haase[1,2], Marla Yidonoy[1], Margaret Chen[1], Erin Green[1], Aaron Jacobson[1], Claire Murphy[1,2]. [1]*Department of Psychology, San Diego State University, San Diego, CA, USA*; [2]*University 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 Raudenbush. *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 Fletcher[1], Arjun Masurkar[1], Junling Xing[1], Wenhui Xiong[1], Shin Nagayama[1], Hiroki Mutoh[2], Riota Homma[3], Lawrence Cohen[3], Thomas Knopfel[2], Wei Chen[1]. [1]*Neurobiology, Yale University School of Medicine, New Haven, USA*; [2]*Laboratoary for Neuronal Circuit Dynamics, RIKEN Brain Science, Wako-shi, Japan;* [3]*Cellular and Molecular Physiology, Yale University School of Medicine, New Haven, CT, USA*

26 #410 **Glomerular Response Mapping Using Virtual Projection Neuron Populations: A Step Towards Representing Whole Antennal Lobe Activity in Realtime.** E. M. Staudacher[1], W. Huetteroth[2], H. L. Parsons[1], J. Schachtner[2], K. C. Daly[1]. [1]*Biology, West Virginia University, Morgantown, WV, USA*; [2]*Biologie, Philipps-Universität Marburg, Marburg, Germany*

27 #411 **Dynamic odor perception and neural code in an insect.** Iori Ito[1], Chik-ying Ong[1,2], Baranidharam Raman[1,3], Mark Stopfer[1]. [1]*NICHD, NIH, Bethesda, MD, USA*; [2]*Biochemistry, Chinese Univ. of Hong Kong, Hong Kong, China;* [3]*NIST, 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 Cohen[1], Ryota Homma[1], EK Kosmidis[1], Steve Youngentob[2]. [1]*Physiology, Yale University, New Haven, CT, US*; [2]*Neuroscience & Physiology, SUNY Upstate Medical University, Syracuse, NY, US*

31 #415 **Directional Asymmetry in Responses of Crayfish Brain Interneurons to Hydrodynamic Stimulation of the Lateral Antennular Flagellum.** DeForest Mellon[1], Joseph A.C. Humphrey[1,2]. *[1]Biology, University of Virginia, Charlottesville, VA, United States; [2]Mechanical and Aerospace Engineering, University of Virginia, Charlottesville, VA, United States*

32 #416 **Imaging juxtaglomerular responses to odorants in mice using 2-photon microscopy.** Ryota Homma[1], Lawrence Cohen[1], Olga Garaschuk[2], Arthur Konnerth[2]. *[1]Physiology, Yale, New Haven, CT, US; [2]Neurobiology, TUM, Munich, Germany*

33 #417 **Constructing odor representations: learning, genetics, and pharmacology.** T.A. Cleland[1], N. Mandairon[1], O. Escanilla[1], K.G. Bath[2], F.S. Lee[2], C. Linster[1]. *[1]NB&B, Cornell University, Ithaca, NY, USA; [2]Psychiatry, Weill Cornell Med. Coll., New York, NY, USA*

34 #418 **Neural basis of latent inhibition to odors in honeybees.** Fernando Locatelli[1], Giovanni Galizia[2], Brian Smith[1]. *[1]School of Life Sciences, ASU, Tempe, AZ, United States; [2]Lehrstuhl für Neurobiologie, Universität Konstanz, Konstanz, Germany*

35 #419 **Interhemispheric connections of the rat anterior olfactory nucleus.** Jennifer Eudy, Kurt Illig. *Psychology, University of Virginia, Charlottesville, VA, United States*

36 #420 **Spatial organization of activity in the anterior olfactory nucleus.** Elizabeth Meyer[2], Rachel Kay[1], Kurt Illig[1], Peter Brunjes[1]. *[1]Department of Psychology, University of Virginia, Charlottesville, VA, United States; [2]Department of Biology, University of Virginia, Charlottesville, VA, United States*

37 #421 **The medial amygdala receives a direct input from ventrally located mitral cells in the main olfactory bulb of mice.** Ningdong Kang[1], Alice Wey[1], James Cherry[2], Michael Baum[1]. *[1]Biology, Boston University, Boston, MA, United States; [2]Psycholog, Boston University, Boston, MA, United States*

38 #422 **Medial Amygdala Response to Territorial, Reproductive and Predator Stimuli.** Chad Samuelsen, C. Blake, M. Meredith. *Biology, Florida State University, Tallahassee, FL, United States*

39 #423 **Initial survey of integration of sensory information in the olfactory cortex in awake mice.** Jonah J. Scott-McKean, Wilder Doucette, Diego Restrepo. *Neuroscience Program, UCDHSC, Aurora, CO, United States*

40 #424 **Pattern completion and separation in anterior piriform cortex.** Donald Wilson. *Zoology, Univ Oklahoma, Norman, OK, US*

41 #425 **Piriform to orbitofrontal transthalamic pathway involved in olfactory attentional processing.** Jane Plailly, James Howard, Jay Gottfried. *CNADC, Northwestern University, chicago, IL, United States*

42 #426 **A nanotube-based electronic nose.** Reza Naima[1], Rehan Khan[1], Brad Johnson[2], Jean-Christophe Gabriel[2], Ying-Lan Chang[2], Qian Wang[2], Noam Sobel[1,3]. *[1]Bioengineering, UC Berkeley, Berkeley, CA, USA; [2]Nanomix Inc., Emeryville, CA, USA; [3]Neurobiology, Weizmann Institute of Science, Rehovot, Israel*

