



12th International Symposium on In Vivo Body Composition Studies

DAY 1: Thursday 20th February

Satellite Mini-Symposium (open to all attendees of the main conference):

10:00 – 12:00

Body Composition Dynamics & Energy Expenditure Patterns

Chair: Jennifer Miles-Chan (New Zealand)

- Did falling energy expenditure due to expanding seed oils in our diet fuel the obesity epidemic?
John Speakman (UK/China)
- Changes in body composition and control of resting metabolic rate during weight loss: Energy allocation to the brain 'drives' adaptive thermogenesis
Manfred Müller (Germany)
- Adaptive thermogenesis driving catch-up fat during weight regain: a role for skeletal muscle hypothyroidism
Abdul Dulloo (Switzerland)
- Impact of energy turnover on the regulation of energy balance and energy partitioning
Anja Bosy-Westphal (Germany)

Main Conference:

09:30 –

Registration desk open

13:30 – 14:00

Opening Ceremony

14:00 – 15:00

Keynote Session 1:

Chair: Dympna Gallagher (USA)

Can Insights Into the Current Body Composition Paradigm Guide Future Research Efforts?

Steven Heymsfield (USA)

15:00 – 16:30

Plenary Session 1:

Chair: Manfred Müller (Germany)

Evolving Techniques & Technologies

- Artificial Intelligence in Body Composition Research: Overview and Laboratory Insights
John Shepherd (USA)
- Current and future applications of point of care spectral photon counting CT
Jenn Clark (New Zealand)
- Have we reached peak impedance?
Leigh Ward (Australia)

16:30 – 18:00

Welcome Reception



12th International Symposium on In Vivo Body Composition Studies

DAY 2: Friday 21st February

08:00 – 08:30	Registration desk open
08:30 – 09:30	Keynote Session 2: <i>Chair: Carrie Earthman (USA)</i> Body Composition at the University of Auckland: end of an era <i>Lindsay Plank (New Zealand)</i>
09:30 – 10:30	Short Oral Communications Session 1: <i>Chair: Anja Bosy-Westphal (Germany)</i> Ultrasound, CT and Bioimpedance Spectroscopy in Clinical Applications <ul style="list-style-type: none">• Bridging Oncology Research and Practice: An innovative online CT body composition analysis program <i>Judy Bauer (Australia)</i>• Bioimpedance phase angle as indicator for geriatric phenotypes <i>Kristina Norman (Germany)</i>• Validation of ultrasound versus magnetic resonance imaging for muscle thickness measurement <i>Shayal Chand (New Zealand)</i>• Supporting lipoedema diagnosis through bioimpedance spectroscopy body composition assessment <i>Belinda Thompson (Australia)</i>
10:30 – 11:00	Refreshment break, with sponsor exhibition
11:00 – 12:30	Plenary Session 2: <i>Chair: Lindsay Plank (New Zealand)</i> Assessment of Muscle in Clinical Settings: Challenges & Considerations <ul style="list-style-type: none">• Optimizing Muscle Assessment in Clinical Practice: Challenges and Considerations <i>Carla Prado (Canada)</i>• Bedside muscle assessment during and after critical illness - experiences from a clinician-researcher <i>Kate Lambell (Australia)</i>• Research Needs and Future Directions in the Application of Available Body Composition Technologies for Diagnosing Malnutrition in Acute Care <i>Carrie Earthman (USA)</i>
12:30 – 13:30	Lunch & Poster Session, with sponsor exhibition

13:30 – 15:00

Plenary Session 3:

Chair: John Speakman (UK/China)

Body composition in Sports and Physical Activity

- Muscle quality assessments in relation to physical performance or physical activity
Yosuke Yamada (Japan)
- The evolution of body composition methods and standards to address military needs
Karl Friedl (USA)
- Physical inactivity, sedentary behaviour, and body composition: Inference from space science and clinical research
Audrey Bergouignan (France / USA)

15:00 – 15:30

Refreshment break, with sponsor exhibition

15:30 – 16:30

Short Oral Communications Session 2:

Chair: Kay Nguo (Australia)

Advancing body composition assessment in the context of physical activity

- The Usefulness of Non-Fasted State Bioelectrical Impedance Measurements in Athletes
Analiza M Silva (Portugal)
- Cross-sectional and prospective agreement between DXA- and prediction equation-estimated appendicular lean mass
Robin Daly (Australia)
- Evaluating D3-Creatine Utility for Body Composition and Muscle Strength in Special Populations
Devon Cataldi (USA)
- Lifespan assessment of body composition, physical function, and cardiorespiratory fitness for maximal healthspan
Christopher Oliver (Australia)

16:30 – 17:30

Hot Topic Points-of-View:

Moderator: Jean-Pierre Montani (Switzerland)

Quality of weight loss with novel anti-obesity pharmacotherapy

- Is loss of bone mass clinically significant?
Berit Heitmann (Denmark)
- Is there evidence for a disproportional loss of muscle mass?
Anja Bosy-Westphal (Germany)

18:30 – 21:30

Conference Dinner & "Triennial" Meeting

The Maritime Room, Princes Wharf, Auckland CBD



12th International Symposium on In Vivo Body Composition Studies

DAY 3: Saturday 22nd February

	Registration desk open
08:30 – 09:30	<p>Keynote Session 3:</p> <p><i>Chair: Abdul Dulloo</i></p> <p>Building capacity for Body Composition Assessment in Low and Middle Income Countries: Insights from the IAEA and the IAEA Body Composition Database <i>Alexia Alford (Austria)</i></p> <p>Body composition, geography and ethnicity: associations with health <i>Jonathan Wells (UK)</i></p>
09:30 – 10:30	<p>Short Oral Communications Session 3:</p> <p><i>Chair: Berit Heitmann (Denmark)</i></p> <p>Populations, Perceptions & Phenotypes</p> <ul style="list-style-type: none">• Mana Mōmona: Fat Indigenous Bodies and Body Sovereignty <i>Ashlea Gillon (New Zealand)</i>• Determinants of weight gain over five years in young South African adults <i>Salome Kruger (South Africa)</i>• Sustained effects of LookAHEAD intervention on body composition among adults with diabetes <i>Maxine Ashby-Thompson (USA)</i>• Image-derived phenotypes: Comparison of DXA and MRI in the UK Biobank <i>Brandon Witcher (UK)</i>
10:30 – 11:00	Refreshment break, with sponsor exhibition
11:00 – 12:30	<p>Plenary Session 4:</p> <p><i>Chair: Jennifer Miles-Chan (New Zealand)</i></p> <p>Diversity, Equity & Inclusion in Body Composition Research</p> <ul style="list-style-type: none">• Indigenous data sovereignty in the context of global databases <i>Jeremy Hema (New Zealand)</i>• Body Composition Beyond the Binary: Challenges and Opportunities <i>Maggie Delano (USA)</i>• South Asians and Diaspora: which body composition phenotypes make them so prone to type 2 diabetes and cardiovascular diseases? <i>Abdul Dulloo (Switzerland)</i>

12:30 – 13:30 Lunch & Poster Session, with sponsor exhibition

13:30 – 14:30 **Short Oral Communications Session 4:**

Chair: John Shepherd (USA)

Body Composition in Early Life

- Prenatal weight gain and adipose tissue depot changes
Elizabeth Widen (USA)
- Understanding the contribution of body composition to energy expenditure in infants
Leanne Redman (USA)
- Birthweight and body composition classifications in South African children: the BC-IT study
Makama Andries Monyeki (South Africa)
- Body composition assessment during the first five years: Shape Up! Keiki
Jonathan Bennett (USA)

14:30 – 15:00 Refreshment break, with sponsor exhibition

15:00 – 16:00 **Forbes Lecture:**

Chair: Steven Heymsfield (USA)

Applications of Body Composition Assessment in Clinical Practice

Dympna Gallagher (USA)

16:00 – 16:30 Closing Ceremony