Dates of future AChemS meetings:

April 26-30, 2006 – Sarasota, FL

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AChemS
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PROGRAM
APRIL 13-17, 2005 - SARASOTA, FL
AChemS Association for Chemoreception Sciences

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Wednesday, April 13, 2005
10:00 AM - 12:00 PM  GWIZ Educational Outreach Event
             (GWIZ Science Center)
12:00 PM - 3:30 PM  Executive Committee (Executive Boardroom)
3:30 PM - 7:30 PM  Registration (Registration Area)
4:00 PM - 5:00 PM  Long Range Planning Committee Meeting
             (Executive Boardroom)
6:30 PM - 8:00 PM  Opening Buffet (North Ballroom)
8:00 PM - 8:30 PM  Welcome and Awards Ceremony (South Ballroom)
8:30 PM - 9:30 PM  GIVAUDAN LECTURE (South Ballroom)
8:30 PM  1  LEPTIN AND THE REGULATION OF BODY WEIGHT
          Friedman J.M.  1  Rockefeller University, New York, NY
9:30 PM - 11:30 PM  Student Travel/Housing Award Volunteer
             Meeting (North Ballroom)
9:30 PM - 10:30 PM  Social Gathering (Prefunction Area)
Thursday, April 14, 2005

7:00 AM - 3:00 PM  Registration (Registration Area)

7:30 AM - 9:00 AM  Continental Breakfast (Prefunction Area)

SLIDES

Thursday - 8:00 AM - 9:00 AM (South Ballroom)

Cellular & Molecular
Emily Liman, Session Chair

8:00
2  CHARACTERISATION OF MOUSE TRIGEMINAL NEURONS IDENTIFIED BY VIRAL TRACING
   Wetzel C.H.,1 Damann N.,1 Dörner J.F.,1 Rothermel M.,1 Klasen K.,1 Mettenleiter T.C.,2 Hatt H.2 1Lehrstuhl für Zellphysiologie, Ruhr-Universität Bochum, Bochum, Germany; 2Friedrich-Loeffler-Institut, Bundesforschungsinstitut für Tiergesundheit, Insel Riems, Germany

8:15
3  MANIPULATING THE DEVELOPING OLFACTORY AND VOMERONASAL SYSTEMS THROUGH THE USE OF ULTRASOUND-GUIDED RETROVIRUS INJECTION
   Chesler A.1, Le Pichon C.1, Peterlin Z.1, Mathews G.1, Firestein S.3 1Biology, Columbia University, New York, NY; 2Neurobiology and Behavior, Columbia University, New York, NY; 3Columbia University, New York, NY

8:30
4  EXPRESSION OF TRPM5 IN THE MAIN OLFACTORY EPITHELIUM
   Lin W.1, Margolskee R.F.2, Zhao Z.1, Liman E.R.A, Restrepo D.3 1Cell and Developmental Biology and Rocky Mountain Taste and Smell Center, University of Colorado Health Sciences Center at Fitzsimons, Aurora, CO; 2Physiology & Biophysics, Mount Sinai School of Medicine, New York, NY; 3Biological Sciences, University of Southern California, Los Angeles, CA

8:45
5  OLFACTORY IMPRINTING ALTERS GENE EXPRESSION IN THE OLFACTORY EPITHELIUM
   Rivard M.V.1, McKenzie M.G.2, Whitlock K.E.1 1Dept. of Molecular Biology and Genetics, Cornell University, Ithaca, NY

Coffee Break - 10:00 AM - 10:30 AM (Prefunction Area)

SYMPOSIUM

Thursday - 10:30 AM - 12:30 PM (South Ballroom)

Coding in the Taste System: New Perspectives on an Old Problem
Tim Gilbertson, Symposium Chair

10:30
10  CODING IN THE TASTE SYSTEM: NEW PERSPECTIVES ON AN OLD PROBLEM
   Gilbertson T.A.1, Glendinning I.2 1Biology & The Center for Integrated BioSystems, Utah State University, Logan, UT; 2Barnard College, Columbia University, New York, NY
POSTERS

Computational Approaches

P1 15 MORPHOLOGICAL CLASSIFICATION AND MORPHOMETRIC MODELING OF ANTENNAL LOBE LOCAL INTERNEURONS IN BOMBYX MORI
Seki T., Ohgushi K., Kanzaki R. 1  Graduation School of Life and Environmental Sciences, University of Tsukuba, Tsukuba, Ibaraki, Japan; 2 Department of Mechno-Information, Graduate School of Information Science and Technology, University of Tokyo, Bunkyo-ku, Tokyo, Japan

P2 16 CHANGING ROLES OF TEMPSLIDES REPRESENTATION OF THE ODORANT DURING THE OSCILLATORY RESPONSE IN THE OLFACTORY BULB
Kim S.1, Singer B.2, Zochowski M.1 1 Physics, University of Michigan, Ann Arbor, MI; 2 Neuroscience, University of Michigan, Ann Arbor, MI

P3 17 CONSENSUS STRUCTURE-FUNCTION DETERMINANTS FOR OLFACTORY RECEPTORS AND ODOR LIGANDS
Crasno C.J., Shepherd G.M. 1  Informatics, Yale University, New Haven, CT; 2Neurobiology, Yale University, New Haven, CT

Olfaction- Central Anatomy

P8 22 NR2B GENE EXPRESSION IS ALTERED IN MOUSE PIRFORM CORTEX AFTER PERIPHERAL DEAFFERENTATION
Kim H.H., Margolis F.L. 1  Anatomy and Neurobiology, University of Maryland at Baltimore, Baltimore, MD

P9 23 BUNGAROTOXIN BINDING IN THE OLFACTORY SYSTEM OF SELECT INBRED MOUSE STRAINS
Clevenger A.C., Adams C.E., Restrepo D. 1  Cell and Developmental Biology, University of Colorado Health Sciences Center, Aurora, CO; Psychiatry, University of Colorado Health Sciences Center, Aurora, CO

P10 24 SEX DIFFERENCES IN THE NUMBER OF TYROSINE HYDROXYLASE IMMUNOREACTIVE PERIGLOMERULAR CELLS SURROUNDING P2 GLOMERULI
Oliva A.M., De La Torre A., Restrepo D. 1  Cell and Developmental Biology and Neuroscience Program, University of Colorado Health Sciences Center, Aurora, CO
P11 25 A NEW, OPEN SOURCE SOFTWARE PACKAGE FOR MAPPING THE GLOMERULAR LAYER OF THE OLFATORY BULB
Salcedo E., Zhang C., Kronberg E., Restrepo D.1 Cell and Developmental Biology, University of Colorado Health Sciences Center, Aurora, CO; 2Illinois Institute of Technology, Chicago, IL

P12 26 INFLUENCES OF SENSORY ACTIVITY ON THE DEVELOPMENT OF OR SPECIFIC GLOMELI
Zou D., Rivers A., Tong L., Firestein S.1 Columbia University, New York, NY; 2Biological Sciences, Columbia University, New York, NY

P13 27 GLUTAMATE TRANSPORTER AND NMDA RECEPTOR EXPRESSION IN THE CANINE Olfactory Bulb
Josephson E.M., Vodyánov V.J., Morrison E.1 Anatomy, Physiology and Pharmacology, Auburn University, Auburn, AL; 2Biosensor Laboratory, Auburn University, Auburn, AL

P14 28 GFAP EXPRESSION IN THE DIABETIC RAT Olfactory Bulb
Dennis J.C., Moody S.W., Wright W.C., Coleman E.S., Judd R.L.1 Anatomy, Physiology and Pharmacology, Auburn University, Auburn, AL; 2Pathobiology, Auburn University, Auburn, AL

P15 29 THE CENTRAL CHEMOSENSORY SYSTEM OF MOSQUITOES
Ignell R., Hansson B.1 Agricultural University of Sweden, Alnarp, Sweden; 2Crop Sciences, Agricultural University of Sweden, Alnarp, Sweden

P16 30 THE PROJECTION OF OUTPUT NEURONS FROM THE OLFATORY BULB OF THE SEA LAMPREY, PETROMYZON MARINUS
Chang S., Askew M.L., Macdonald H., Raslan Z., Dubuc R., Zielinski B.S.1 Biological Sciences, University of Windsor, Windsor, Ontario, Canada; 2Kinesiology, Université du Québec à Montreal, Montreal, Ontario, Canada

P17 31 THE LOCALIZATION OF TERMINAL NERVE FIBERS IN THE OLFATORY BULB OF ROUND GOBY (NEOGOBIOUS MELANOSTOMUS)
Ren X., Zielinski B.S., Jasra S.K., Vaissica J.J., Siara L., Corkum L.D., Li W., Scott A.P.1 Biological Sciences, University of Windsor, Windsor, Ontario, Canada; 2Fisheries and Wildlife, Michigan State University, East Lansing, MI; 3Weymouth Laboratory, The Center for Environment, Fisheries and Aquaculture Sciences, Weymouth, Dorset, United Kingdom

P18 32 CHARACTERIZATION OF THREE DISTINCT TYPES OF OUTPUT NEURONS IN THE ADULT ZEBRAFISH OLFATORY BULB
Fuller C.L., Byrd C.A.1 Biological Sciences, Western Michigan University, Kalamazoo, MI

P19 33 DISTINGUISHING BETWEEN PERIGLOMERULAR AND GRANULE CELLS IN THE MOUSE Olfactory Bulb
Baker H.1, Saino-Saito S.2 Burke Med. Res. Inst., Cornell University, White Plains, NY; 2Department of Anatomy and Cell Biology, Yamagata University School of Medicine, Yamagata, Japan

P20 34 LONG-TERM EFFECTS OF ACUTE SOCIAL STRESS ON NEUROGENESIS IN THE MALE GOLDEN HAMSTER DENTATE GYRUS AND Olfactory Bulb
Bath K.G., Johnston R.1 Psychology, Cornell University, Ithaca, NY

P21 35 BULBAR SYNAPTIC TARGETS MAINTAIN Olfactory SENSORY NEURONS IN ADULT MICE
Guthrie K., Ardiles Y.1 Biomedical Science, Florida Atlantic University, Boca Raton, FL

Olfaction- Peripheral Anatomy

P22 36 MITRAL CELL SURVIVAL, REGENERATION OF Olfactory TRACT AND RECOVERY OF Olfaction FOLLOWING NEONATAL Olfactory TRACT AXONAL DAMAGE IN RATS
Subramani M., Bhaskar S., T.R. R.1 John Dempsey Hospital, University of Connecticut Health Center, Farmington, CT; 2Neurophysiology, National Institute of Mental Health and Neurosciences, Bangalore, Karnataka, India

P23 37 TENASCIN-C AND ITS RECEPTORS AND BINDING PARTNERS IN THE DEVELOPING Olfactory SYSTEM
Treloar H.B., Dinglase L.V., Greer C.A.1 Neurosurgery, Yale University, New Haven, CT

P24 38 ONSET OF Olfactory SENSORY NEURON MOLECULAR PHENOTYPE IN THE EARLY EMBRYONIC MOUSE
Miller A.M., Treloar H.B., Greer C.A.1 Neurosurgery, Yale University, New Haven, CT
P25  39  OLFACITION AND Olfactory Epithelium in Zinc Gluconate Treated Mice
Slotnick B., Harrod D., Sanguino A., Husband S.  
Psychology, University of South Florida, Tampa, FL

P26  40  Olfactory Ensheathing Cells and Target Tissue Influence Primary Olfactory Axon Trajectory.
St John J., Allen C., Claxton C., Key B., Storan M.  
School of Biomedical Sciences, University of Queensland, Brisbane, Queensland, Australia

P27  41  MORPHOLOGICAL ANALYSIS OF CRAYFISH (ORCONECTES RUSTICUS) MAJOR CHELAE SENSORY HAIRS
Belanger R.M., McDowell K.E., Chang S., Moore P.A., Zielinski B.S.  
Laboratory for Sensory Ecology, Department of Biological Sciences, J.P. Scott Center for Neuroscience, Mind & Behavior, Bowling Green State University, Bowling Green, OH; Department of Biological Sciences, University of Windsor, Windsor, Ontario, Canada

P28  42  EVIDENCE FOR ENDOGENOUS NEUROSTEROID PRODUCTION IN THE MAMMALIAN OLFACTORY MUCOSA: IMMUNOCYTOCHEMICAL LOCALIZATION OF CYTOCHROME P450SCC.
Foster J.D.  
Western University of Health Sciences, Pomona, CA

P29  43  MORPHOLOGICAL ANALYSIS OF TWO TYPES OF RECEPTOR NEURONS IN GOAT OLFACTORY EPITHELIUM Wakabayashi Y., Okamura H., Mori Y., Ichikawa M.  
Japan Society for the Promotion of Science (JSPS), Tokyo, Japan; Physiol. Genetic Regulation, Nat. Inst. Agrobiol. Sci., Ibaraki, Japan; Laboratory of Veterinary Ethology, University of Tokyo, Tokyo, Japan; Tokyo Metropol Institute of Neuroscience, Tokyo, Japan

P30  44  SODIUM CHANNEL DISTRIBUTION IN THE MOUSE MAIN OLFACTORY EPITHELIUM
Frenz C.T., Dionne V.E.  
Department of Biology, Boston University, Boston, MA

P31  45  DIFFERENTIAL DISTRIBUTION OF AQUAPORINS IN MAIN AND VOMERONASAL OLFACTORY EPITHELIUM, AND IN VALLATE TASTE BUDS: A FREEZE-SUBSTITUTION FINE-STRUCTURAL STUDY IN THE RAT
Menco B.  
Neurobiology and Physiology, Northwestern University, Evanston, IL

P32  46  LECTIN APPLICATION TO THE OLFACTORY EPITHELIUM SUPPORTS THE MULTIPLE PROFILE-MULTIPLE RECEPTOR SITE MODEL FOR VERTEBRATE OLFACITION
Apfelbach R., Deutsch S., Weiler E.M., Polak E.H.  
Dept. of Zoology, University of Tuebingen, Tuebingen, Germany; Laboratoire de Neurophysiologies Enseignement, Université Paris VI, Paris, France

Pheromones/VNO

P33  47  A PUTATIVE SOCIAL CHEMOSIGNAL ELICITS DIFFERENT CORTICAL RESPONSES THAN PERCEPTUALLY SIMILAR ODORANTS
Lundstrom J.N., Olsson M.J., Schaal B., Hummel T.  
Psychology, Uppsala University, Uppsala, Sweden; Centre des Sciences du Goût, Centre National de la Recherche Scientifique, Dijon, France; University of Dresden, Dresden, Germany

P34  48  MEDIAL AMYGDALA CATEGORIZES SPECIES-SPECIFIC CHEMOSENSOR INPUT IN BOTH MALE HAMSTERS AND MALE MICE.
Samuelsien C.L., Westberry J., Meredith M.  
Program in Neuroscience, Florida State University, Tallahassee, FL

P35  49  MODULATION OF MAIN OLFACTORY INPUT TO THE MEDIAL AMYGDALA BY GONADOTROPIN-RELEASING HORMONE (GNRH).
Blake C., Westberry J., Meredith M.  
Florida State University, Tallahassee, FL; Neuroscience, Florida State University, Tallahassee, FL

P36  50  DESENSITIZATION IN THE MAMMALIAN VOMERONASAL ORGAN
Miller S., Smith L., Wekese K.  
Alabama State University, Montgomery, AL; Biological Sciences, Alabama State University, Montgomery, AL

P37  51  SEX-SPECIFIC RESPONSES TO URINARY CHEMICALS BY THE MOUSE VOMERONASAL ORGAN
Thompson R.N., Robertson B., Napier A., Wekese K.  
Biological Science, Florida State University, Tallahassee, FL; Biological Sciences, Alabama State University, Montgomery, AL

P38  52  CHEMICAL ASSESSMENT OF FIGHTING RISKS: THE FINE-TUNED RESPONSES OF THE LIZARD LIOLAEMUS MONTICOLA
Labra A.  
Dept. Biol. Sci., Program in Neurosci., Florida State University, Tallahassee, FL
P39 53 HOMER, A FAMILY OF ADAPTOR PROTEINS, IS EXPRESSED IN THE VOMERONASAL ORGAN AND OLFATORY BULB.
Brannt J.H., Faddol D.A. 1 Prog. Neurosci., Florida State University, Tallahassee, FL; Neurosci. & Mol. Biophysics, Florida State University, Tallahassee, FL

P40 54 IDENTIFICATION OF A SEX-SPECIFIC PEPTIDE THAT STIMULATES VOMERONASAL SENSORY NEURONS IN BEHAVING MICE
Kimoto H., Haga S., Sato K., Touhara K. 1 Department of Integrated Biosciences, University of Tokyo, Kashiwa, Chiba, Japan

P41 55 THE ONTOGENY OF SEXUALLY DIMORPHIC REPRODUCTIVE SIGNALS AND RESPONSES BY WILD AND CAPTIVE ASIAN AND AFRICAN ELEPHANTS
Rasmussen L. 1, Schulte B. 1, Goodwin T. 1, Greenwood D. 1 OGI School of Science, OHSU, Beaverton, OR; Georgia Southern University, Statesboro, GA; Hendrix College, Conway, AR; Molecular Olfaction, HORT Institute, Auckland, New Zealand

P42 56 ANDROGEN RECEPTOR EXPRESSION IN FEMALE OLFATORY EPITHELIUM
Weiler E. 1 Ruhr-Universität Bochum, Bochum, Germany

P43 57 KINETIC STUDIES ON LIGAND BINDING TO INSECT PHEROMONE-BINDING PROTEINS
Plettner E. 1, Gong Y. 1 Chemistry, Simon Fraser University, Burnaby, British Columbia, Canada

P44 58 SEX, STRAIN AND INDIVIDUAL VARIATION IN THE MAJOR URINARY PROTEINS (MUPS) EXPRESSED BY INBRED LABORATORY MICE
Cheetham S.A. 1, Smith A.L. 1, Hurst J.L. 1, Beynon R.J. 1 Faculty of Veterinary Science, University of Liverpool, Neston, United Kingdom; IMR & Department of Pathobiology, University of Pennsylvania, Philadelphia, PA

P45 59 RELATIVE ROLES OF THE MAIN AND ACCESSORY OLFATORY SYSTEMS IN BEHAVIORAL RESPONSES TO MHC CLASS I PEPTIDES: BRUCE EFFECT
Kelliker K.R. 1, Sperer M. 1, Li X. 1, Zufall F. 1, Leinders-Zufall T. 1 Anatomy and Neurobiology, University of Maryland School of Medicine, Baltimore, MD

P46 60 MHC-RELATED ODORPRINTS IN MICE

P47 61 HLA-RELATED ODORANTS IN HUMANS

P48 62 COMPARISON OF VOLATILE COMPONENTS OF MICE AND THEIR URINE
Overath P.A., Röck F., Weimar U., Rammensee H. 1 Department of Immunology, University ofTuebingen, Tuebingen, Germany; Department of Physical Chemistry, University ofTuebingen, Tuebingen, Germany

P49 63 WATER-SOLUBLE ALARM PHEROMONE INDUCED AUTONOMIC STRESS RESPONSE IN MALE RATS
Kiyokawa Y., Kikutake T., Takeuchi Y., Mori Y. 1 Graduate School of Agricultural and Life Sciences, University of Tokyo, Bunkyo-ku, Tokyo, Japan

P50 64 MALE BLUE CRAB PHEROMONE ORIGINATES IN SEMEN
Rittschof D. 1 Duke University, Beaufort, NC

P51 65 DIVERGENT V1R REPERTOIRES IN FIVE SPECIES
Young J.M., Kamhere M., Trask B.J., Lane R.P. 1 Division of Human Biology, Fred Hutchinson Cancer Research Center, Seattle, WA; Department of Molecular Biology and Biochemistry, Wesleyan University, Middletown, CT; Fred Hutchinson Cancer Research Center, Seattle, WA; Wesleyan University, Middletown, CT
SCHEDULE EVENTS