43 #427 **The dog can detect the expiration-odor of cancer patient.** Yuji Satou[1], Keiichi Tonosaki[2]. *[1]Dog Center, OJPC, Tateyamashi, Japan; [2]Dept of oral Physiology, Meikai univ., Sch of dentistry ,, Sakatoshi, Japan*

44 #428 **Diagnosis of an odor-producing genetic disorder: trimethylaminuria using salivary analysis.** Chris L. Whittle, Jason Eades, George Preti. *Monell Chemical Senses Center, Philadelphia, PA, United States*

45 #429 **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*

46 #430 **NMDA-receptor-like protein in Paramecium Chemoresponse to Glutamate.** C. Jacobs, S.D. Weeraratne, J. Yano, J.L. Van Houten. *Biology, University of Vermont, Burlington, VT, United States*

47 #431 **The Effect of Periodic Input on Antennal and Antennal lobe responses in the Moth Manduca sexta.** Shreejoy Tripathy[1], Oakland Peters[2], Kevin Daly[2]. *[1]Biomedical Engineering, Johns Hopkins, Baltimore, MD, United States; [2]Biology, West Virginia University, Morgantown, WV, United States*

48 #432 **OMP MECHANISM OF ACTION: A MODEL.** Frank L. Margolis[1], Steven Youngentob[2], Joyce Margolis[1], Paul Kent[3], Jae Hyung Koo[1]. *[1]Anat. and Neurobiol., Univ. of MD Sch. of Med., Baltimore, MD, United States; [2]Neurosci. and Physiol., Upstate Med. Sch., Syracuse, NY, United States; [3]Neurol., 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

51 #435 **A Specific Heat Shock Protein Enhaces the Expression of Mammalian Olfactory Receptor Proteins.** Lian Gelis, Anastasia Mashukova, Weiyi Zhang, Jon Barbour, Hanns Hatt, Eva M. Neuhaus. *Dept Cell Physiology, Ruhr-Universitaet Bochum, Bochum, Germany*

Saturday, PM

12:30pm–2:30pm **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 Menashe[1,2], Ronny Aloni[1], Tsviya Olender[1], Doron Lancet[1]. *[1]Department of Molecular Genetics, Weizmann Institute of Science, Rehovot, Israel; [2]Division 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 Young[1], Hillary Massa[1], Leo Goodstadt[2], Chris Ponting[2], Barbara Trask[1]. *[1]Div. Human Biology, Fred Hutchinson Cancer Research Center, Seattle, WA, United States; [2]Dept. 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*

8:00pm–10:30pm **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 #441 **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 #442 **Multimodal fast optical interrogation of neural circuits.** Karl Deisseroth. *Dept. Bioengineering, Stanford University, USA, United States*

9:25 #443 **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 Kataoka[1], Anne Hansen[1], Yoshiro Ishimaru[2], Hiroaki Matsunami[2], Thomas Finger[1]. *[1]Rocky Mtn. Taste & Smell Ctr., Univ. Colo Med Sch., Aurora, CO, United States; [2]Molecular 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 Ohmoto, 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, Liquan Huang. *Monell Chemical Senses Center, Philadelphia, PA, United States*

11 #455 **Taste cells secrete ATP via Pannexin 1 hemichannels.** Yutaka Maruyama[1], Yi-Jen Huang[1], Elizabeth Pereira[1], Nirupa Chaudhari[1,2], Stephen D. Roper[1,2]. *[1]Department of Physiology & Biophysics, University of Miami, Miami, FL, USA; [2]Program 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 Huang[1], Yutaka Maruyama[1], Guennadi Dvoriantchikov[1], Elizabeth Pereira[1], Nirupa Chaudhari[1,2], Stephen Roper[1,2]. *[1]Physiology & Biophysics, Miller School of Medicine, University of Miami, Miami, FL, US; [2]Program in Neuroscience, Miller School of Medicine, University of Miami, Miami, FL, US*

13 #457 **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*

14 #458 **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*

15 #459 **Bitterness of iso-alpha-acids is localized to posterior oral cavity and is enhanced by the addition of NaGluconate.** Paul Breslin, Suzanne Alarcon, Catherine Peyrot Des Gachons. *Monell Chem Sens Ctr, Phila, PA, United States*

16 #460 **Spatial summation of taste revisited.** Barry Green, Lenka Urban, Juyun Lim. *The John B. Pierce Laboratory, New Haven, CT, USA*

17 #461 **ADAPTATION TO SUCROSE AND NACL TRACKED DISCRETELY OR CONTINUOUSLY.** Marion Frank[1], Kelly Burger[2], Miao-Fen Wang[2], Lawrence Marks[2]. [1]*Oral Health & Diagnostic Sciences, University of Connecticut Health Center, Farmington, CT, United States*; [2]*John B. Pierce Laboratory, New Haven, CT, United States*

18 #462 **Chlorhexidine induced salt-taste distortions and stimulus cation valency.** Aiman Johar[1], Marion Frank[1], Janneane Gent[2]. [1]*Neurosciences, Oral Health & Diagnostic Sciences, University of Connecticut School of Dental Medicine, Farmington, CT, United States*; [2]*Epidemiology and Public Health, Yale University School of Medicine, New Haven, CT, United States*

