

PROGRAM



XXIIIrd Annual Meeting of the Society for the Study of Ingestive Behavior

The Sheraton Denver Downtown Denver, CO • July 7 - 11, 2015

MARK YOUR CALENDARS

SSIB 2016July 12 - July 16



Centro de Congressos Porto, Portugal

SSIB 2017July 11 - July 15



Le Centre Sheraton Montreal Montreal, Quebec

XXIIIrd Annual Meeting of the Society for the Study of Ingestive Behavior

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PRESIDENT'S MESSAGE

Dear SSIB Community,

It is my great pleasure to welcome you all to the 23rd annual meeting of the Society for the Study of Ingestive Behavior in Denver. This is the first time SSIB has met here, and we are all looking forward to an outstanding meeting in a wonderful location.

Our scientific program once again reflects our efforts to balance



molecular, cellular, animal physiology and behavioral approaches (Track 1) with social, psychological, and human research (Track 2). I strongly believe this integrated organization is a hallmark of SSIB that sets us apart from other societies in the field, This year's program results from the efforts and hard work of the Program Committee.
Chaired by Mitch Roitman, together with Track Chairs Helen Raybould and Dana Small, the Program Committee has created a meeting that offers a unique mix of all research genres focused on ingestive behaviors. Our goal is to make sure as best we can that each session contains something for everybody. To anchor the daily schedule we have four keynote lectures supported by Mars. We are very pleased to welcome Susan Fried, Anita Jansen, Paul Kenny, and Howard Steiger as this year's Mars lecturers.

It is my pleasure to announce two items at the meeting that recognize the major contributions that Harry Kissileff has made to the field of ingestive behaviors and to SSIB itself. Harry is a founding member of SSIB and has worked tirelessly for the Society ever since. First, we highlight Harry's major contributions to the field in this year's Presidential Symposium. It features four distinguished speakers who will discuss the current state of the science in which Harry has been such an important innovator. Second, the award made to the best oral presentation from a postdoctoral fellow will now be known as the Harry Kissileff Award. It will complement the Gerald P. Smith Award for the best graduate student oral presentation. Both will be presented at the banquet on Saturday.

I would like to offer congratulations to our award winners for this year: Ed Stricker, the Distinguished Career Award; Dana Small, the Alan N. Epstein Award; and Barbara Rolls, the Hoebel Prize for Creativity. Presentations will be made during the awards session on Saturday afternoon, which concludes the formal science part of the meeting. This session is always a highlight, and I invite you to attend this stimulating and enjoyable event to honor our awardees and hear their presentations.

SSIB places great importance on providing opportunities for students, post-docs, and junior faculty to present their work to the field. Last year we were able to make fifteen New Investigator Travel Awards (NITAs), a record number. This year because of the continued support from Novo Nordisk, and the very generous donations from our members, I am very pleased that we are able to maintain the same number of NITAs as in 2014. These travel awards are made to students and postdoctoral fellows whose abstracts were judged to be outstanding and deserving of financial support. Eight of these will be presented during the NITA symposium; the other seven during appropriate oral sessions. You will see these awardees highlighted at various points in the Program. We are very grateful to all who have made the NITAs possible.

This year we have a new award category: the best poster presentation from a graduate student or post-doc. Two awards will made, one each for Track 1 and Track 2. I would like to thank Sara Hargrave for advocating to the Board for this new award, and for her efforts in making it possible.

The task of making SSIB an effective organization and the annual meeting a successful and stimulating scientific event is the responsibility of dedicated and hard working volunteer members. Without their efforts we would not be here today in Denver. And so at this point I would like to acknowledge the work of the people who make SSIB run efficiently. My first thanks are to Barry Levin, who as Past-President has provided much help, sage advice, and valuable opinion throughout my year as President; he has certainly made my duties easier. Our incoming President, Suzanne Higgs, has also given me a great deal of support and input throughout the year. She chaired the NITA and Epstein award selection committees, and we are all grateful to her for performing these important tasks. The Program Committee is a key part of SSIB, and so once again I would like to thank Mitch Roitman and the rest of the committee for their considerable efforts in putting this year's meeting together. Many thanks also to the SSIB officers, all the chairs and members of the different committees that have contributed in various ways, and to the SSIB Board of Directors who oversee all things SSIB.

Our annual meeting would not be possible without the support of all our corporate sponsors and exhibitors. Many of them are long time friends of SSIB to whom we are very grateful for their continued support. Their generous donations and willingness to exhibit helps make the meeting possible. Our exhibitors have chosen SSIB as a venue because they believe their products are of potential value to your research. I welcome them all to the meeting and strongly encourage you to visit their booths and see their products during the next few days. This year I want to offer special thanks to all the SSIB members who made personal donations. Your efforts were outstanding and have helped considerably.

Finally, I would like to thank our management company, SPLtrak. Jamie Price, Adam Kohm, and Tracy Tarant provide friendly, efficient, timely, and extremely effective management throughout the year. I have very much enjoyed working with them, and I gratefully acknowledge and appreciate their efforts.

I hope that you have a enjoyable, stimulating, and successful meeting.

Alan Watts watts@usc.edu SSIB President 2014-2015



GENERAL INFORMATION

DATES

The XXIIIrd Annual Meeting of the Society for the Study of Ingestive Behavior begins Tuesday, July 7, 2015 and adjourns Saturday, July 11, 2015.

CONFERENCE VENUE

The Sheraton Denver Downtown 1550 Court Place Denver, CO 80202 (303) 893-3333

REGISTRATION INFORMATION

Name badges and final programs will be distributed at the Registration Desk. The Registration Desk is located in the South Convention Lobby.

SPEAKER READY AREA

The speaker ready area will be available to all oral presenters to both preview and edit your presentations if necessary. The speaker ready area is located at the Registration Desk. Additional information for Oral and Poster Presenters may be found on pages 11 and 12.

NO PHOTOGRAPHY POLICY

The conference organizers have decided that photography is not allowed except for official conference photographers.

MOBILE (CELLULAR) TELEPHONES

As a courtesy to others, please switch off mobile telephones during all sessions.

LOST AND FOUND
All lost and found articles will be held at the conference registration desk.

EXHIBITS & BREAKS

The exhibits are located in the South Convention Lobby and will be open during the following hours:

Wednesday

10:30 AM - 11:00 AM (coffee break) 5:30 PM - 7:30 PM (poster session)

Thursday

10:30 AM - 11:00 AM (coffee break) 3:30 PM - 4:00 PM (coffee break) 6:00 PM - 8:00 PM (poster session)

Friday

10:30 AM - 11:00 AM (coffee break) 6:00 PM - 8:00 PM (poster session)

Saturday

10:30 AM - 11:00 AM (coffee break)

ONLINE/MOBILE CONFERENCE PROGRAM

SSIB attendees may access the online conference in multiple formats.

Web-Based App http://mobile.ssib.org

iOS/Android App

STEP 1: Download the MA eProgram App from the iOS App Store or Google Play.



STEP 2: Use the scan event QR code feature and the following activation code:



Or enter "ssib2015" as the username and password.



SSIB 2015 OFFICERS

Alan Watts, DPhil (2015) University of Southern California, USA *President*

Suzanne Higgs, Ph.D. (2015) University of Birmingham, UK *President-Elect*

Barry Levin, MD (2015) Rutgers-New Jersey Medical School, USA *Past-President*

Derek Daniels, Ph.D. (2015) University of Buffalo, USA Secretary

Ruth Harris, Ph.D. (2015) Medical College of Georgia, USA *Treasurer*

SSIB 2015 BOARD MEMBERS

Christine Feinle-Bisset, Ph.D. (2016) University of Adelaide, Australia

Kevin Myers, Ph.D. (2017) Bucknell University, USA

Bob Ritter, Ph.D. (2015) Washington State University, USA

Mitch Roitman, Ph.D. (2016) University of Illinois at Chicago, USA

Dana Small, Ph.D. (2016) Yale University, USA

Kellie Tamashiro, Ph.D. (2016) Johns Hopkins University, USA

Margriet Westerterp, Ph.D. (2015) Maastricht University, Netherlands

Diana Williams, Ph.D. (2017) Florida State University, USA

Sara Hargrave, M.S. (2017 - Student Representative) Purdue University, USA

Harry R. Kissileff, Ph.D. (Honorary Member) Columbia University Medical Center, USA

SSIB 2015 PROGRAM CHAIR

Mitch Roitman, Ph.D.

University of Illinois at Chicago, USA

SSIB 2015 PROGRAM COMMITTEE

Track Chairs

Helen Raybould, Ph.D.

UC Davis School of Veterinary Medicine, USA Track 1 Chair

Dana Small, Ph.D.

Yale School of Medicine, The John B Pierce Laboratory, USA Track 2 Chair

Committee Members

Scott Kanoski, Ph.D.

University of Southern California, USA Track 1

Kimberly Kinzig, Ph.D.

Purdue University, USA

Track 1

Ellen Ladenheim, Ph.D.

Johns Hopkins University School of Medicine, USA Track 1

Robert Ritter, Ph.D.

Washington State University, USA Track 1

Megan Dailey, Ph.D.

University of Illinois, Urbana-Champaign, USA Track 1

Jessica Santollo, Ph.D. SUNY Buffalo, USA

Track 1

Marion Hetherington, BSc, DPhil

University of Leeds, UK

Track 2

Kathleen Keller, Ph.D.

The Pennsylvania State University, USA Track 2

Laurence Nolan, Ph.D.

Wagner College, USA

Track 2

Jeff Brunstrom, Ph.D.

University of Bristol, UK

Track 2

Eric Robinson, Ph.D.

University of Liverpool, UK

Track 2

SSIB 2015 LONG RANGE PLANNING COMMITTEE

Alan Spector, Ph.D. Florida State University, USA Committee Chair

Suzanne Higgs, Ph.D. (2016) University of Birmingham, UK

Michael Lowe, Ph.D. (2016) Drexel University, USA

Thomas Lutz, Ph.D. (2016) University of Zurich, Switzerland

Julie Mennella, Ph.D. (2016) Monell Chemical Senses Center, USA

Kevin Myers, Ph.D. (2016) Bucknell University, USA

Helen Raybould, Ph.D. (2016) UC Davis School of Veterinary Medicine, USA

Diana Williams, Ph.D. (2016) Florida State University, USA



CORPORATE PREMIER

MARS incorporated

Mars, Incorporated

Based in McLean, Virginia, Mars, Incorporated is private, family-owned food company, with annual sales of more than \$33 billion. Based on the objective of a "mutuality of benefits" for all stakeholders, Mars has 6 segments - Petcare, Chocolate, Wrigley, Food, Drinks and Symbioscience and employs more than 75,000 Associates worldwide.



Novo Nordisk

Novo Nordisk is a global healthcare company with more than 90 years of innovation and leadership in diabetes care. Additionally, we continue to invest in developing treatments for obesity, haemophilia and growth disorders. Headquartered in Denmark, Novo Nordisk employs approximately 39,000 people in 75 countries and markets its products in more than 180 countries.



PepsiCo, Inc.

Pepsico, inc.
Pepsico is one of the world's leading food and beverage companies. A more than \$65 billion global powerhouse, PepsiCo makes hundreds of foods and beverages ranging from treats to healthy eats that are loved throughout the world, including Quaker, Tropicana, Gatorade, Frito-Lay and Pepsi-Cola.



Research Diets, Inc.

Research Diets, Inc. formulates and produces purified OpenSource Diets® for laboratory animals. Custom diets shipped in 5-7 days. The BioDAQ® Food and Liquid Intake Monitor features spill-reducing hoppers, mounts to home cage, records the time, duration, amount of each meal automatically. Automated gate is programmable by time or amount consumed.