12:00 PM - 1:30 PM  Cash Lunch Cart (Prefunction Area)
12:30 PM - 2:00 PM  Minority/Clinical Award Luncheon (Prefunction Area)
3:00 PM - 4:30 PM  NIH Workshop: "Funding Opportunities for Young Investigators" (South Ballroom)
5:00 PM - 7:00 PM  CHeMa Social (Florida Room)
6:00 PM - 8:30 PM  Registration (Registration Area)
8:00 PM - 8:30 PM  Evening Break (Prefunction Area)

POSTERS

Thursday - 7:00 PM - 11:00 PM (P1-54 North Ballroom; P55-P106 South Ballroom)

Olfactory Bulb: Neurophysiology (North Ballroom)
P1  66 STIMULUS SPECIFIC SPATIO-TEMPSLIDES CA2+ DYNAMICS OF MOAT OLFACTORY PROJECTION NEURONS
Carlsson M.A.1, Hansson B.S.2, SLU, Alnar, Sweden; 1Crop Science, SLU, Alnar, Sweden

P2  67 EFFECTS OF BOND TYPE, POSITION, NUMBER, AND STEREOCHEMISTRY ON GLOMERICULAR RESPONSES TO HYDROCARBON ODORANTS IN THE RAT OLFACTORY BULB.
Ho S.L.1, Chen A.L.1, Johnson B.A.1, Leon M.1 1Dept. of Neurobiology and Behavior, University of California, Irvine, CA

P3  68 SPIKING PROPERTIES OF EPL INTERNEURONS
Hamilton K.A.1, Hayar A.1, Ennis M.2 1Cellular Biol. and Anatomy, Louisiana St. Univ. Health Sci. Ctr., Shreveport, LA; 2Anatomy and Neurobiol., University of Tennessee Health Science Center, Memphis, TN

P4  69 THE BURSTING OF OLFACTORY BULB EXTERNAL TUFTED (ET) CELLS IS COORDINATED BY SYNAPTIC AND GAP JUNCTION CURRENTS
Hayar A.1, Shipley M.T.; Ennis M.1 1Anatomy and Neurobiology, University of Tennessee, Memphis, TN; 2Anatomy and Neurobiology, University of Maryland at Baltimore, Baltimore, MD

P5  70 ACTIVATION OF METABOTROPIC GLUTAMATE RECEPTORS (MGLURS) ENHANCES BURSTING IN EXTERNAL TUFTED CELLS OF THE OLFACTORY BULB
Ennis M.1, Hayar A.1 1Anatomy and Neurobiology, University of Tennessee, Memphis, TN

P6  71 SEROTONIN MODULATION OF EXTERNAL TUFTED CELLS IN MOUSE OLFACTORY BULB GLOMERULI
Aungst J.1, Shipley M.T.; 1Anatomy & Neurobiology, University of Maryland at Baltimore, Baltimore, MD; 2University of Maryland at Baltimore, Baltimore, MD

P7  72 CELLULAR AND SYNAPTIC PROPERTIES OF DOPAMINERGIC JUXTAGLOMERULAR (DA-JG) NEURONS IN THE MOUSE OLFACTORY BULB
Pan Y.1, Aungst J.1, Puche A.C.2, Shao Z.2, Shipley M.T.; 1Anatomy & Neurobiology, University of Maryland at Baltimore, Baltimore, MD; 2University of Maryland at Baltimore, Baltimore, MD

P8  73 CHOLINERGIC MODULATION IN THE ZEBRAFISH OLFATORY BULB.
Edwards J.1, Greig A.2, Michel W.C.2 1Molecular Pharmacology, Physiology and Biotechnology, Brown University, Providence, RI; 2Physiology, University of Utah, Salt Lake City, UT

P9  74 THE INFLUENCE OF STIMULUS DURATION ON OLFACTORY EVENT RELATED POTENTIALS
Franzelli L.1, Wohlgemuth C.1 1University of Dresden Medical School, Dresden, Germany

P10  75 SLICE ELECTROPHYSIOLOGY AND HISTOLOGICAL EVIDENCE OF CALCIUM-FLUXING AMPA RECEPTORS IN THE OLFACTORY BULB
Blakemore L.J.1, Trombley P.Q. 1Biological Science, Florida State University, Tallahassee, FL
P11  76  ODORANT RESPONSE PROPERTY OF THE MOR-EG
GLOMERULUS IN TRANSGENIC MICE
Oka Y.1, Katada S.1, Omura M.3, Suwa M.3, Yoshihara Y.3,
Touhara K.1 1Department of Integrated Biosciences, University of
Tokyo, Chiba, Japan; 2CBRC, National Institute of Advanced
Industrial Science and Technology, Tokyo, Japan; 3RIKEN Brain
Science Institute, Saitama, Japan

P12  77  PHARMACOLOGICAL ANALYSIS OF THE
PHYSIOLOGICAL FUNCTIONS OF GABAERGIC INTRA-
AND INTER-GLOMERULAR INHIBITION IN THE
ANTENNAL LOBE OF A MOTh
Lei H.1, Martin J.1, Christensen T.A.1, Hildebrand J.G.1
1Neurobiology, University of Arizona, Tucson, AZ

P13  78  MODULATING LEVELS OF NITRIC OXIDE AND SOLUBLE
GUANYLYL CYCLASE AFFECTS ANTENNAL LOBE
NEURON PROCESSING IN THE MOTh, MANDUCA SEXTa
Wilson C.1, Hudson J.1, Christensen T.3, Nighorn A.3 1ARL,
Division of Neurobiology, University of Arizona, Tucson, AZ;
2Neurobiology, University of Arizona, Tucson, AZ

P14  79  LEARNING-INDUCED OSCILLATORY ACTIVITIES
CORRELATED TO ODOR RECOGNITION: A NETWORK
ACTIVITY
Martin C.1, Gervais R.1, Ravel N.1 1Institut des Sciences
Cognitives CNRS/Univ Lyon1, Bron, France

P15  80  INTERCORRELATION OF OLFACTORY BULB SPIKES
DURING LOCAL FIELD POTENTIAL OSCILLATIONS IS LOW
Scott J.W.1, Sherrill L.1, Green E.1 1Cell Biology, Emory
University, Atlanta, GA

P16  81  MODULATION OF RECEPTOR NEURON INPUT TO THE
OLFACTORY BULB MEDIATED BY FEEDBACK VERSUS
LATERAL PRESYNAPTIC INHIBITION
Megann J.P.1, Firez N.1, Gainey M.A.1, Muratore C.1, Elias A.S.1,
Wachowiak M.1 1Biology, Boston University, Boston, MA

P17  82  BASIC CHARACTERISTICS OF NEURON NETWORK
COMPONENTS IN THE ANTENNAL LOBE OF THE
SILKMOTH
Namiki S.1, Kazawa T.1, Kanzaki R.1 1Graduate School of Life and
Environmental Sciences, University of Tsukuba, Tsukuba, Japan;
2Department of Mechno-Informatics, Graduate School of
Information Science and Technology, University of Tokyo, Tokyo,
Japan

P18  83  OLFACTORY BULB (OB) RESPONSES ARE ALTERED BY
REGIONAL BLOCKADE OF EPITHELIAL REGIONS BY
EXPOSURE TO ULTRAVIOLET (UV) LIGHT
Cheung M.1, White J.E.1, Kauer J.S.1 1Neuroscience, Tufts
University, Boston, MA

P19  84  REPRESENTATION OF ODORS IN THE MOUSE
OLFACTORY BULB
Rinberg D.1, Koulakov A.3, Ollinger F.1, Gelperin A.1 1Monell
Chemical Senses Center, Philadelphia, PA; 2Freeman Building,
Cold Spring Harbor Laboratory, Cold Spring Harbor, NY

P20  85  SCREENING FOR PLASMA MEMBRANE EXPRESSION OF
FLUORESCENT PROTEIN (FP)-VOLTAGE SENSITIVE
SENSORS
Kosmidis E.1, Homma R.1, Cohen L.B.1, Baker B.1 1Physiology,
Yale University, New Haven, CT

P21  86  DENDRITES OF JuxtAGLOMERULAR NEURONS IN RAT
OLFACTORY BULB EXPRESS CA2+-PERMEABLE AMPA
RECEPTORS
Ma J.1, Lowe G.1 1Monell Chemical Senses Center, Philadelphia,
PA

Human Olfactory Performance  (North Ballroom)

P22  87  EFFECTS OF ODORS ON THE EXERCISE PERFORMANCE
OF SUBJECTS AT DIFFERENT TRAINING LEVELS
Merrihew M.1, Kent J.1, Hornung D.1 1Biology, St. Lawrence
University, Canton, NY

P23  88  EPISODIC ODOR MEMORY: INFLUENCES OF
HANDEDNESS, SEX, AND SIDE OF NOSE
Doty R.L.1, Kerr K.1 1Smell and Taste Center, University of
Pennsylvania, Philadelphia, PA

P24  89  POSTMENOPAUSAL HORMONE REPLACEMENT: DO
ESTROGEN AND PROGESTERONE DIFFERENTIALLY
AFECT SMELL FUNCTION?
Armstrong D.J.1, Neff J.1, Sammel M.D.2, Toubrier L.A.1, Evans
D.1, Moberg P.J.3, Sundheim S.3, Doty R.L.1
1Otorhinolaryngology, University of Pennsylvania, Philadelphia,
PA; 2Biostatistics and Epidemiology, University of Pennsylvania,
Philadelphia, PA; 3Psychiatry, University of Pennsylvania,
Philadelphia, PA; 4Obstetrics and Gynecology, University of
Pennsylvania, Philadelphia, PA
P25  90  RELATIONSHIP BETWEEN INDIVIDUAL ODOR THRESHOLD, ODOR QUALITY PERCEPTION, AND ODOR IDENTIFICATION
Hudson R.1, Arriola A.1, Martínez-Gómez M.1, Distel H.2 1Univ Nacional Autónoma de México, Mexico City, Mexico; 2Centro /axcala Biol Conducta, Un}_{átomá de Tlaxcala, Tlaxcala, Mexico; 3Inst Med Psychol, Univ München, München, Germany

P26  91  TIME AND INTENSITY PATTERNS OF ORTHONASAL AND RETRONASAL SMELLING
Sood S.1, Halpern B.P.2 1Neurobiology and Behavior, Cornell University, Ithaca, NY; 2Psychology, Cornell University, Ithaca, NY

P27  92  SMELL IDENTIFICATION DECLINES FROM AGE 36 YEARS AND MAINLY AFFECTS PLEASANT ODOURS.
Hawkes C.1, Fogo A.1, Shah M.1 1Essex Neuroscience Centre, Romford, Essex, United Kingdom; 2Neurology, Essex Neuroscience Centre, Romford, Essex, United Kingdom

P28  93  MODELING ODOR MIXTURE PERCEPTION
Broman D.A.1, Moeller P.2, Olsson M.J.3 1Department of Psychology, Umeå University, Umed, Sweden; 2Department of Food Science, Sensory Science, Royal Veterinary and Agricultural University, Frederiksberg C, Denmark; 3Psychology, Uppsala University, Uppsala, Sweden

P29  94  TASK DEMANDS AFFECT SNIFFING BEHAVIOR
Sheena H.M.1, John H.J.1, Konstantin R.A.1, Jason B.M.1, Robert G.C.1, Frank R.A.3 1Psychology, University of Cincinnati, Cincinnati, OH; 2Cell Biology, University of Cincinnati, Cincinnati, OH; 3Psychology/The Graduate School, University of Cincinnati, Cincinnati, OH

P30  95  HOW BIG ARE INDIVIDUAL DIFFERENCES IN OLFACTION ANYWAY?
Cain W.S.1, Schmidt R.1 1Surgery (Otolaryngology), University of California, San Diego, La Jolla, CA

P31  96  THE INFLUENCE OF MECAMYLAMINE ON TRIGEMINAL AND OLFACTORY CHEMORECEPTION OF NICOTINE
Therauf N.1, Markovic K.1, Braun G.1, Bleich S.1, Rieulbach U.1, Lunkenheimer J.1 1Department of Psychiatry and Psychotherapy, University of Erlangen-Nürnberg, Erlangen, Bavaria, Germany

P32  97  COGNITIVE EFFECTS OF HUMAN EMOTION SEMIOCHEMICALS
De Groot D.1, Haviland-Jones J.1 1Psychology, Rutgers, The State University of New Jersey, Piscataway, NJ

P33  98  PERCEPTION OF FRESHNESS OF FOOD BY HUMANS: SENSITIZATION EFFECTS SHOWN IN A CHEMOSENSORY EVOKED RELATED POTENTIAL PARADIGM
Barkat S.1, Sicard G.1, Lorig T.S.1 1Neurosciences & Systèmes Sensoriels, CNRS, Lyon, France; 2CENG, Dijon, France; 3Cognitive Neuroscience, Washington and Lee University, Lexington, VA

P34  99  EFFECTS OF INTERMITTENT PEPPERMINT ODOR ADMINISTRATION ON ALERTNESS, MOOD, MOBILITY, AND SLEEP PATTERNS
Schuler A.1, Raudenbush B.1 1Psychology, Wheeling Jesuit University, Wheeling, WV

P35  100  MEASUREMENTS RELATED TO ODOR PERCEPTION ARE MODULATED BY LOOKING AT EMOTIONALLY EVCATIVE IMAGES
Pollatos O.1, Kopietz R.1, Linn J.1, Albrecht J.1, Kettenmann B.1, Kobal G.2, Wiesmann M.1 1Neuroradiology, University of Munich, Munich, Germany; 2Radiology, Virginia Commonwealth University, Richmond, VA; 3Physiology, Virginia Commonwealth University, Richmond, VA

P36  101  EFFECTS OF ODOR ADMINISTRATION ON DRIVING PERFORMANCE, SAFETY, ALERTNESS, AND FATIGUE
Grayhem R.1, Esgr W.3, Sears T.1, Raudenbush B.1 1Psychology, Wheeling Jesuit University, Wheeling, WV

P37  102  PERCEPTION OF ODORS AT DIFFERENT STAGES OF AGE WITH SPECIAL REGARD TO SEX, PUBERTY AND MENOPAUSE
Buschmann-Maiworm R.E.1, Kneuer S.1 1Psychology, University of Munster, Munster, NRW, Germany

P38  103  REACTION TIMES TO SEQUENCES OF TWO ODOURS
Koester E.P.1, Moeller P.2 1Sensory Science, Royal Veterinary and Agricultural University, Frederiksberg, Denmark; 2Food Science, Sensory Science, Royal Veterinary and Agricultural University, Frederiksberg C, Denmark

P39  104  SCENT TRACKING IN HUMANS.
Sobel N.1, Jadkewitz B.1, Porter J.A.1, Telles C.1, Mainland J.1, Zelano C.1, Bremser E.1, Johnson B.1, Young N.1, Khan R.M.1 1Neuroscience, University of California, Berkeley, Berkeley, CA

P40  105  NEURAL CORRELATES OF ATTENTION TO PLEASANT VERSUS UNPLEASANT ODORS
Djordjevic J.1, Boyle J.A.1, Penicaud S.1, Jones-Gorman M.1 1Montreal Neurological Institute, Montreal, Quebec, Canada
Trigeminal Neurophysiology *(North Ballroom)*

P41 106 PERITHEM ESHOLD EXPOSURE INCREASES ODOR DETECTABILITY BUT NOT ODOR RECOGNITION
Diamond J., Breslin P., Dalton P. *Monell Chemical Senses Center, Philadelphia, PA*

Trigeminal: Cellular *(North Ballroom)*

P42 159 SOLITARY CHEMOSENSORY CELL TURNOVER IN THE NASAL EPITHELIUM
Gulbransen B.D., Finger T.E. *Neuroscience, University of Colorado Health Sciences Center, Aurora, CO; Cellular and Structural Biology, University of Colorado Health Sciences Center, Denver, CO*

P43 160 INVESTIGATION OF CHEMOSENSORY PROPERTIES OF TRIGEMINAL NEURONS USING ADENOVIRUS BASED EXPRESSION OF A PIP2 SIGNALLING MARKER
Klasen K., Gisselmann G., Hatt H., Wetzel C.H. *Ruhr-Universität Bochum, Bochum, Germany*

P44 161 CALCIUM-DEPENDENCE OF ANKTM1 FUNCTION
Dörner J.F., Hatt H., Wetzel C.H. *Ruhr-Universität Bochum, Bochum, Germany*

P45 162 CHEMOSENSORY PROPERTIES OF TRIGEMINAL NEURONS INNERVATING THE NASAL CAVITY OF MICE
Damann N., Rothermel M., Mettenleiter T.C., Hatt H., Wetzel C.H. *Lehrstuhl für Zellphysiologie, Ruhr-Universität, Bochum, Germany; Friedrich-Loeffler-Institut, Bundesforschungsinstitut für Tiersgesundheit, Insel Riems, Germany*

P46 163 ELECTROPHYSIOLOGICAL CHARACTERISATION OF NASAL TRIGEMINAL NEURONS IDENTIFIED BY VIRAL TRACING
Rothermel M., Damann N., Mettenleiter T.C., Hatt H., Wetzel C.H. *Lehrstuhl für Zellphysiologie, Ruhr-Universität Bochum, Bochum, Germany; Friedrich-Loeffler-Institut, Bundesforschungsinstitut für Tiersgesundheit, Insel Riems, Germany*

P47 164 TRIGEMINAL THRESHOLDS CORRELATE TO THE WIDTH OF THE NASAL CAVITY
Gartz L., Konstantinidis I.E., Reden J., Rodewald A., Gerber J.C. *Otorhinolaryngology, University of Dresden Medical School, Dresden, Germany; AEHEPA University Hospital, Thessaloniki, Greece; University of Dresden, Dresden, Germany; Neuroradiology, University of Dresden Medical School, Dresden, Germany; Dresden University Hospital, Dresden, Germany*

P48 165 EXCITATION OF COLD-SENSITIVE TRIGEMINAL CAUDALIS NEURONS BY MUSTARD OIL AND OTHER IRRITANTS
Carstens E., Mitsuyo T. *Neurobiology, Physiology and Behavior, University of California, Davis, Davis, CA*

P49 166 ETHANOL AFFECTS THE MECHANICAL RESPONSE IN TRIGEMINAL NERVE ENDINGS ON THE TONGUE OF RHESUS MONKEYS
Danilova V., Danilov Y., Roberts T., Hellekant G. *University of Wisconsin-Madison, Madison, WI*

P50 167 CHOLINERGIC RECEPTOR CELLS IN NASAL RESPIRATORY EPITHELIUM
Ogura T., Lin W. *Cell & Development Biology, University of Colorado Health Sciences Center at Fitzsimons, and Rocky Mountain Taste and Smell Center, Aurora, CO*

P51 168 ACTIVATION OF THE HUMAN SECONDARY SOMATOSENSORY CORTEX FOLLOWING MODERATELY PAINFUL TRIGEMINAL STIMULATION OF THE NASAL MUCOSA: FMRI STUDY
Albrecht J., Wiesmann M., Linn J., Kopietz R., Sakar V., Anzinger A., Kobal G. *Neuroradiology, University of Munich, Munich, Germany; Philip Morris USA Research Center, Richmond, VA*

P52 169 PERIPHERAL TRIGEMINAL NERVE RESPONSES TO A HOMOLOGOUS SERIES OF CARBOXYLIC ACIDS
Allgood S., Silver W.L. *Biology, Wake Forest University, Winston-Salem, NC*

P53 170 TRIGEMINAL NERVE RESPONSES TO PUNGENT SPICES
Alimohammadi H., Silver W.L. *Biology, Wake Forest University, Winston-Salem, NC*
Taste: Human Sensory Performance (South Ballroom)

P54  271  ANTERIOR HUMAN NASAL MUCOSA MORE SENSITIVE TO TOUCH
Leopold D.1, Bien A.1, Wrobel B.2, Holbrook E.3, Meyer G.E.4, 
Bratney N.1, Meza J.1 1Otolaryngology-Head and Neck Surgery, 
University of Nebraska Medical Center, Omaha, NE; 2Otolaryngology - Head and Neck Surgery, University of Southern 
California, Los Angeles, CA; 3Otolaryngology, Massachusetts 
General Hospital, Boston, MA; 4Biological Systems Engineering, 
University of Nebraska-Lincoln, Lincoln, NE