19 #463 **Detection and Recognition Thresholds For Sucrose and Quinine HCl for Moderate Dry Mouth Sufferers (MDMS) and Sjogren's Syndrome Sufferers (SS).** Marie Richardson[1], Shireen Uppal[1], Steve Alexander[1], Phil Stern[2]. [1]*CH R&D, GlaxoSmithKline, Weybridge, UK*; [2]*CH R&D, GlaxoSmithKline, Parsippany, NJ, US*

20 #464 **Examination of Taste Recognition Thresholds with Edible Taste Strips.** Si Lam[1], Nabil Sayed[1], Susan Georgekutty[1], M. Andrew Yanaka[1], and Gregory S. Smutzer[1,2]. [1]*Biology Department, Temple University, Philadelphia, PA, USA*; [2]*and Smell and Taste Center, University of Pennsylvania School of Medicine, Philadelphia, PA, USA*

21 #465 **A Test for Gustatory Function.** Gregory Smutzer[1,2], Lloyd Hastings[3], Tu-Quyen Hoang[1], Jennifer X. Yau[1], Laura K. Pham[1], and My Vinh Cong[1]. [1]*Biology Dept., Temple University, Philadelphia, PA, USA*; [2]*Smell and Taste Center, University of Pennsylvania School of Medicine, Philadelphia, PA, USA;* [3]*Osmic Enterprises Inc., Cincinnati, OH, USA*

22 #466 **MODIFYING BITTERNESS DEPENDS ON VEGETABLE TYPE AND PROP TASTING.** G. Napoleone[1], JE Hayes[2], BS Sullivan[1], VB Duffy[1,2]. [1]*Allied Health Sciences, University of Connecticut, Storrs, CT, United States*; [2]*Nutritional Sciences, University of Connecticut, Storss, CT, United States*

23 #467 **The relationship between caffeine, taste and anxiety.** Lucy Donaldson[1], Tom Heath[1], Emma Richardson[1], Charlotte Kenyon[1], Victoria Smith[1], David Nutt[2], Jan Melichar[2]. [1]*Physiology, University of Bristol, Bristol, United Kingdom*; [2]*Psychopharmacology, University of Bristol, Bristol, United Kingdom*

24 #468 **SENSORY PERCEPTION AND CHARACTERIZATION OF NOVEL SENSORY EVOKING FLAVOR INGREDIENTS.** Beverly J Tepper[1], Yvonne Koelliker[1], Carter Green[2]. [1]*Food Science, Rutgers University, New Brunswick, NJ, United States*; [2]*Takasago Intl Corp, Rockleigh, NJ, United States*

25 #469 **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*

26 #470 **Impact of apo-E deficiency on regeneration of olfactory receptor neurons post injury in mice.** Britto Nathan[1], Ikemefuna Nwosu[1], Salina Gairhe[1], Sreenivas Nannapaneni[1], Robert Struble[2]. [1]*Biological Sciences, Eastern Illinois University, Charleston, IL, United States*; [2]*School of Medicine, Southern Illinois University, Springfield, IL, United States*

27 #471 **Regeneration of the olfactory nerves following mild and severe injury and efficacy of dexamethazone treatment.** Masayoshi Kobayashi[1,2], Yuichi Majima[2], Richard Costanzo[1]. [1]*Physiology, Virginia Commonwealth University School of Medicine, Richmond, VA, USA*; [2]*Otorhinolaryngology-Head & Neck Surgery, Mie University Graduate Sch. of Medicine, Tsu, Mie, Japan*

28 #472 **NEUROGENESIS IN THE ADULT RAT OLFACTORY EPITHELIUM AND SUBVENTRICULAR ZONE: DIFFERENTIAL EFFECTS OF ATYPICAL ANTIPSYCHOTICs.** Sarah Pixley[1], Henry Nasrallah[2]. [1]*Cell and Cancer Biology, Univ. Cincinnati Coll. Med., Cincinnati, OH, United States*; [2]*Psychiatry, Univ. Cincinnati Coll. Med., Cincinnati, OH, United States*

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 Biju, 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, Haiqing Zhao. *Biology, Johns Hopkins University, Baltimore, MD, USA*

33 #477 **DEVELOPMENT OF THE GLIAL INVESTMENT OF GLOMERULI IN THE DROSOPHILA OLFACTORY 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 OLFACTORY 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?** Ambarish Ghatpande, Alan Gelperin. *Monell Chemical Senses Center, Philadelphia, PA, United States*

36 #480 **Visualization and Manipulation of Mitral Cell Dendritic Maturation in vivo by Lentivirus.** Dennis Hawisher, Ting-Wen Cheng, Qizhi 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 Bulsing[1], Monique Smeets[1], Thomas Hummel[2], Marcel Van den Hout[1]. [1]*Clinical and Health Psychology, Utrecht University, Utrecht, Netherlands*; [2]*Smell and Taste Clinic, Dresden University, Dresden, Germany*

38 #482 **THRESHOLDS AND CHEMOSENSORY EVENT-RELATED POTENTIALS TO MALODORS: DIFFERENCES RELATED TO SEX AND AGE.** Anita Chopra[1], Arianne Baur[2], Thomas Hummel[2]. [1]*Perception & Behaviour, Unilever Research and Development, Merseyside, UK*; [2]*Otorhinolaryngology, University of Dresden Medical School, Dresden, Germany*