CORPORATE BENEFACTOR



Elsevier

Elsevier is a world-leading provider of information solutions that enhance the performance of science, health, and technology professionals, empowering them to make better decisions, deliver better care, and sometimes make groundbreaking discoveries that advance the boundaries of knowledge and human progress.

CORPORATE SPONSORS



DSI is a pioneering biomedical research company focused on preclinical systems physiology and pharmacology. The global leader in physiologic monitoring, DSI offers telemetry, instrumentation, software and services that facilitate accelerated, well-informed, drug therapy and development decisions.



Sable Systems International

Metabolic measurement systems for preclinical phenotyping and room Calorimetry. Sable's Promethion™ platform is the new standard for accuracy, workflow efficiency, and best-practice data management. Auto-baselined, synchronized monitoring of MR, RER/RQ, food/water uptake, and control for paired, yoked, or timed feeding. Total activity, wheel and/or beambreak array capture position and displacement.



Stoelting
Stoelting has been an innovator in producing equipment for pre-clinical research equipment since 1886. We proudly offer a complete line of behavioral testing equipment, anchored by ANY-maze™; an easy to use video tracking system for automated measurements of many types of behavioral paradigms. Please visit ANY-maze.com for more details.



TSE Systems is a leading global manufacturer for Metabolic & Behavioral Phenotyping and screening systems . The TSE PhenoMaster® offers a modular solution for state-of-the-art automated metabolic and behavioral monitoring of rodents within the home cage. Metabolism: •Push & Pull Calorimetry, •Urine & Feces Quantification, •Drinking, Feeding with access control, Body Weight Monitoring. Behavior & Exercise: •Home Cage Activity, •Running Wheel Activity, •Motorskill Testing, •Operant Conditioning, learning/memory. Physiology monitoring: •Telemetry (Blood Pressure, Heart Rate, ECG, EEG, Activity, Temperature).

INSTRUCTIONS TO ORAL PRESENTERS

PRESENTATION UPLOAD

Speakers are asked to bring their presentations to the registration desk on a USB storage device one day prior to their presentation. You may also upload your presentation using the link sent to you via email. Please be sure to upload your presentation no later than 24 hours before the start of your session.

If your talk contains multimedia files, please be sure to bring those files to the conference in case they have to be reinserted into your presentation.

AT THE MEETING

Speakers should arrive at least 15 minutes prior to their session to introduce themselves to the session chair. DO NOT BRING YOUR LAPTOP to the session room. A/V staff will not be able to connect your laptop.

A NOTE TO MAC USERS

Mac users should not use "drag-and-drop" to insert pictures and video files. Most problems, such as the infamous "red x" are the result of this. Using the "INSERT" command from the menu will virtually eliminate these issues. The PowerPoint file must have the .ppt or .pptx suffix to be accepted. As noted above, QuickTime movies (.MOV) must be converted to a PC compatible format before submission.



INSTRUCTIONS TO POSTER PRESENTERS

As a poster presenter you have the following responsibilities:

 Find your assigned poster session and number using either the author index or online mobile program.

Please note there are three poster sessions:

Poster Session 1

Wednesday, July 8: 5:30 PM - 7:30 PM

Poster Session 2

Thursday, July 9: 6:00 PM - 8:00 PM

Poster Session 3

Friday, July 10: 6:00 PM - 8:00 PM

- 2. All posters must be mounted by noon on the day of your poster presentation. Poster display boards will be available for mounting of posters beginning at 8:00 AM on the day of your presentation.
- 3. Be present at your poster during the poster session to present your work. Posters must remain on display until the end of your poster session.
- Posters must be removed by 8:00 AM the morning following your poster presentation.

Please visit the Registration Desk if you have any questions regarding your presentation.



AWARD RECIPIENTS

DISTINGUISHED CAREER AWARD



EDWARD M. STRICKER, PH.D.
Dean, University Honors College
Bernice L. & Morton S. Lerner Chair
University Professor of Neuroscience
University of Pittsburgh

ALAN N. EPSTEIN RESEARCH AWARD



DANA SMALL, PH.D.
Professor, Department of Psychiatry
Yale School of Medicine
Deputy Director, The John B Pierce Laboratory

HOEBEL PRIZE FOR CREATIVITY



BARBARA J. ROLLS, PH.D. The Pennsylvania State University

JULY 7 - 11 • DENVER

NEW INVESTIGATOR TRAVEL AWARDEES (NITA)

Stephanie Fearnbach Pennsylvania State University, USA

Emily Feig Drexel University, USA

Sara Hargrave American University, USA

Ted Hsu University of Southern California, USA

Caroline Johnson University of Southern California, USA

Sara Keefer Boston College, USA

Samantha Kling The Pennsylvania State University, USA

Nils Kroemer The John B. Pierce Laboratory and Yale University, USA

Zhi Yi Ong University of Pennsylvania, USA

Menna Price Swansea University, UK

Amy Reichelt University of New South Wales, Australia

David Reiner University of Pennsylvania, USA

Merel Rijnsburger AMC Amsterdam

Lin Song Johns Hopkins University, USA

Anastasia Zink University of Minnesota, USA

SUPPORTED IN PART BY NOVO NORDISK

TUESDAY PROGRAM SUMMARY

Opening Greetings 4:45 - 5:00 PM (Grand 1)

MARS Lecture 1 5:00 - 6:00 PM (Grand 1)

Opening Reception 6:00 - 8:00 PM (15 Fifty Restaurant)

WEDNESDAY PROGRAM SUMMARY

Symposium 1: Presidential Symposium: In Honor of Harry Kissileff: Approaches to Understanding Healthy and Disordered Eating

8:30 - 10:30 AM (Grand 1)

Break

10:30 - 11:00 AM (South Convention Lobby)

Oral 1: Oral Sensory Processes

11:00 - 1:00 PM (Grand 1)

Oral 2: Gut to Brain and Back Again

11:00 - 1:00 PM (Grand 2)

Publishing Workshop 1:30 - 3:00 PM (Grand 2)

Symposium 2: Nutraceuticals: The Good, the Bad and the

Ugly 3:30 - 5:30 PM (Grand 1)

Oral 3: Disinhibition, Impulsivity and Restrained Eating $3:30-5:30\ PM\ (Grand\ 2)$

Poster Session I

5:30 - 7:30 PM (South Convention Lobby)

THURSDAY PROGRAM SUMMARY

NITA Symposium

8:30 - 10:30 AM (Grand 1)

Break

10:30 - 11:00 AM (South Convention Lobby)

MARS Lecture 2

11:00 - 12:00 PM (Grand 1)

Symposium 3: Social Factors as Contributors to Obesity 1:30 - 3:30 PM (Grand 1)

Oral 4: Limbic Circuits 1:30 - 3:30 PM (Grand 2)

3:30 - 4:00 PM (South Convention Lobby)

Symposium 4: Cognitive Control of Meal Size

4:00 - 6:00 PM (Grand 1)

Oral 5: Development and Eating: Bidirectional Influences 4:00 - 6:00 PM (Grand 2)

Poster Session II

6:00 - 8:00 PM (South Convention Lobby)

FRIDAY PROGRAM SUMMARY

Symposium 5:The Mile High Club: Cannabis and Endocanabinoid Effects on Ingestive Behavior 8:30 - 10:30 AM (Grand 1)

Oral 6: Portion and Meal Control 8:30 - 10:30 AM (Grand 2)

Break

10:30 - 11:00 AM (South Convention Lobby)

MARS Lecture 3

11:00 - 12:00 PM (Grand 1)

Career Development Workshop 12:15 - 1:45 PM (Grand 2)

Symposium 6: Pharmacotherapies for Metabolic Disorders: Current Status and Future Directions 4:00 - 6:00 PM (Grand 1)

Oral 7: Learning and Conditioning 4:00 - 6:00 PM (Grand 2)

Poster Session III 6:00 - 8:00 PM (South Convention Lobby)

SATURDAY PROGRAM SUMMARY

Symposium 7: Understanding Food Choice 8:30 - 10:30 AM (Grand 1)

Oral 8: Nutrient Effects on Brain Function 8:30 - 10:30 AM (Grand 2)

Break

10:30 - 11:00 AM (South Convention Lobby)

MARS Lecture 4

11:00 - 12:00 PM (Grand 1)

Awards Session

2:30 - 4:15 PM (Grand 1)

Business Meeting

4:15 - 5:15 PM (Grand 1)

Banquet

7:00 - 12:00 AM (Grand 1)

TUESDAY, JULY 7

WELCOME

4:45 - 5:00 PM

Grand 1

OPENING GREETINGS - ALAN WATTS, PRESIDENT

MARS LECTURE

5:00 - 6:00 PM

Grand 1

Chair: Michael Lowe

5:00 Eating Disorders, Gene-Environment

1 Interactions and the Epigenome: Roles of Nutritional Status Stress Exposures HOWARD STEIGER^{1,2}

¹Douglas Institute, Montreal, QC, Canada, ²McGill University, Montreal, QC, Canada

SOCIAL EVENT

6:00 - 8:00 PM

15 Fifty Restaurant (Lobby)

OPENING RECEPTION

WEDNESDAY, JULY 8

SYMPOSIUM

8:30 - 10:30 AM

Grand 1

SYMPOSIUM 1: PRESIDENTIAL SYMPOSIUM IN HONOR OF HARRY KISSILEFF: APPROACHES TO UNDERSTANDING HEALTHY AND DISORDERED EATING

Chair: Alan Watts

8:30 "But what is the mechanism?" Beyond phenomena in the study of human eating behavior
KL KELLER, SN FEARNBACH, LK ENGLISH

KL KELLER, SN FEARNBACH, LK ENGLISH The Pennsylvania State University, University Park, PA, USA

9:00 Gastrointestinal (GI) contributions to energy intake and GI symptoms in humans

C FEINLE-BISSÉT NHMRC Centre of Research Excellence in Translating Nutritional Science to Good Health & University of Adelaide Discipline of Medicine, Adelaide, Australia

- 9:30 Individual differences in flavour-based 4 learning: a microstructural analysis. MR YEOMANS School of Psychology, University of Sussex, Brighton, United Kingdom
- 10:00 Primary Cilium in the Control of Body Weight.
 5 RL LEIBEL, L WANG, G STRATIGOPOULOS
 Columbia University, New York, NY, USA

BREAK

10:30 - 11:00 AM

South Convention Lobby

ORAL SESSION

11:00 - 1:00 PM

Grand 1

ORAL 1: ORAL SENSORY PROCESSES

Chair: Ann Marie Torregrossa

11:00 When a calorie is not a calorie: Decoupling sweet taste from caloric load disrupts metabolic response RK BABBS^{1,2}, BP PATEL^{1,2}, NB KROEMER^{1,2}, DM SMALL^{1,2}
*John B. Pierce Laboratory, New Haven, CT, USA,

²Yale School of Medicine, New Haven, CT, USA 11:15 Rats learn to prefer the orosensory properties

11:15 Rats learn to prefer the orosensory properties of glucose over those of fructose
 LA SCHIER, AC SPECTOR
 Dept of Psychology and Program in Neuroscience, Florida State Univ, Tallahassee, FL, USA

11:30 Altered flavor-nutrient conditioning in obesity

8 G COPPIN^{1,2,3}, AE WRAY^{1,2}, MG VELDHUIZEN^{1,2}, IE
DE ARAUJO^{1,2}, DM SMALL^{1,2,3}

11The John B. Pierce Laboratory, New Haven, CT,
USA, ²Yale University, New Haven, CT, USA, ³Max
Planck Institute for Metabolism Research, Cologne,
Germany

