



10TH SWISS WINTER CONFERENCE

on

INGESTIVE BEHAVIOR

St. Moritz

Switzerland

17 February – 21 February 2019

ACKNOWLEDGEMENTS

The organizers gratefully acknowledge:

Research Diets, Inc.

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for a generous donation

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TSE Systems for a generous donation and for sponsoring a travel award for the outstanding early postdoc presentation at the 2019 Meeting

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&

**The American Journal of Physiology:
Regulatory, Integrative and Comparative Physiology**

Willis K. Samson, Editor-in-Chief

<http://ajpregu.physiology.org/>

AJP-RICP for sponsoring travel awards for the outstanding postdoctoral or fellow presentation; AJP-RICP will also invite some speakers to prepare mini-reviews based on their presentations

PROGRAM

10th Swiss Winter Conference on Ingestive Behavior

17 February – 21 February 2019

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Organizers

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Registration and opening reception on Saturday are in
the Hotel Lobby near the Aula

Scientific sessions are in the Hannes Reimann-Saal

Afternoon coffee and cake are in the Stüva Restaurant

Dinners are in various Hotel's restaurants, as described below

SCHEDULE

SUNDAY 17.02.19

16.00 **Registration** in the Aula Lobby

18.00 **Greeting Reception** in the Aula Lobby

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MONDAY 18.02.19

08.00 **Welcome & Introduction**

Thomas Lutz

08.10 – 11.00 **Session #1, Body Weight Regulation**

Hägg, Jansson, Palsdottir, Monfared, Westerterp, Raben

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17.00 -19.30 **Session #2, Amylin**

Zakariassen, Boccia, Gamakharia, Lutz

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TUESDAY 19.02.19

08.00 – 11.00 **Session #3, Amylin, Development**

Coester, Lundh, LeFoll, Croizier, Boyle

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17.00 – 19.30 **Session #4, Peptides, Taste and Metabolic Sensing**

Moran, Hayes, Ritze, Tups, Berthoud

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WEDNESDAY 20.02.19

08.00 – 11.00 **Session #5, Peptides and other factors**

Samson, Olszewski, Kotz, Hultman, Läger

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17.00 – 19.30 **Session #6, Cytokines, plasticity, cannabinoids**

Anesten, Picard, Schürmann, Denis, Cota

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THURSDAY February 21.02.19

08.00 – 11.00 Session #7, Miscellaneous
Fulton, Edwards, Gero, Bueter, Sjoedin

11.30 Check out and departure

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Farewell !

Auf Wiedersehen !

Uf Wiederluege !

Sin seveser !

Arrivederci !

Au Revoir !

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ABSTRACTS

Interleukin-6 (IL-6) in the central amygdala is bioactive and increased by glucagon-like peptide-1 (GLP-1) receptor activation.

Fredrik Anesten¹, Adrià Dalmau Gasull¹, Jennifer E. Richard^{1,2}, Imre Farkas^{3,4}, Devesh Mishra^{1,2}, Lily Taing^{1,2}, Fu-Ping Zhang⁵, Matti Poutanen⁵, Vilborg Palsdottir¹, Zsolt Liposits^{3,4}, Karolina P. Skibicka^{1,2}, John-Olov Jansson¹

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The role of gut hormones in the beneficial effects of bariatric surgeries

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Amylin's action on CGRP and DBH neurons in the lateral parabrachial nucleus

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Exploring rodent models of maternal obesity and its effects on the metabolic health of the dam

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Predictors of a Healthy Eating Disorder Examination-Questionnaire (EDE-Q) Score 1 Year After Bariatric Surgery

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Amylin Signalling in POMC Neurons Controls Energy Metabolism and Activity

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Feeding and metabolic consequences of genetic exclusion of CB1 receptors from mitochondria

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Synapse formation in hypothalamic neurons: influence of postnatal overnutrition

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Fasting induces astroglial plasticity in the olfactory bulb glomeruli of rats: evidence for a role of astrocytes in the sensory regulation of food intake

Isabelle **DENIS**, Virginie DAUMAS-MEYER, Gaëlle CHAMPEIL-POTOKAR, Catherine CHAUMONTET, Patrice CONGAR

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REVISITING THE ROLE OF THE DORSAL VAGAL COMPLEX IN SODIUM APPETITE

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Neural circuits and neuroimmune mechanisms underlying mood deficits in obesity

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The Role and Regulation of Amylin Synthesis in the Brain

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Microstructural analysis of liquid lunch intake after Roux-en-Y gastric bypass – interim results at 3-months of an exploratory prospective controlled study

Daniel Gero, M.D.¹, Balint File, MSc², Lukas Frick, M.D.¹, Robert E. Steinert, PhD¹, Alan C. Spector, PhD⁴, Marco Bueter, M.D., PhD¹

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Interactions between the gravitostat and the fibroblast growth factor system for the regulation of body weight

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It hurts so good – why do humans like spicy food?