P55  107  RELATIONSHIP BETWEEN GENOTYPES OF THE TAS2R38 
BITTER TASTE RECEPTOR GENE AND SWEET 
PREFERENCES IN CHILDREN AND ADULTS.
Mennella J.A.1, Pepino M.Y.2, Kennedy J.M.3, Reed D.R.4 1Monell 
Chemical Senses Center, Philadelphia, PA

P56  108  `ACTIVE` VS. `PASSIVE` TASTING: EVIDENCE OF 
DIFFERENTIAL EFFECTS ACROSS TASTE STIMULI, 
SENSORY MODALITIES, AND SLIDES SITES.
Urban L.1, Alvarez-Reeves M.2, Collins H.3, Green B.4 1Sensory 
Neuroscience, The John B. Pierce Laboratory, New Haven, CT; 2The John B. Pierce Laboratory, New Haven, CT

P57  109  SWITCHING COSTS ASYMMETRY IN PLEASANTNESS 
AND INTENSITY IN TASTE
Veldhuizen M.G.1, Krooze J.H.2 1Taste and Smell Laboratory 
Utrecht, Psychonimics, Utrecht University, Utrecht, Netherlands; 
2Wageningen Taste and Smell Centre, Wageningen University, 
Wageningen, Netherlands

P58  110  ENHANCED RESPONSES IN THE CORTICAL SENSORY 
AREAS TO ANTICIPATED TASTE OR FOOD STIMULI; 
MAGNETOENCEPHALOGRAPHIC STUDIES IN HUMANS
Yamamoto C.1, Morikawa K.1, Yamamura H.1, Nakagawa S.2, 
Yamaguchi M.1, Sutani K.3, Tonoike M.2, Yamamoto T.1 
1Department of Behavioral Science, Graduate School of 
Human Sciences, Osaka University, Osaka, Japan; 2Institute for 
Human Science and Biomedical Engineering, National Institute of 
Advanced Industrial Science and Technology, Osaka, Japan

P59  111  INTERACTIONS BETWEEN CYCLAMATE AND MSG 
TASTES IN HUMAN SUBJECTS
Cowart B.J.1, Vainius A.A.1, Klock C.T.1, Breslin P.A.1 1Monell 
Chemical Senses Center, Philadelphia, PA

P60  112  PTC NON-TASTERS FIND THE FRUIT OF ANTIDESMA 
BUINUN BITTER, WHILE PTC TASTERS FIND IT SWEET.
Tharp C.D.1, Tharp A.1, Alarcon S.M.2, Reed D.R.3, Breslin P.A.4 1Monell Chemical Senses Center, Philadelphia, PA

P61  113  TWIN-STUDY DEMONSTRATES HERITABILITY OF 
SENSITIVITY TO SOUR TASTE FROM CITRIC ACID.
Canty T.M.1, Wise P.M.2, Breslin P.A.3 1Monell Chemical Senses 
Center, Philadelphia, PA

P62  114  ADAPTATION VS. INHIBITION: EVIDENCE OF INCREASED 
SENSITIVITY TO SUCROSE AFTER ADAPTATION 
Galindo-Cuspinera V.1, Breslin P.1 1Monell Chemical Senses 
Center, Philadelphia, PA

P63  115  GENETIC AND ENVIRONMENTAL VARIATION IN TASTE 
MEDIATES VEGETABLE SWEETNESS, BITTERNESS AND 
INTAKE
Dinehart M.E.1, Lanier S.2, Hayes J.E.1, Chapo A.1, Bartoshuk 
L.M.1, Duffy V.B.1 1Allied Health, University of Connecticut, 
Storrs, CT; 2Surgery, Yale University, New Haven, CT

P64  116  TASTE AND DIETARY PREDICTORS OF CENTRAL 
ADIPOSITY IN ADULT FEMALES
Lanier S.1, Hutchins H.2, Duffy V.B.1 1Allied Health, University of 
Connecticut, Storrs, CT; 2Zone Labs Inc, Danvers, MA

P65  117  APPLICATION OF STRUCTURAL EQUATION MODELING 
TO TAS2R38 GENOTYPE, 6-N-PROPYLTHIOURACIL (PROP) 
BITTERNESS AND SUPERTASTING
Hayes J.E.1, Kidd J.R.2, Kidd K.K.1, Bartoshuk L.1, Duffy V.B.1 1Nutritional Sciences, University of Connecticut, Storrs, CT; 2Psychiatry, Yale University, New Haven, CT
3Surgery, Yale University, New Haven, CT

P66  118  INHIBITION OF TASTE BY CHLORHEXIDINE IN HUMANS
McCollum K.1, Frank M.E.1, Gent J.F.2 1Neurosciences, SLIDES 
Diagnosis, University of Connecticut, Farmington, CT; 2Epidemiology & Public Health, Yale University, New Haven, CT

P67  119  ADAPTATION AND RECOVERY-FROM-ADAPTATION TO 
SUCROSE AND SODIUM CHLORIDE
Ashkenazi A.1, Marks L.E.1, Elgart B.1, Frank M.E.2 1John B. 
Pierce Laboratory, New Haven, CT; 2SLIDES Diagnosis, 
University of Connecticut, Farmington, CT
Taste Development *(South Ballroom)*

P68 120 EXPERIENCE INDUCED CHANGES IN HUMAN SWEET TASTE  
Peo C.1, Gonzalez K.M.1, Kennedy L.M.2 1Neuroscience Program,  
Smith College, Northampton, MA; 2Neuroscience Laboratory,  
Dept. Biology, Clark University, Worcester, MA

P69 121 EXPERIENCE-INDUCED CHANGES IN TASTE IDENTIFICATION FOR MONOSODIUM GLUTAMATE (MSG) ARE REVERSIBLE  
Chiyoko K.1, Kennedy L.M.2, Halpern B.1 1Cornell University,  
Ithaca, NY; 2Clark University, Worcester, MA

P70 122 THE EFFECT OF A NUTRITIONAL PRELOAD ON GUSTATORY ACTIVATION: AN ER-FMRI STUDY  
Haase L.B.1, Cerf-Ducastel B.1, Fowler A.1, Nguyen L.1, Machado A.1, Araín Y.1, Dalley E.1, Kemmotsu N.1, Murphy C.1 1Psychology, San Diego State University, San Diego, CA

P71 123 BITTERNESS OF ILEX PARAGUARIENSIS (IP) INFUSIONS: AFFECTED BY FLAVOR MANIPULATIONS OR CAFFEINE?  
Tamasi O.1, Gurlekian L.1, Drunday F.1, Calviño A.1 1Universidad de Buenos Aires, Buenos Aires, Argentina

P72 124 PROPERTIES OF LACTISOL (2-(4-METHOXYPHENOXY) PROPANOIC ACID)  
Delwiche J.1, Warnock A.R.1, Heffelfinger A.L.1, Zevchak S.1 1Food Science and Technology, Ohio State University, Columbus, OH; 2Cargill Custom Dressings, Port St Lucie, FL

P73 125 PERCEIVED SALTINESS AND THE SODIUM EVOCKED LINGUAL SURFACE POTENTIAL CORRELATE  
Feldman G.M.1, Mogyorosi A.1, Heck G.2 1Internal Medicine,  
Virginia Commonwealth University, Richmond, VA; 2Physiology,  
Virginia Commonwealth University, Richmond, VA

P74 126 TASTE BLINDNESS TO 6-N-PROPYLTHIOURACIL (PROP) AND BODY WEIGHT IN A GENETICALLY-ISOLATED POPULATION IN SOUTHERN ITALY.  
Tepper B.J.1, Zhao L.1, Ulrich N.1, Persico G.1, Ciullo M.1,  
Colonna V.1, Nutile T.2, Gasparini P.1 1Food Science, Rutgers  
University, New Brunswick, NJ; 2Institute of Genetics and  
Biophysics, CNR, Naples, Italy; 3Telethon Institute of Genetics and Medicine, Naples, Italy

P75 127 NEURONAL DEATH IN THE DEVELOPING RAT GENICULATE GANGLION  
Carr V.M.1, Sollars S.2, Farbman A.1 1Neurobiology and  
Physiology, Northwestern University, Evanston, IL; 2University of Nebraska at Omaha, Omaha, NE

P76 128 DIETARY PROTEIN RESTRICTION PRODUCES ATTENUATED SALT RESPONSES IN THE CHORDA TYMPANI NERVE TO SODIUM-SPECIFIC STIMULI IN RATS.  
Thomas J.E.1, Hill D.L.1 1Neuroscience, University of Virginia,  
Charlottesville, VA; 2Psychology, University of Virginia,  
Charlottesville, VA

P77 129 PATTERNS OF FUNGIFORM TASTE BUD INNERRATION IN C57BL/6J AND BAX KNOCKOUT MICE.  
Guagliardo N.1, Hill D.L.1 1Psychology, University of Virginia,  
Charlottesville, VA

P78 130 DEVELOPMENTAL SUSCEPTIBILITY OF FUNGIFORM PAPILLAE FOLLOWING LINGUAL NERVE TRANSECTION IN RATS  
Gomez A.M.1, Sollars S.I.1 1Psychology, University of Nebraska at Omaha, Omaha, NE

P79 131 DEVELOPMENTAL REGULATION OF THE GENICULATE GANGLION BY NEUROTROPHINS BDNF AND NT-4  
Patel A.1, Krimm R.P.1 1Anatomical Sciences and Neurobiology,  
University of Louisville, Louisville, KY

P80 132 BONE MORPHOGENETIC PROTEINS REGULATE FUNGIFORM PAPILLA DEVELOPMENT IN EMBRYONIC RAT TONGUE.  
Zhou Y.1, Liu H.1, Mistretta C.1 1School of Dentistry, University of Michigan, Ann Arbor, MI

P81 133 ROLES FOR PI3K, MEK AND P38 MAP KINASE SIGNALING IN REGULATING THE FUNGIFORM PAPILLA RESPONSE TO EPIDERMAL GROWTH FACTOR DURING TONGUE DEVELOPMENT.  
Liu H.1, Zhou Y.1, Mistretta C.1 1School of Dentistry, University of Michigan, Ann Arbor, MI

P82 134 DEVELOPMENT OF GUSTATORY NERVE TERMINAL FIELD VOLUMES FOLLOWING NEONATAL CHORDA TYMPANI NERVE TRANSECTION  
Lane A.H.1, Sollars S.I.1 1Psychology, University of Nebraska at Omaha, Omaha, NE
P83  135  BMP4 AND SONIC HEDGEHOG COORDINATE THE DEVELOPMENT OF TASTE PAPILAE.
Liggins C.A.1, Ripley A.N.1, Denkers N.2, Barlow L.A.1  1Cell and Developmental Biology, University of Colorado Health Sciences Center, Aurora, CO; 2Pathology, Colorado State University, Fort Collins, CO

P84  136  BDNF IS REQUIRED FOR TARGETING OF GUSTATORY FIBERS DURING DEVELOPMENT.
Lopez G.F.1, Krimm R.F.1  1Anatomical Sciences and Neurobiology, University of Louisville School of Medicine, Louisville, KY

P85  137  IDENTIFICATION OF MOLECULAR MARKERS SELECTIVELY EXPRESSED IN TASTE BASAL CELLS
Iwatsuki K.1, Margolskee R.F.1  1Physiology & Biophysics, Howard Hughes Medical Institute, Mount Sinai School of Medicine, New York, NY

P86  138  EXPRESSION OF FOXA2 AND GUSTDUCIN IN TASTE BUDS
Iwatsuki K.1, Matsumoto N.2, Margolskee R.F.1  1Physiology & Biophysics, Howard Hughes Medical Institute, Mount Sinai School of Medicine, New York, NY; 2Division of Liver Diseases, Mount Sinai School of Medicine, New York, NY

P87  139  SEMA3F EXPRESSION AND REPELLENT EFFECTS IN THE DEVELOPING GUSTATORY SYSTEM.
Vilbig R.1, Rochlin M.W.1  1Biology, Loyola University of Chicago, Chicago, IL

P88  140  T1R3 EXPRESSION ACROSS TASTE FIELDS DURING POSTNATAL MOUSE DEVELOPMENT
Kim J.1, Roper S.1, Chaudhari N.1  1Physiology and Biophysics, University of Miami, Miami, FL

P89  141  POSTNATAL DEVELOPMENT OF GUSTATORY NERVE TERMINAL FIELDS IN CONTROL RATS.
Mangold J.E.1, Hill D.L.1  1Psychology, University of Virginia, Charlottesville, VA

P90  142  EPB/EPHRIN EXPRESSION IN THE DEVELOPING GUSTATORY SYSTEM
Spec A.1, Huang R.1, Rochlin M.W.1  1Biology, Loyola University of Chicago, Chicago, IL

Feeding & Drinking  (South Ballroom)

P91  143  A COMPARATIVE ANALYSIS OF THE ULTRASTRUCTURAL MORPHOLOGY OF THE THREE GUSTATORY NERVE AXONS IN THE NUCLEUS OF THE SOLITARY TRACT IN DEVELOPMENTALLY SODIUM-RESTRICTED AND CONTROL RATS
May O.L.1, Erisir A.1, Hill D.L.1  1Psychology, University of Virginia, Charlottesville, VA

P92  144  CHARACTERIZATION OF A LONG-TERM PRIMARY TASTE CELL CULTURE
Ozlemer H.1, Rawson N.E.1  1Monell Chemical Senses Center, Philadelphia, PA

P93  145  CALCIUM INTAKE AND WEIGHT
Hooper R.1, Lewis A.1, Thaw A.1  1Psychology, Millsaps College, Jackson, MS; 2Millsaps College, Jackson, MS

P94  146  BEHAVISLIDES EFFECTS OF CAFFEINATED COLA CONSUMPTION ON FIRST GRADERS
Oliver M.1, Hirsch A.R.1, Ye Y.2  1Smell and Taste Treatment and Research Foundation, Chicago, IL; 2Illinois Mathematics and Science Academy, Aurora, IL

P95  147  ALTERED TASTE SENSITIVITY IN OBESE, PREDIABETIC OLETF RATS.
Hajnal A.1, Norgren R.1, Covasa M.1, Piekutowski A.1  1Neural & BehaviSLIDES Sciences, Pennsylvania State University, Hershey, PA; 2Nutritional Sciences, Pennsylvania State University, University Park, PA

P96  148  MOTIVATIONAL SUBSTITUTIONS IN FOOD AND DRUG ADDICTION
Pelchat M.L.1, Childress A.2, Valdez J.3, Bykowski C.1, Ragland J.D.1  1Monell Chemical Senses Center, Philadelphia, PA; 2Psychiatry, University of Pennsylvania, Philadelphia, PA

P97  149  EFFECT OF TASTE AND PALATABILITY ON LINGUAL PRESSURE DURING SWALLOWING
Pelletier C.1, Dhanaraj G.1  1Syracuse University, Syracuse, NY

P98  150  EFFECTS OF SLIDES MOVEMENTS ON PERCEIVED FOOD FLAVORS.
De Wijk R.A.1, Prinz J.3  1Wageningen Center for Food Sciences/A&F, Wageningen, Netherlands; 2Wageningen Center for Food Sciences/TNO-V, Wageningen, Netherlands
P.151 INDUCTION OF KALLIKREINS IN RAT SUBMANDIBULAR SALIVA BY SWEET TASTE INHIBITORS CONTAINED GYMNEA DIET. Yamada A., Nakamura Y., Katsukawa H., Ninomiya Y.; SLIDES Neuroscience, Kyushu University, Fukuoka, Japan; SLIDES Physiology, Asahi University, Mito, Japan


P.153 SEX DIFFERENCES IN ADULT OBESITY RISK ASSOCIATED WITH CHILDHOOD TOBACCO EXPOSURE Snyder D.J., O'Malley S.S., McKeel S.A., Bartoshuk L.M.; Neuroscience, Yale University, New Haven, CT; Psychiatry, Yale University, New Haven, CT; Surgery, Yale University, New Haven, CT

P.154 INGESTION OF NON-CALORIC PALATABLE FOOD MASH DID NOT INDUCE C-FOS EXPRESSION IN THE RAT PVN AND NTS Jaehn I.W., Yoo S.B., Ryu V., Ahn K.M., Gao E.F., Lee J.H.; Pharmacology, Yonsei University College of Medicine, Seoul, South Korea; SLIDES & Maxillofacial Surgery, Seoul National University College of Dentistry, Seoul, South Korea

P.155 BRAIN MECHANISMS OF HEDONIC VALUE OF TASTE AND INGESTIVE BEHAVIOR Yamamoto T., Shimura T., Furudono Y., Ando C., Imaoka H., Yamamoto C.; Department of Behavioral Science, Graduate School of Human Sciences, Osaka University, Osaka, Japan

P.156 MOUSE STRAINS SHOW DIFFERENCES IN INTAKE OF ALKALINES Bougher J., Pour L., Shank A.J., St. John S.J.; Anatomy & Neurobiology, University of Tennessee, Memphis, TN; Psychology, Reed College, Portland, OR; Anatomy & Neurobiology, University of Tennessee Health Sciences Center, Memphis, TN

P.157 RATS FORM TASTE-NAUSEA ASSOCIATIONS IN 8 MINUTES: NEW METHODS TO EXPLORE THE TEMPSLIDES AND QUALITATIVE DYNAMICS OF CONDITIONED TASTE AVERSION PROCESSING. Baird J.P., St. John S., Nguyen E.A.; Psychology & Neuroscience, Amherst College, Amherst, MA; Reed College, Portland, OR; Psychology, Amherst College, Amherst, MA

P.158 SELECTIVE BREEDING OF MOUSE LINES DIVERGENT IN SWEETENER CONSUMPTION Bachmanov A.A., Bosak N.P., Beauchamp G.K.; Monell Chemical Senses Center, Philadelphia, PA

Friday, April 15, 2005

7:00 AM - 1:00 PM Registration (Registration Area)

7:30 AM - 9:00 AM Continental Breakfast (Prefunction Area)

9:45 AM - 10:15 AM Coffee Break (Prefunction Area)

POSTERS

Friday - 8:00 AM - 12:00 PM (P1-P51 North Ballroom; P52-P102 South Ballroom)

Olfactory CNS (North Ballroom)

P1 171 A CORTICAL HIGH-PASS FILTER CONTRIBUTES TO OLFATORY FIGURE-GROUND SEPARATION Kadohisa M., Wilson D.A.; Zoology, University of Oklahoma, Norman, OK

P2 172 ODOTOPIC MAP IN THE FOREBRAIN OF CHANNEL CATFISH Nikonov A.A., Finger T., Caprio J.; Biological Sciences, Louisiana State University, Baton Rouge, LA; Cell & Dev. Biol., University of Colorado Health Sciences Center, Aurora, CO

P3 173 THE CLONING AND CHARACTERIZATION OF THE DISTRIBUTION OF AN OCTOPAMINE RECEPTOR AND TWO SEROTONIN RECEPTORS IN THE OLFATORY SYSTEM OF THE TOBACCO HAWKMOUTH MANDUCA SEXTA Dacks A., Hua L., Christensen T., Nighorn A.; Neurobiology, University of Arizona, Tucson, AZ; Biochemistry and Molecular Biophysics, University of Arizona, Tucson, AZ
P4 174 OLFACTORY WORKING-MEMORY IN PRIMARY OLFACTORY CORTEX
Zelano C.1, Mainland J.2, Johnson B.2, Pousette F.3, Porter J.A.4, Telles C.A.5, Bremner E.1, Khan R.M.1, Sobel N.1
1University of California, Berkeley, Berkeley, CA; 2Neuroscience, University of California, Berkeley, Berkeley, CA; 3Bioengineering, University of California, Berkeley, Berkeley, CA; 4Psychology, University of California, Berkeley, Berkeley, CA; 5Helen Wills Neuroscience Institute, University of California, Berkeley, Berkeley, CA