39 #483 **More precise measurements of olfactory event related potentials and magnetic fields.** Tatsu Kobayakawa[1], Hideki Toda[1], Nao Goto[1], Sachiyo Akiyama[2]. [1]*Institute for Human Science and Biomedical Engineering, Advanced industrial science and technology (AIST), Tsukuba, Japan*; [2]*National Agency for the Advancement of Sports and Health, Tokyo, Japan*

40 #484 **Olfactory sensitivity in euthymic bipolar patients.** Simona Negoias[1], Johannes Frasnelli[1], Johannes Gerber[2], Peter Braeunig[3], Stephanie Krueger[4]. [1]*Smell and Taste Clinic, University of Dresden Medical School, Dresden, Germany*; [2]*Dep. of Neuroradiology, University of Dresden Medical School, Dresden, Germany*; [3]*Dep. of Psychiatry, Chemnitz Clinic, Chemnitz, Germany*; [4]*Dep. of Psychiatry, University of Dresden Medical School, Dresden, Germany*

41 #485 **Orthonasal and retronasal perception of binary odor mixtures.** Akiko ISHII[1], Natacha ROUDNITZKY[2], Moustafa BENSAFI[3], Thomas HUMMEL[2], Catherine ROUBY[3], Thierry THOMAS-DANGUIN[1]. [1]*FLAVIC, INRA, DIJON, France*; [2]*University of Dresden, Smell & Taste Clinic, DRESDEN, Germany*; [3]*CNRS-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 Felbaum, 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 Felbaum, 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 Wilson[1], Caroline Coffield[2], Estelle Mayhew[2], Jeannette Haviland-Jones[2]. [1]*Psychology, La Salle University, Philadelphia, PA, United States*; [2]*Psychology, 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 Schreder, Johanna May, Jennifer Linn, Martin Wiesmann. *Neuroradiology, Ludwig-Maximilians-University, Munich, Germany*

48 #492 **Androstenol/androsterone may condition a human hormonal effect/behavioral affect.** Linda Kelahan[1], Heather Hoffmann[1], James V. Kohl[2], Amber Shea[3]. [1]*Psychology, Knox College, Galesburg, IL, United States*; [2]*Independent Researcher, Epworth, GA, United States;* [3]*Applied 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 Lyon1, Lyon, France*

50 #494 **Individual differences in processing olfactory information: comparing behavioral measures to self-report.** Monique Smeets[1], Hendrik Schifferstein[2], Sarai Boelema[1]. [1]*Dept of Clinical and Health Psychology, Utrecht University, Utrecht, Netherlands*; [2]*Dept 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 Ong[1,2], Mark Stopfer[1]. [1]*NICHD, NIH, Bethesda, MD, USA*; [2]*Biochemistry, 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. Magidson[1], A.M. McNamara[1], T.A. Cleland[1], D.A. Wilson[2], C. Linster[1]. [1]*Neurobio & Behav, Cornell University, Ithaca, NY, United States*; [2]*Zoology, 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.)

Sunday, AM

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

8:00
#499 **BDNF modulation of adult neurogenesis: impact on neuroblast migration and survival as well as spontaneous olfactory discrimination.** Kevin Bath[1], Nathalie Mandairon[2], Rithwick Rajagopal[3], Ruchi Kapoor[1], Dequiang Jing[1], Zhe-Yu Chen[1], Thomas Cleland[2], Barbara Hempstead[4], Moses Chao[3], Francis Lee[1]. *[1]Psychiatry, Weill Medical College of Cornell, New York, NY, U.S.; [2]NB&B, Cornell University, Ithaca, NY, U.S.; [3]Skirball Institute, New York Univesity, New York, NY, U.S.; [4]Medicine, WMC Cornell, New York, NY, U.S.*

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, Univeristy of Ljubljana, Ljubljana, Slovenia*

8:30
#501 **Entrainment of the Circadian System of the Newborn Rabbit by Pheromonal Cues.** Robyn Hudson[1], Estrella Chévez[1], Hans Distel[2], Ivette Caldelas[1]. *[1]Biología Celular y Fisiología, Universidad Nacional Autónoma de México, Instituto de Investigaciones Biomédicas, Mexico; [2]Institut 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 Aihara[1], Akihito Yasuoka[2], Yuki Yoshida[1], Takumi Misaka[1], Satoshi Iwamoto[3], Michiko Watanabe[1], Keiko Abe[1]. *[1]University of Tokyo, Japan; [2]Maebashi Institute of Technology, United States; [3]Gifu University, United States*

9:15 #504 **Odor Detection of Ozone and d-Limonene: Reactants in Indoor Spaces.** William Cain[1], Roland Schmidt[1], Wolkoff Peder[2]. *[1]Chemosensory Perception Lab - Surgery, University of California - San Diego, La Jolla, CA, United States; [2]Indoor Environment Group, National Institute of Occupational Health, Copenhagen, Denmark*

9:30 #505 **Older Adults with the APOE4 Risk Factor for Alzheimer's Disease Show Altered Topographical Brain Response in an Odor Recognition Memory Task.** Claire Murphy[1,2], Andrew Bender[1]. *[1]San Diego State University, San Diego, CA, USA; [2]University of California, San Diego, CA, USA*