11:45 The taste of P

- 9 MG TORDOFF, TR ALEMAN Monell Chemical Senses Center, Philadelphia, PA, USA
- 12:00 Glucose vs saccharin: Tests of the sweet-calories hypothesis RA BOAKES¹, WR BATSELL², MD KENDIG¹, SI MARTIRE¹, KB ROONEY¹ ¹University of Sydney, Sydney, Australia, ²Kalamazoo College, Kalamazoo, MI, USA
- 12:15 Oral Stimulation with Sucralose Reveals
 11 Differential Patterns of FLI in the Rostral NTS of Sucralose-Preferring and –Avoiding Rats GC LONEY, LA ECKEL Florida State University, Tallahassee, FL, USA
- Nerve damage obscures links between oral anatomy and sensation that guide dietary health DJ SNYDER¹, LM BARTOSHUK²
 Occupational Science, University of Southern California, Los Angeles, CA, USA, ²Food Science & Human Nutrition, University of Florida, Gainesville, FL, USA
- 12:45 Variation at a common polymorphism in the CD36 gene is associated with liking of low-fat dairy and parental perception of child weight.
 S ADISE, AC CLOSE, R BLOOM, KL KELLER Pennsylvania State University, Department of Nutritional Sciences, University Park, PA, USA

ORAL SESSION

11:00 - 1:00 PM

Grand 2

ORAL 2: GUT TO BRAIN AND BACK AGAIN

Chair: Rick Rodgers

11:00 Loss of cocaine- and amphetamine-regulated

transcript in vagal afferent neurons drives 14 hyperphagia and weight gain G DE LARTIGUE^{1,3}, JP KRIEGER², SJ SHIN², W LANGHANS², HE RAYBOULD³ ¹Yale University/ The John B Pierce Lab, New Haven, CT, USA, ²ETH Zurich, Schwerzenbach, Switzerland, ³University of California, Davis, CA, USA

Gastric vagal afferents are a food entrainable 11:15

15 circadian satiety signal S KENTISH^{1,2}, G HATZINIKOLAS¹, H LI¹, C FRISBY¹, G WITTERT^{1,2}, A PAGE^{1,2} ¹University of Adelaide, Adelaide, Australia, ²SAHMRI, Adelaide, Australia

11:30 Endogenous GLP-1 receptor signaling in the

16 nucleus tractus solitarius is required for energy balance control AL ALHADEFF, EG MIETLICKI-BAASE, BD MERGLER, HJ GRILL, MR HAYES University of Pennsylvania, Philadelphia, PA, USA

11:45 Central β3-adrenergic activation is sufficient to

17 induce potent anorexia, weight loss and white fat browning JE RICHĂRD, P MICALLEF, B CHANCLON, IW ASTERHOLM, KP SKIBICKA Gothenburg University, Gothenburg, Sweden

12:00 Effects of viscosity and nutrient load on gastric

emptying as determined by MRI G CAMPS¹, M MARS¹, K DE GRAAF¹, PAM SMEETS^{1,2} ¹Wageningen University, Wageningen, Netherlands, ²Image Sciences Institute, University Medical Center

Utrecht, Utrecht, Netherlands 12:15 Olanzapine reduces the excitability of DMV

19 neurons, including a subset of stomach- and liverrelated neurons IJ ANWAR, K MIYATA, A ZSOMBOK

Department of Physiology, Tulane University, New Orleans, LA, USA

12:30 Indirect effect of apelin on gastric vagal afferent satiety signaling. H Ll^{1,2}, SJ KENTISH^{1,2}, CL FRISBY^{1,2}, GA 20

WITTERT^{1,2}, AJ PAGE^{1,2} ¹University of Adelaide, Adelaide, Australia, ²SAHMRI, Adelaide. Australia

12:45 Cocaine- and amphetamine-regulated transcript (CART) mediates the satiating effects of glucagon-like peptide-1 (GLP-1) in rat vagal afferent neurons JP KRIEGER¹, M ARNOLD¹, KG PETTERSEN¹, W LANGHANS¹, G DE LARTIGUE², SJ LEE¹ 21 ¹Physiology and Behavior Laboratory, ETH Zürich, ZURICH, Switzerland, ²John B. Pierce Laboratory, NEW HAVEN, CT, USA

WORKSHOP

1:30 - 3:00 PM

Grand 2

PUBLISHING WORKSHOP

Organizer: Toby Charkin

SYMPOSIUM

3:30 - 5:30 PM

Grand 1

SYMPOSIUM 2: NUTRACEUTICALS: THE GOOD, THE BAD AND THE UGLY

Chair: Dana Small

3:30 Nutraceuticals for body-weight management:

the role of green tea catechins M. S WESTERTERP-PLANTENGA 22

Maastricht University, Maastricht, Netherlands

4:00 Promoting Metabolic Health and Lifespan by Increasing Oxidative Stress M RISTOW 23

ETH, Zurich, Switzerland

4:30 A role for Vitamin D3 signaling in obesity and

dopamine-related behaviors 24

JR TRINKO¹, BB LAND¹, WB SOLECKI¹, RJ WICKHAM¹, LA TELLEZ¹², JG MALDONADO-AVILES¹, IE DE ARAUJO¹², NA ADDY¹, RJ DILEONE1

¹Dept. of Psychiatry, Yale University School of Medicine, New Haven, CT, USA, 2The John B. Pierce Laboratory, New Haven, CT, USA

Botanical extracts: in vitro calcium imaging 5.00

25 G HERMANN, K VANCE, J COLLIER, S BURKE, **R** ROGERS

PBRC, Baton Rouge, LA, USA

ORAL SESSION

3:30 - 5:30 PM

Grand 2

ORAL 3: DISINHIBITION, IMPULSIVITY AND RESTRAINED EATING

Chair: Kerri Boutelle

3:30 Subjective social status modulates evaluation and intake of high calorie foods
BK CHEON¹², Y-Y HONG^{3,4}

¹Division of Psychology, Nanyang Technological University, Singapore, Singapore, ²Clinical Nutrition Research Center, Singapore Institute for Clinical Sciences, Singapore, Singapore, ³School of Business, Nanyang Technological University, Singapore, Singapore, ⁴School of Psychology, Beijing Normal

University, Beijing, China

Quebec, QC, Canada

3:45 Steep temporal discounting is associated with poor diet quality in humans BM APPELHANS¹, CC TANGNEY¹, SA FRENCH², LM POWELL³, H Ll¹ ¹Rush University Medical Center, Chicago, IL, USA, ²University of Minnesota, Minneapolis, MN, USA,

4:00 Brain network activity during simulation of dietary restraint is associated with real food choice in a buffet meal G MAGEROWSKI*, C PEñA-GóMEZ*, K PAPADOPOULOS, L AMREIN, M ALONSO-ALONSO

³University of Illinois at Chicago, Chicago, IL, USA

BIDMC. Harvard Medical School, Boston, MA, USA

- 4:15
 Altered response to stress and sucrose licking microstructure in binge eating prone female rats J CALVEZ, A MITRA, C DE AVILA, E TIMOFEEVA CRIUCPQ, Faculty of Medicine, Department of Psychiatry and Neuroscience, Laval University,
- 4:30 Disinhibition is associated with the pattern of weight loss and regain in a 1-year trial of portion control strategies

 BL JAMES, LS ROE, BJ ROLLS

 Pennsylvania State University, University Park, PA, USA
- 4:45 Pressure to be thin predicts body weight and fat gain in adolescence

C SUELTER¹, L SHOMAKER¹, M SHANKS¹, N SCHVEY²³, N KELLY¹²³, K PICKWORTH³, M TANOFSKY-KRAFF²³, J YANOVSKI³
¹CSU, Fort Collins, CO, USA, ²USUHS, Bethesda, MD, USA, ³NIH, Bethesda, MD, USA

- 5:00 Use of financial incentives for the purchase of healthy groceries: A randomized pilot study TV KRAL¹, AL BANNON¹, RH MOORE²¹University of Pennsylvania, Philadelphia, PA, USA,²North Carolina State University, Raleigh, NC, USA
- 5:15
 Hedonic hunger predicts left-sided activity and restrained eating predicts right-sided activity in the prefrontal cortex
 SR WINTER, J KOUNIOS, EH FEIG, B ERICKSON, S BERKOWITZ, MR LOWE
 Drexel University, Philadelphia, PA, USA

POSTERS

5:30 - 7:30 PM

South Convention Lobby

POSTER SESSION I

- 1 11 Sex and sex differences
- 12 20 Disordered eating
- 21 25 Hindbrain
- 26 30 Methods
- 31 34 Water and fluid intake
- 35 40 Hypothalamus
- P1 Membrane-initiated estradiol signaling transiently
- 34 affects food intake in female rats.
 MJ BUTLER, R HILDEBRANDT, A-M
 TORREGROSSA, SB OGDEN, LA ECKEL
 Program in Neuroscience, Florida State University,
 Tallahassee. FL. USA
- P2 Blunting of HPA stress responses by sucrose
- 35 varies between male and female rats
 AE EGAN, AMK THOMPSON, D BUESING, S
 FOURMAN, AEB PACKARD, MB SOLOMON, YM
 ULRICH-LAI
 U. of Cincinnati, Cincinnati, OH, USA
- P3 Protein supplementation enhances satiating
- 36 effiiency in women but not men M HERZOG¹, S DONNELLY¹, E OZBARDAKCI¹, E DHURANDHAR², D ALLISON², H KISSILEFF¹ ¹Columbia University, New York, NY, USA, ²University of Alabama, Birmingham, AL, USA
- P4 Morphine-induced suppression of saccharin
- 37 intake: Effects of gender and interstimulus interval CB JENNEY, PS GRIGSON PennState College of Medicine, Hershey, PA, USA
- P5 Brain-Derived Neurotrophic Factor Increased
- 38 Energy Expenditure of Estradiol-Treated Ovariectomized Rats via Enhancing Sympathetic Activity

X LIU1, M SHEN1, ZHU Z1, CK GAVINI2, CM NOVAK2, H SHI1

¹Department of Biology, Miami University, Oxford, OH, USA, ²Department of Biological Sciences, Kent State University, Kent, OH, USA

- P6 Estradiol modulates the anorexic response to
- 39 central GLP-1
 CB MASKE, LA ECKEL, DL WILLIAMS
 Psychology Department & Program in Neuroscience,
 Florida State University, Tallahassee, FL, USA
- P7 AM4113 decreases food intake in female rats with greater behavioral specificity than rimonabant. SB OGDEN¹, MJ BUTLER¹, M MALAMAS², A MAKRIYANNIS², LA ECKEL¹¹Prog. in Neuroscience, Florida State University, Tallahassee, FL, USA, ²Center for Drug Discovery, Northeastern University, Boston, MA, USA
- P8 Sex differences in angiotensin II-induced
- 41 behavioral desensitization
 J SANTOLLO, D DANIELS
 University at Buffalo, Buffalo, NY, USA

- P9 Estrogen effects on oxytocin in the forebrain and 42
- hindbrain of ovariectomized rats: Implications for eating behavior? DK SĪOAN, AG TORRES, KS CURTIS Oklahoma State University - Center for Health Sciences, Tulsa, OK, USA
- P10 Reproducibility and validity of satiety measures in
- healthy women AJ TUCKER, S HEAP, J INGRAM, M LAW, AJ 43 WRIGHT University of Guelph, Guelph, ON, Canada
- P11 Stress effects on taste preferences in male and

44 female Rats M VENKATESHA2, A MARONEY3, CJ RAYMOND1, DK SLOAN¹, KS CURTIS ¹Oklahoma State University - Center for Health Sciences, Tulsa, OK, USA, ²Union High School, Tulsa, OK, USA, ³Jenks High School, Tulsa, OK, USA