P5 175 CNS PROCESSING OF PULSE DURATION IN THE CRAYFISH, PROCAMBARUS CLARKII
Wolf M.1, Daly K.C.5, Moore P.A.6
1Biological Sciences, Bowling Green State University, Bowling Green, OH; 2Biology, West Virginia University, Morgantown, VA

P6 176 DIFFERENTIAL HABITUATION OF UNIT ACTIVITY, BETA ACTIVITY, AND GAMMA ACTIVITY IN OLFACTORY CORTEX
Gilmour H.L.,1 Stripling J.S.,1 Psychology, University of Arkansas, Fayetteville, AR

P7 177 REAL-TIME GAS CONCENTRATION MONITORING METHOD FOR CHEMOSENSORY EVENT-RELATED POTENTIAL MEASUREMENT
Toda H.1, Yamada H.2, Saito S.3 National Institute of Advanced Industrial Science and Technology, Tsukuba, Ibaraki, Japan

P8 178 SYNAPTIC CORRELATES OF OLFACTORY RECOGNITION MEMORY
Kaba H.1, Huang G.1 Department of Integrative Physiology, Kochi Medical School, Nankoku, Kochi, Japan

P9 179 EYE CLOSURE IN DARKNESS ANIMATES OLFACTORY CORTICAL AREAS
Wiesman M.1, Kopietz R.1, Albrecht J.1, Linn J.1, Reine U.1, Kara E.1, Kettenmann B.1, Kobal G.1, Thomas S.3 Neuroradiology, University of Munich, Munich, Germany; 3Radiology, Virginia Commonwealth University, Richmond, VA; 3Physiology, Virginia Commonwealth University, Richmond, VA; 3Neurology, University of Munich, Munich, Germany

P10 180 EVIDENCE OF OLFACTORY CROSS-ADAPTATION OF AN UNPLEASANT MERCAPTAN ODORANT BY A PLEASANT MERCAPTAN AS REVEALED BY CHEMOSENSORY EVENT-RELATED POTENTIALS
Reynolds D.J.1, Chopra A.3, Grimshaw S.2, Taylor D.2, Hitchcock D.2, Kemp S.2, Kettenmann B.1 University College Chester, Chester, United Kingdom; 3Unilever R&D, Bebington, United Kingdom; 3Unilever R&D, Sharnbrook, United Kingdom; 3Radiology, Virginia Commonwealth University, Richmond, VA

P11 181 VARIABILITY IN OLFACTORY FMRI STUDY RESULTS
Gerber J.C.1 Dresden University Hospital, Dresden, Germany

P12 182 SINGLE ODORANTS VERSUS BINARY ODOR MIXTURES: A PET INVESTIGATION
Boyle J.A., Djordjevic J., Olsson M.J., Penicaud S., Jones-Gotman M.1 Montreal Neurological Institute, Montreal, Quebec, Canada; 2Psychology, Uppsala University, Uppsala, Sweden

P13 183 AGE-DEPENDENT IMPAIRMENT IN LTP IN ANTERIOR PIRIFORM CORTEX OF MICE LACKING THE FRAGILE X MENTAL RETARDATION PROTEIN
Larson J., Jessen R., Kim D.1 Psychiatry, University of Illinois at Chicago, Chicago, IL

P14 184 CONTEXT AND CHEMISTRY AS FACTORS FOR INNATE ODOR RESPONSES
Lowry C.A., Fanselow M.S., Kay L.M.1 Neurobiology, University of Chicago, Chicago, IL; 2Psychology, University of California, Los Angeles, Los Angeles, CA; 3University of Chicago, Chicago, IL

Olfactory Receptor Neurons (North Ballroom)

P15 185 DETECTION OF MHC CLASS I PEPTIDES BY THE MAMMALIAN MAIN OLFACTORY SYSTEM
Schra M.1, Kellner K.R.2, Boehm T.3, Leinders-Zufall T.3, Zufall F.1 Anatomy and Neurobiology, University of Maryland at Baltimore, Baltimore, MD; 3Max-Planck-Institute of Immunobiology, Freiburg, Germany

P16 186 LIPOCALINS IN THE OLFACTORY EPITHELIUM OF THE NEWT, CYNOPOUS PYROHOGASTER
Iwasa T.1, Urano K.1, Sawada K.1, Okano K.1, Nakamura T.1 Material Science and Engineering, Muroran Institute of Technology, Muroran, Hokkaido, Japan; 2Applied Physics and Chemistry, The University of Electro-Communications, Chofu, Tokyo, Japan

P17 187 NONSELECTIVE CATION CHANNELS IN RAT OLFACTORY RECEPTOR NEURONS
Zhanuarov A.B.1, Ache B.W.1 Whitney Laboratory for Marine Bioscience, Center for Smell and Taste, McKnight Brain Institute, University of Florida, Gainesville, FL

P18 188 PLASMA MEMBRANE CALCIUM PUMPS OF MOUSE OLFACTORY NEURONS
Vanhouwen J.1, Valentine M.1, Weeraratne S.D.1, Delay R.1 Biology, University of Vermont, Burlington, VT
P19 189 UNCONVENTIONAL NEURONS IN THE NASAL CAVITY OF HUMANS
Hansen A.1, Witt M.2, Hummel T.1 1Cell and Developmental Biology, University of Colorado Health Sciences Center, Aurora, CO; 2Technische Universität, Dresden, Germany

P21 191 SIGNAL TRANSDUCTION PROTEINS IN THE SQUID, LOLLIGUNCULA BREVIS
Mobley A.S.1, Lucero M.T. 1Physiology, University of Utah, Salt Lake City, UT

P22 192 MOLECULAR IDENTIFICATION OF A TRPC PROTEIN HOMOLOG FROM LOBSTER OLFACTORY RECEPTOR NEURONS
Urban J.M.1, Bobkov Y.V.1, Zhaninazarov A.B.1, Ache B.W.1 1Whitney Laboratory for Marine Bioscience, Center for Smell and Taste, McKnight Brain Institute, University of Florida, Gainesville, FL

P23 193 CHARACTERIZATION OF A FUNCTIONALLY DIFFERENT SUBPOPULATION OF LOBSTER OLFACTORY RECEPTOR NEURONS
Bobkov Y.V.1, Aggio J.F.1, Urban J.M.1, Daly K.C.2, Ache B.W.1 1Whitney Laboratory for Marine Bioscience, Center for Smell and Taste, McKnight Brain Institute, University of Florida, Gainesville, FL; 2Dept. Biology, West Virginia University, Morgantown, WV

P24 194 CHARACTERIZATION OF A DROSOPHILA MELANOGASTER CHEMOSENSORY SPECIFIC SNMP
Fernandez K.1, Taraskevicius D.1, Vogt R.G.1 1Biological Sciences, University of South Carolina, Columbia, SC

P25 195 FUNCTIONAL CHARACTERIZATION OF TWO HUMAN OLFATORY RECEPTORS EXPRESSED IN THE BACULOVIRUS SF9 INSECT CELL SYSTEM
Clot-Faybesse O.1, Matarazzo V.3 1Institut National de Recherche Agronomique (INRA, France), Dijon, France; 2Neuroscience, Johns Hopkins University, Baltimore, MD

P26 196 RESPONSE PROFILES OF OLFATORY RECEPTOR NEURONS IN XENOPUS LAEVIS TADPOLES: A THEORETICAL ANALYSIS
Manzini L.1, Schild D.1 1Department of Molecular Neurophysiology, University of Goettingen, Goettingen, Germany

Olfactory Regeneration (North Ballroom)

P27 197 INVESTIGATIONS ON PRESENCE AND FUNCTION OF NITRIC OXIDE IN THE OLFACTORY SYSTEM OF MICE
Brunert D.1, Kleinbongard P.2, Kelm M.3, Hans H.1, Christian H. W.1 1Department of Cellphysiology, Ruhr-University Bochum, Bochum, Germany; 2Department of Cardiology, Heinrich-Heine Universität Düsseldorf; Düsseldorf, Germany

P28 198 DETERMINING THE LOCATION OF CNG CHANNELS IN OLFACTORY CILIA
Flannery R.1, French D.3, Krantz W.B.3, Groetsch C.W.3, Kleene S.J.1 1University of Cincinnati, Milford, OH; 2Mathematics, University of Cincinnati, Cincinnati, OH; 3Chemical Engineering, University of Cincinnati, Cincinnati, OH; 4Mathematical Sciences, University of Cincinnati, Cincinnati, OH; 5Cell Biology, Neurobiology, and Anatomy, University of Cincinnati, Cincinnati, OH

P29 199 GONADOTROPIN RELEASING HORMONE (GNRH) MODULATION OF OLFACTORY RESPONSES IN COHO SALMON.
Athos J.1, Dickey J.1, Hodges N.1, Swanson P.1, Dittman A.1 1Northwest Fisheries Science Center, Seattle, WA

P30 200 CYCLIC-AMP DYNAMICS AND ADENYLYL CYCLASE ACTIVITIES WITHIN THE OLFACTORY CILIA
Takeuchi H.1, Kurahashi T.1 1Frontier Biosciences, Osaka University, Osaka, Japan

P31 201 THE ROLE OF TRANSPORTER PROTEINS IN RELEASE OF THE NEUROMODULATOR ATP IN THE MOUSE OLFATORY EPITHELIUM
Brown B.1, Hegg C.1 1Physiology, University of Utah, Salt Lake City, UT

P32 202 MOLECULAR EVENTS DURING REGENERATION OF OLFACTORY SENSORY NEURONS
Mcclintock T.S.1, Shetty R.1, Bose S.C.1 1Physiology, University of Kentucky, Lexington, KY

P33 203 DELAYED OLFACTORY NERVE REGENERATION IN APOE-DEFICIENT MICE
Nathan B.P.1, Nisar R.2, Short J.1, Grisom E.1, Strubbe R.1 1Biological Sciences, Eastern Illinois University, Charleston, IL; 2School of Medicine, Southern Illinois University, Charleston, IL
P34  204  RECOVERY AFTER OLFAC TORY AXOTOMY IN MICE: PHARMACOLOGIC AND GENETIC EFFECTS  
Kern R.C. 1, Raviv J.R. 1, Conley D.B. 1, Robinson A.M. 1  
1Otologyngology-HNS, Northwestern University, Chicago, IL  

P35  205  EASE ANALYSIS OF GENE EXPRESSION PROFILES FROM MURINE OLFAC TORY MUCOSA FOLLOWING TARGET ABLATION  
Borders A.S. 1, Getchell M. 1, Liu H. 1, Stromberg A.J. 1, Getchell T. 1  
1Physiology, University of Kentucky, Lexington, KY; 2Anatomy and Neurobiology, University of Kentucky, Lexington, KY; 3Statistics, University of Kentucky, Lexington, KY  

P36  206  REMODELING OF THE OLFAC TORY BULB AND EPITHELIUM IN RESPONSE TO NMDA-MEDIATED EXCITOTOXICITY  
Fung F. 1, Currie E. 1, Roskams J. 1  
1Zoology, University of British Columbia, Vancouver, British Columbia, Canada  

P37  207  ALTERED CHEMOKINE EXPRESSION PROFILES FOLLOWING TARGET ABLATION IN THE OLFAC TORY EPITHELIUM OF SCAVENGER RECEPTOR A-DEFICIENT MICE  
Getchell M.L. 1, Li H. 1, Vaishnav R.A. 1, De Villiers W.A. 1, Stromberg A.J. 1, Getchell T.V. 1  
1Anatomy and Neurobiology, University of Kentucky, Lexington, KY; 2Statistics, University of Kentucky, Lexington, KY; 3Physiology, University of Kentucky, Lexington, KY; 4Internal Medicine, University of Kentucky, Lexington, KY  

P38  208  PROTEOMIC AND TRANSCRIPTI ONAL ANALYSIS OF AGING IN MURINE OLFAC TORY EPITHELIUM  
Vaishnav R.A. 1, Poon H.F. 1, Butterfield D.A. 1, Getchell M.L. 1, Getchell T.V. 1  
1Physiology, University of Kentucky, Lexington, KY; 2Chemistry, University of Kentucky, Lexington, KY; 3Anatomy and Neurobiology, University of Kentucky, Lexington, KY  

P39  209  EXPRESSION OF PAX6 IN OLFAC TORY EPITHELIUM  
Guo Z. 1, Manglapus G. 1, Harris M. 1, Schwob J.E. 1  
1Anatomy & Cellular Biology, Tufts University, Boston, MA  

P40  210  ANALYSIS OF THE SPATIAL ORGANIZATION OF THE RETINALDE HY DE DEHYDROGENASES IN THE ADULT OLFAC TORY MUCOSA  
Pelsu C.E. 1, Drager U. 1, Schwob J.E. 1  
1Anatomy & Cellular Biology, Tufts University, Boston, MA; 2Shriver Center, University of Massachusetts Medical School (Worcester), Worcester, MA  

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Multimodal Neurophysiology & Behavior (North Ballroom)

P41  211  ELECTRICAL ACTIVITY OF LOCAL OLFAC TORY INTERNEURONS IN THE CRAYFISH BRAIN IS MODIFIED BY HYDRODYNAMIC INPUT  
Mellon D. 1  
1Biology, University of Virginia, Charlottesville, VA  

P42  212  INTERACTIONS BETWEEN THE POSTERSIOR PIRIFORM CORTEX, FORELIMB MOTOR CORTEX AND RED NUCLEUS DURING AN OLFAC TORY GUIDED, SKILLED REACHING TASK  
Hermer-Vazquez L. 1, Hermer-Vazquez R. 1  
1Psychology, University of Florida, Gainesville, FL  

P43  213  CHEMOSENSORY EVENT-RELATED POTENTIALS: DIFFERENT FROM OTHER SENSES?  
Olofsson J.K. 1, Ericsson E. 1, Murphy C. 1, Nordin S. 1  
1Psychology, Umeå University, Umeå, Sweden; 2Psychology, San Diego State University, San Diego, CA  

P44  214  EAR AND NOSE: SIMILAR NETWORKS IN FAMILIARITY PROCESSING  
Phillips J. 1, Tillmann B. 1, Royet J. 1  
1Neuroscience, CNRS, Lyon, Rhone, France  

P45  215  THE AMYGDALA/PIRIFORM ENCODES INCENTIVE SALIENCE OF ODORS PREDICTING AN APPETITIVE DRINK  
Mak Y.E. 1, Mcllne F. 1, Phillips N. 1, Small D.M. 1  
1Surgery, John B. Pierce Laboratory and Yale University, New Haven, CT; 2Cognitive Neuroscience, Unilever R&D, Merseyside, United Kingdom; 3Sensory Neuroscience, Unilever, Wirral, England, United Kingdom  

P46  216  SIMULTANEOUS GUSTATORY STIMULI MODULATE ORTHO- AND RETRONASAL OLFAC TION  
Welge-Lüssen A.C. 1, Husner A. 1, Klarhöfer M. 1, Small D.M. 1, Thomas H. 1  
1ENT Department, University of Basel, Basel, Switzerland; 2MR Physics, University of Basel, Basel, Switzerland; 3Yale University, New Haven, CT; 4Smell and taste clinic, University of Dresden, Medical School, Dresden, Germany  

P47  217  ETHANOL-TASTE INTERACTION: THE ROLE OF SMELL  
Otero-Losada M.E. 1  
1LS-Neurociencias, CONICET-Hospital de Clinicas, Buenos Aires, Argentina  

P48  218  OLFAC TOMOTOR COUPLING DURING SKILLED REACHING IN RATS  
Hermer-Vazquez R. 1, Hermer-Vazquez L. 1  
1Psychology, University of Florida, Gainesville, FL
P49 219  SURPRISING TONGUE: EFFECTS OF ELECTROTACTILE SENSORY SUBSTITUTION.  
    Danilov Y.\textsuperscript{1}, Tyler M.\textsuperscript{2}, Kamm K.L.\textsuperscript{3}, Bachy-Rita P.\textsuperscript{1}  
    \textsuperscript{1}Wicab, Inc., Middleton, WI; \textsuperscript{2}R&D, Wicab, Inc., Middleton, WI; \textsuperscript{3}Occupational Therapy, University of Wisconsin-Milwaukee, Milwaukee, WI; \textsuperscript{4}Rehabilitation Medicine, University of Wisconsin-Madison, Madison, WI

P50 220  THE PH OF CHEMICAL DEFENSES IN SEA HARE APLYSIA CALIFORNICA MODULATES BEHAVIOR AND CHEMOSENSORY RESPONSE IN THE SPINY LOBSTER PANULIRUS INTERRUPUTUS  
    Shabani S.\textsuperscript{1}, Derby C.D.\textsuperscript{1}  
    \textsuperscript{1}Biology, Georgia State University, Atlanta, GA

P51 221  VERBAL CONTEXT INFLUENCES FLAVOR PERCEPTION  
    White T.L.\textsuperscript{1}  
    \textsuperscript{1}Psychology, Le Moyne College, Syracuse, NY

**Taste: Animal Behavior (South Ballroom)**

P52 222  AMILORIDE-ADULTERATED NAFL TASTES LIKE KCL AND NA GLUCONATE TASTES LIKE NAFL TO THE NA-DEPLETED RAT  
    St. John S.J.\textsuperscript{1}  
    \textsuperscript{1}Psychology, Reed College, Portland, OR

P53 223  LICK RESPONSIVENESS OF EIGHT MOUSE STRAINS TO SWEETENERS: EFFECTS OF ALLELIC VARIATION IN THE TAS2R3 GENE  
    Glendinning J.\textsuperscript{1}, Chyou S.\textsuperscript{1}, Onishi M.\textsuperscript{1}, Patel P.\textsuperscript{1}, Zheng K.\textsuperscript{1}  
    \textsuperscript{1}Biological Sciences, Barnard College, Columbia University, New York, NY

P54 224  OLEIC AND LINOLEIC ACID ALTERS LICKING RESPONSES TO SWEET, SOUR, SALT, AND BITTER TASTANTS IN RATS.  
    Labban C.\textsuperscript{1}, Anderson A.\textsuperscript{1}, O'Connor H.\textsuperscript{1}, Pittman D.\textsuperscript{1}  
    \textsuperscript{1}Psychology, Wofford College, Spartanburg, SC

P55 225  THE ROLE OF THE CHORDA TYMPANI NERVE IN THE DETECTION OF FREE FATTY ACIDS IN RATS.  
    Shields S.\textsuperscript{1}, Murchison L.\textsuperscript{1}, Wallace J.\textsuperscript{1}, Harris L.\textsuperscript{1}, Pittman D.\textsuperscript{1}  
    \textsuperscript{1}Psychology, Wofford College, Spartanburg, SC

P56 226  THE ROLE OF THE CHORDA TYMPANI NERVE IN LINOLEIC ACID DETECTION BY MALE AND FEMALE RATS  
    Stratford J.M.\textsuperscript{1}, Curtis K.S.\textsuperscript{1}, Contreras R.J.\textsuperscript{1}  
    \textsuperscript{1}Program in Neuroscience, Florida State University, Tallahassee, FL

P57 227  MICROSTRUCTURAL ANALYSIS OF NAFL CONSUMPTION AFTER BRIEF DIETARY NA+ DEPRIVATION  
    Vaughn J.M.\textsuperscript{1}, Dietz D.\textsuperscript{1}, Curtis K.S.\textsuperscript{1}, Contreras R.J.\textsuperscript{1}  
    \textsuperscript{1}Program in Neuroscience, Florida State University, Tallahassee, FL

P58 228  RELATIONSHIPS BETWEEN INSULIN RELEASE AND TASTE.  
    Tonosaki K.\textsuperscript{1}  
    \textsuperscript{1}Meikai University, School of Dentistry, in Japan, Sakatsoshi, Japan, Japan

P59 229  SODIUM CHLORIDE PREFERENCE IN TRPV1 KNOCKOUT MICE  
    Ruiz C.\textsuperscript{1}, Gutknecht S.\textsuperscript{1}, Mahaffey J.\textsuperscript{1}, Delay E.\textsuperscript{2}, Kinnamon S.\textsuperscript{1}  
    \textsuperscript{1}Biomedical Sciences, Colorado State University, Fort Collins, CO; \textsuperscript{2}Regis University, Denver, CO