9:45 #506 **Pleasantness of binary mixtures.** Hadas Lapid[1,2], Rehan Khan[1], David Harel[2], Noam Sobel[1]. *[1]Neurobiology, Weizmann Institute of Science, Rehovot, Israel; [2]CS 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 Restrepo[1], Robert Margolskee[2], Gerald Donnert[3], Stefan W. Hell[3], Anne Hansen[1], Weihong Lin[4]. *[1]Cell and Dev. Biology, UCDHSC, Aurora, CO, USA; [2]Neuroscience, Mount Sinai School of Medicine, New York, NY, USA; [3]Biophotonics, Max Planck Institute for Biophysical Chemistry, Göttingen, Germany; [4]Biological 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 Hu[1], Chun Zhong[1], Cheng Ding[1], Qiuyi Chi[2], Hiroaki Matsunami[2], Minmin Luo[1]. *[1]National Institute of Biological Science, Beijing, China; [2]Department 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*

11:45 #510 **What can we learn from the septal organ?** Minghong Ma. *Neuroscience, University of Pennsylvania, Philadelphia, PA, United States*

12:10 #511 **Deconstructing smell.** Linda Buck. *HHMI, Fred Hutchinson Cancer Res Cen, WA, USA*

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

1 #512 **THE MOUSE NST: A CYTOARCHITECTONIC ATLAS.** Donald Ganchrow[1], Judith Ganchrow[2], Nicholas Warner[3], Mark Whitehead[3]. *[1]Anatomy/Anthropology, Tel-Aviv University, Tel-Aviv, Israel; [2]Dental Sciences, Hebrew University, Jerusalem, Israel; [3]Surgery/Anatomy, UCSD, La Jolla CA, CA, United States*

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

3 #514 **Juxtacellular labeling as a technique for studying structure-function relationships in the nucleus of the solitary tract.** Andre Roussin[1], Patricia Di Lorenzo[1], Andrew Rosen[1], Laura Schweitzer[2]. *[1]Psychology, Binghamton University, Binghamton, NY, United States; [2]Bassett 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*

6 #517 **TRPV2 expression in geniculate and petrosal ganglia and the rostral nucleus of the solitary tract.** M. Kim[1,2], R.M. Bradley[1], C.M. Mistretta[1]. [1]*Dept. Biol. Mat. Sci., Sch. Dent., Univ. Mich., Ann Arbor, MI, United States*; [2]*Nursing, Chonnam National Univ., Gwangju, Korea*

7 #518 **Taste information from both sides of the tongue converge on the neurons in the nucleus of the solitary tract.** Young K Cho[1], Cheng-Shu Li[2]. [1]*Physiology and Neuroscience, Kangnung National University, Kangnung, Republic of Korea*; [2]*Anatomy, Southern Illinois University, Carbondale, IL, USA*

8 #519 **Characterization of synaptic potentials at the first synapse in the central taste pathway.** M. Wang, R.M. Bradley. *Dept. Biologic & Materials Sci., Sch. Dent., Univ. Michigan, Ann Arbor, MI, United States*

9 #520 **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*

10 #521 **The role of Group III metabotropic glutamate receptors in transmission of gustatory inputs to the brainstem.** R.M. Hallock, T.E. Finger. *Rocky Mtn. Taste & Smell Ctr. U Colo Med Sch, CO, United States*

11 #522 **Contribution of the T1R3 taste receptor to the response properties of central gustatory neurons in mice.** Christian Lemon[1], David Smith[1], Robert Margolskee[2]. [1]*Anatomy & Neurobiology, Univ Tennessee, Memphis, TN, United States*; [2]*Neuroscience, Mount Sinai School of Medicine, New York, NY, United States*

12 #523 **Gustatory cortex neurons respond to the reward value of sucrose independently of taste signaling.** Ivan de Araujo[1], Albino Oliveira-Maia[1], Tatiana Sotnikova[2], Raul Gainetdinov[2], Miguel Nicolelis[1], Sidney Simon[1]. [1]*Neurobiology, Duke University, Durham, NC, USA*; [2]*Cell Biology, Duke University, Durham, NC, USA*

13 #524 **RESPONSES OF THE CHORDA TYMPANI NERVE TO NACL FOLLOWING BRIEF DIETARY NA+ DEPRIVATION WITH NACL REPLETION.** Joanne Vaughn, Robert Contreras. *Psychology and Program in Neuroscience, Florida State University, Tallahassee, FL, United States*

14 #525 **Potassium deprivation produces a chloride appetite in the rat.** Casey Guenthner[1], Stuart McCaughey[2], Mike Tordoff[2], John-Paul Baird[1]. [1]*Psychology, Amherst College, Amherst, MA, United States*; [2]*Monell Checmical Senses Center, Philadelphia, PA, United states*

15 #526 **Amiloride Blunts the Saltiness of NaCl After Adaptation to NaCl.** George Feldman[1,2], Gerard Heck[3]. [1]*Internal Medicine, VCU, Richmond, VA, USA*; [2]*Medical, VAMC, Richmond, VA, USA;* [3]*Physiology, VCU, Richmond, VA, USA*

16 #527 **Oral factors mediating equimolar NaCl and LiCl taste discrimination in rats.** Rebecca Dailey, John-Paul Baird. *Psychology & Neruoscience, Amherst College, Amherst, MA, United States*

17 #528 **After chorda tympani nerve transection, rats relearn a presurgically trained NaCl vs KCl taste discrimination using remaining gustatory input.** Ginger Blonde, Mircea Garcea, Enshe Jiang, Alan Spector. *Dept. of Psychology and Ctr. for Smell and Taste, Univ. of Florida, Gainesville, FL, USA*