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The central fibroblast growth factor receptor/beta klotho system: comprehensive mapping in *mus musculus* and comparisons to non-human primate and human samples using an automated *in situ* hybridization platform

Karin Hultman¹, Jarrad M. Scarlett^{2,3}, Arian F. Baquero⁴, Anda Cornea⁴, Yu Zhang⁴, Casper B.G. Salinas¹, Jenny Brown², Gregory J. Morton², Erin J. Whalen⁴, Kevin L. Grove⁴, Frank H. Koegler⁴, Michael W. Schwartz², Aaron J. Mercer⁴

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Body weight homeostat that regulates fat mass independently of leptin in rats and mice

John-Olov Jansson¹, Vilborg Palsdottir¹, Daniel Hägg², Erik Schéle¹, Suzanne Dickson¹, Fredrik Anesten¹, Tina Bake¹, Jakob Bellman¹, Maria Johansson¹, Sara Windahl², Claes Ohlsson²

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Chemogenetic activation of orexin neurons ameliorates aging-induced changes in behavior, spontaneous physical activity and energy expenditure

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Funding source: This work was supported by the Department of Veterans Affairs ([5I01RX000441-04](#)) and the National Institute of Health ([5R01DK100281-03](#)).

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Effects of dietary protein and methionine restriction on development of type 2 diabetes by FGF21 secretion.

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Endogenous amylin contributes to the birth of microglial cells in the arcuate nucleus of the hypothalamus and the area postrema during embryogenesis

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Mapping neuronal activation patterns after acute dosing of a non-selective amylin analogue in rodent obesity models

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The amylin receptor agonist salmon calcitonin reduces eating and body weight in mice that do not carry specific amylin-1 or amylin-3 receptors

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Prevalence of obesity and knowledge of girls and the effects of behavioral nutrition and their relationship with parents' lifestyle

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Roux-en Y Gastric Bypass and Vertical Sleeve Gastrectomy Differentially Affect Taste Preferences for and Neural Responses to Tastants

Moran, TH, Smith KR, Papantoni A, Veldhuizen MG, Carnell S, Steele KE.

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Anorexigenic properties of oxytocin in the hunger-satiety continuum

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The gravitostat regulates fat mass in obese male mice while leptin regulates fat mass in lean male mice

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A genetic screen identified hypothalamic IL-1R signaling as a regulator of insulin-induced glucagon secretion

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PREVIEW - Lifestyle intervention for prevention of type-2 diabetes in > 2,200 adults: Results from a 3-year multinational randomised trial comparing 2 diets and 2 exercise strategies

Anne Raben, Mikael Fogelholm, Margriet Westerterp-Plantenga, Ian Macdonald, J Alfredo Martinez, Teodora Handjieva-Darlenska, Gareth Stratton, Maija Lenz-Huttunen, Tony Lam, Jouko Sundvall, Sally Poppitt, Pia Christensen, Thomas M Larsen, Jennie Brand-Miller - on behalf of the PREVIEW consortium.

University of Copenhagen, DK. University of Helsinki, FI. Maastricht University, NL. University of Nottingham, UK. University of Navarra, ES. Medical University of Sofia, BG. University of Swansea, UK. University of Stuttgart, DE. NetUnion, CH. National Institute for Health and Welfare, Helsinki, Finland. University of Auckland, New Zealand. University of Sydney, Australia.

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Central nervous effects of long-term high-sucrose diet as revealed by early gene imaging and [18F]FDG PET/fMRI in response to a glucose challenge

Mario Amend¹, Tudor M. Ionescu¹, Kristian Adamatzky², Gregor Schörk², Manfred Hallschmid^{2,4}, Bernd Pichler¹, **Yvonne Ritze**²

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Connecting the dots: Matching Sites of CART’s Actions and GPR160 Expression

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The impact of cilia-genes on pancreatic islet function

Oliver Kluth¹, Mandy Stadion¹, Pascal Gottmann¹, Heja Aga¹, Ulrika Krus², Charlotte Ling², Jantje Gerdes³, **Annette Schürmann**¹

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Are food preferences altered after weight-loss surgery and is this then important?

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Impact of the saturated fatty acid palmitate on neuronal morphology and function

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Metabolic effects of a controlled 48-h high protein vs. medium protein diet, after 34 months on the respective diets - a PREVIEW respiration chamber study

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Modulation of gene expression in hypothalamic and hindbrain nuclei of obese mice treated with the amylin/calcitonin receptor agonist, salmon calcitonin

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