- P12 Rats vulnerable to weight loss during activity-45 based anorexia lack increased expression of Agrp and Orexin in response to starvation. GJ BOERSMA, NC LIANG, JD ALBERTZ, LA MOODY, S ARYAL, TH MORAN, KL TAMASHIRO Psychiatry & Behavioral Sciences, Johns Hopkins Univ., Baltimore, MD, USA
- P13 Satiation and elective anorexia compared between
- 46 ratio and interval schedules in mice M CERVANTEZ, KL ROBERTSON, NE ROWLAND University of Florida, Gainesville, FL, USA
- Role of Anxiety in Inhibitory Control Deficits in P14
- 47 **Eating Disorders** AV ELY, CE WIERENGA, WH KAYE University of California, San Diego, San Diego, CA, USA
- The Unique Contributions of Episode Size and P15 Loss of Control Eating in Purging Syndromes K J FORNEY¹, LB BODELL¹, A HAEDT-MATT², PK 48 KEEL1 ¹Florida State University, Tallahassee, FL, USA,
- ²Illinois Institute of Technology, Chicago, IL, USA P16 Effects of Idealized Media Images on Food Intake and Appearance Anxiety A MITRA, A.C. THOMPSON 49

St. Catherine University, St. Paul, MN, USA

P17 Relationships between disordered eating attitudes 50 and executive functioning in an overweight/obese treatment seeking sample

TM MONREAL¹, SH HIGGS², KB BOUTELLE¹, JL LIANG¹ ¹University of California at San Diego, La Jolla, CA,

USA, ²University of Birmingham, Birmingham, United Kingdom

- P18 The association of maternal anxiety and 51 depressive symptoms with infant appetitive traits
 - at 3 months and 12 months of age. PL QUAH Singapore Institute of Clinical Sciences, Singapore, Singapore
- P19 Binge-like high-fat diet intake enhances preference
- and motivation for highly palatable food. S SIROHI, A VANCLEEF, C KOWALSKI, A 52 MCGREGOR, R MCLAUGHLIN, JF DAVIS Department of Integrative Physiology & Neuroscience, College of Veterinary Medicine, Washington State University, Pullman, WA, USA

P20 The relationship between obesity, quality of life, 53 and psychopathology in primary care settings DH SUTTON

N. Arizona Univ., Flagstaff, AZ, USA

- P21 Selective activation of A1/C1 catecholamine 54
 - neurons by DREADD enhances food intake in rats A-J LI, Q. WANG, S. RITTER Washington State University, Pullman, WA, USA
- P22 Variation of caloric intake and dorsovagal complex 55 synapsin phosphorylation in rats fed high fat diet. JS NASSE, RC RITTER Washington State University, Pullman, WA, USA
- P23 Astrocytes in the hindbrain trigger 56 counterregulation R ROGERS¹, S RITTER², D MCDOUGAL¹, G

HERMANN¹ ¹PBRC, Baton Rouge, LA, USA, ²WSU, Pullmann, WA, USA

- P24 Forebrain Catecholaminergic Projections Restrain 57 High Calorie Diet-Associated Hyperphagia and Adiposity ALAN WATTS, ANNE JOKIAHO Dept. of Biological Sciences, USC, Los Angeles, CA, USA
- P25 Hindbrain prolactin-releasing peptide (PrRP) 58 neurons are not closely linked to motor circuits controlling intrinsic tongue muscles H ZHENG, L. RINAMAN Univ. Pittsburgh, Pittsburgh, PA, USA
- P26 An open source operant conditioning chamber K DEVARAKONDA, KP NGUYEN, AV KRAVITZ National Institute of Diabetes and Digestive and Kidney 59 Diseases, Diabetes, Endocrinology, and Obesity Branch, Bethesda, MD, USA
- P27 **Human Bite-Count Variability: Limitations for** Measuring Energy Intake J GUO, E PREUSCHL, L HOWARD, T BEMIS, S GOODWIN, L YANNAI, KD HALL NIDDK/NIH, Bethesda, MD, USA 60
- P28 Integrating neurocognitive evaluation during a meal: a feasibility study G MAGEROWSKI, M ALONSO-ALONSO 61 BIDMC, Harvard Medical School, Boston, MA, USA
- The 'smart dining table': a prototype for automatic evaluation of eating behavior during a meal P29 62 S MANTON, G MAĞEROWSKI, M ALÖNSO-ALONSO BIDMC, Harvard Medical School, Boston, MA, USA
- Engineering a system to monitor home cage P30 63 feeding behavior in rodents KP NGUYEN1, AV KRAVITZ1,2 ¹National Institute of Diabetes and Digestive and Kidney Diseases, National Institutes of Health, Bethesda, MD, USA, ²National Institute on Drug Abuse, National Institutes of Health, Bethesda, MD, USA
- P31 Seasonal variation in salt appetite A AGBARIA, N MAHAJNA, M NAHAS, F TRUDI, R YAACOBI, G ZOHAR, M LESHEM 64 Department of Psychology, The University of Haifa, Haifa, Israel

P32 Fluid balance challenges influence Glucagonlike peptide-1-associated gene expression both peripherally and centrally

NJ MCKAY, DL GALANTE, D DANIELS University at Buffalo, Buffalo, NY, USA

Tulsa, OK, USA

P33 Effects of age and ovariectomy on thirst and salt 66 appetite in rats.

RLTHUNHORST¹, KS CURTIS², T BELTZ¹, B XUE¹, AK JOHNSON¹
¹Department of Psychology and the Cardiovascular Center, University of Iowa, Iowa City, IA, USA,
²Department of Pharmacology and Physiology, Oklahoma State University-Center for Health Sciences,

P34 Water intake and central activation stimulated by lsoproterenol in ovariectomized young and aged female rats

P35 TRPV1 expressing hypothalamic neurons control glucose metabolism

glucose metabolism

IJ ANWAR¹, K MIYATA¹, CL ENIX¹, CA NUGENT², SD
SAGASER², AV DERBENEV¹, A ZSOMBOK¹

¹Department of Physiology, Tulane University, New
Orleans, LA, USA, ²Neuroscience Program, Tulane
University, New Orleans, LA, USA

- P36 Neuropeptide Y in the lateral hypothalamus specifically increases carbohydrate intake when rats are fed a free-choice high fat high sugar diet MCR GUMBS, L EGGELS, SE LA FLEUR AMC-UvA, Amsterdam, Netherlands
- P37 Role of hypothalamic microglia in synaptic organization onto proopiomelanocortin neuron for regulation of energy balance JG KIM¹, IS NAM-GOONG², SH JIN³, BJ LEE³ ¹Division of Life Sciences, Incheon National University, Incheon, South Korea, ²Department of Internal Medicine, Ulsan University Hospital, Ulsan, South Korea, ³Department of Biological Sciences, University of Ulsan, Ulsan, South Korea
- P38 Amylin-IL-6 Enhancement of VMH Leptin Signaling
 71 B.E. LEVIN¹², M. JOHNSON², L. LARSEN², A.A. DUNNMEYNELL¹, C. BOYLE³, T.A. LUTZ³, M HAYES⁴, C LE
 FOLL¹₃

 ¹V A Medical Center, E. Orange, NJ, USA, ²Rutgers,
 NJ Medical School, Newark, NJ, USA, ³Inst. Veterinary
 Physiology, Univ Zurich, Zurich, Switzerland, ⁴University
 of Pennsylvania, Philadelphia, PA, USA
- P39 Effect of tonicity-responsive binding protein on the hypothalamic regulation of energy balance IS NAM-GOONG¹, JG KIM², HR KIM³, BJ LEE³ ¹Department of Internal Medicine, Ulsan University Hospital, Ulsan, South Korea, ²Division of Life Sciences, Incheon National University, Incheon, South Korea, ³Department of Biological Sciences, University of Ulsan, Ulsan, South Korea
- P40 Effects of offering a vegetable pure, diluted or
 73 hidden on toddlers' intake
 G JAGER, V DE WILD, C DE GRAAF
 Wageningen University, Wageningen, Netherlands

	SYMPOSIUM	
8:30 - 10:30 AM		Grand 1
	NITA SYMPOSIUM	

Chair: Suzanne Higgs

- 8:30 Orexin neuron activation drives spontaneous physical activity and promotes healthy body weight.

 AN ZINK¹, CJ BILLINGTON², CM KOTZ¹²
 ¹Dept. of Food Science and Nutrition, U of MN, St. Paul, MN, USA, ²VA Medical Center, Minneapolis, MN, USA
- 8:45
 75 Promoting consideration of long- versus shortterm goals reduces impulsivity and snack intake MJ PRICE¹, S HIGGS², M LEE¹ ¹Swansea University, Swansea, United Kingdom, ²University of Birmingham, Birmingham, United Kingdom
- 9:00
 The state of the energy density or portion size of milk affect preschool children's intake at a meal?

 SMR KLING, LS ROE, BJ ROLLS
 The Pennsylvania State University, University Park, PA, USA
- 9:15
 77 Glucagon-like peptide-1 receptor signaling in anterior and posterior regions of the paraventricular thalamic nucleus differentially affects feeding behavior ZY ONG, HJ GRILL
 University of Pennsylvania, Philadelphia, PA, USA
- 9:30 Dieting history and satiety interact to affect food cue responsivity: an ERP study EH FEIG, S WINTER, S BERKOWITZ, B ERIKSON, J KOUNIOS, M LOWE Drexel University, Philadlephia, PA, USA
- 9:45
 79 mediating appetite through ghrelin receptor signaling
 TM HSU, JD HAHN, VR KONANUR, SE KANOSKI University of Southern California, Los Angeles, CA, USA
- 10:00 Establishing the Mechanisms that Control
 80 Neuroendocrine Corticotropin Releasing Hormone
 Neuronal Activity
 CS JOHNSON, AG WATTS
 University of Southern California, Los Angeles, CA,
 USA
- 10:15 Differential effects of glucose and glucose plus lipid infusions towards the brain on peripheral glucose metabolism and hypothalamic gene expression.
 M RIJNSBURGER¹, L EGGELS¹, N VAN LOON¹, J CASTEL², C MAGNAN², A KALSBEEK¹, MJ SERLIE¹, S LUQUET², SE LA FLEUR¹
 ¹AMC-UvA, Amsterdam, Netherlands, ²Univ Paris-7, Paris, France

SUPPORTED IN PART BY NOVO NORDISK

BREAK

10:30 - 11:00 AM

South Convention Lobby

MARS LECTURE

11:00 - 12:00 PM

Grand 1

Chair: Marion Hetherington

11:00 A Cognitive Profile of Obesity and its

82 Translation Into New Interventions

ANITA JANSEN

Maastricht University, Maastricht, Netherlands

SYMPOSIUM

1:30 - 3:30 PM

Grand 1

SYMPOSIUM 3: SOCIAL FACTORS AS CONTRIBUTORS TO OBESITY

Chair: Carol Shively

1:30 Adverse social experience sustains emotional

83 feeding in females

ME WILSON

Emory University, Atlanta, GA, USA

2:00 ASSOCIATION AMONG SOCIAL STATUS, 84 EATING BEHAVIOR, AND METABOLIC

EFFICIENCY

E DHURANDHAR¹, SS BHOYAR¹, M CARDEL², CK MARTIN³, DB ALLISON¹. ¹University of Alabama at Birmingham, ²University of Colorado Anschutz Medical Campus, ³Pennington Biomedical Research Center

2:30 The Influence of Experimentally Manipulated 85 Social Status on Eating Behavior: A Pilot Study