P60 230  OROSENSORY DETECTION OF DIETARY LIPIDS: ROLE FOR THE FATTY ACID TRANSPORTER (FAT/CD36)  
    Lagueurte F.\textsuperscript{1}, Pilerly-DeGrace P.\textsuperscript{1}, Patrias B.\textsuperscript{1}, Febbraio M.\textsuperscript{2}, Montmayeur J.\textsuperscript{1}, Besnard P.\textsuperscript{1}  
    \textsuperscript{1}Centre National de la Recherche Scientifique, Dijon, France; \textsuperscript{2}Cellular Biology, Lerner Research Institute, Cleveland, OH

P61 231  COMPARISON OF THE TASTES OF MSG AND GLYCINE  
    Westburg A.M.\textsuperscript{1}, Mitzefelt J.D.\textsuperscript{2}, Delay E.R.\textsuperscript{1}  
    \textsuperscript{1}Neuroscience Program, Psychology Dept., Regis University, Denver, CO

P62 232  GENERALIZATION OF CONDITIONED TASTE AVERSION (CTA) TO MONOSODIUM GLUTAMATE (MSG) AND INOSINE MONOPHOSPHATE (IMP) IN 129P3/J AND C57BL/6BYJ MICE  
    Murata T.\textsuperscript{1}, Bachmanov A.A.\textsuperscript{1}, Beauchamp G.K.\textsuperscript{1}  
    \textsuperscript{1}Monell Chemical Senses Center, Philadelphia, PA

P63 233  PRELIMINARY ASSESSMENT OF SUCROSE AND MSG TASTE CAPABILITIES OF T1R3 KNOCKOUT MICE  
    Delay E.R.\textsuperscript{1}, Hernandez N.P.\textsuperscript{1}, Heyer B.R.\textsuperscript{1}, Margolskee R.F.\textsuperscript{2}  
    \textsuperscript{1}Neuroscience Prog., Dept. Psychology, Regis University, Denver, CO; \textsuperscript{2}Physiology & Biophysics, Mount Sinai School of Medicine, New York, NY

P64 234  GENERALIZATION OF CTA BETWEEN MONOSODIUM GLUTAMATE AND L-PROLINE IN RATS  
    Duran B.L.\textsuperscript{1}, Vo L.N.\textsuperscript{1}, Koprowski S.M.\textsuperscript{1}, Delay E.R.\textsuperscript{1}  
    \textsuperscript{1}Neuroscience Prog., Dept. Psychology, Regis University, Denver, CO
P65 235 P2X2/P2X3 DOUBLE KNOCKOUT MICE DO NOT RESPOND TO MOST TASTE STIMULI
Barrows J., Danilova V., Hellekant G., Kinnamon S., Finger T.  
Cell and Developmental Biology, University of Colorado Health Sciences Center, Denver, CO; Animal Health and Biomedical Sciences, University of Wisconsin-Madison, Madison, WI; Biomedical Sciences, Colorado State University, Fort Collins, CO

P66 236 REMOVAL OF BDNF FROM ADULT TASTE BUDS CAUSES SUBTLE BEHAVIOURAL AND ANATOMICAL CHANGES IN MICE.
Vigers A.J., Kwok L., Jones K.R., Finger T.E.  
Cellular and Developmental Biology, University of Colorado Health Sciences Center, Aurora, CO; Molecular, Cellular and Developmental Biology, University of Colorado, Boulder, CO

P67 237 TASTE EFFECTIVENESS AND PREFERENCE OF SUGAR ALCOHOLS IN C57BL/6 MICE
Sako N., Gibo R., Sugimura T., Yamamoto T.  
SLIDES Physiology, Asahi University School of Dentistry, Mizuho, Gifu, Japan; SLIDES Physiology, Graduate School of Human Sciences, Osaka University, Osaka, Japan

Taste: Molecular Studies (South Ballroom)

P68 238 GROUP IIA PHOSPHOLIPASE A2 IS PREDOMINANTLY EXPRESSED IN MATURE TASTE RECEPTOR CELLS OF RAT CIRCUMVALLATE PAPILAE.
Ooike H., Matsumoto I., Abe K.  
Applied Biological Chemistry, University of Tokyo, Bunkyou-ku, Tokyo, Japan

P69 239 DO MONKEYS TASTE LIKE HUMANS?
Parry C., Erkner A., Le Coutre J.  
Nestle Research Center, Lausanne 26, VD, Switzerland

P70 240 REGULATING CALCIUM IN TASTE CELLS: EXPRESSION OF CALCIUM ATPASES
Medler K.  
Biological Sciences, University at Buffalo, Buffalo, NY

P71 241 TASTE-CELL-SPECIFIC OVER-EXPRESSION OF BDNF IN MICE LEADS TO THE SUPERTASTER MORPHOLOGICAL PHENOTYPE
Nosrat C.A., Margolskee R., Nosrat I.  
Laboratory of SLIDES Neurobiology, Biologic & Materials Sciences, University of Michigan, Ann Arbor, MI; Medicine, Mount Sinai School of Medicine, New York, NY

P72 242 FUNCTIONAL CHARACTERIZATION OF A RAT MGLUR1 VARIANT FROM VALLATE PAPILAE
San Gabriel A.M., Uneyama H., Torii K., Yoshie S.  
Ajinomoto Co., Inc., Kawasaki-shi, Japan; Department of Anatomy, Nippon Dental University, Niigata-shi, Japan

P73 243 DIETARY NACL-INDUCED CHANGES IN THE ALDOSTERONE-REGULATED SALT TASTE TRANSDUCTION PATHWAY
Biology & The Center for Integrated BioSystems, Utah State University, Logan, UT

P74 244 TASTE RESPONSES IN MICE LACKING AQP5
Spray K.J., Davis T.J., Menon A.G., Gilbertson T.A.  
Biology & The Center for Integrated BioSystems, Utah State University, Logan, UT; Molecular Genetics, Biochemistry and Microbiology, University of Cincinnati College of Medicine, Cincinnati, OH

P75 245 TRANSSYNAPTIC TRANSPORT OF WHEAT GERM AGGLUTININ EXPRESSED IN A SUBSET OF TYPE II TASTE CELLS OF TRANSGENIC MICE
Damak S., Margolskee R.F.  
Nestle Research Center, Lausanne, VD, Switzerland; Department of Physiology and Biophysics, Howard Hughes Medical Institute, Mount Sinai School of Medicine, New York, NY

P76 246 WHITHER THE SWEET TASTE IN CATS
Li X., Li W., Wang H., Cao J., Huang L., Bachmanov A.A., Reed D.R., Legrand-Defretin V., Beauchamp G.K., Brand J.G.  
Monell Chemical Senses Center, Philadelphia, PA; The WALTHAM Center for Pet Nutrition, Melton Mowbray, Leicestershire, United Kingdom

P77 247 IDENTIFICATION OF VOLTAGE-GATED PH-SENSITIVE CHLORIDE CHANNELS IN TASTE BUD CELLS
Monell Chemical Senses Center, Philadelphia, PA

P78 248 MOLECULAR STUDIES OF THE GUSTDUCIN-PHOSPHODIESTERASE 1A INTERACTION
Benard O., Max M., Margolskee R.F.  
Dept. of Physiology and Biophysics, Mount Sinai School of Medicine, New York, NY; Dept. of Physiology and Biophysics, Howard Hughes Medical Institute, Mount Sinai School of Medicine, New York, NY

P79 249 THE ROLE OF CALCIUM-SENSITIVE ADENYLYL CYCLASE IN TASTE BUDS
Trubey K., Culpepper S., Maruyama Y., Chaudhari N.  
Physiology and Biophysics, University of Miami, Miami, FL
P80  250  DIET-INDUCED CHANGES IN EXPRESSION OF FATTY ACID-SENSITIVE POTASSIUM CHANNELS IN RAT TASTE BUDS
Hansen D.R., Burks C.A., Gilbertson T.A.  /Biology & The Center for Integrated Biosystems, Utah State University, Logan, UT

P81  251  IDENTIFICATION AND CHARACTERIZATION OF HUMAN SWEET RECEPTOR BINDING SITES FOR AGONISTS AND ANTAGONISTS
Jiang P., Cui M., Zhao B., Liu Z., Snyder L.A., Benard L.M., Osman R., Max M., Margolskee R.F.  /Department of Physiology and Biophysics, Mount Sinai School of Medicine, New York, NY; Department of Physiology and Biophysics, HHMI, Mount Sinai School of Medicine, New York, NY

P82  252  X-RAY CRYSTALLOGRAPHIC STUDIES OF THE SINGLE CHAIN MONELLIN MNE1: IMPLICATIONS FOR INTERACTIONS WITH T1R TASTE RECEPTORS.
Hobbs J.R., Munger S.D., Conn G.L.  /Faculty of Life Sciences, University of Manchester, Manchester, United Kingdom; Anatomy and Neurobiology, University of Maryland School of Medicine, Baltimore, MD

P83  253  CODING SEQUENCE VARIATION IN HUMAN SWEET AND UMAMI TASTE RECEPTOR GENES
Kim U., Wooding S., Riaz N., Ricci D., Jorde L., Drayna D.  /Biology, Kyungpook National University, Daegu, South Korea; Human Genetics, University of Utah, Salt Lake City, UT; NIDCD, National Institutes of Health, Rockville, MD; National Institute on Deafness and Other Communication Disorders, National Institutes of Health, Rockville, MD

P84  254  MEASURING LIGAND BINDING TO THE MOUSE T1R2 N-TERMINAL DOMAIN
Vigues S., Hobbs J.R., Nie Y., Conn G.L., Munger S.D.  /Anatomy and Neurobiology, University of Maryland School of Medicine, Baltimore, MD; Faculty of Life Sciences, University of Manchester, Manchester, United Kingdom

P85  255  T1R3 BINDS SWEET LIGANDS AT PHYSIOLOGICAL CONCENTRATIONS
Nie Y., Hobbs J.R., Vigues S., Conn G.L., Munger S.D.  /Anatomy and Neurobiology, University of Maryland School of Medicine, Baltimore, MD; Faculty of Life Sciences, University of Manchester, Manchester, United Kingdom

P86  256  FUNCTIONAL CHARACTERIZATION OF THE HUMAN T2R7, T2R14, T2R43, AND T2R47 BITTER RECEPTORS.
Sainz E., Gutierrez J., Battey J.F., Northup J.K., Sullivan S.L.  /National Institute on Deafness and Other Communication Disorders, National Institutes of Health, Rockville, MD

Taste: Clinical  (South Ballroom)

P87  257  TRIGEMINAL NERVE RESPONSE IN HUMANS FOR 3M NACL SOLUTIONS, STUDIED BY MEG
Komiyama A., Kobayakawa T., Goto N., Saito S., Ikeda M.  /Otology, Mie University, Tokyo, Tokyo, Japan; National Institute of Advanced Industrial Science and Technology, Ibaraki, Japan

P88  258  OBJECTIVE ASSESSMENT OF TERBINAFE-INDUCED TASTE LOSS
Dytek R.L., Haxel B.R., Babish S.E.  /Smell and Taste Center, University of Pennsylvania, Philadelphia, PA; Otology, University of Mainz, Mainz, Germany

P89  259  SUBSTANCE AND TONGUE-REGION SPECIFIC LOSS IN BASIC TASTE-QUALITY IDENTIFICATION IN ELDERLY ADULTS
Nordin S., Brämerson A., Hummel T., Bringlöv E., Kobal G., Bende M.  /Department of Psychology, Umed University, Umed, Sweden; Department of Otorhinolaryngology, Central Hospital, Skövde, Sweden; University of Dresden, Dresden, Germany; Department of Clinical and Experimental Pharmacology, University of Erlangen-Nürnberg, Erlangen, Germany

P90  260  CONFOCAL MICROSCOPY OF THE PERIPHERAL GUSTATORY SYSTEM: COMPARISON BETWEEN HEALTHY SUBJECTS AND PATIENTS SUFFERING FROM TASTE DISORDERS DURING RADIOCHEMOTHERAPY
Just T., Bombror I., Fietkau R., Guthoff R., Hummel T., Pau H.  /Otorhinolaryngology, University of Rostock, Rostock, Germany; Radiotherapy, University of Rostock, Rostock, Germany; Ophthalmology, University of Rostock, Rostock, Germany; University of Dresden, Dresden, Germany

P91  261  GLOSSOSPHERYNGEAL SENSORY NEUROPATHY: IMPLICATION IN DYSGEUSIA AND GLOSSOSYNDROMA
Pitovski D.Z., Enrich S.  /Otology, Wake Forest University, Winston-Salem, NC

P92  262  TASTE SENSE IS ABNORMAL IN IDIOPATHIC PARKINSON'S DISEASE
Sliah M., Fernando M., Findley L., Hawkes C.  /Essex Neurocentre, Romford, Essex, United Kingdom

P93  263  CHANGES IN SWEET TASTE IN WOMEN WITH GESTATIONAL DIABETES MELLITUS
Belzer L., Tepper B., Ranzini A.  /Food Science, Rutgers, The State University of New Jersey, New Brunswick, NJ; Maternal and Fetal Medicine, St. Peter's University Hospital, New Brunswick, NJ
Trigeminal (South Ballroom)

P94 264 NASAL IRRITANT SENSITIVITY: INVERSE RELATIONSHIP BETWEEN SENSORY ACUITY AND PHYSIOLOGIC REACTIVITY
Shusterman D.J. 1 Medicine, University of Washington, Seattle, WA

P95 265 RETRONASAL SMELLING: AN SLIDES CAVITY COMPONENT
Dragich A.M. 1, Halpern B.P. 2 Dept. of Food Sci. & Tec., University of California, Davis, Davis, CA; 3 Neurobiology and Behavior, Cornell University, Ithaca, NY

P96 266 TEMPORAL INTEGRATION OF NASAL IRRITATION FROM AMMONIA AT THRESHOLD AND SUPRA-THRESHOLD LEVELS
Wise P.M. 1, Canty T.M. 1, Wysocki C.J. 1 Monell Chemical Senses Center, Philadelphia, PA

P97 267 QUANTIFICATION OF THE EFFICACY OF VAPORS TO ELICIT NASAL CHEMESTHESIS IN ANOSMICS
Cometto-Muniz J.E. 1, Cain W.S. 1, Abraham M.H. 2 Chemosensory Perception Laboratory, Surgery (Otolaryngology), University of California, San Diego, La Jolla, CA; 3 Chemistry, University College London, London, United Kingdom

P98 268 ODOR AND IRRITATION FROM COMPLEX MIXTURES OF AROMATIC HYDROCARBONS AND THEIR MAIN CONSTITUENTS
Schmidt R. 1, Medeiros A.M. 2, Daughtrey W.C. 3, Jarnot B.M. 3, Cain W.S. 1 Surgery (Otolaryngology), University of California, San Diego, La Jolla, CA; 3 ExxonMobil Biomedical Sciences, Inc., and Exxon Chemical Company, Annandale, NJ

P99 269 CHEMESTHETIC RESPONSIVENESS IS INDEPENDENT OF THERMAL TASTE AND CHEMICAL TASTE.
Green B. 1, Alvarez-Reeves M. 1, George P. 1, Akirav C. 1 The John B. Pierce Laboratory, New Haven, CT

P100 270 CAN A SINGLE PROCESS ACCOUNT FOR BOTH SENSITIZATION AND DESENSITIZATION EFFECTS TO SLIDES IRRITATION?
Mcburney D.H. 1, Balaban C.D. 2, Aeffeltranger M.A. 3 Psychology, University of Pittsburgh, Pittsburgh, PA; 3 Otolaryngology, Cell Biology, and Communications Disorders, University of Pittsburgh, Pittsburgh, PA; 3 Psychology, Bethany College, Bethany, WV

Friday, April 15, 2005

11:30 AM - 1:00 PM Cash Lunch Cart (Prefunction Area)
12:45 PM - 2:30 PM AChemS Business Meeting (The Keys)
2:00 PM 4th Annual Ultimate Frisbee Tournament Lido Beach (in front of Holiday Inn)
6:00 PM - 8:30 PM Registration (Registration Area)

SYMPOSIA

Friday - 7:00 PM - 8:15 PM (South Ballroom)

Polak Young Investigator Taste Symposium
Linda Barlow, Symposium Chair

7:00 274 THE GUSTATORY RECEPTOR 5A REGION IN DROSOPHILA MELANOGASTER REVEALS INTEGRATED GENETIC NETWORKS FOR GUSTATORY PERCEPTION, STARVATION RESISTANCE AND LONGEVITY
Rollmann S.M. 1, Magwire M.M. 2, Yamamoto A. 1, Mackay T.F. 2, Anhalt R.R. 3 Zoology and W. M. Keck Center for BehaviSLIDES Biology, North Carolina State University, Raleigh, NC; 3 Genetics and W. M. Keck Center for BehaviSLIDES Biology, North Carolina State University, Raleigh, NC; 3 Zoology, Genetics and W. M. Keck Center for BehaviSLIDES Biology, North Carolina State University, Raleigh, NC
7:15  275  ALLELIC VARIATION OF THE TAS1R3 GENE AFFECTS TASTE-EVOKED RESPONSES IN THE NUCLEUS OF THE SOLITARY TRACT OF MICE.
Mccaughey S.A., Bachmanov A.A. 1  Monell Chemical Senses Center, Philadelphia, PA

7:30  276  A COMBINATORIAL CODE FOR BITTER TASTE RECEPTORS
Bufo B. 1, Kuhn C. 1, Brockhoff A. 1, Behrens M. 1, Krautwurst D. 1, Appendino G. 2, Meyerhof W. 1  Molecular Genetics, German Institute of Human Nutrition Potsdam-Rehbruecke, Nuthetal, Germany; 2DISCAFF, Universita del Piemonte Orientale, Novara, Italy

7:45  277  ACID BLOCK OF TRPM5, A TRANSIENT RECEPTOR POTENTIAL CHANNEL INVOLVED IN BITTER, SWEET AND AMINO ACID TRANSDUCTION
Liman E. 1, Liu D. 1  Biological Sciences, University of Southern California, Los Angeles, CA

8:00  278  NASACCHARIN BOTH STIMULATES AND INHIBITS THE HTAS1R2-TAS1R3 SWEET TASTE RECEPTOR IN VIVO AND IN VITRO: EVIDENCE SUPPORTING AN ALLOSTERIC MODEL OF A TAS1R HETERODIMER RECEPTOR.
Galindo-Cuspinera V. 1, Winnig M. 2, Bufo B. 3, Meyerhof W. 2, Breslin P.A. 1  Monell Chemical Senses Center, Philadelphia, PA; 2Molecular Genetics, German Institute of Human Nutrition Potsdam-Rehbruecke, Nuthetal, Germany

8:00 PM - 8:30 PM  Evening Break (Prefunction Area)

SYMPOSIA

Friday - 8:30 PM - 10:30 PM (South Ballroom)

Odor Signals >From the Immune System: How the Nose Detects Genetic Individuality  
Frank Zufuall, Symposium Chair

