



***11<sup>TH</sup> SWISS WINTER CONFERENCE***

***on***

***INGESTIVE BEHAVIOR***

**St. Moritz**

**Switzerland**

**15 February – 19 February 2020**

## **ACKNOWLEDGEMENTS**

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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

### *10<sup>th</sup> Swiss Winter Conference on Ingestive Behavior*

**15 February – 19 February 2020**

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### **Organizers**

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Registration and opening reception on Saturday  
are in the Aula Lobby

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

### SATURDAY 15.02.20

**18.00**            **Registration and Apéro** in the Lobby bar

**19.00**            **Dinner** in the Stüva Restaurant

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### SUNDAY 16.02.20

**08.00**            **Welcome & Introduction**  
Thomas Lutz

**08.10 – 11.10** **Session #1, RYGB**  
Alceste, Berthoud, Sjödin, Gero, Ismaeli, Moran

**17.00 – 19.30** **Session #2, Amylin, Reward**  
Lutz, Coester, Gamakharia, Boccia, Fulton

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### MONDAY 17.02.20

**08.10 – 11.00** **Session #3, Obesity**  
Drenowski, Boyle, Erlanson-Albertsson, Ritze, Tups, Holst

**17.00 – 19.30** **Session #4, Anorexia, Cachexia, Metabolic sensing**  
Hurley, Borner, Schraner, Langlet, Labouebe

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### TUESDAY 18.02.20

**08.00 – 11.00** **Session #5, Arcuate function, Inflammation**  
Croizer, Rizwan, Bolborea, De La Serre, Le Foll, Läger

**17.00 – 19.30** **Session #6, BW Regulation, Autonomic/  
metabolic function**  
E. Ravussin, Y. Ravussin, Kotz, Olszewski, Buettner

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**WEDNESDAY 19.02.20**

**08.00 – 10.15** **Session #7, Ingestive behavior, Rhythms, Glucose homeostasis**

Samson, Picard, Knight, Van Couter, Kamstra

**10.30** **Awards**

**11.00** **Check out and departure**

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*Farewell !*

*Auf Wiedersehen !*

*Uf Wiederluege !*

*Sin seveser !*

*Arrivederci !*

*Au Revoir !*

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## ABSTRACTS

### **Microstructure of ingestive behavior and weight loss in patients one year after RYGB**

**Daniela Alceste, M.Sc.**<sup>1</sup>, Ivana Raguz, M.D, Daniel Gero, M.D.<sup>1</sup>, Marco Bueter, M.D., PhD<sup>1</sup>

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### **Insulin-like growth factor binding protein-2 is required for the full beneficial effects of RYGB in high-fat diet-induced obese mice**

**Hans-Rudolf Berthoud**<sup>1</sup>, Michael Mumphrey<sup>1</sup>, R. Leigh Townsend<sup>1</sup>, Zheng Hao<sup>1</sup>, Frédéric Picard<sup>2</sup>

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### **AP to LPBN noradrenaline signaling mediates amylin's and sCT's hypophagic and body weight suppressive effects in male rats**

**Lavinia Boccia**, Christelle Le Foll, Thomas A. Lutz

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### **Hypothalamic tanycytes generate acute hyperphagia through activation of the arcuate neuronal network.**

**Matei Bolborea**, Eric Pollatzek, Heather Benford, Tamara Sotelo-Hitschfeld and Nicholas Dale.

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**GDF15 induces anorexia through nausea and emesis**

**Tito Borner**<sup>1</sup>, Evan D. Shaulson<sup>1</sup>, Misgana Y. Ghidewon<sup>2</sup>, Amanda B. Barnett<sup>1</sup>, Charles C. Horn<sup>3,4,5</sup>, Robert P. Doyle<sup>6,7</sup>, Harvey J. Grill<sup>2,9</sup>, Matthew R. Hayes<sup>1,8,9</sup>, Bart C. De Jonghe<sup>1,9</sup>

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**Evaluating the relationship between maternal obesity and postpartum behavioral profile in a polygenic rat model of obesity**

**Christina N. Boyle**, Andrea Leuthardt, and Thomas A. Lutz

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**New approaches to monitor autonomic neurotransmitter release and adrenergic signaling in peripheral organs and the functional role of unrestrained sympathetic outflow in overnutrition and aging.**

**Christoph Buettner** and Kenichi Sakamoto, Department of Medicine, Diabetes, Obesity, and Metabolism Institute, Icahn School of Medicine at Mount Sinai, New York, NY, USA