18 #529 **Differential effects of fructose and glucose on intake behavior in rats.** Keiichi Tonosaki. *Dept of oral Physiology, Meikai univ., Sch of dentistry ,, Sakatoshi, Japan*

19 #530 **The Effects of Greater Superficial Petrosal Nerve Transection in Rats on Licking Responses to Sucrose and Putative Sweet-Tasting Amino Acids in Brief-Access Taste Tests.** Enshe Jiang, Ginger Blonde, Mircea Garcea, Alan Spector. *Dept. of Psychology and Center for Smell and Taste, Univ. of Florida, Gainesville, FL, USA*

20 #531 **Effect of IMP on behavioral response to D-alanine in mice.** Yuko Murata[1], Alexander Bachmanov[2], Gary Beauchamp[2]. [1]*NRIFS, Fisheries Research Agency, Yokohama, Japan*; [2]*Monell Chemical Senses Center, Philadelphia, PA, USA*

21 #532 **The Nature of Fragrance Preferences in Young Women.** Marie-Paule Bensoussan, Robin Freyberg. *Psychology, Yeshiva University, New York, NY, United States*

22 #533 **The influence of fragrance on facial attractiveness and attraction.** David Reynolds, Paraskevi Antonopoulou. *Dept. of Psychology, University of Chester, UK*

23 #534 **Concentration-detection functions for odor from homologous n-alcohols.** J. Enrique Cometto-Muniz[1], William Cain[1], Michael Abraham[2], Ricardo Sanchez-Moreno[2]. [1]*Chemosensory Perception Laboratory, Surgery (Otolaryngology), University of California, San Diego, La Jolla, CA, United States*; [2]*Chemistry, University College London, London, United Kingdom*

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

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

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

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

29 #540 **Taste is Abnormal in Parkinson's Disease and Suggests Cortical Spread.** Mossadiq Shah, Jacquie Deeb, Marina Fernando, Alastair Noyce, Leslie Findley, Elisa Visentin, Christopher Hawkes. *Essex 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. *Product safety and analytics, Fraunhofer IVV, 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. *Monell 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 odorant pleasantness from odorant structure: Cross-cultural validation.** Rehan Khan[2], Chung-Hay Luk[2], Adeen Flinker[2], Amit Aggarwal[2], Hadas Lapid[1], Rafi Haddad[1], noam sobel[1,2]. [1]*Neurobiology, Weizmann Institute of Science, Rehovot, Israel*; [2]*Neuroscience, UC Berkeley, Berkeley, CA, USA*

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

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

37 #548 **ABILITY OF GUM FLAVORS TO DISTRACT PARTICIPANTS FROM PAINFUL STIMULI: 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 Larsson[1], Lars Farde[2], Thomas Hummel[3], Nina Erixon-Lindroth[2], Lars Bäckman[4]. *[1]Department of Psychology, Stockholm University, Stockholm, Sweden; [2]Department of Psychiatry, Karolinska Institutet, Stockholm, Sweden; [3]Department of Otorhinolaryngology, Dresden Medical School, Dresden, Germany; [4]Aging Research Center, Karolinska Institutet, Stockholm, Sweden*

39 #550 **Upright or supine: Body position matters for weak odors.** Johan Lundstrom, Julie Boyle, Giulia de Prophetis, 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*

41 #552 **Olfactory perception in patients with eating disorders.** Katrin Markovic, Udo Reulbach, Carolin Betz, Eva Kleehaupt, Norbert Thuerauf. *Psychiatry and Psychotherapy, university of Erlangen-Nuremberg, Erlangen, Germany*

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 habituation is similar following presentation of a novel odor via the same route and the same odor via a novel route.** Genevieve Bender[1,2], Dana Small[1,2], Simona Negoias[3], Thomas Hummel[3]. *[1]JB Pierce Laboratory, United States; [2]Yale University School of Medicine, New Haven, CT, United States; [3]Dresden Medical School, Dresden, Germany*

46 #557 **Central Presentation of Postviral Olfactory Disorder Evaluated by FDG PET.** Jeong-Whun Kim[1], Yu Kyeung Kim[2]. *[1]Otorhinolaryngology, Seoul National University, Seongnam, South Korea; [2]Nuclear Medicine, Seoul National University, Seongnam, South Korea*

47 #558 **Effect of diet on volatile profiles of urines and sweat in humans.** Jae Kwak[1], Weiguang Yi[1], Alan Willse[2], George Preti[1], Julie Mennella[1], Allison Steinmeyer[1], Jon Wahl[2], Kunio Yamazaki[1], Gary Beauchamp[1]. *[1]Monell Chemical Senses Center, Philadelphia, PA, United States; [2]Pacific Northwest National Laboratory, Richland, WA, United States*

48 #559 **An epidemiological study on the frequency of smell and taste impairment.** Thomas Hummel[1], Mechthild Vennemann[2,3], Klaus Berger[3]. *[1]Smell & Taste Clinic, Dept. of ORL, Univ. of Dresden Medical School, Dresden, Germany; [2]Dept. of Epidemiology and Social Medicine, Univ. of Münster, Münster, Germany; [3]Dept. of Legal Medicine, Univ. of Münster, Münster, Germany*