8:30  279  CHEMOSENSORY DETECTION OF HISTOCOMPATIBILITY PHENOTYPES: RESPONSES AND FUNCTIONS
Potts W.K. 1  Biology, University of Utah, Salt Lake City, UT
<table>
<thead>
<tr>
<th>Time</th>
<th>Event Description</th>
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<tr>
<td>7:00 AM</td>
<td>Continental Breakfast 7:30-9:00</td>
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<tr>
<td>8:00 AM</td>
<td>Registration: 7 am-3 pm &amp; 6-8:30 pm</td>
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<tr>
<td>9:00 AM</td>
<td>8:00-9:00 Slide Session: Cellular &amp; Molecular Biology South Ballroom</td>
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<tr>
<td>10:00 AM</td>
<td>8:00-12:00 Poster Session: Computational Approaches</td>
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<td>11:00 AM</td>
<td>9:15-10:15 Slide Session: Chemosensory Dev. South Ballroom</td>
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<td>12:00 PM</td>
<td>10:30-12:30 Symposia: Cengage, Tase, Mental Studies, Trigeminal psychophysical</td>
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<td>1:00 PM</td>
<td>12:30-2:00 Minority and Clinical Travel Award Luncheon Executive Board Room</td>
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<td>2:00 PM</td>
<td>AChemS Business Meeting: The Keys</td>
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<td>3:00 PM</td>
<td>NIH Workshop: Funding Opportunities for Young Investigators South Ballroom</td>
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<td>4:00 PM</td>
<td>3:00-4:30 4th Annual Ultimate Frisbee Tournament – Lido Beach</td>
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<td>5:00 PM</td>
<td>5:00-7:00 Social ChEmA Social Florida Room</td>
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<td>6:00 PM</td>
<td>6:30-8:00 Opening Buffet (ticketed event) North Ballroom</td>
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<tr>
<td>7:00 PM</td>
<td>7:00-11:00 Polish Young Investigator Taste Symposium South Ballroom</td>
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<td>8:00 PM</td>
<td>7:00-11:00 Polish Young Investigator Taste Symposium South Ballroom</td>
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<tr>
<td>9:00 PM</td>
<td>9:00-9:15 Presidential Symposium: Periperal Taste Physiology</td>
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<td>10:00 PM</td>
<td>9:15-10:15 Slide Session: Imaging the Neural Code South Ballroom</td>
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<tr>
<td>11:00 PM</td>
<td>10:30-12:30 Symposium: Mapping Olfactory Bulb South Ballroom</td>
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**Wednesday April 13, 2005**

**Thursday April 14, 2005**

**Friday April 15, 2005**

**Saturday April 16, 2005**

**Sunday April 17, 2005**
9:00  280  ENCODING IMMUNE SYSTEM SIGNALS BY THE
MAMMALIAN NOSE: THE SCENT OF GENETIC
COMPATIBILITY
Zufall F. 1 Anatomia and Neurobiology, University of Maryland
School of Medicine, Baltimore, MD

9:30  281  COMBINATORIAL COEXPRESSION OF NEURAL AND
IMMUNE MULTIGENE FAMILIES IN MOUSE
VOMERONASAL SENSORY NEURONS
Mombaerts P. 1 The Rockefeller University, New York, NY

10:00  282  EVOLUTION OF MOLECULAR MECHANISMS INFORMING
ABOUT GENETIC INDIVIDUALITY: FROM
INTERINDIVIDUAL TO INTERCELLULAR
DISCRIMINATION
Boehm T. 1 Max-Planck-Institute of Immunobiology, Freiburg,
Germany

POSTERS

Friday - 7:00 PM - 11:00 PM (North Ballroom)

Olfactory: Clinical

P1  283  "OLFACTORY TRAINING" IN PATIENTS WITH
OLFACTORY LOSS
Hummel T. 1, Kissom K. 1, Müller A. 1, Roden J. 1, Weidenbecher
M. 1, Hüttenbrink K. 1 1 Smell & Taste Clinic, Department of
Otorhinolaryngology, University of Dresden Medical School,
Dresden, Germany; 2 Otorhinolaryngology, University of
Erlangen-Nürnberg, Erlangen, Germany; 3 Otorhinolaryngology,
University of Cologne, Köln, Germany

P2  284  ODOR JUDGEMENTS IN PATIENTS WITH ALCOHOL-
DEPENDENCE
Rupp C. 1, Fleischhacker W. 1, Hausmann A. 1, Hinterhuber H. 1,
Kurz M. 1 1 Department of Psychiatry, Innsbruck Medical
University, Innsbruck, Austria

P3  285  JAPANESE ODOR STICK IDENTIFICATION TEST (OSIT-J):
COMPARISON OF DATA FROM U.S. AND JAPANESE
SUBJECTS
Kobayashi M. 1, Saito S. 1, Kobayakawa T. 1, Deguchi Y. 1, Costanzo
R.M. 1 1 Physiology, Virginia Commonwealth University School of
Medicine, Richmond, VA; 2 Neuroscience Research Institute,
National Institute of Advanced Industrial Science and Technology,
Tsukuba, Ibaraki, Japan; 3 Central Research Laboratory, Takasago
International Corporation, Hiratsuka, Kanagawa, Japan
P4 286 RECOVERY OF Olfactory Function Following Closed Head Injury or Infections of the Upper Respiratory Tract
Reden J.1, Müller A.1, Konstantinidis I.1, Landis B.2 1University of Dresden Medical School, Dresden, Germany; 2Otolaryngology, University of Geneva, Geneva, Switzerland

P5 287 Seasonality of Post-Infectious Olfactory Dysfunction: Retrospective Study of 461 Patients
Konstantinidis I.1, Müller A.1, Frasnelli J.1, Reden J.2 1Otolaryngology, AHEPA University Hospital, Thessaloniki, Greece; 2Smell & Taste Clinic, Department of Otorhinolaryngology, University of Dresden, Medical School, Dresden, Germany

P6 288 Measuring Implicit Beliefs About Odors and Health: The “Mysterious Machine” Task
Smeets M.1, Bulsing P.1 1Faculty of Social Sciences, Utrecht University, Utrecht, Netherlands

P7 289 Similarities and Differences in Odor Identification and Sniff Suppression in Parkinson’s Disease
Baillie J.M.1, Rybalsky K.A.1, Revilla F.J.3, Gesteland R.C.3, Frank R.A.1 1Psychology, University of Cincinnati, Cincinnati, OH; 2Neurology, University of Cincinnati, Cincinnati, OH; 3Cell Biology, Neurobiology & Anatomy, University of Cincinnati, Cincinnati, OH

P8 290 Olfactory Functions in Asymptomatic Carriers of the Huntington Disease Mutation
Larsson M.1, Lundin A.2, Robins Wahlin T.3 1Psychology, Stockholm University, Stockholm, Sweden; 2Rehabilitation Medicine, Danderyd Hospital, Stockholm, Sweden; 3Neurotec, Karolinska Institute, Stockholm, Sweden

P9 291 A 10-Item Smell Identification Scale for Early Detection of Alzheimer’s Disease
Tabert M.H.1, Liu X.1, Doty R.L.1, Serby M.1, Albers M.W.1, Devanand D.P.1 1Psychiatry, Columbia University College of Physicians and Surgeons, New York, NY; 2Biostatistics, Columbia University, New York, NY; 3Otorhinolaryngology, University of Pennsylvania School of Medicine, Philadelphia, PA; 4Psychiatry, Beth Isreal Medical Center, New York, NY; 5Neurology, Columbia University College of Physicians and Surgeons, New York, NY

P10 292 The Effect of Gender and the Apolipoprotein E Epsilon 4 Allele on Recognition Memory for Olfactory and Visual Stimuli in Patients Diagnosed with Alzheimer’s Disease and Healthy Older Adults
Gilbert P.1, Sundermann E.2, Murphy C.3 1Head and Neck Surgery, University of California, San Diego, San Diego, CA; 2Psychology, San Diego State University, San Diego, CA

P11 293 Differences Between Orthonasal and Retronasal Olfaction in Patients Without Nasal Polyposis
Landis B.1, Heilman S.2, Frasnelli J.3, Hummel T.4 1University of Geneva, Geneva, Switzerland; 2ENT, University of Dresden, Dresden, Germany; 3University of Dresden, Dresden, Germany

P12 294 Odorization of the Incubator Prevents Apneas in Premature Infants
Marlier L.1, Gaugler C.2, Messer J.3 1Centre National de la Recherche Scientifique UMR5170, Strasbourg, France; 2Pediatric II, Centre Hospitalier Universitaire, Strasbourg, France

P13 295 The Impact of Inflammation on the Olfactory Epithelium in Patients with Chronic Rhinosinusitis
Galioto A.1, Yee K.K.1, Ozdener H.2, Rawson N.E.3 1Monell Chemical Senses Center, Philadelphia, PA

P14 296 Retronasal Transport and Active Nasal Blocking: Implications for Exposure Studies
Greene G.J.1, Kipen H.1 1Environmental and Occupational Medicine, University of Medicine and Dentistry of New Jersey, Piscataway, NJ

P15 297 Assessment of Strategies for Optimizing Parkinson’s Disease Detection Using UPSIT Item Analysis
Barbash S.E.1, Moberg P.J.1, Doty R.L.1 1Smell and Taste Center, University of Pennsylvania, Philadelphia, PA; 2Psychiatry, University of Pennsylvania, Philadelphia, PA

P16 298 Olfactory Functioning Following Anteromedial Temples Lobe Resection
Olsson M.J.1, Geignant M.1, Jones-Gotman M.1, Lundstrom J.N.1, Ahs P.1, Moeller P.1, Fredrikson M.1, Kumlien E.1 1Psychology, Uppsala University, Uppsala, Sweden; 2McGill University, Montreal, Quebec, Canada; 3Food Science, Sensory Science, Royal Veterinary and Agricultural University, Fredriksberg C, Denmark; 4Department of Neuroscience, Uppsala University, Uppsala, Sweden
LONG-TERM CHANGES IN OLFAC TORY FUNCTION IN PATIENTS WITH CHEMOSENSORY DISTURBANCES EVALUATED AT THE UNIVERSITY OF PENNSYLVANIA SMELL AND TASTE CENTER FROM 1980 TO 2004

THE INFLUENCE OF PHARMACO-RESISTANT TEMPORALIS LOBE EPILEPSY AND TEMPORALIS LOBE RESECTION ON OLFACTION

OLFACTORY-TRIGEMINAL INTERACTION: EVIDENCE FROM PATIENTS WITH CONGENITAL ANOSMIA
Schuster B., Fraselli J., Hummel T. \* Smell & Taste Clinic, Department of Otolaryngology, University of Dresden Medical School, Dresden, Germany

RELATIONSHIPS AMONG THREE TESTS OF HUMAN OLFACTORY FUNCTION IN A CLINICAL SETTING
Tourbier I.A., Moberg P.J., Doty R.L. \* Smell and Taste Center, University of Pennsylvania, Philadelphia, PA; \* Smell and Taste Center, Department of Psychiatry, University of Pennsylvania, Philadelphia, PA

THE EFFECT OF ESTRADIOL AND ITS INTERACTION WITH THE APOE EPSILON 4 GENOTYPE ON OLFACTORY FUNCTIONING IN NONDEMENTED ELDERLY FEMALES AND FEMALES DIAGNOSED WITH ALZHEIMER'S DISEASE
Sundermann E.E., Gilbert P., Murphy C. \* Psychology, San Diego State University, San Diego, CA; \* Head and Neck Surgery, University of California, San Diego, San Diego, CA

NUMERICAL MODELING OF ORTHO-VS. RETRO-NASAL AIRFLOW AND ODORANT DELIVERY AMONG RHINOSINUSITIS PATIENTS
Zhao K., Hummel T., Landis B., Dalton P. \* Monell Chemical Senses Center, Philadelphia, PA; \* Dept. of Otorhinolaryngology, University of Dresden, Dresden, Germany; \* Dept. of Otorhinolaryngology, University Hospital of Geneva, Geneva, Switzerland

SENSITIVITY AND SPECIFICITY OF THE 3-ITEM QUICK SMELL IDENTIFICATION TEST (Q-SIT)

ROLE OF NITRIC OXIDE IN NEURONAL DIFFERENTIATION OF THE OLF442 OLFACTORY CELL LINE
Asteaga G., Sulz L., Mackay-Sim A., Bacigalupo J. \* Millenium Institute CBB, University of Chile, Santiago, Chile; \* School of Biomolecular and Biomedical Science, Griffith University, Brisbane, Queensland, Australia

OLFACTORY EPITHELIUM PROMOTES MITRAL CELL DENDRITIC OUTGROWTH
Tran H., Chen H., Posthumus J., Gong Q. \* Cell Biology and Human Anatomy, University of California, Davis, CA

METAMORPHOSIS OF AN OLFACTORY SYSTEM: HORMONAL REGULATION OF GROWTH AND PATTERNING IN THE ANTENNAL IMAGINAL DISC OF THE MOTH MANDUCU SEXTA
Fernandez K.A., Vogt R. \* Biological Sciences, University of South Carolina, Columbia, SC

SUPPLEMENTATION WITH RETINOIC ACID LEADS TO RECOVERY OF OMP+ NEURON POPULATION IN VAD OE Asson-Batres M.A., Smith W.B., Davis G.B. \* Biological Sciences, Tennessee State University, Nashville, TN

GLUTamate-SCAVENGING GLIA DURING OLFACTORY BULB DEVELOPMENT
Jones B.J., Richter M., Roskams J. \* Zoology, University of British Columbia, Vancouver, British Columbia, Canada
P29 311 MOLECULAR DEVELOPMENT OF THE MOUSE SEPTAL ORGAN
Tian H.1, Ma M.2 1Neuroscience, University of Pennsylvania, Philadelphia, PA

P30 312 IDENTIFICATION OF CELL SURFACE ANTIGEN EXPRESSED BY GLOBOSE BASAL CELLS
Jang W.1, Kim K.1, Schwob J.E.2 1Anatomy & Cellular Biology, Tufts University, Boston, MA; 2Molecular Biotechnology, Konkuk University, Seoul, South Korea

P31 313 MULTIPOTENT STEM CELLS FROM ADULT OLFATORY MUCOSA
Murrell W.1, Feron F.1, Wetzig A.1, Cameron N.1, Splatt K.1, Bellette B.2, Bianco J.1, Perry C.1, Lee G.1, Mackay-Sim A.1 1School of Biomolecular and Biomedical Science, Griffith University, Brisbane, Queensland, Australia; 2Department of Otolaryngology - Head and Neck Surgery, Princess Alexandra Hospital, Brisbane, Queensland, Australia; 3Department of Neurosurgery, Royal Adelaide Hospital, Adelaide, South Australia, Australia

P32 314 IMMEDIATE EARLY GENE EXPRESSION IN THE ZEBRAFISH OLFATORY EPITHELIUM
Mckenzie M.G.1, Rivard M.V.1, Whitlock K.E.1 1Dept. of Molecular Biology and Genetics, Cornell University, Ithaca, NY

P33 315 GNT1 GLYCOSYLATION IS REQUIRED FOR AXON CONNECTIVITY WITH THE OLFACTORY BULB
Henion T.R.1, Raitcheva D.1, Grosholz R.1, Hennet T.2, Schwarting G.A.1 1Shriver Center, University of Massachusetts Medical School (Worcester), Waltham, MA; 2Inst. of Physiology, University of Zurich, Zurich, Switzerland

P34 316 ANALYSIS OF KALLMANN GENE FUNCTION IN THE DEVELOPING ZEBRAFISH
Kim H.K.1, Smith K.1, Whitlock K.1 1Dept. Molecular Biology and Genetics, Cornell University, Ithaca, NY

P35 317 DIFFERENTIAL GENE EXPRESSION IN THE DEVELOPING MOUSE OLFATORY BULB
Cheng T.1, Gong Q.2 1Cell Biology and Human Anatomy, University of California, Davis, Davis, CA; 2Med-Cell Biology and Human Anatomy, University of California, Davis, Davis, CA

P36 318 MOLECULAR CLONING AND CHARACTERIZATION OF PRONEURAL GENES IN THE OLFACTORY ORGAN OF SPINY LOBSTERS, PANULIRUS ARGUS.
Chien H.1, Liu H.1, Schmidt M.1, Tai P.C.1, Derby C.D.1 1Biology, Georgia State University, Atlanta, GA

P37 319 SOCIAL EXPERIENCE REDUCES POSTEMBRYONIC NEUROGENESIS IN THE OLFATORY SYSTEM OF JUVENILE CRAYFISH PROCAMBARUS CLARKII.
Johnstone L.M.1, Song C.K.1, Schmidt M.1, Edwards D.H.1, Derby C.D.1 1Biology, Georgia State University, Atlanta, GA

Central Taste

P38 320 GUSTATORY NEURAL RESPONSES IN THE MEDIAL ORBITOFRONTAL CORTEX OF THE OLD WORLD MONKEY
Pritchard T.C.1, Edwards E.M.1, Hilgert K.1, Gavlick A.1, Maryniak T.D.1, Schwartz G.J.2, Scott T.R.3 1Neural and Behavioral Sciences, Pennsylvania State University, Hershey, PA; 2Medicine, Albert Einstein College of Medicine, Bronx, NY; 3College of Sciences, San Diego State University, San Diego, CA

P39 321 FUNCTIONAL CHOLINERGIC RECEPTORS IN THE NUCLEUS OF THE SOLITARY TRACT OF THE RAT
Uteshev-Gaarde V.V.1, Smith D.V.1 1Anatomy and Neurobiology, University of Tennessee Health Science Center, Memphis, TN

P40 322 REPRESENTATION OF BITTER TASTING CHEMICALS IN THE RAT NST
Geran L.C.1, Travers S.P.1 1SLIDES Biology, Ohio State University, Columbus, OH

P41 323 EFFECT OF SEROTONIN ON MEMBRANE PROPERTIES OF NEURONS OF THE RAT INFERIOR SALIVARY NUCLEUS
Suvabeh T.1, Bradley R.M.1 1Biologic & Materials Sciences, University of Michigan, Ann Arbor, MI

P42 324 RESPONSES OF GUSTATORY NEURONS IN THE GENICULATE GANGLION TO L-MSG AND LINOLEIC ACID
Breza J.M.1, Curtis K.S.1, Contreras R.J.1 1Program in Neuroscience, Florida State University, Tallahassee, FL

P43 325 INTRACELLULAR CHARACTERIZATION OF TASTE-RESPONSIVE NEURONS OF THE HAMSTER SOLITARY NUCLEUS
Li C.X.1, Li C.S.1, Smith D.V.1, Waters R.S.1 1Anatomy and Neurobiology, University of Tennessee Health Science Center, Memphis, TN
P44 326 CODING OF BITTER STIMULI BY CENTRAL GUSTATORY NEURONS
Smith D.V.1, Brassard S.M.1, Mozhiu K.1, Rubrum A.M.1, Lemon C.H.1 1Anatomy and Neurobiology, University of Tennessee Health Science Center, Memphis, TN

P45 327 RESPONSE PROPERTIES OF CELLS IN THE RAT NUCLEUS OF THE SOLITARY TRACT FOLLOWING GLOSSOPHARYNGEAL NERVE STIMULATION: EVIDENCE OF MODULATORY ACTIVITY AND THE CONVERGENCE OF INPUT FROM THE HYPOGLOSSAL NERVE
Hallock R.M.1, Di Lorenzo P.M.1 1Psychology, Binghamton University, Binghamton, NY

P46 328 RESPONSES IN THE NUCLEUS OF THE SOLITARY TRACT TO TASTE STIMULI OF SIMILAR QUALITY CAN VARY INDEPENDENTLY ACROSS REPEATED TRIALS
Roussin A.T.1, Di Lorenzo P.M.1 1Psychology, Binghamton University, Binghamton, NY

P47 329 EFFECTS OF MARGINAL ZINC DEFICIENCY ON NACl PREFERENCE AND OXYTOCIN SECRETION IN SD RATS
Goto T.1, Suzuki H.1, Shirakawa H.1, Furakawa Y.1, Komai M.1 1Department of Biotechnology, School of Science and Engineering, Ishinomaki Senshu University, Ishinomaki, Japan; 2Lab of Nutrition Faculty Agriculture, Tohoku University, Sendai, Miyagi, Japan

P48 330 A SYSTEMS-LEVEL REPRESENTATION OF APPETITE
De Araujo I.1, Pereira A.1, Riberio S.1, Nicolelis M.A.1, Simon S.A.1 1Neurobiology, Duke University, Durham, NC; 2Anesthesiology, Duke University, Durham, NC

P49 331 EXTENSIVE ANATOMICAL OVERLAP OF GREATER SUPERFICIAL PETROSAL (GSP) AND IXTH NERVE TERMINAL FIELDS IN HAMSTER SOLITARY NUCLEUS (NTS)
Stewart R.1, Chastain M.1, Selby A.1, Stewart J.1 1Psychology, Washington and Lee University, Lexington, VA