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## **Viral depletion of calcitonin receptors in the area postrema: A proof-of-concept study**

**Bernd Coester**<sup>1</sup>, Christelle Le Foll<sup>1</sup>, Thomas A. Lutz<sup>1</sup>

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## **EphrinB1 modulates glutamatergic synaptic inputs onto POMC neurons and controls glucose homeostasis**

Manon Gervais, Alexandre Picard, Bernard Thorens, **Sophie Croizier**

Center for Integrative Genomics, University of Lausanne, Lausanne, Switzerland

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## **Dietary behaviors, obesity, and the built environment**

**Adam Drewnowski**

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## **The management of overweight and obesity in patients with psychotic disorders**

**Charlotte Erlanson-Albertsson**<sup>a</sup>, Kajsa Lycken<sup>b</sup>

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**Nucleus accumbens D1R neuronal activity differentially modulates anxiety and depressive-like behaviors elicited by prolonged saturated high-fat feeding**

Léa Décarie-Spain<sup>1</sup>, David Lau<sup>1</sup>, Cécile Hryhorczuk<sup>1</sup>, Thierry Alquier<sup>1</sup>, Guillaume Ferreira<sup>2</sup> & **Stephanie Fulton<sup>1</sup>**

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<sup>2</sup> Laboratoire de Nutrition et Neurobiologie intégrée, INRA Bordeaux, Université de Bordeaux

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**Sites of amylin synthesis in the brain and its regulation**

**Salome Gamakharia**, Christina N. Boyle, Thomas A. Lutz

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**Microstructural changes in ingestive behavior in patients with severe obesity before and up to 1-year after Roux-en-Y Gastric Bypass in comparison to normal-weight controls**

**Daniel Gero**, M.D. <sup>1</sup>, Balint File, MSc <sup>2</sup>, Daniela Alceste, MSc <sup>1</sup>, Aiman Ismaeil, MD <sup>1</sup>, Lukas Frick, M.D. <sup>1</sup>, Robert E. Steinert, PhD <sup>1</sup>, Alan C. Spector, PhD <sup>4</sup>, Marco Bueter, M.D., PhD<sup>1</sup>

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## **Anti-obesity effect of a GPR39 agonist**

Kaare V Grundahl<sup>1</sup>, Thi A Diep<sup>1,2</sup>, Natalia Petersen<sup>2</sup>, Ian Tought<sup>3</sup>, Chunyu Jin<sup>1</sup>, Franziska Mende<sup>2</sup>, Helen Cox<sup>3</sup> and **Birgitte Holst**<sup>1,2</sup>

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## **Female rats on the activity based anorexia (ABA) paradigm have significant deficits in plasma glutathione and cysteine at max weight loss but not at 10 days recovered**

**Mathew M Hurley**, K Murlanova, LK Macias, A Sabir, H Bhasin, RC Weiner, KL Tamashiro, MV Pletnikov, TH Moran

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## **Effect of immediate postoperative supplementation of high fat diet in long term alteration on solid food preference and subsequent weight loss after RYGB in Rats**

**Aiman M. Ismaeil**<sup>1,3</sup>, Daniel Gero<sup>1</sup>, Daniela Alceste<sup>1</sup>, Christina N. Boyle<sup>2</sup>, Thomas Lutz<sup>2</sup>, Marco Bueter<sup>1</sup>

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## **Overfeeding elicits an effect of leptin on body weight regulation and impairs glucose homeostasis in the zebrafish**

**Kaj Kamstra**<sup>1,2</sup>, Julia Horsfield<sup>3</sup>, Alex Tups<sup>1,2</sup>

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## **Regulation of feeding circuits by the vagus nerve**

**Zachary Knight**

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## **Inhibition of orexin/hypocretin neurons ameliorates elevated physical activity and energy expenditure in the A53T mouse model of Parkinson's disease**

**Catherine M. Kotz**<sup>1,2</sup>, Jean Pierre Pallais<sup>1,2</sup>, Milos Stanojlovic<sup>1,2</sup>

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## **Role of AMPK and TXN2 in hypothalamic glucose-inhibited neurons function.**

**Gwenaël Labouèbe**<sup>1,2</sup>, Simon Quenneville<sup>1,2</sup>, and Bernard Thorens<sup>1</sup>

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<sup>2</sup>Those authors equally contributed to this work

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## **FGF21 contributes to cortical bone remodeling due to protein restriction**