M CARDEL¹, A DULIN-KEITA², EJ DHURANDHAR³, K HARRIS JACKSON¹, J BECK¹, A TOMCZIK¹, JC PETERS¹, SL JOHNSON¹, JO HILL¹, DB ALLISON³ ¹University of Colorado Anschutz Medical Campus, Aurora, CO, USA, ²Brown University, Providence, RI, USA, ³University of Alabama at Birmingham, Birmingham, AL, USA

3:00 Stress, Depression and Obesity: The Ghrelin Connection

JM ZIGMAN

Departments of Internal Medicine and Psychiatry, UT Southwestern Medical Center, Dallas, TX, USA

ORAL SESSION

ORAL 4: LIMBIC CIRCUITS

1:30 - 3:30 PM

Grand 2

Chair: Nicholas Bello

- 1:30 Unraveling the role of dopamine neurons in sensing energy balance and in feeding RA ADAN, R VAN ZESSEN, R PANDIT, L BOEKHOUDT, G VAN DER PLASSE Brain Center Rudolf Magnus, Utrecht, Netherlands
- 1:45
 88
 Intra-VTA insulin decreases nucleus
 accumbens dopamine release in vivo
 L NAEF¹, J HUANG², C LEE², D MEBEL², SL
 BORGAND¹
 ¹University of Calgary, Calgary, AB, Canada,
 ²University of British Columbia, Vancouver, BC,
 Canada
- 2:00 BMI positively correlates with amygdalohypothalamic effective connectivity in the absence of hunger X SUN^{1,2}, MG VELDHUIZEN^{1,2}, AE BABBS¹, IE DE ARAUJO^{1,2}, DR GITELMAN³, DM SMALL^{1,2} ¹The J.B. Pierce Lab, New Haven, CT, USA, ²Yale Univ., New Haven, CT, USA, ³Northwestern Univ., Chicago, IL, USA
- 2:15 Distinct relationships of the chemokine CXCL12 to high-fat diet intake, emotional behaviors, and hypothalamic neuropeptide systems
 K POON, JR BARSON, HT HO, SF LEIBOWITZ The Rockefeller University, New York, NY, USA
- 2:30 Nicotine differentially impacts body weight gain and reinforcement in obese-prone and resistant rats
 LE RUPPRECHT, TT SMITH, EC DONNY, AF SVED
 University of Pittsburgh, Pittsburgh, PA, USA
- 2:45
 92
 Portion size area affects expected anxiety
 responses to food cues.
 M. HERZOG¹, C. DOUGLAS¹, J.M.
 BRUNSTROM², K. HALMI³, H. KISSILEFF¹
 ¹Columbia University Medical Center, New York,
 NY, USA, ²University of Bristol, Bristol, United
 Kingdom, ³Weill Cornell Medical College, White
 Plains, NY, USA
- 3:00 Central GLP-1 signaling limits hedonically- but not homeostatically-driven food intake
 A.D. KREISLER, L. RINAMAN University of Pittsburgh, Pittsburgh, PA, USA
- 3:15 Central nucleus of the amygdala glutamate receptors mediate cisplatin-induced malaise and energy balance dysregulation through direct hindbrain projections
 AL ALHADEFF, RA HOLLAND, HJ GRILL, BC DE JONGHE
 The University of Pennsylvania, Philadelphia, PA, USA

BREAK

3:30 - 4:00 PM

South Convention Lobby

SYMPOSIUM	
4:00 - 6:00 PM	Grand 1
SYMPOSIUM 4: COGNITIVE CONTROL	L OF MEAL SIZE

Chair: Bob Boakes

idii. Bob Bounco		
4:00 95	What do studies on portion size and energy density tell us about the cognitive control of meal size? BJ ROLLS Pennsylvania State University, University Park, PA, USA	
4:30 96	Does dietary variability compromise flavour- nutrient learning? AA MARTIN, D FERRIDAY, PJ ROGERS, JM BRUNSTROM Nutrition and Behaviour Unit, University of Bristol, Bristol, United Kingdom	
5:00 97	Control of meal size by direct neuroendocrine signaling in the mesolimbic reward system EG MIETLICKI-BAASE University of Pennsylvania, Philadelphia, PA, USA	
5:30 98	Remembering to eat or not: hippocampal regulation of energy intake MB PARENT	

Georgia State University, Atlanta, GA, USA

ORAL SESSION

4:00 - 6:00 PM

Grand 2

ORAL 5: DEVELOPMENT AND EATING: BIDIRECTIONAL INFLUENCES

Chair: Gretha Boersma

4:00 Nicotine and ethanol co-use in Long-Evans rats:
 99 Stimulatory effects of perinatal exposure to a fatrich diet
 O KARATAYEV, O LUKATSKAYA, S MOON, W GUO, D CHEN, D ALGAVA, S ABEDI, S LEIBOWITZ Rockefeler U. NY. NY. USA

4:15 Adolescent high fat feeding disrupts cognitive flexibility via downregulation of reelin expression

in the prefrontal cortex (PFC)
MA LABOUESSE¹, J RICHETTO², L PUJADAS³, U
STADLBAUER^{1,2}, E SORIANO³, W LANGHANS¹, U
MEYER^{1,2}

¹Physiology of Behavior Laboratory, ETH, Zurich, Switzerland, ²University of Zurich, Zurich, Switzerland, ³CIREN, Barcelona, Spain

- 4:30 NITA AWARD WINNER: Maternal high-fat diet during gestation or lactation differentially impairs offspring hypothalamic neurocircuit development L. SONG¹², S.G. BOURET³, G.J. BOERSMA¹, Z.A. CORDNER¹, J.Q. YAN², T.H. MORAN¹, K.L. TAMASHIRO¹
 ¹Dept of Psychiatry, Johns Hopkins University School of Medicine, Baltimore, MD, USA, ²Dept of Physiology, Xi'an Jiaotong Univ, Xi'an, China, ³The Saban Research Inst, Univ of Southern California, Los Angeles, CA, USA
- 4:45
 102
 deficits following sucrose consumption during adolescence in rats
 AC REICHELT¹, KN ABBOTT¹, RF WESTBROOK¹, MJ MORRIS²
 ¹School of Psychology, UNSW Sydney, Sydney, Australia, ²School of Medical Sciences, UNSW Sydney, Sydney, Australia
- Infants' reactions to novel foods predict food neophobia during early childhood KJ MODING, CA STIFTER Pennsylvania State University, University Park, PA, USA
- 5:15 NITA AWARD WINNER: Neural response to images of food varying in energy density is associated with body composition in children SN FEARNBACH, LK ENGLISH, SJ WILSON, JS SAVAGE, BJ ROLLS, KL KELLER Pennsylvania State University, University Park, PA, USA
- 5:30 Children's neural response to food images that vary in portion size LK ENGLISH¹, SN FEARNBACH¹, SJ WILSON¹, JO FISHER², BJ ROLLS¹, KL KELLER¹ ¹Penn State University, University Park, PA, USA, ²Temple University, Philadelphia, PA, USA
- 5:45 Children's attraction to sweetness and its impact on eating behavior C DIVERT, S ISSANCHOU, S NICKLAUS INRA, UMR1324 CSGA, Dijon, France

POSTERS

6:00 - 8:00 PM

South Convention Lobby

POSTER SESSION II

- 1 17 Foods, feeding and choice
- 18 23 Mothers and children
- 24 31 Central and gut signals
- 32 34 CCK
- 35 Immune
- 36 37 Misc

Park, PA, USA

- P1 Effects of monotonous versus varied ("junk food") high-fat diet on obesity and food motivation
 IJ TYREE, AL TRACY
 Grinnell College. Grinnell, IA, USA
- P2 Does serving larger portions of all items at a meal affect preschool children's vegetable intake?

 SMR KLING, KL KELLER, LS ROE, BJ ROLLS The Pennsylvania State University, University
- P3 Perceived social norms predict changes in self-reported vegetable intake J LIU¹, E ROBINSON², S HIGGS¹, JM THOMAS¹¹School of Psychology, University of Birmingham, Birmingham, United Kingdom, 2Department of Psychology University of Liverpool, Liverpool, United Kingdom
- P4 Effects of a modern 'junk food' or 'natural food' cafeteria diet on flavor-nutrient learning and sweet taste responses in rats KP MYERS, KM PALFRAMAN Bucknell University, Lewisburg, PA, USA
- P5 Selective reduction of dietary carbohydrate versus fat does not influence subsequent ad libitum intake

 SB BERNSTEIN¹, AB COURVILLE¹, J
 PRESSER¹, KD HALL²
 ¹NIH Clinical Center Nutrition Department,
 Bethesda, MD, USA, ²NIH National Institute of Diabetes and Digestive and Kidney Diseases,
 Bethesda, MD, USA
- P6 Dissociation in leptin's modulation of food intake versus thermogenesis in rats offered a high-fat high-sucrose diet KCG DE GIT¹, R PANDIT¹, MCM LUIJENDIJK¹, SE LA FLEUR², RAH ADAN¹¹UMCU, Utrecht, Netherlands, ²AMC, Amsterdam, Netherlands
- P7 Physical properties of lipid emulsions affect short-term food intake and gastrointestinal function in rats

 M ARNOLD¹, S FEDELE¹, N SCHEUBLE³, H PARKER², L DIAN⁴, P FISCHER³, A STEINGOETTER², W LANGHANS¹¹Physiology and Behavior Laboratory, ETH Zurich, Switzerland, ²Division of Gastroenterology and Hepatology, University Hospital Zurich, Switzerland, ³Laboratory of Food Process Engineering, ETH Zurich, Switzerland, ⁴Institute for Biomedical Engineering, ETH Zurich, Switzerland

P8	Enhanced glycolysis mediates the oleic
114	acid (OA)-induced stimulation of glucagon
	like peptide 1 (GLP-1) secretion from
	enteroendocrine cells
	R CLARA, W LANGHANS, A MANSOURI
	Physiology and Behavior Laboratory, ETH, Zürich,
	Switzerland

P9 Mice do not always choose cheap food
115 DM MINAYA, R HELLER, LL HINTENLANG, KL
ROBERTSON, NE ROWLAND
University of Florida, Gainesville, FL, USA

P11 Diurnal changes in ingestive behavior:
116 Monitoring food "Micro-Intake" events in mice
provides essential information
J LIGHTON¹, A MOELICH²

¹Sable Systems International, Las Vegas, NV,
USA, ²Sable Systems Europe, Berlin, Germany

P12 How Does Calorie Information Affect Women's Food Choices and Intake?
CA FORESTELL, JC KNAPP, B KRUJA, KM OBERG, LA PIULSON The College of William & Mary, Williamsburg, VA, USA

P13 The influence of eating frequency on appetite during weight loss
CC WOLZ, HA RAYNOR
Department of Nutrition, University of Tennessee, Knoxville. TN. USA

P14 Galanin is upregulated by acute high fat diet intake

E ENGLAND¹, L GAN², DL HARTZELL³, JY YANG³, S AMBATI³, RB MEAGHER⁴, CA BAILE³
¹Neuroscience Division, Biomedical and Health Sciences Institute, University of Georgia, Athens, GA, USA, ²Veterinary Medicine Department, Southwest University, P. R., China, ³Department of Animal & Dairy Science, University of Georgia, Athens, GA, USA, ⁴Department of Genetics, University of Georgia, Athens, GA, USA

P15 Central MCH receptor signaling increases food impulsivity and consummatory aspects of feeding independent of palatability TM HSU, JA CHEUNG, SE KANOSKI University of Southern California, Los Angeles, CA, USA

P16 Identifying Diet-congruent Beverages in 121 Dieters and Non-dieters LJ NOLAN¹, MM HETHERINGTON² ¹Wagner College, Staten Island, NY, USA, ²University of Leeds, Leeds, United Kingdom

