

# RACMEM-2014

## Tokyo, Japan

### Local Organising Committee:

*Shigeho Tanaka, Kumpei Tokuyama, Masanobu Hibi, Kouichi Yasunaga*

### Scientific Program

#### Saturday 21st October

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|---------------|---|
| 08:30 – 08:45 | <b>Welcome</b><br><i>Shigeho Tanaka</i>   |
| 08:45 – 09:30 | <b>Keynote Lecture 1</b> ( <i>Moderator: Kong Chen</i> )<br><b>Energy expenditure and its role in long and short term weight gain</b><br><i>Jonathan Krakoff</i>  |
| 09:30 – 09:35 | Break   |
| 09:35 – 10:55 | <b>Session 1: Exercise and energy metabolism</b> ( <i>Moderator: Edward Melanson</i> ) <ul style="list-style-type: none"><li>• Metabolic adaptations following massive weight loss with and without exercise<br/><i>Darcy L. Johannsen</i></li><li>• Energy expenditure of low-level and isometric exercise: Exploring new approaches to study thermogenesis<br/><i>Abdul G Dulloo</i></li><li>• Effects of high intensity intermittent exercise on post-exercise resting oxygen consumption<br/><i>Katsunori Tsuji</i></li><li>• RER for the masses<br/><i>Gary Shaw</i></li></ul> |
| 10:55 – 11:20 | Coffee/tea break  |
| 09:35 – 10:55 | <b>Session 2: Energy metabolism in animals</b> ( <i>Moderator: Dale A. Schoeller</i> ) <ul style="list-style-type: none"><li>• Why do penguins not fly?<br/><i>John R. Speakman</i></li><li>• Energy expenditure, activity, and life history in great apes<br/><i>Herman Pontzer</i></li><li>• Long-term calorie restriction decrease metabolic cost of movement and prevents decrease of physical activity during aging in rhesus monkeys<br/><i>Yosuke Yamada</i></li></ul>   |
| 12:20 – 14:00 | <b>Lunch / Poster Session</b>   |
| 14:00 – 15:20 | <b>Session 3: Diet, Nutrition and energy metabolism</b> ( <i>Moderators: Paul MacLean &amp; Masanobu Hibi</i> ) <ul style="list-style-type: none"><li>• Obesity's impact on lactation: Consequences on energy balance and postnatal programming</li></ul>   |

*Paul MacLean*

- Running for youth; on the behavioral energetics of aging mice  
*Gertjan Van Dijk*
- Enhanced body fat utilization as energy induced by dietary polyphenols  
*Koichi Yasunaga*
- Effect of protein overfeeding on energy expenditure measured in a metabolic chamber  
*Leanne M Redman*

15:20 – 15:25 Coffee/tea break

15:25 – 16:10 **Mini Debate: Does HF diet affect the accuracy of DLW?** (Moderator: Paul MacLean)

*John Speakman vs. Gertjan Van Dijk*

16:10 – 16:30 Coffee/tea break

16:30 – 17:50 **Symposium 1: Why is the prevalence of obesity in Japan low?** (Moderators: Shigeho Tanaka & Van Hubbard)

- Why is the prevalence of obesity in Japan low?  
From epidemiological aspect  
*Hidemi Takimoto*
- Why is the prevalence of obesity in Japan low?  
From metabolic aspect  
*Fuminori Katsukawa*
- Why is the prevalence of obesity in Japan low?  
From physiological aspect  
*Kunio Torii*

18:00 – 19:45 **Conference Dinner**

## Sunday 12th October

08:30 – 09:15 **Keynote Lecture 2** (Moderator: Shigeho Tanaka)  
**Brown adipose tissue, energy expenditure, and obesity in humans**  
*Masayuki Saito*

09:15 – 09:20 Break

09:20 – 10:40 **Session 4: Brown adipose tissue** (Moderator: Masayuki Saito)

- Biological determinants of brown adipose tissue activity and capacity  
*Denis Richard*
- Recruitment of brown adipose tissue after daily ingestion of catechin in men [YIA Best Abstract Award]  
*Takeshi Yoneshiro*
- Quantifying shivering using electromyography and heart rate variability in healthy lean young men  
*Robert J Brychta*
- Noninvasive evaluation of human brown adipose tissue using quantitative near-infrared spectroscopy  
*Takafumi Hamaoka*

10:40 – 11:00 Coffee/tea break

11:00 – 12:20

**Session 5: Methodology for prediction total energy expenditure**

(Moderators : Kong Chen & Guy Plasqui)

- Understanding the impact of exercise-induced increases in energy expenditure on heat balance in older adults and individuals with chronic disease: a calorimetric perspective  
*Glen Kenny*
- Respiratory chambers: beyond energy expenditure  
*Eric Ravussin*
- Common calibration applied to four calorimeter laboratories  
*Jon Moon*
- Interactions between thermal biology and energy homeostasis in the mouse  
*Gustavo Abreu-Vieira*

12:20 – 12:40

**Young Investigator Awards: Best abstract & poster awards**

- Metabolic responses to different high-fat meals in normal weight and obese women [Abstract Award]  
*Jamie A Cooper*

12:40 – 14:40

**Lunch & Human Calorimeter Tour in Kao**

14:40 – 16:00

**Symposium 2: Influence of circadian misalignment on energy metabolism**

(Moderators: Kumpei Tokuyama & Karl Friedl)

- Impact of sleep restriction on energy balance  
*Marie-Pierre St-Onge*
- Impact of circadian misalignment induced by simulated shiftwork on energy metabolism  
*Kenneth P Wright*
- Forward genetics of sleep in mice  
*Masashi Yanagisawa*

16:00 – 16:20

Coffee/tea break

16:20 – 17:05

**Keynote Lecture 3 (Moderator: Guy Plasqui)**

**Appetite control and energy balance**

*Margriet S Westerterp-Plantenga*

17:05

**Closing**

*Kumpei Tokuyama*