**Thomas Laeger**<sup>1,2</sup>, Teresa Castaño-Martinez<sup>1,2</sup>, Christopher D. Morrison<sup>3</sup>, Margaret A. McNulty<sup>4,5</sup>

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### **Tanycyte glucokinase deletion impairs feeding behavior**

Antoine Rohrbach, Roxane Pasquettaz and **Fanny Langlet**

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### **Microglia in the nodose ganglion are necessary for high-fat diet induced hyperphagia in rats**

**Claire de La Serre**, Carolina Cawthon

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### **Chow-fed DIO rats exhibit heightened GFAP and decreased Iba1 density in the ARC compared to DR rats**

Janine Schläpfer, Thomas A. Lutz and **Christelle Le Foll**

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**Role of RAMP1 and RAMP3 in mediating different aspects of amylin-mediated control of energy balance**

Bernd Coester, Sydney W Pence, Soraya Arrigoni, Christina N Boyle, Christelle Le Foll,  
**Thomas A. Lutz**

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**Preoperative taste-related activation in the VTA to tastants correlates with weight loss in patients receiving RYGB but not vertical sleeve gastrectomy**

**Tim Moran**, Kimberly R. Smith, Afroditi Papantoni, Maria G. Veldhuizen, Vidya Kamath, Susan Carnell and Kimberly E. Steele

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**Oxytocin-opioid system interactions as the basis for developing pharmacological strategies to reduce food intake**

**Pawel K. Olszewski**, Mitchell A. Head, Anica Klockars, Allen S. Levine

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**Autonomic control of glucagon secretion and hepatic liver neoglucogenesis by glutamatergic Fgf15 neurons of the dorsomedial nucleus of the hypothalamus**

**Alexandre Picard**<sup>1</sup>, Salima Metref<sup>1</sup>, David Tarussio<sup>1</sup>, Wanda Dolci<sup>1</sup>, Xavier Berney<sup>1</sup>, Sophie Croizier<sup>1</sup>, Gwenaël Labouebe<sup>1</sup> and Bernard Thorens<sup>1</sup>.

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**Metabolic Flexibility: a novel experimental approach to measure 12-hour macronutrient balances in a whole-body indirect calorimetry chamber**

**Eric Ravussin**, David H. McDougal and Kara L. Marlatt

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**Overfeeding and Neural Pathways that Regulate Body Weight**

**Yann Ravussin**

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**High-sucrose diet impairs item rather than spatial memory performance while not affecting 24-hour sleep/wake behavior in mice**

**Yvonne Ritze**<sup>1</sup>, Kristian Adamatzky<sup>1</sup>, Stefanie Wendel<sup>1</sup>, Carlos N. Oyanedel<sup>1</sup>, Marion Inostroza, Jan Born<sup>1-3</sup>, Manfred Hallschmid<sup>1-3</sup>

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**Region-specific deletion of beta-catenin leads to impaired glucose tolerance and increased body weight**

**Mohammed Z. Rizwan**<sup>1,2,4</sup>, Peter Shepherd<sup>3,4</sup>, Alex Tups<sup>1,4</sup>, David R. Grattan<sup>2,4</sup>

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## **A Novel Activator of Thirst: Possible Mechanism of Action and Physiologic Relevance**

**Rick Samson**, Christopher Haddock, Gina Yosten

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## **PrRP and GLP-1 dependent mechanisms contributing to cancer anorexia-cachexia syndrome**

**Marissa Schraner**, Keila Navarro I Batista, Thomas Lutz, Thomas Riediger

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## **Predictors of weight loss after bariatric surgery – a cross-disciplinary approach combining behavioral, physiological, social and psychological measures**

**Anders Sjödín**<sup>1</sup>, M Nielsen<sup>1,2,\*</sup>, B Christensen<sup>3,\*</sup>, J Schmidt<sup>1</sup>, L Tækker<sup>4</sup>, L Holm<sup>5</sup>, S Lunn<sup>4</sup>, C Ritz<sup>1</sup>, N Albrechtsen<sup>6,7</sup>, J Holst<sup>7,8</sup>, T Schnurr<sup>8</sup>, T Hansen<sup>8</sup>, A Floyd<sup>9</sup>, and C le Roux<sup>10</sup>

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## **All Power to the Flower. An Extract from the Dahlia plant as a new Treatment for Type 2 Diabetes?**

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## **Circadian misalignment and the risk of obesity: Potential role of the endocannabinoid system**

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