P17 Thylakoid consumption reduces wanting and liking for palatable food - treatment effects are correlated to a reduced food intake EL STENBLOM, C MONTELIUS, E EGECIOGLU, C ERLANSON-ALBERTSSON Department of Experimental Medical Science, Appetite Regulation Unit, Faculty of Medicine, Lund University, Lund, Sweden

P18 Benefits of a school based nutritionintervention program in Appalachia: Parent reports and student outcomes. AM DOERFLINGER, LD ROBERTS Marietta College, Marietta, OH, USA

P19	Linking mother's perception of her weight
124	history to psychological attributes and child
	fooding

S BOUHLAL¹, L ABRAMS¹, CM MCBRIDE², S PERSKY1

¹Social and Behavioral Research Branch, NIH/ NHGRI, Bethesda, MD, USA, ²Emory University Rollins School of Public Health, Atlanta, GA, USA

P20 Anxious adolescents reporting poor quality of maternal care have alterated food intake 125 according to cortisol levels

TD MACHADO¹, R DALLE MOLLE ¹, RS REIS¹, DM RODRIGUES², AB MUCELLINI² BC ERGANG³, AC CUNHA³, R TOAZZA², GG MANFRO², PP SILVEIRA¹

¹Department of Pediatrics, Porto Alegre, Brazil, ²Department of Psychiatry, Porto Alegre, Brazil, ³Department of Nutrition, Porto Alegre, Brazil

- P21 126 Maternal obesity regulates taste receptor expression in the heart of rat offspring MJ MORRIS, G HARDY, H BAHARI, M RAIPULA Pharmacology, School of Medical Sciences UNSW Australia, Sydney, Australia
- Intrauterine growth restriction (IUGR) can 127 change the hedonic response to sweet taste role of the mu opioid receptors in the nucleus accumbens DP LAUREANO¹, RD MOLLE², MB ALVES¹, C LUFT⁴, M DESAI³, MG ROSS³, PP SILVEIRA^{1,2} ¹PPG Neurociências UFRGS, Porto Alegre, Brazil, ²PPGSCA-HCPA-UFRGS, Porto Alegre, Brazil, ³Dept of Ob/Gyn, Harbor-UCLA Med Ctr, Torrance, CA, USA, 4PUCRS, Porto Alegre, Brazil
- P23 Birth weight predicts feeding behavior in

siblings 128 M AGŘANONIK⁴, H GAUDREAU², M J MEANEY¹, R D LEVITAN², P P SILVEIRA³ ¹McGill University, Montreal, QC, Canada, ²University of Toronto, Toronto, ON, Canada, 33Universidade Federal do Rio Grande do Sul, Porto Alegre, Brazil, ⁴Fundação de Economia e Estatística, Porto Alegre, Brazil

P24 GLP-1 receptors in lateral septum influence 129 sucrose and corn oil intake

SJ TERRILL, CM DELLAMORTE, N LILLY, DL WILLIAMS

Psychology Department & Program in Neuroscience, Florida State University, Tallahassee, FL, USA

- P25 Ghrelin signaling is not essential for sugar or 130 fat conditioned flavor preferences in mice A SCLAFANI, K TOUZANI, K ACKROFF Brooklyn College of CUNY, Brooklyn, NY, USA
- P26 Central ghrelin administration increases food 131 foraging/hoarding that is blocked by GHSR1a antagonism and attenuates PVH neuronal activation MA THOMAS^{1,2}, TJ BARTNESS^{1,2}

¹Department of Biology, Georgia State University, Atlanta, GA, USA, ²Center for Obesity Reversal, Georgia State University, Atlanta, GA, USA

P27 Investigation into the Central Actions of 132 Adropin LM STEIN, GLC YOSTEN, WK SAMSON Saint Louis University, St. Louis, MO, USA

P36

P28 133 Inhibition of c-Jun N-terminal Kinase Suppresses Feeding and Reduces Body Weight S GAO, P LOGRASSO Department of Molecular Therapeutics, The

Scripps Research Institute, Jupiter, FL, USA

Novel ghrelin receptor inverse agonists as 141 possible therapeutics against overweight and metabolic disease K ABEGG¹, M HUTTER¹, C PIETRA², C GIULIANO², TA LUTZ¹, T RIEDIGER¹ ¹University of Zurich, Institute of Veterinary Physiology, Zurich, Switzerland, ²Helsinn SA, Research and Preclinical Development Dept, Lugano, Switzerland

P29 A modified Roux-en-Y gastric bypass procedure alters the feeding responses evoked 134 by exogenous gastrin releasing peptides MC WASHINGTON¹, KE WILLIAMS¹, J BERGER², RE JOHNSON¹, T JOHNSON-ROUSE¹, C FREEMAN¹, A HARRISON¹, J HEATH¹, R SEELEY2, AI SAYEGH1 ¹Tuskegee University, Tuskegee, AL, USA, ²University of Cincinnati, Cincinnati, OH, USA

P30 Regulation of food intake by leptin receptors located in the raphe nuclei CA GRILLO, MC RISHER, VA MACHT, AL 135 BUMGARDNER, CE PETYAK, LP REAGAN, JR **FADEL** Pharmacology, Physiology & Neuroscience Department, School of Medicine, University of South Carolina, Columbia, SC, USA

- P31 Operant licking for intragastric sugar: 136 differential reinforcing actions of glucose, sucrose and fructose K ACKROFF, A SCLAFANI Brooklyn College of CUNY, Brooklyn, NY, USA
- P32 Physiological basis of sensory-enhancement of satiety: a role for CCK and PP MR YEOMANS¹, R RE², H LUNDHOLM², L 137 CHAMBERS3 School of Psychology, University of Sussex, Brighton, United Kingdom, 2Leatherhead Food Research, Leatherhead, United Kingdom, 3British Nutrition Foundation, London, United Kingdom
- P33 CCK response deficiency in synphilin-1 transgenic mice WW SMITH¹, D YANG¹, M SMITH², P CHOI², A MOGHADAM ², T LI¹, TH MORAN² 11Department of Pharmaceutical Sciences, University of Maryland School of Pharmacy, Baltimore, MD, USA, ²2Department of Psychiatry, Johns Hopkins University School of Medicine, Baltimore, MD, USA
- Effect of cholecystokinin-8 and cholecystokinin-33 on meal size and intermeal P34 139 interval and the gastrointestinal site of action regulating them in diet-induced obese rats maintained on normal rat chow MC WASHINGTON, KE WILLIAMS, AI SAYEGH Tuskegee University, Tuskegee, AL, USA
- P35 Don't Eat Yourself Sick: Obesity is Associated 140 with Compromised Immunity AM MAGNUSON, A BOOTH, J FOUTS, D REGAN, S DOW, MT FOSTER Colorado State University, Fort Collins, CO, USA
- P37 The tools we use to eat: do they affect the 142 amount we consume? D.A. LEVITSKY Cornell University, Ithaca, NY, USA

SYMPOSIUM

8:30 - 10:30 AM

Grand 1

SYMPOSIUM 5:THE MILE HIGH CLUB: CANNABIS AND ENDOCANABINOID EFFECTS ON INGESTIVE BEHAVIOR

Chair: Nick DiPatrizio

 8:30 Medical Marijuana: A Feeding frenzy
 143 RW FOLTIN, M HANEY
 NYSPI/Columbia University Medical Center, New York, NY, USA

9:00 Disruption of endocannabinoid signaling decreases ingestive behaviors and curtails accumbal encoding of food related cues JF CHEER University of Maryland School of Medicine, Baltimore, MD, USA

9:30 Novel insights on the role of the

endocannabinoid system in the regulation of energy balance
 D COTA^{1,2}
 INSERM U862, Bordeaux, France, ²University of Bordeaux, Bordeaux, France

10:00 Intestinal lipid-derived signals that sense

146 **dietary fat**D PIOMELLI

University of California, Irvine, CA, USA

ORAL SESSION

8:30 - 10:30 AM

Grand 2

ORAL 6: PORTION AND MEAL CONTROL

Chair: Laurence Nolan

8:30 Portion size influences meal intake in the pastoralist Samburu people of Kenya KP MYERS¹, R DEAN², JM BRUNSTROM², PJ ROGERS², JD HOLTZMAN³

¹Bucknell University, Lewisburg, PA, USA, ²University of Bristol, Bristol, United Kingdom, ³Western Michigan University, Kalamazoo, Ml, USA

8:45 Energy compensation and dietary learning:
148 A study of Samburu pastoralists from North-

Central Kenya.

JM BRUNSTROM¹, PJ ROGERS¹, KP MYERS²,
JD HOLTZMAN³

Living British British United Kingdom

¹University of Bristol, Bristol, United Kingdom, ²Bucknell University, Lewisburg, PA, USA, ³Western Michigan University, Kalamazoo, MI, USA

9:00 Long-term effect of water loading on food intake.
149 NJ MCKAY, IV BELOUS, AM ZIEGLER, JL TEMPLE
University at Buffalo, Buffalo, NY, USA

GLP-1 receptors in the dorsomedial

150 hypothalamus (DMH) are essential for the regulation of energy balance SJ LEE¹, KG PETTERSEN¹, JP KRIEGER ¹, M ARNOLD¹, R CLARA¹, N JEJELAVA¹, MR HAYES², W LANGHANS

¹Physiology and Behavior Laboratory, ETH, Zurich, Switzerland, ²Department of Psychiatry, University of Pennsylvania, Philadelphia, PA, USA

9:30

Is it good to have options? The effect of offering a choice of portion sizes on intake at a meal FM ZURAIKAT¹, LS ROE¹, GJ PRIVITERA², BJ 151 ROLLS¹ ¹Penn State University, University Park, PA, USA, ²St. Bonaventure University, St. Bonaventure, NY, USA

9:45 Amylin and leptin interact in the control of eating

T.A LUTZ, S DUFFY, C.N BOYLE Institute of Veterinary Physiology, University of 152 Zurich, Zürich, Switzerland

10:00 Do distracted mothers overfeed their infants?

RB GOLEN¹, AK VENTURA² **15**3 ¹Drexel University, Philadelphia, PA, USA, ²California Polytechnic State University, San Luis Obispo, CA, USA

NITA AWARD WINNER: GLP-1 receptor 10:15

154 signaling in the lateral dorsal tegmental area is physiologically required for the regulation of food intake and body weight
DJ REINER¹, SE KANOSKI², MR HAYES1
¹University of Pennsylvania, Philadelphia, PA, USA, ²University of Southern California, Los Angeles, CA, USA

BREAK

10:30 - 11:00 AM

South Convention Lobby

MARS LECTURE

11:00 - 12:00 PM

Grand 1

Chair: Matt Hayes

155 Mechanisms of Compulsive Eating PAUL KENNY

Icahn School of Medicine at Mount Sinai NY

WORKSHOP

12:15 - 1:45 PM

Grand 2

CAREER DEVELOPMENT WORKSHOP

Chair: Megan Dailey

No faculty attendees please. This session provides an environment for students and post-docs to openly discuss issues related to their career development. Please note that lunch is NOT provided.