P50 332 IONOTROPIC GLUTAMATE RECEPTOR EXPRESSION IN PREGANGLICIONIC NEURONS OF THE RAT INFERIOR SALIVATORY NUCLEUS
Kim M.1, Cheigo, Jr. D.J.1, Bradley R.M.1 1Nursing, Chonnam University Medical School, Gwangju, South Korea; 2Cariology, Restorative Sciences & Endodontics, University of Michigan, Ann Arbor, MI; 3Biologic & Materials Sciences, University of Michigan, Ann Arbor, MI

P51 333 TASTE REACTIVITY AND NST FOS EXPRESSION IN “GIN” MICE
Travers J.J.1, Herman K.1, Yoo J.J.1, Travers S.P.1 1SLIDES Biology, Ohio State University, Columbus, OH

P52 334 ORGANIZATION OF BARREL-BASED FACIAL TASTE SYSTEM IN WEATHER LOACH
Barry M.A.1, Tehrani N.1, Ma P.M.1 1Dept. of Biology, Queens College, Flushing, NY

Saturday, April 16, 2005
7:00 AM - 3:00 PM
Registration (Registration Area)
7:30 AM - 9:00 AM
Continental Breakfast (Prefunction Area)

SLIDES

Saturday - 8:00 AM - 9:00 AM (South Ballroom)

Chemosensory Behavior
Richard Vogt, Session Chair
8:00 335 TOWARD THE OLFATORY CODE IN THE BEHAVING MOUSE
Rinberg D.1, Koulakov A.1, Ollinger F.1, Gelperin A.1 1Monell Chemical Senses Center, Philadelphia, PA; 2Cold Spring Harbor Laboratory, Cold Spring Harbor, NY

8:15 336 CHEMOTOPY PREDICTS OLFATORY DISCRIMINATION IN ZEBRAFISH (DANIO RERIO)
Miklavc P.1, Valentinic T.1 1Biology, University of Ljubljana, Ljubljana, Slovenia

8:30 337 CHEMICAL SIGNALS AND CHEMOSENSORY PATHWAYS INVOLVED IN SPINY LOBSTER SHELTERING BEHAVIOR
Horner A.J.1, Derby C.D.1 1Biology, Georgia State University, Atlanta, GA
8:45  338  MECHANISMS OF SPERM NAVIGATION IN TURBULENT FLOW
Riffell J., Zimmer R. 1 ARL Division of Neurobiology, University of Arizona, Tucson, AZ; 2Ecology and Evolution, University of California, Los Angeles, Los Angeles, CA

SLIDES

Saturday - 9:15 AM - 10:15 AM (South Ballroom)

Imaging the Neural Code
Dana Small, Session Chair

9:15  339  EFFECTS OF FEEDING ON RESPONSES IN OLFAC TORY BULB REVEALED BY FMRI
Xu F., Schaffer J., Rothman D.L., Hyder F., Shepherd G.M. 1 Yale University, New Haven, CT

9:30  340  BRAIN MECHANISMS FOR EXTRACTING SPATIAL INFORMATION FROM SMELL
Porter J.A., Anand T., Johnson B., Mainland J., Khan R.M., Sobel N. 2 Biophysics Graduate Group, University of California, Berkeley, Berkeley, CA; 3Bioengineering, University of California, Berkeley, Berkeley, CA; 4Helen Wills Neuroscience Institute, University of California, Berkeley, Berkeley, CA

9:45  341  DISSOCIABLE CODES OF ODORANT STRUCTURE AND ODOR QUALITY IN HUMAN PIRIFORM CORTEX
Gottfried J.A., Winston J.S. 1 , Dolan R.J. 2 Cognitive Neurology & Alzheimer's Disease Center, Chicago, IL; 3Functional Imaging Laboratory, London, United Kingdom

10:00  342  AN APPLICATION FOR QUANTITATIVE ANALYSES AND COMPARISONS OF RODENT FMRI ODOR MAPS
Liu N.1, Xu F.2, Miller P.L.1, Shepherd G.M.2 1Center for Medical Informatics, Yale University, New Haven, CT; 2Neurobiology, Yale University, New Haven, CT

10:00 AM - 10:30 AM  Coffee Break (Prefunction Area)

SYMPOSIA

Saturday - 10:30 AM - 12:30 PM (South Ballroom)

Mapping Olfactory Bulb
Diego Restrepo, Session Chair

10:30  343  GUIDELINES FOR ODOR MAP-MAKING
Shepherd G.M. 1 , Xu F.1, Liu N.1, Hyder F.1, Rothman D.L. 1 Yale University, New Haven, CT

10:50  344  TESTING PREDICTIONS OF A COMBINATORIAL IDENTITY CODE
Leon M. 1 , Johnson B. 1 3 Psychobiology, University of California, Irvine, Irvine, CA; 2Neurobiology and Behavior, University of California, Irvine, Irvine, CA

11:10  345  MOLECULAR-FEATURE CLUSTERS IN THE ODOR MAPS OF THE OLFATORY BULB.
Mori K. 1, Takahashi Y.K. 1, Igarashi K. 1 Dept. of Physiology, University of Tokyo, Tokyo, Japan

11:30  346  ENCODING NATURAL SCENES IN THE MOUSE MAIN Olfactory Bulb
Katz L.C. 1 Neurobiology, Duke University Medical Center, Durham, NC

11:50  347  NATURAL ODOR MAPS IN THE MAIN Olfactory BULB
Restrepo D. 1, Lin W. 1, Salcedo E. 1, Margoliske R. 2 3 Cell and Developmental Biology, University of Colorado Health Sciences Center at Fitzmons, Aurora, CO; 2Physiology and Biophysics, Mount Sinai School of Medicine, New York, NY

12:10  348  GLOMERULAR ORGANIZATION AND TEMPSSLIDES
DYNAMICS OF ODOR MAPS IMAGED WITH RECEPTOR NEURON-SPECIFIC PROBES
Wachowiak M. 1, Mcgann J.P. 1, Verhagen J. 1 Boston University, Boston, MA
### POSTERS

**Peripheral Taste Physiology**

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**Taste: Neurotransmitters & Modulators**

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Maruyama Y.1, Pereira E.1, Chaudhari N.1, Roper S.D.1
1Physiology & Biophysics, University of Miami, Miami, FL

P17 365 CO-OCCURRENCE OF CALCIUM BINDING PROTEINS AND CALCIUM-FLUXING GLUTAMATE RECEPTORS IN THE PRIMARY GUSTATORY NUCLEUS OF GOLDFISH
Ikenaga T.1, Huesa G.1, Finger T.E.1 1Cell and Developmental Biology, University of Colorado Health Sciences Center, Aurora, CO

P18 366 GABA AS AN INHIBITORY TRANSMITTER IN THE TASTE BUD.
Cao Y.1, Zhao F.1, Herness M.S.1 1SLIDES Biology, Ohio State University, Columbus, OH

P19 367 DO TRPM5 EXPRESSING CELLS HAVE CLASSICAL SYNAPSES?
Clapp T.R.1, Margolskee R.F.1, Kinnamon S.C.1 1Biomedical Sciences, Colorado State University, Fort Collins, CO;
2Physiology and Biophysics, Howard Hughes Medical Institute, Mount Sinai School of Medicine, New York, NY

P20 368 A QUANTITATIVE STUDY OF SYNTAXIN-1 IMMUNOREACTIVITY IN RAT TASTE BUDS: COLOCALIZATIONS WITH -GUSTDUCIN, PLC2, SYNAPTOTREVIN-2, PGP 9.5, AND 5-HT
Yang R.1, Thomas S.1, Ma H.1, Schmidt K.1, Kinnamon J.C.1 1Department of Biological Sciences, University of Denver, Denver, CO

P21 369 IMMUNOREACTIVITY TO SENSORY TRANSDUCTION AND SYNAPTIC PROTEIN MARKERS IN THE TASTE BUDS OF MOUSE AND RAT CIRCUMVALLATE PAPILAE: A QUANTITATIVE COMPARISON
Ma H.1, Yang R.1, Thomas S.1, Kinnamon J.C.1 1Department of Biological Sciences, University of Denver, Denver, CO

P22 370 PRESYNAPTIC CA++-FLUXING GLUTAMATE RECEPTORS ON PRIMARY AFFERENT TERMINALS IN GOLDFISH.
Huesa G.1, Ikenaga T.1, Finger T.E.1 1Cell and Devel. Biology, University of Colorado Health Sciences Center, Aurora, CO

P23 371 REGIONAL LOCALIZATION PATTERNS OF GLYCOCONJUGATE VARY AMONG PAPILAE IN VARIOUS MAMMALIAN ANIMALS
Taniguchi K.1, Koida A.1, Hirasawa Y.1, Saito T.R.1, Tsujio M.1, Yoshioka K.1, Mutoh K.1 1Department of Veterinary Anatomy, Kitasato University, Towada, Aomori, Japan; 2Department of Laboratory Animal Science, Nippon Veterinary and Animal Science University, Musashino, Tokyo, Japan

P24 372 MAILLARD PEPTIDES ARE A CLUE TO THE KOKUMI TASTE OF THE TYPICAL KOREAN SOY SAUCE, GANJANG Rhyme M.1, Ogasawara M.2, Kim E.3, Nakakuki H.3 1Korea Food Research Institute, Seongnam-si, Gyeonggi-do, South Korea;
2Food Creation Center, Kyowa Hakko Co., Ltd, Ibaraki, Japan;
3Food Function Research Division, Korea Food Research Institute, Seongnam-Si, Gyeonggi-Do, South Korea

Ion Channels, Rafts & Pumps

P25 373 OLFACTORY PHYSIOLOGY AND BEHAVIOR OF MICE WITH ALTERATIONS IN METABOLISM OR WEIGHT
Das P.1, Parsons A.1, Scarborough J.1, Hoffman J.1, Wilson J.1, Thompson R.N.1, Kennett J.1, Overton J.M.1, Fadool D.A.1 1Dept. Biol. Sci., Proc. in Neurosci., Florida State University, Tallahassee, FL;
2Dept. Nutr., Food, & Exercise Sci.; Proc. in Neurosci., Florida State University, Tallahassee, FL

P26 374 ADAPTOR PROTEINS PERTURB OLFACTORY BULB K CHANNEL MODULATION BY RECEPTOR TYROSINE KINASES.
Marks D.R.1, Colley B.S.1, Das P.1, Fadool D.A.1 1Dept. Biol. Sci., Program in Neurosci. & Mol. Biophysics, Florida State University, Tallahassee, FL

P27 375 DIFFERENTIAL MODULATION OF KV1.3 AND KV1.5 CHANNELS BY BDNF AND INSULIN SIGNALING IN THE OLFACTORY BULB.
Colley B.S.1, Fadool D.A.1 1Dept. Biol. Sci., Proc. in Neurosci. & Mol. Biophysics, Florida State University, Tallahassee, FL

P28 376 ARACHIDONIC ACID STIMULATES A CA2+-ACTIVATED K+ CURRENT IN MOUSE VNO NEURONS
Zhang P.1, Delay R.1 1Biology, University of Vermont, Burlington, VT
P29 377 SINGLE CA2+ ACTIVATED CL- CHANNELS IN CHEMOSENSORY CILIA OF TOAD Olfactory Receptor Neurons
Delgado R., Bacigalupo J. Biology Department, Faculty of Sciences, U of Chile, Millennium Institute for Advanced Studies in Cell Biology and Biotechnology, Region Metropolitana, Santiago, Chile; Biology Department, Faculty of Sciences, University of Chile, Region Metropolitana, Santiago, Chile

P30 378 EFFECT OF ADENYLYL CYCLASE INHIBITORS ON ELECTROOLFACTOGRAM (EOG) RESPONSES IN RAT Buntinas L., Restrepo D. Cell and Developmental Biology, University of Colorado Health Sciences Center, Aurora, CO; Cell and Developmental Biology, University of Colorado Health Sciences Center, Denver, CO

P31 379 FUNCTIONAL ROLE OF LIPID RAFT MICRODOMAINS IN CYCLIC NUCLEOTIDE-GATED CHANNEL ACTIVATION Brady J., Karpen J., Brown R.L., Martens J. Neurology, Oregon Health & Science University, Beaverton, OR; Pharmacology, University of Michigan, Ann Arbor, MI

P32 380 LIPID RAFTS ORGANIZE CHEMOSENSORY SIGNALING IN PARAMECIUM Ray K., Pan Y., Chandran S., Johnstone C., Yano J., Vanhouten J. Biology, University of Vermont, Burlington, VT; University of New Hampshire, Durham, NH

P33 381 THE ORGANIZATION OF PLASMA MEMBRANE CALCIUM PUMPS IN PARAMECIUM: IMPLICATIONS FOR SIGNAL TRANSDUCTION Pan Y., Yano J., Vanhouten J. Biology, University of Vermont, Burlington, VT

P34 382 PARAMECIUM RYANODINE RECEPTORS LOCALIZE TO MITOCHONDRIA AND CONTRIBUTE TO DEPOLARIZATION-MEDIATED SWIMMING BEHAVIOR Brown H.I., Glenton A. Virginia Military Institute, Lexington, VA; Biology, University of Vermont, Burlington, VT

P35 383 BRAIN RESPONSE TO PUTATIVE PHEROMONES DIFFERS BETWEEN HOMO- AND HETEROSEXUAL MEN Savic I., Berglund H., Lindstrom P. Neuroscience, Karolinska Institute, Stockholm, Sweden; Medicine, Karolinska Institute, Stockholm, Sweden; Clinical Neuroscience, Karolinska Institute, Stockholm, Sweden

P36 384 DISSOCIATING SOMATOSENSORY AND OLFATORY CUES AS INPUTS TO THE Olfactomotor System Mainland J.D., Young N., Sobel N. Neuroscience, University of California, Berkeley, CA

P37 385 PROP AND RETRONASAL OLFACTION Bartoshuk L.M., Christensen C., Duffy V., Sheridan K., Small D.M., Snyder D. Surgery, Yale University, New Haven, CT; Monell Chemical Senses Institute, Philadelphia, PA; School of Allied Health Sciences, University of Connecticut, Storrs, CT; Flavor Division, International Flavors and Fragrances, Inc., Dayton, NJ

P38 386 ODOR CHARACTERISTICS PREDICT ODOR SIMILARITY Luk C., Berger E., Johnson B., Khan R.M., Sobel N. Biotechnology, University of California, Berkeley, CA; Helen Will Neuroscience Institute, University of California, Berkeley, CA

P39 387 ADAPTATION & IDENTIFYING COMPONENTS OF OLFATORY MIXTURES IN HUMANS Goyert H., Frank M.E., Gent J.F., Hettinger T.P. Psychology, Cornell University, Ithaca, NY; Neurosciences, SLIDES Diagnosis, UCONN Health Center, Farmington, CT; Center for Perinatal, Pediatric and Environmental Epidemiology, Yale School of Medicine, New Haven, CT

P40 388 LIFESPAN CHANGES IN SOURCE MEMORY FOR Olfactory Stimuli Pirogovsky E., Stull K., Callahan B., Morris A., Rice J., Herbert A., Zanni A., Vallejo F., Gilbert P., Murphy C. Psychology, San Diego State University, San Diego, CA; Department of Head and Neck Surgery, University of California, San Diego, CA

P41 389 TRANSFORMATIONS IN ODOR PERCEPT IDENTITY AS A FUNCTION OF INTENSITY Bremner E.A., Mainland J., Zelano C., Khan R.M., Sobel N. Neuroscience, University of California, Berkeley, CA; University of California, Berkeley, CA
P42 390 THE RESPONSIVENESS OF FMRI SIGNAL TO ODOR CONCENTRATION
Grunfeld R., Wang J., Meadowcroft M., Ansel L., Sun X.,
Eslinger P.J., Connor J.R., Smith M.B., Yang Q.
Radiology, Pennsylvania State University, Hershey, PA;
Neurology, Pennsylvania State University, Hershey, PA;
Neurosciences and Anatomy, Pennsylvania State University, Hershey, PA

P43 391 EMOTIONAL FAMILIARITY AND THE DETECTION OF EMOTIONAL CHEMOSIGNALS
Chen D., Zhou W., Meusburger T., Lucas N.
Psychology, Rice University, Houston, TX

P44 392 CHARACTERIZATION OF FMRI HEMODYNAMIC RESPONSE IN HUMAN CENTRAL Olfactory SYSTEM
Wang J., Grunfeld R., Meadowcroft M., Ansel L., Sun X.,
Eslinger P.J., Smith M.B., Yang Q.
Radiology, Pennsylvania State University, Hershey, PA;
Neurology, Pennsylvania State University, Hershey, PA

P45 393 THE EFFECT OF MAGNETIC FIELD ON OLFACTION
Telles C., Zelano C., Mainland J., Khan R., Sobel N.
Neuroscience, University of California, Berkeley, CA;
Biophysics, University of California, Berkeley, CA; University of California, Berkeley, CA

P46 394 INHIBITION OF BITTER TASTE BY ADENOSINE 5'-MONOPHOSPHATE (AMP) IN NON-TASTERS AND SUPER-TASTERS OF PROP
White E.A., Tepper B.J.
Food Science, Rutgers, The State University of New Jersey, New Brunswick, NJ

P47 395 THE INTERACTION BETWEEN EVALUATIVE AND PASSIVE RESPONSE TO TASTE IN THE HUMAN BRAIN
Bender G., Mak Y.E., Small D.M.
Interdepartmental Neuroscience, Yale University, New Haven, CT; Surgery, John B. Pierce Laboratory and Yale University, New Haven, CT

P48 396 DIFFERENTIAL BRAIN PATTERNS DURING INTENSITY AND PLEASANTNESS EVALUATION OF TASTE STIMULI
Psychology, San Diego State University, San Diego, CA; Psychology, San Diego State University, Head and Neck Surgery, University of California San Diego, San Diego, CA

P49 397 THE IMPACT OF AROMA ON PERCEPTION OF AGE
Hirsch A.R., Ye Y.
The Smell & Taste Treatment and Research Foundation, Chicago, IL; Illinois Mathematics and Science Academy, Aurora, IL

P50 398 CHILDREN'S HEDONIC RESPONSE TO ALCOHOL ODORS ARE RELATED TO PARENTAL DRINKING AND SMOKING HABITS
Forestell C.A., Steinmeyer A., Howard J., Mennella J.A.
Monell Chemical Senses Center, Philadelphia, PA

P51 399 MORE THAN HEDONICS: COGNITIVE MEASURES IMPACTED BY SOME ODORS
Psychology, Rutgers, The State University of New Jersey, Piscataway, NJ; La Salle University, Brick, NJ; Rutgers, The State University of New Jersey, Piscataway, NJ

P52 400 THE MOLECULAR BASIS OF INDIVIDUAL RECOGNITION SCENTS USED IN DIFFERENT CONTEXTS
Hurst J.L., Thom M.D., Neison C.M., Beynon R.J.
Veterinary Clinical Science, University of Liverpool, Neston, United Kingdom; Life Sciences, Anglia Polytechnic University, Cambridge, United Kingdom; Veterinary Preclinical Science, University of Liverpool, Liverpool, United Kingdom

11:30 AM - 1:00 PM Cash Lunch Cart (Prefunction Area)

12:30 PM - 2:00 PM Clinical Luncheon (The Keys)
Clinical Luncheon Director, Thomas Hummel

3:00 PM - 5:00 PM Workshop "Nasal Chemesthetic Variability" Workshop Chairs: Dennis Shusterman and Thomas Hummel
(Ringling Room)
Workshop Directors: Dennis Shusterman and Thomas Hummel

6:00 PM - 7:30 PM Registration (Registration Area)

SYMPOSIUM
Saturday - 7:00 PM - 9:15 PM (South Ballroom)

Presidential Symposium: Obesity: Biological Determinants of Ingestive Behavior
Mimi Halpern, Symposium Chair