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

50 #561 **Sex differences in neuronal processing based on odor type.** Julie Boyle[1], Johan Lundstrom[1], Bettina Pause[2], Robert Zatorre[1], Marilyn Jones-Gotman[1]. *[1]Montreal Neurological Institute, McGill University, Montreal, QC, Canada; [2]Psychology, Heinrich-Heine-University, Duesseldorf, Germany*

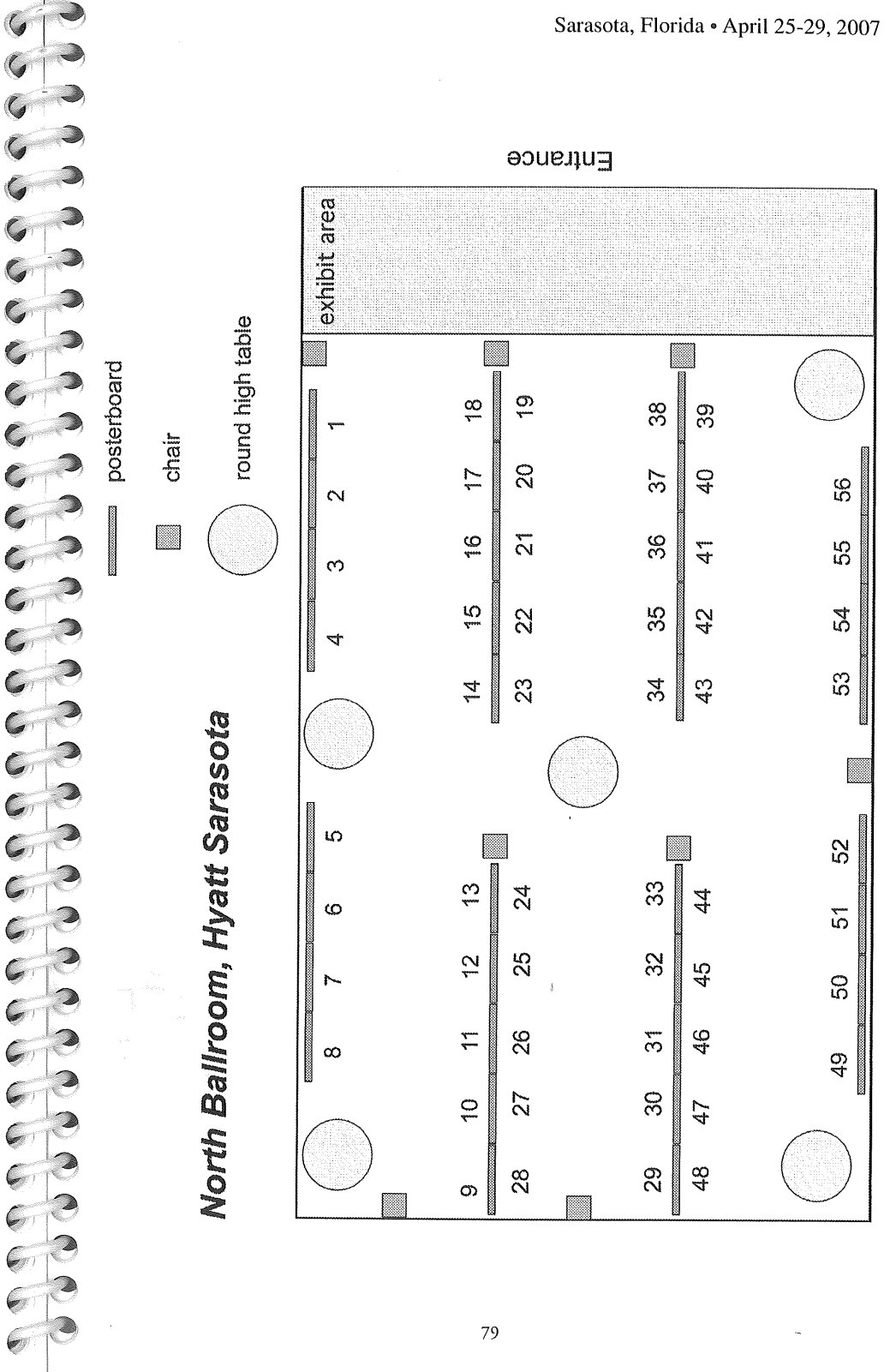
51 #562 **Multivariate pattern analysis of odor quality in human piriform cortex.** James Howard[1], John-Dylan Haynes[3], Jane Plailly[1], Todd Parrish[2], Jay Gottfried[1]. *[1]CNADC, Northwestern University, Chicago, IL, United States; [2]Radiology, Northwestern University, Chicago, IL, United States; [3]Human 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 LI[1], James Howard[1], Mark Benton[1], Emil Davchev[1], Vess Djoev[1], Todd Parrish[2], Jay Gottfried[1&3]. *[1]CNADC, Northwestern Northwestern, Chicago, IL, United States; [2]Radiology, Northwestern Northwestern, Chicago, IL, United States; [3]Neurology, Northwestern Northwestern, Chicago, IL, United States*

53 #564 **Olfactory discrimination acuity and thallium transport in the olfactory nerve of traumatic olfactory disturbance mice model.** Hideaki Shiga[1], Yayoi Kinoshita[1], Koshin Washiyama[2], Daisuke Ogawa[2], Ryohei Amano[2], Toshiaki Tsukatani[1], Takaki Miwa[1], Mitsuru Furukawa[1]. *[1]Otorhiolaryngology, Kanazawa University, Kanazawa, Japan; [2]Forefront Medical Technology, Kanazawa University, Kanazawa, Japan*