SYMPOSIUM

4:00 - 6:00 PM

Grand 1

SYMPOSIUM 6: PHARMACOTHERAPIES FOR METABOLIC DISORDERS: CURRENT STATUS AND FUTURE DIRECTIONS

Chair: Marc Andre Cornier

4:00 The Use of Nonhuman Primates For Key Insights Into the Pathogenesis and Treatment Of Obesity And Diabetes Kevin Grove Oregon Health & Science University, OR, US
 4:30 Could peripheral taste-signaling proteins

be exploited as targets for anti-obesity pharmacotherapeutic intervention? RK PALMER Opertech Bio, Inc., Philadelphia, PA, USA

5:00 Targeting the Alpha Cell in Hypoglycemia WK SAMSON, LM STEIN, GLC YOSTEN Saint Louis University, St. Louis, MO, USA

5:30 Nutrient Sensing Through Metabolite
 Receptors In The Enteroendocrine System
 T SCHWARTZ. University of Copenhagen
 Denmark

ORAL SESSION

4:00 - 6:00 PM

Grand 2

ORAL 7: LEARNING AND CONDITIONING

Chair: Kevin Myers

 4:00 Obesity-prone rats show enhanced cuetriggered food seeking RC DERMAN, CR FERRARIO University of Michigan, Ann Arbor, MI, USA

4:15
162
NITA AWARD WINNER: Systemic
administration of the orexin/hypocretin
antagonist SB-334867 attenuates Pavlovian
cue-food conditioning
SE KEEFER, S COLE, GD PETROVICH
Boston College, Chestnut Hill, MA, USA

4:30
The orexin/hypocretin antagonist SB-334867
impairs cue-induced feeding and increases
Fos expression in prefrontal cortex and
thalamus
S COLE, HS MAYER, GD PETROVICH
Psychology, Boston College, Chestnut Hill, MA,
USA

4:45
 The number and type of palatable foods associated with a context affect the selectivity of cue-potentiated feeding.
 MD KENDIG, RA BOAKES, LH CORBIT School of Psychology, University of Sydney, Sydney, Australia

5:00 Functional brain changes associated with 165

weight loss S NESELILER^{1,2}, W HU², M ZACCHIA^{1,2}, K LARCHER², S SCALA¹, M LAMARCHE³, S STOTLAND⁴, M LAROQUE⁴, E MARLISS^{1,3}, A DAGHER^{1,2}

¹McGill University, Montreal, QC, Canada, ²McConnell Brain Imaging, Montreal Neurological Institute, Montreal, QC, Canada, 3McGill Nutrition and Food Science Centre, Montreal, QC, Canada, ⁴ Motivation Weight Management Clinic, Montreal, QC, Canada

5:15 Self-reported responsivity and

166 psychophysiological responding during a food exposure task B MATHESON¹, C CAMACHO², A BRADEN¹, V RISBROUGH¹, KN BOUTELLE¹¹University of California, San Diego, La Jolla, CA, USA, ²Hawaii Center for Children and Families, Kailua, HI, USA

5:30 Neural & behavioral consequences of daily 167 high-sugar juice consumption: An fMRI experiment K.S. BURGER, G WEAVER University of North Carolina, Chapel Hill, NC, USA

5.45Conditioned avoidance of a high fat/high 168 sucrose diet differentially generalizes to orosensory stimuli Y TREESUKOSOL¹, T.H. MORAN^{1,2} ¹Department of Psychiatry & Behavioral Sciences, School of Medicine, Johns Hopkins University, Baltimore, MD, USA, ²Johns Hopkins Global

Obesity Prevention Center. Johns Hopkins University, Baltimore, MD, USA

POSTERS

6:00 - 8:00 PM

South Convention Lobby

POSTER SESSION III

1 -	10	Reward

- 11 20 Learning, Memory & Cognition
- 21 25 Exercise and body weight regulation
- 26 29 **Taste and Odor**
- 30 32 Gut
- 33 34 **Nutraceuticals**
- 35 36Adipose tissue
- 37 Genes and behavior
- Ρ1 Optogenetic inhibition of ventral tegmental 169 area dopamine neurons reduces reward-

seeking G VAN DER PLASSE¹. R VAN ZESSEN¹. MP SMIDT², GMJ RAMAKERS¹, GD STUBER³, RAH ADAN¹

¹Dept Transl Neurosci, Brain Cen Rudolf Magnus, Univ Med Cen, Utrecht, Netherlands, ²Swammerdam Inst Life Sci, Univ of Amsterdam, Amsterdam, Netherlands, ³Psychiatry & Cell Biol and Physiol, Univ of North Carolina, Chapel Hill, NC. UŠA

- P2 Hedonic hunger's relation to neural,
- 170 behavioral & perceptual responses to food stimuli: Evidence from three studies AJ SANDERS, KS BURGER University of North Carolina, Chapel Hill, NC, USA
- P3 Mesotelencephalic and Systemic Ghrelin Signaling in Operant Responding for Food ET BROCKWAY, JA SELVA, PJ CURRIE 171 Dept Psychology, Reed College, Portland, OR, USA
- P4 Body weight is related to striatal response
- 172 to predicted, but not unpredicted milkshake receipt and this relationship is not influenced by baseline cerebral blood flow. AĞ DIFELICEANTONIO^{1,3}, YM NAKAMURA¹, M QIU2, P GEHA1,2, DM SMALL1,2,3 John B Pierce Institute, New Haven, CT, USA,
 - ²Yale School of Medicine, New Haven, CT, USA, ³Max Planck Institute for Metabolism Research, Cologne, Germany
- P5 Brain reward responses to olfactory food 173 cues in obese participants - preliminary fMRI results

HFA ZOON, L VAN GENDEREN, SEM DE BRUIJN, G JAGER, PAM SMEETS, C DE GRAAF, S BOESVELDT Division of Human Nutrition, Wageningen

University, Wageningen, Netherlands P6

Dopaminergic dysfunction, food intake, and physical activity in diet-induced obesity K DEVARAKONDA, DM FRIEND, KD HALL, AV 174 **KRAVITZ**

> National Institute of Diabetes and Digestive and Kidney Diseases, Diabetes, Endocrinology, and Obesity Branch, Bethesda, MD, USA

P7 Sex Differences in Demand for Highly Palatable 175 Food Rewards: Role of Orexin Neurons LR FREEMAN¹, BS BENTZLEY¹, G ASTON-JONES²

¹Medical University of South Carolina, Charleston, SC, USA. ²Rutgers University, Piscataway, NJ, USA

P8 Decreased dorsal striatal response to a palatable milkshake is associated with impaired negative outcome learning in obese/overweight, but not

healthy weight individuals. Y NAKAMURA¹, A DIFELICEANTONIO^{1,3}, P GEHA^{1,2}, D SMALL^{1,2,3}

D SMALL^{1,2,3}
¹The John B. Pierce Laboratory, New Haven, CT, USA, ²Yale University School of Medicine, New Haven, CT, USA, ³Max Planck Institute for Metabolism Research, Cologne, Germany

P9 Molecular inducers of non-homeostatic snack food intake
S KRESS, A HESS, T HOCH, M PISCHETSRIEDER FAU, Erlangen-Nürnberg, Germany

P10 Optogenetic Manipulation of Posterior

- 178 Paraventricular Thalamic Circuits Alters Chocolate Intake KR URSTADT, DA ALI, ER GRANT, NM RABAH, KC BERRIDGE Psych. Dept., Univ. of Michigan, Ann Arbor, MI, USA
- P11 The effect of obesity on hippocampal leptin and 179 spatial memory in the radial arm maze MJ RIEGSECKER, D JAIME GARCIA, AL TRACY Grinnell College, Grinnell, IA, USA
- P12 Partial aberration of oral sensory relay to brain may affect the retrieval of taste-associated memory DY KIM^{1,2}, JY KIM¹, S CHUNG¹, JH KOO², JH LEE¹, JW JAHNG¹

 **Seoul National University School of Dentistry, Seoul, South Korea, **2Dept Brain Science, DGIST, Dae Gu,
- P13 Food odors and attentional bias for visual food cues
 WW ZHUANG, TL SCHROEDER, CA FORESTELL College of William and Mary, Williamsburg, VA, USA

South Korea

- P14 Stress and personality interact to modulate the neural response to food cues
 S NESELILER¹, K LARCHER¹, B TANNENBAUM^{1,2}, M ZACCHIA^{1,2}, J PRUESSNER^{1,3}, A DAGHER^{1,2}

 ¹McGill University, Montreal, QC, Canada, ²Montréal
- ¹McGill University, Montreal, QC, Canada, ²Montréal Neurological Institute, Montreal, QC, Canada,
 ³Douglas Mental Health University Institute, Montreal, QC, Canada
 P15 Integration of Internal and External Cues in the
- 183 Learned Control of Appetitive Behavior S JONES, CH SAMPLE, SL HARGRAVE, TL DAVIDSON American University, Washington, DC, USA
- P16 Western diet intake disrupts learning mechanisms involved in externality
 - 184 involved in externality CH SAMPLE, S JONES, SL HARGRAVE, TL DAVIDSON American University, Center for Behavioral Neuroscience, Washington, DC, USA
- P17
 185
 Effects of chronic sucrose intake on cognitive performance of 3xTg-AD and Non transgenic mice.

 KR GUZMÁN-RAMOS¹², G PACHECO-LóPEZ¹, L
 AYALA-GUERRERO³, F BERMÚDEZ-RATTONI³

 ¹Universidad Autónoma Metropolitana-Lerma, Lerma de Villada, Mexico, ²Universidad Autónoma Metropolitana-Xochimilco, Mexico, Mexico, ³Instituto de Fisiología Celular, Mexico, Mexico

P18 Differences in Physiological Food Cue 186 Reactivity Between Emotional Eaters and Non-**Emotional Eaters**

A BRADEN¹, C CAMACHO², B MATHESON¹, V RISBROUGH¹, KN BOUTELLE¹ ¹University of California, San Diego, CA, USA, ²Hawaii Center for Children and Families, Kailua, HI, USA

P19 **Greater Perceived Ability to Form Vivid Mental** 187 Images in Individuals with High Compared to Low BMI

BP PATEL^{1,2}, K ASCHENBRENNER^{1,2}, D SHAMAH¹, DM SMALL¹⁻⁴

¹The John B. Pierce Laboratory, New Haven, CT, USA, ²Department of Psychiatry, Yale University School of Medicine, New Haven, CT, USA, ³Interdepartmental Neuroscience, Yale University School of Medicine, New Haven, CT, USA, ⁴Department of Psychology, Yale University, New Haven, CT, USA

P20 PhosphoLean reduces impulsivity in heavy drinkers on a Go/No-Go Task
MV BURKE^{1,2}, MJ VAN KOOTEN^{1,2,3}, MG 188 VELDHUIZEN^{1,2}, SS O'MALLEY², DM SMALL^{1,2} ¹JB Pierce Lab, New Haven, CT, USA, ²Yale Univ, New Haven, CT, USA, ³Univ of Groningen, Groningen, Netherlands

P21 Assessing macronutrient diet preference 189 in rats selectively bred to run long vs short distances

J. R LEE^{1,2,3}, J. E MUCKERMAN¹, B. N WAHLE¹, A. M WRIGHT¹, F. W BOOTH⁴, M. J WILL^{1,2,3} ¹Department of Psychological Sciences, Columbia, MO, USA, 2Christopher Bond Life Sciences Center, Columbia, MO, USA, 3Interdisciplinary Neuroscience Program, Columbia, MO, USA, ⁴Department of Biomedical Sciences, Columbia,

P22 Short-term Weight Variability Predicts Weight 190 Gain AF MURATORE, EH FEIG, SR WINTER, MR LOWE Drexel University, Philadelphia, PA, USA

P23 Energetic cost of a running wheel: 191 Implications for exercise-based weight loss interventions TJ O'NEAL1, DM FRIEND1, AV KRAVITZ1,2 ¹National Institute of Diabetes and Digestive and Kidney Diseases, National Institutes of Health, Bethesda, MD, USA, ²National Institute on Drug Abuse, National Institutes of Health, Bethesda,

MD, ÚSA P24 The effects of CRF receptor antagonists on 192 food intakes and choice in sedentary and

wheel running rats N-C. LIANG¹, T.H. MORAN² ¹Psychology, University of Illinois-Urbana Champaign, Champaign, IL, USA, ²Psychiatry and Behavioral Sciences, Johns Hopkins University, Baltimore, MD, USA

P25 Body composition changes following sugar 193 and food restriction with exercise in a sugarsweetened beverage rat model of obesity KB ROONEY, K MILLS, MD KENDIG, SI MARTIRE, RA BOAKES University of Sydney, Sydney, Australia

- P26 Continuous recording of blood glucose reveals
 194 that taste modulates the blood glucose response
 to a gavaged glucose load
 R.L. POOLE, H.T. ELLIS, M.G. TORDOFF
 Monell Chemical Senses Center, Philadelphia, PA,
 USA
- P28 Cannabinoid modulation of sweet taste perception
 195 and liking

G JAGER, S DE BRUIJN, R WITKAMP, C DE GRAAF Wageningen University, Wageningen, Netherlands

P29 Study on the Processing of Binary Odor Mixtures
196 in Rat: Implication for the Complex Food Odor
Perception
T ONUMA, N SAKAI

Department of Psychology, Tohoku University, Sendaishi, Miyagi, Japan Nutrient induced changes in intestinal epithelial

- P30 Nutrient induced changes in intestinal epithelial
 197 crypt and stem cell metabolism
 W ZHOU, MJ DAILEY
 University of Illinois at Urbana-Champaign, Urbana, IL, USA
- P31 Diet-induced obesity is associated with a change in the intestinal microbiota, activation of microglia, and reorganization of the nucleus of the solitary tract.