7:00 INTRODUCTION
Sclafani A. Psychology, Brooklyn College of CUNY, Brooklyn, NY

7:15 401 HORMONES AND NEUROPEPTIDES INVOLVED IN ENERGY BALANCE
Woods S.C. Department of Psychiatry, University of Cincinnati, Cincinnati, OH
7:45 402 NEURAL MECHANISMS CONTROLLING FOOD INTAKE AND BODY WEIGHT: MIND VERSUS METABOLISM
Berthoud H.1 1Neurobiology of Nutrition Laboratory, Pennington Biomedical Research Center, Louisiana State University System, Baton Rouge, LA

8:15 403 CHEMOSENSORY CONTROLS OF FOOD INTAKE
Schafani A.1 1Psychology, Brooklyn College of CUNY, Brooklyn, NY

8:45 404 REWARD MECHANISMS AND HEDONICS OF FEEDING BEHAVIOR
Levine A.S.1 1Food Science and Nutrition, University of Minnesota, St. Paul, MN

9:30 PM - 10:30 PM NIH NIDCD Sponsored Nobel Reception (South Ballroom & Prefunction Area)
Debra Fadool, Session Chair

POSTERS

Saturday - 7:00 PM - 11:00 PM (North Ballroom)

Olfactory & VNO Receptors

P1 405 FUNCTIONAL ANALYSIS OF A STABLY EXPRESSED HUMAN OLFACTORY RECEPTOR
Bieri S.1, Valero A.1, Schilling B.1 1Givaudan Schweiz AG, Duebendorf, Zurich, Switzerland

P2 406 BOMBYKOL AND BOMBYKAL RECEPTORS IN THE SILK MOTH, BOMBYX MORI: A MOLECULAR MECHANISM OF SEX-PHEROMONE RECEPTION
Nakagawa T.1, Sakurai T.2, Nishioke T.1, Touhara K.1 1Department of Integrated Biosciences, University of Tokyo, Chiba, Japan;
Division of Applied Biosciences, Kyoto University, Kyoto, Japan;
Division of Applied Life Sciences, Kyoto University, Kyoto, Japan

P3 407 ECTOPIST expression of olfactory receptor genes in heterologous tissues
Lancet D.1, Olender T.1, Khen M.1, Yanai L.1, Feldmesser E.1 1Molecular Genetics, Weizmann Institute of Science, Rehovot, Israel

P4 408 FUNCTIONAL EXPRESSION AND CHARACTERIZATION OF MOUSE ODORANT RECEPTORS IN XENOPUS OCYTES
Abaffy T.1, Matsunami H.2, Lueutje C.W.3 1Pharmacology, University of Miami, Miami, FL; 2MGM, Duke University, Durham, NC

P5 409 OLFATORY RESPONSES IN THE PROBOSCIS OF ANOPHELES GAMBAE
Kwon H.1, Ruetzler M.1, Zwiebel L.1 1Biological Sciences, Vanderbilt University, Nashville, TN

P6 410 ANTIBODIES RECOGNIZING OLFATORY RECEPTOR SUBTYPES
Breer H.1, Strotmann J.1, Lévi O.1, Schwarzenbacher K.1, Fleischer J.1 1Institute of Physiology, University of Hohenheim, Stuttgart, Germany

P7 411 ODOANT RECEPTOR HETERODIMERIZATION IN THE OLFATORY SYSTEM OF DROSOPHILA
Neuhaus E.M.1, Gisselmann G.1, Farhat K.1, Zhang W.1, Stoertkuhl K.1, Hatt H.2 1Ruhr-Universitaet Bochum, Bochum, Germany;
Cell Physiology, Ruhr-University Bochum, Bochum, Germany

P8 412 STRUCTURAL DETERMINANTS OF CITRONELLIC ODORANT RECOGNITION BY THE HUMAN OLFACTORY RECEPTORS OR1A1 AND OR1A2
Krautwurst D.1, Schmiedeberg K.1, Shirokova E.1, Meyerhof W.1, Weber H.1, Schilling B.2 1Molecular Genetics, German Institute of Human Nutrition Potsdam-Rehbruecke, Nutheatal, Germany;
Fragrance Research Bioscience, Givaudan Schweiz AG, Duebendorf, Switzerland

P9 413 FUNCTIONAL EXPRESSION OF SEA LAMPREY OLFATORY RECEPTORS
Lischka F.1, Wu H.3, Li W.3, Teeter J.1 1Monell Chemical Senses Center, Philadelphia, PA; 2Fisheries and Wildlife, Michigan State University, East Lansing, MI

P10 414 ASSESSING THE IMPORTANCE OF OLFACATION FOR SEA TURTLES BY USING ALLELIC VARIATION TO SHOW SELECTION ON OLFACTORY RECEPTOR GENES
Vieyra M.1, Vogt R.1 1Biological Sciences, University of South Carolina, Columbia, SC

P11 415 RELATIONSHIPS BETWEEN TRANSDUCTION PATHWAYS AND THE CHEMOSENSITIVITIES OF GOLDFISH OLFACTORY RECEPTOR NEURONS
Sato K.1, Touhara K.2, Sorensen P.W.3 1Integrated Biosciences, University of Tokyo, Kashiwa, Chiba, Japan; 2University of Tokyo, Chiba, Japan; 3University of Minnesota, Minneapolis, MN
P12 416 LOCATION OF LIGAND BINDING SITES ON ODORANT BINDING PROTEINS USING PHOTOAFFINITY PROBES AND MASS SPECTROMETRY
Greenwood D., Rasmussen L.E., Cooney J., Jensen D., Lazar J., Prestwich G. *HortResearch, Auckland, New Zealand; *Chemical and Biological Sciences, Oregon Graduate Institute of Science & Technology, Beaverton, OR; *HortResearch, Hamilton, New Zealand; *Columbia University, New York, NY; *University of Utah, Salt Lake City, UT

P13 417 ODORANT SPECIFIC REQUIREMENT FOR ARRESTIN FUNCTION IN DROSOPHILA MELANOGASTER
Walker W.B., Merrill C. *Biological Sciences, Vanderbilt University, Nashville, TN; *Neurobiology and Physiology, Northwestern University, Evanston, IL

P14 418 MEDIATORS OF SPERM MOTILITY- ODORANT RECEPTOR EXPRESSION PROFILES OF HUMAN SPERM
Schwane K., Spehr M., Wawrzik M., Riffell J.A., Zimmer R.K., Hatt H. *Cell Physiology, Ruhr-University Bochum, Bochum, Germany; *Anatomy and Neurobiology, University of Maryland at Baltimore, Baltimore, MD; *Biology, University of California, Los Angeles, CA

P15 419 DE-ORPHANING, FUNCTIONAL CHARACTERIZATION AND CAMP SIGNALLING OF FIVE HUMAN V1R-LIKE RECEPTORS.
Shirokova E., Raguse J., Meyerhof W., Krautwurst D. *Molecular Genetics, German Institute of Human Nutrition Potsdam-Rehbruecke, Nutshel, Germany; *Clinic and Polyclinic for SLIDES and Maxillofacial Surgery and Plastic Surgery, Charité - Campus Virchow Hospital, Berlin, Germany

P16 420 DNA STRUCTURAL CHANGES ARE ASSOCIATED WITH ODOR SENSING IN NOVEL DNA-BASED FLUORESCENT SENSORS.
Williams L.B., Kauer J.S., White J.E. *Neuroscience, Tufts University, Boston, MA

Chemical Ecology and Social Recognition

P17 421 THE DETERMINANTS OF DOMINANCE IN CRAYFISH: THE ROLE OF SOCIAL COMMUNICATION
Moore P.A. *Biological Sciences, Bowling Green State University, Bowling Green, OH

P18 422 THE INTRINSIC AND EXTRINSIC FACTORS INVOLVED IN THE SOCIAL BEHAVIOR OF CRAYFISH
Bethann P., Peters N., Moore P.A. *Department of Biological Sciences, Bowling Green State University, Bowling Green, OH

P19 423 CHEMOSENSORY SIGNALS IN STREAM HABITATS: IMPLICATIONS FOR ECOLOGICAL INTERACTIONS
Zulandt T.J., Wolf M.C., Martin A.L. *Biological Sciences, Bowling Green State University, Bowling Green, OH

P20 424 SOCIAL COMMUNICATION AND ANALYSIS OF STATUS SPECIFIC URINE IN THE CRAYFISH, ORCONECTES RUSTICUS
Martin A.L., Moore P.A. *Biological Sciences, Bowling Green State University, Bowling Green, OH

P21 425 EVOLUTION OF SOCIAL COMMUNICATION IN FLOWING SYSTEMS
Simon J.L., Fero K.C., Bergman D.A., Redman C.N., Moore P.A. *Biological Sciences, Bowling Green State University, Bowling Green, OH; *Physiology, University of Kentucky, Lexington, KY

P22 426 ARGinine: A POTENT PREY ATTRACTANT TO PREDATORY NEWTS IN MOUNTAIN STREAMS.
Ferrr R.P., Zimmer R.K. *Department of Ecology and Evolutionary Biology, University of California, Los Angeles, Los Angeles, CA

P23 427 A BLEND OF THREE NOVEL SULFATED STEROIDS RELEASED BY LarVAL SEA LAMPREY FUNCTIONS AS A POTENT PHEROMONE FOR MIGRATORY ADULTS
Fine J.M., Hovey T.R., Sorensen P.W. *Fisheries, Wildlife & Conservation Biology, University of Minnesota, St. Paul, MN; *Chemistry, University of Minnesota, Minneapolis, MN

P24 428 TIMING AND DURATION OF ODOR EXPOSURE IS CRITICAL FOR SUCCESSFUL OLFACTORY IMPRINTING IN SOCKEYE SALMON (ONCORHYNCHUS NERKA)
Dittman A.H., Havy M.A., May D., Athos J. *Northwest Fisheries Science Center, NOAA-Fisheries, Seattle, WA; *School of Aquatic and Fishery Sciences, University of Washington, Seattle, WA

P25 429 INTRASPECIFIC CHEMICAL SIGNALING IN THE SEA HARE: APLYSIA CALIFORNICA: DEFENSIVE SECRECTIONS ALSO CONTAIN CONSPECFIC ALARM CUES
Kicklighter C., Kamio M., Prince E., Kubanek J., Derby C. *Biology, Georgia State University, Atlanta, GA; *Biology, Georgia Institute of Technology, Atlanta, GA
Olfactory Behavior

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436 NEURONAL CONTROL OF ANTENNULAR GROOMING IN THE SPINY LOBSTER, PANULIRUS ARGUS
Schmidt M.1, Derby C.1 1Biology, Georgia State University, Atlanta, GA

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430 DOES THE FREQUENCY OF OCCURRENCE OF ODORANTS IN THE CHEMICAL ENVIRONMENT DETERMINE OLFACTORY SENSITIVITY? A STUDY WITH ACYCLIC MONOTERPENE ALCOHOLS IN THREE SPECIES OF NONHUMAN PRIMATES
Laska M.1, Hoeichelmann D.1, Huber D.1, Schumacher M.1 1University of Munich, Munich, Germany

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431 INCREASED CONSPECIFIC AND HETERO SPECIFIC VOCALIZATIONS IN RESPONSE TO AN AVIAN SOCIAL ODOR
Hagelin J.C.1, Johnson J.E.1, Strong A.L.1, Saunders A.B.1 1Biology, Swarthmore College, Swarthmore, PA

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436 CHICKEN EMBRYOS ARE CAPABLE OF HABITUATING TO AN AVIAN SOCIAL ODOR
Simonet J.C., Lyson T.R.2, Hagelin J.C.1 1Biology, Swarthmore College, Swarthmore, PA; 2Swarthmore College, Swarthmore, PA

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434 SOCIAL BEHAVIOR AND ODOR FUNCTION OF A TANGERINE-SCENTED SEABIRD
Kett L.R.1, Hagelin J.C.1, Rasmussen L.E. L.2 1Biology, Swarthmore College, Swarthmore, PA; 2Biochemistry, Oregon Graduate Institute of Science & Technology, Beaverton, OR

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435 THE INFLUENCE OF PREDATOR ODORS ON MATERNAL BEHAVIOR OF RODENTS.
Voznessenskaya V.V.1, Makarova A.M.1, Voznesenskaya A.E.2, Clark L.3 1Institute of Ecology & Evolution RAS, Moscow, Russia; 2Physiology, Lomonosov Moscow State University, Moscow, Russia; 3Repellents, National Wildlife Research Center, Fort Collins, CO

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437 BEHAVISLIDES CONSEQUENCES OF NORADRENALINE SIGNALING BLOCKADE IN THE MAIN OLFACTORY BULB OF ADULT MICE
Doucette W.1, Restrepo D.1 1University of Colorado Health Sciences Center, Aurora, CO

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438 EPIGENETIC IMPRINTING OF RASGRF1 AFFECTS ASSOCIATIVE ODOR LEARNING IN NEONATAL MICE
Devito L.1, Boudadi K., Armstrong C.1, Soloway P.2, Cleland T.1 1Neurobiol & Behav, Ithaca, NY; 2Div Nutr Sci, Cornell University, Ithaca, NY

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439 ONTOGENY OF ODOR DISCRIMINATION: INTENSITY MODULATION OF OLFACTORY ACUITY EMERGES POSTNATALLY.
Fletcher M.1, Wilson D.A.1, Cleland T.2 1Zoology, University of Oklahoma, Norman, OK; 2Cornell University, Ithaca, NY

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440 THE ROLE OF CENTRIFUGAL PROJECTIONS TO THE OLFACTORY BULB IN OLFACTORY PROCESSING
Kiselyczyn C.1, Lister C.1 1Cornell University, Ithaca, NY

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441 CHARACTERIZATION OF COMPOUNDS IN ANAL GLAND SECRETION OF NUTRIA (MYOCASTOR COYPUSS)
Finckbeiner S.M.1 1Neurobiology and Behavior, Cornell University, Ithaca, NY

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442 EXPOSURE TO ODORS IMPROVES OLFACTORY DISCRIMINATION IN ADULT RATS
Mandairon N.1, Kiselyczyn C.1, Lister C.1 1Cornell University, Ithaca, NY

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443 A SIMPLE SHIFT IN PERIPHERAL OLFACTORY SPECIFICITY IS ASSOCIATED WITH DIVERGENT MALE MOTH BEHAVISLIDES PREFERENCE
Hillier K.N.1, Vickers N.J., Groot A.T.2, Gould F.L.2 1University of Utah, Salt Lake City, UT; 2Entomology, North Carolina State University, Raleigh, NC

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444 GENETIC BASIS OF KIN RECOGNITION
Gerlach G.1, Roberts S.3, Hodgins-Davis A.1 1Marine Resources Center, Marine Biological Laboratory, Woods Hole, MA

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445 CRITICAL ROLE OF URINE-DERIVED FAMILIALITY ODOR IN MICE AGGRESSIVE BEHAVIOR
Nakamura K., Kikusui T., Takeuchi Y., Mori Y.1 1Graduate School of Agricultural and Life Sciences, University of Tokyo, Bunkyo-ku, Tokyo, Japan
P42 446 EFFECT OF LEARNING ON FOS-ACTIVATION PATTERNS AND NEUROGENESIS IN THE OLFACTORY SYSTEM
Mennarri A.M.1, Bath K.G.2, Cleland T.A.1, Linster C.1
1Department of Neurobiology & Behavior, Cornell University, Ithaca, NY; 2Psychology, Cornell University, Ithaca, NY

P43 447 ODORS AS SIGNALS: HUMAN ODORTYPES
Yamazaki K.1, Curran M.1, Mennella J.1, Kwak J.1, Steinmeyer A.1, Beauchamp G.K.1
1Monell Chemical Senses Center, Philadelphia, PA

P44 448 A RE-EXAMINATION OF ODOR MIXTURE QUALITY AND ITS ASSESSMENT
Kay L.M.1, Bloom G.2, Crk T.3, Thorngate J.3
1Psychology, University of Chicago, Chicago, IL; 2Neurobiology, University of Chicago, Chicago, IL; 3The College, University of Chicago, Chicago, IL

P45 449 OLFACTORY PREFERENCES IN THE ZEBRAFISH
Smith K.M.1, Newton L.1, Whitlock K.E.1
1Molecular Biology and Genetics, Cornell University, Ithaca, NY

Sunday, April 17, 2005

8:30 AM - 1:00 PM Registration (Registration Area)

8:00 AM - 10:00 AM Continental Breakfast (Prefunction Area)

SYMPOSIA

Sunday - 10:00 AM - 1:00 PM (South Ballroom)

Receptors Symposium I
Peter Mombaerts, Symposium Chair

10:00 450 UNRAVELING SMELL
Buck L.1
1Physiology and Biophysics, University of Washington, Seattle, WA

10:45 451 PHEROMONE RECEPTORS IN DROSOPHILA
Steven B.1, Amrein H.1
1Molecular Genetics and Microbiology, Duke University, Durham, NC

11:15 452 SEMI-MONOCLONAL EXPRESSION OF THE ODORANT RECEPTOR TRANSGENE
Serizawa S.1, Miyamichi K.1, Sakano H.1
1Department of Biophysics and Biochemistry, University of Tokyo, Tokyo, Japan

11:45 453 CODING SEQUENCE VARIATION IN HUMAN SWEET AND UMAMI TASTE RECEPTOR GENES
Kim U.1, Riaz N.1, Drayna D.1
1NIHNC, National Institutes of Health, Rockville, MD

12:15 454 DE-ORPHANING, FUNCTIONAL CHARACTERIZATION AND CAMP SIGNALLING OF FIVE HUMAN V1R-LIKE RECEPTORS
Krautwurst D.1, Shirokova E.1, Raguse J.1, Meyerhof W.1
1Molecular Genetics, German Institute of Human Nutrition Potsdam-Rehbruecke, Nutherl, Germany; 2Clinic and Polyclinic for SLIDES and Maxillofacial Surgery and Plastic Surgery, Charité - Campus Virchow Hospital, Berlin, Germany

12:30 PM - 2:00 PM Cash Lunch Cart (Prefunction Area)

SYMPOSIUM

Sunday - 2:30 PM - 4:30 PM (South Ballroom)

Receptors Symposium II
Tim McClintock, Symposium Chair

2:30 455 COMBINATORIAL CODING GUIDES OLFATORY BEHAVIOR IN DROSOPHILA LARVAE
Vossshall L.B.1
1Rockefeller University, New York, NY

3:00 456 THE UNIQUE CONTRIBUTIONS OF T1R2 AND T1R3 TO THE DETECTION OF SWEET STIMULI
Munger S.D.1, Nie Y.1, Vigues S.1, Hobbs J.3, Conn G.L.2
1Anatomy and Neurobiology, University of Maryland School of Medicine, Baltimore, MD; 2Faculty of Life Sciences, University of Manchester, Manchester, United Kingdom

3:30 457 DROSOPHILA OBP LUSH IS REQUIRED FOR ACTIVITY OF PHEROMONE-SENSITIVE NEURONS
Smith D.1
1Pharmacology, University of Texas Southwestern Medical Center at Dallas, Dallas, TX
SYMPOSIUM

Sunday - 7:00 PM - 9:15 PM (South Ballroom)

Receptors Symposium III
Leslie Voshall, Symposium Chair

7:00  459  A GENOMIC PERSPECTIVE ON THE EVOLUTION OF OLFACTION IN PRIMATES
Gilad Y.†  †Yale University, New Haven, CT

7:30  460  THE MOLECULAR RESPONSE PROFILE OF AN ODORANT RECEPTOR: DROSOPHILA OR22A.
Galizia G.†  †University of California, Riverside, Riverside, CA

8:00  461  MOLECULAR MECHANISMS UNDERLYING SEX-PHEROMONE RECEPTION
Touhara K.†  †Department of Integrated Biosciences, University of Tokyo, Chiba, Japan

8:30  462  OLFACTORY RECEPTORS
Axel R.†  †Biochemistry and Molecular Biophysics, Columbia University, New York, NY

9:30 PM - 10:30 PM  Senomyx Sponsored Social Gathering (Prefunction Area)

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