54 #565 **fMRI Investigation of Central Olfactory Deficit in Early Alzheimer's Disease.** Erin Zimmerman[1], Paul Eslinger[1,2,3], Robert Grunfeld[1], Jeffrey Vesek[1], Mark Meadowcroft[1,3], Jianli Wang[1], James Connor[4], Michael Smith[5], Qing Yang[1]. *[1]Radiology, Penn State University, Hershey, PA, United States; [2]Neurology, Penn State University, Hershey, PA, United States; [3]Neural & Behavioral Sciences, Penn State University, Hershey, PA, United States; [4]Neurosurgery, Penn State University, Hershey, PA, United States; [5]Novartis 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. Albrecht[1], R. Kopietz[1], A.M. Kleemann[1], V. Schöpf[1], G. Fesl[1], A. Anzinger[1], T. Schreder[1], G. Kobal[2], M. Wiesmann[1]. *[1]Dept. of Neuroradiology, Ludwig Maximilian University, Munich, Germany; [2]Sensory Research R&T, Philip Morris USA Inc., Richmond, VA, USA*



Wednesday April 25, 2007

- 10:00 - 12:00 **Educational Outreach** GWIZ Science Center
- 12:00 - 3:30 **Executive Committee** Executive Board Room
- 3:30 - 7:30 **Registration** Prefunction Area
- 4:00 - 5:00 **Long Range Planning Com.** Executive Board Rm
- 6:30 - 8:00 **Opening Buffet** (ticketed event) North Ballroom
- Welcome & Awards
- **Givaudan Lecture** **Speaker: Dr. Gene Robinson** South Ballroom
- **Social Gathering & Cash Bar** Prefunction Area
- **Organizational Meeting for Students with Travel Awards** North Ballroom

Thursday April 26, 2007

Registration: 7 am - 3 pm & 6 pm - 8:30 pm

Continental Breakfast 7:30 - 9:00

- 8:00 - 10:00 **Slide Session** 10 min talks — South Ballroom
- 8:00 - 12:30 **Poster Session & Exhibits** — North Ballroom
- 10:30 - 12:30 **Symposium** *Connecting Genetics & Perceptual Variations (Vosshall)* — South Ballroom
- 12:30 - 2:00 **Luncheon:** *Minority and Clinical Travel Awardees* Executive Boardroom
- 1:00 - 3:00 **Symposium** *Human Axillae: Why? (Rankin & Christiansen)* — South Ballroom
- 3:00 - 5:15 **Industry Symposium** — South Ballroom
- 3:00 - 5:00 NIH **Workshop** Ringling
- 5:30 - 7:00 **Industry Reception** (ticketed event) Florida Room
- 7:30 - 10:30 **Symposium** *Olfaction beyond the olfactory bulb: From perception to memory (Ravel & Wilson)* — South Ballroom
- 7:00 - 11:00 **Poster Session & Exhibits** — North Ballroom

Friday April 27, 2007

Registration: 7 am - 3 pm & 6 pm - 8:30 pm

Continental Breakfast 7:30 - 9:00

- 8:00 - 10:00 **Symposium** *Neural coding in the chemical senses (Lemon)* — South Ballroom
- 8:00 - 12:30 **Poster Session & Exhibits** — North Ballroom
- 10:30 - 12:30 **Symposium** *Gastrointestinal Chemosensation (Margolskee)* — South Ballroom
- 12:45 - 2:30 **AChemS Business Meeting** South Ballroom
- 3:00 - 5:00 **Workshop** *Odor signaling in humans (Jacobs)* — South Ballroom
- 5:00 - 7:00 **ChHEMA Social** Florida Room
- 7:00 - 8:30 **Slide Session** 10 min talks — South Ballroom
- **IFF Lecture** South Ballroom
- **Social Gathering & Cash Bar** Prefunction Area
- 7:00 - 11:00 **Poster Session & Exhibits** — North Ballroom

Saturday April 28, 2007

Registration: 7 am - 3 pm & 6 pm - 8:30 pm

Continental Breakfast 7:30 - 9:00

- 8:00 - 10:00 **Slide Session** 10 min talks — South Ballroom
- 8:00 - 12:30 **Poster Session & Exhibits** — North Ballroom
- 10:30 - 12:30 **Symposium** *Central Chemosensory Perception (Amrein)* — South Ballroom
- 12:30 - 2:00 **Clinical Luncheon:** *Speaker: Dr. Ling. Chin, NIDCD "Translational & Clinical Research Programs at NIH"* (ticketed event) The Keys
- 2:30 - 5:00 Sports Event
- 3:00 - 5:00 **Workshop** *Genomics approaches to study chemosensory receptors (Gilad)* — South Ballroom
- 8:00 - 10:30 **Presidential Symposium** — South Ballroom
- 7:00 - 11:00 **Poster Session & Exhibits** — North Ballroom

Sunday April 29, 2007

Registration: 7 am - 3 pm & 6 pm - 8:30 pm

Continental Breakfast 7:30 - 9:00

- 8:00 - 10:00 **Slide Session** 10 min talks — South Ballroom
- 8:00 - 12:30 **Poster Session & Exhibits** — North Ballroom
- 10:30 - 12:30 **Symposium** *Parallel processing by multi olfactory subsystems (Ma)* — South Ballroom

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