 EM COOPER², AC VAUGHN², PM DILORENZO³, JL O'LOUGHLIN⁴, ME KONKEL⁴, JH PETERS², K CZAJA¹

 ¹VBDI, University of Georgia, Athens, GA, USA, ²IPN, Washington State University, Pullman, WA, USA, ³Dept of Psychology, Binghamton University, Binghamton, NY, USA, ⁴SMB, Washington State University, Pullman, WA, USA
- P32 Effect of diet on the number and differentiated type of intestinal epithelial cells
 KA MCGEEVER, EP RETZBACH, MJ DAILEY
 University of Illinois at Urbana-Champaign, Urbana, IL, USA
- P33 Green Coffee Extract did not affect BW, BMI, Waist
 200 Circumference, BP or Basel Plasma Insulin, but
 appears to Improve Insulin Sensitivity in Obese
 People
 TR BONO¹, DM SURINA-BAUMGARTNER¹, G
 MACGREGOR¹, W LANGHANS²
 ¹UAH, Huntsville, AL, USA, ²ETH Zürich, Zurich,
 Switzerland
- P34 The Myth of the Anti-Obesity Effect of Garcinia Cambogia
 HM MURPHY, CH WIDEMAN
 Neuroscience Program, John Carroll University,
 University Heights, OH, USA
- P35 Brown Adipose Tissue (BAT) Sensory Innervation
 Monitors Lipolysis
 V.A. RYU, T.J. BARTNESS
- Georgia State University, Atlanta, GA, USA
 Protective Effects of Subcutaneous Adipose
 Tissue: Role as the "Metabolic Sink"
 A BOOTH, A MAGNUSON, M PAGLIASSOTTI, Y WEI,
 D WANG, MT FOSTER
 Food Science and Human Nutrition, Colorado State
 University, Fort Collins, CO, USA
- P37
 204
 Receptivity to concepts linking genes and eating behaviors
 S BOUHLAL¹, CM MCBRIDE², S PERSKY¹
 ¹Social and Behavioral Research Branch, NIH/
 NHGRI, Bethesda, MD, USA, ²Emory University
 Rollins School of Public Health, Atlanta, GA, USA

SATURDAY, JULY 11

SYMPOSIUM

8:30 - 10:30 AM

Grand 1

SYMPOSIUM 7: UNDERSTANDING FOOD CHOICE

Chair: Jeff Brunstrom

8:30 Food choice in children: the past, the present, the future S CARNELL Johns Hopkins University, Baltimore, MD, USA

9:00 The brain's response to the choice to consume saturated fat and liquid sugar SE LA FLEUR AMC, Amsterdam, Netherlands

9:30 Gastric Bypass-Induced Changes in Food
207 Selection – Roles of Taste and Experience
CM MATHES¹, CW LE ROUX², AC SPECTOR¹
¹Dept. of Psychology, Florida State University,
Tallahassee, FL, USA, ²Diabetes Complications
Reseach Centre, School of Medicine, University
College Dublin, Dublin, Ireland

10:00
New insights on food choice: from neurocognitive mechanisms to real-life meals M ALONSO-ALONSO
Laboratory of Bariatric and Nutritional Neuroscience, Beth Israel Deaconess Medical Center, Harvard Medical School, Boston, MA, USA

ORAL SESSION

8:30 - 10:30 AM

Grand 2

ORAL 8: NUTRIENT EFFECTS ON BRAIN FUNCTION

Chair: Stephanie Fulton

8:30
NITA AWARD WINNER: Western Diet Exposure
Increases Permeability in a Model Blood-Brain
Barrier
SL HARGRAVE, KL DECICCO-SKINNER, S
JONES, CH SAMPLE, TL DAVIDSON
Center for Behavioral Neuroscience, American
University, Washington, DC, USA

8:45
210
Pre-existing and diet-induced alterations in nucleus accumbens function in preclinical models of obesity.
CR FERRARIO, MF OGINSKY
University of Michigan Medical School, Ann Arbor, MI, USA

9:00 Reduced sensory-evoked activity of locus coeruleus-norepinephrine neurons following dietary-induced binge eating and relationship to NPY

BL YEOMANS, CY YANG, JL VERPEUT, NT BELLO

Rutaers. The State University of NJ. New

Brunswick, NJ, USA

SATURDAY, JULY 11

- 9:15
 212
 Sucrose-induced plasticity in the basolateral amygdala in a 'comfort' food paradigm AEB PACKARD¹, S Dl², S FOURMAN¹, S GHOSAL¹, AE EGAN¹, JG TASKER², YM ULRICH-LAl¹
 ¹University of Cincinnati, Cincinnati, OH, USA, ²Tulane University, New Orleans, LA, USA
- 9:30
 213
 Dietary Modulation of Striatal D2 Receptor
 Binding Potential and Stress Responses in
 Adult Female Macaques
 CA SHIVELY, MA NADER, SR JONES, SE APPT,
 TC REGISTER
 Wake Forest School of Medicine, Winston-Salem,
 NC. USA
- 9:45
 214

 With potent motor side effects
 S FEDELE, M ARNOLD, J KRIEGER, M KLARER, U MEYER, W LANGHANS, A MANSOURI
 Physiology and Behavior Laboratory, ETH Zurich, Zurich, Switzerland
- 10:00
 215

 NITA AWARD WINNER: Weighing the Evidence: Variance in Brain Responses to Milkshake Receipt is Predictive of Feeding Behavior

 NB KROEMER^{1,2}, X SUN^{1,2}, MG VELDHUIZEN^{1,2}, AE BABBS¹, IE DE ARAUJO^{1,2}, DM SMALL^{1,2}

 1The John B. Pierce Laboratory, New Haven, CT, USA, ²Yale University, New Haven, CT, USA
- 10:15
 Brain fatty acid and ketone sensing and the regulation of food intake in DIO and DR rats C LE FOLL¹, A.A DUNN-MEYNELL², B.E LEVIN¹.²

 ¹Dept Neurology and Neurosciences, NJ Medical School, Newark, NJ, USA, ²VA Med. Ctr, East Orange, NJ, USA



SATURDAY, JULY 11

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10:30 - 11:00 AM

South Convention Lobby

Grand 1

MARS LECTURE

11:00 - 12:00 PM

Chair: Tim Moran

11:00 Shades of White: The Regulation of Fat

217 Distribution and Function

SUSAN FRIED

Boston University, Boston, MA, USA

2:30 - 4:15 PM

Grand 1

AWARDS SESSION

Chairs: Tanja Kral, Scott Kanoski, Linda Rinaman

2:30 Hoebel Prize for Creativity

218 Barbara Rolls

Pennsylvania State University

3:05 Alan N. Epstein Research Award

219 Dana Small

Yale School of Medicine, The John B Pierce Laboratory

3:40 Distinguished Career Award

220 Edward Stricker

University of Pittsburgh

MEETING

4:15 - 5:15 PM

Grand 1

BUSINESS MEETING

Chair: Alan Watts

BANQUET

7:00 - 12:00 AM

Grand 1

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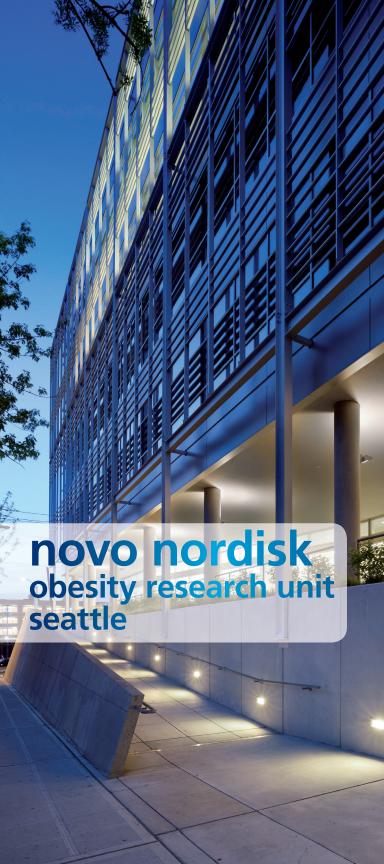
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novo nordisk demonstrating commitment to obesity care

As Novo Nordisk works to expand its role in advancing obesity care for the nearly 80 million adults who struggle with this disease, the company last year announced the opening of a new research unit in Seattle, Washington. The Obesity Research Unit is led by Dr. Kevin Grove, a renowned endocrinologist specializing in obesity and health-related quality of life, and will be housed within the Novo Nordisk Research Center, which was founded in 2009. The shared premises will foster synergies between all of the research and development functions of the center, including the type 1 diabetes research currently underway.

The unit began work in 2014, and will expand to 60 research staff by 2016. Recruiting experts from around the world from industries, such as academia, biotech, and pharmaceutical, Novo Nordisk is committed to building a multidimensional work force that demonstrates a broad range of skills and expertise. Globally, approximately 300 employees are working in obesity research and development at Novo Nordisk.

Harnessing the right expertise to achieve success

To ensure success of the Obesity Research Unit, we welcome renowned scientists to join us to lead the Obesity Research group and efforts, working in close partnership with academia and biotech to drive scientific excellence. Known as an innovation hub, Seattle offers a plethora of talent and invaluable resources in research and development, as well as a local mind-set oriented toward collaboration with both public and private organizations to help advance new target finding and drug development activities.

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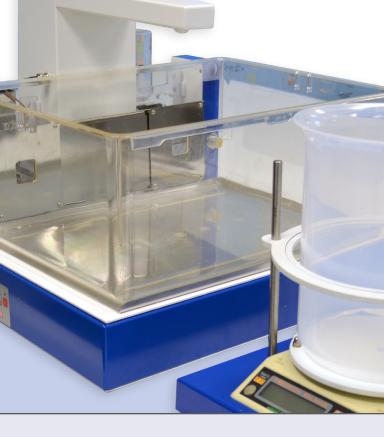


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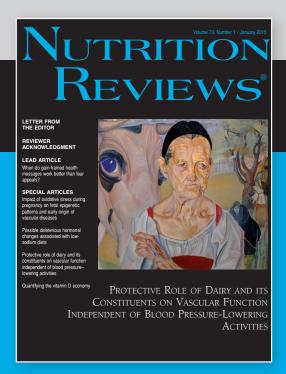
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