

THU	CHECKING-IN	08H30-09H00
THU	Lecture #2	09H00-09H45
	Fundamental human body of expenditure relations Steven B. Heymsfield (USA)	composition-energy
THU	Symposium #1	09H45-11H15
	Measuring changes in body challenge to validity and pr Chair: Steven B. Heymsfield (USA)	-
1 <sup>st</sup> talk	<b>Measuring changes in body co loss and regain – a methodolo</b> Anja Bosy-Westphal (Germany)	
2 <sup>nd</sup> talk	<b>Growth and nutrition: the role in pediatric age</b> Angelo Pietrobelli (Italy)	e of body composition
3 <sup>rd</sup> talk	Validity of longitudinal measu composition by advanced ima Wei Shen (USA)	-
	Coffee break	11H15-11H45
THU	ORAL SESSION #1 Body composition and ener Chair: Klaas Westerterp (The Neth	
11H45-12H:00	<b>Energy expenditure, energy balance and body</b> <b>composition over a season</b> Analiza M. Silva, Catarina N. Matias, Diana A. Santos, Diana Thomas, Steven B. Heymsfield, & Luís B. Sardinha (Portugal & USA)	
12H00-12H15	<b>Contributions of high-metabo</b> <b>resting energy expenditure in</b> Elizabeth M. Widen, Hye R. Yang, So Patrick Kang, & Dympna Gallagher	<b>Tanner 1 children</b> onia Gidwani, Kim Kelly,

12H15-12H30	information about REE n measurements of fat and surgery-assisted weight I Isaiah Janumala, John Thorn	FFM before and after
12H30-12H45	Impact of physical activity energy expenditure at moderate and vigorous intensity on total and abdominal obesity in youthDiana A. Santos, João P. Magalhães, Cláudia S. Minderico, & Luís B. Sardinha (Portugal)Impact of short-term controlled over- and underfeeding on the body weight and body compositionMaryam Pourhassan, Janna Enderle, Lisa Schweitzer, Claus- Christian Glüer, & Manfred J. Müller (Germany)	
12H45-13H00		
	LUNCH	13H00-13H45
THU	CHAIRMEN-LED F Chairs: Robert M. Malina (U Timothy Ackland (A Wei Shen (USA)	
	-	n anthropometric measures, ing habits in female college college
	<b>Total and visceral fat in c</b> Angela Andreoli, Francesca D Roberto Sorge, & Giuseppe G	Di Chio, Michelangelo Nasuto,
		<b>enic phenotypes</b> rhassan, Wernher Braun, Britta , & Manfred J. Müller (Germany)
	<b>Lipid profile and percent</b> <b>adolescents</b> Flaviani A. Papaléo, René Bre (Brazil)	<b>age of body fat in active</b> nzikofer, & Denise V. Macedo
	status, overfat and cardio Azorean adolescents age	

Manuel J. Coelho-e-Silva, António J. Figueiredo, João Valentedos-Santos, Aristides Machado-Rodrigues, Raul Martins, Rute Santos, Enio V. Ronque, Edilson S. Cyrino, Rômulo A. Fernandes, & Robert M. Malina (Portugal, Brazil, & USA)

World Health Organization and Brazilian references based on body mass index for detecting excess body fatness in schoolchildren Danielle B. Leal, Maria A. Assis, & Wolney L. Conde (Brazil)
<b>Physical activity and bone mineral density of fracture-critical regions of proximal femur</b> Edgar Lopes, Vera Zymbal, Lurdes M. Rebocho, & Fátima Baptista (Portugal)
Longitudinal study of physical activity, body composition and trunk morphology effects on pelvic tilt from the second trimester of pregnancy to the postpartum period Filomena Vieira, Ana F. Graça, Liliana Aguiar, Marco Branco, & Rita Santos-Rocha (Portugal)
Quick methods for determining body composition in diverse populations Janet Kurzynske, Kelly Webber, Hazel Forsythe, & Monica Fowler (USA)
<b>Measuring equine body composition using</b> <b>bioimpedance spectroscopy</b> Leigh C. Ward, Kimberley J. White, Wayne L. Bryden, & Judy A. Cawdell-Smith (Australia)
A photo-based approach for assessing body postures and their association with obesity Ligaj Pradhan, Chengcui Zhang, Danielle K. Powell, David B. Allison, & Olivia Affuso (USA)
What predictive equations of body composition based on anthropometry are more accurate in older adults? Maria A. Camina, Beatriz Mateo, & Maria P. Redondo (Spain)
Applicability of anthropometric measures for estimating whole-body skeletal muscle volume in prepubertal children Megumi Ohta, Taishi Midorikawa, Yuki Hikihara, Shizuo Sakamotro, Yasuo Kawakami, Hiroaki Kanehisa, & Tetsuo Fukunaga (Japan)
CAAFE, a website to assess weight status, diet and physical activity in schoolchildren: Formative Research Results Maria A. Assis, Filipe Costa, Patricia Di Pietro, Maria C. Calvo, Sergio F. Freitas, Emil Kupek, Francilene K. Vieira, Vanessa Davies, Raquel Engel, Cristine Gabriel, & Camilie Schmoelz (Brazil)
Improvement of reference values of the BMI for classification of nutritional status in a Brazilian sample Mirele S. Mialich, Edson Z. Martinez, & Alceu Jordão Junior (Brazil)

<b>Dual energy x-ray absorptiometry based evaluation</b> of elite Gaelic athletic association players Robert Davies, Katie Hughes, Clodagh Toomey, Will McCormack, Ciara Sinnott-O'Connor, Cian O'Neill, Alexandra Cremona, Peter Francis, Siobhan Leahy, & Phil Jakeman (Ireland)
<b>Estimation of arm adipose tissue quotient from a bioimpedance measurement</b> Ruben Buendia, & Leigh C. Ward (Sweden, & Australia)
Project PANK: Preliminary results of a multidisciplinary school-based intervention in children with cardiovascular and metabolic risk factors. A Randomized Controlled Trial. Rui Batalau, Joana Cruz, Paulo Cabrita, Pedro Gonçalves, Tânia Guerreiro, Magda Santos, Ricardo Gonçalves, João Leal, & António L. Palmeira (Portugal)
Can percentage body fat be accurately estimated by air displacement plethismography using predicted thoracic gas volume in the elderly? Vivian Wahrlich, Luiz A. Anjos, Bruna M. Silva, Rosane Q. Lessa, Michele G. Ribeiro, Bianca D. Carlos, & Layanne C. Silva (Brazil)
Associations between intensive dance practice and growth, maturity and bone resistance in young dancers Sónia Coelho, Lurdes M. Rebocho, Vera Zymbal, & Fátima Baptista (Portugal)
<b>Peak height velocity of female eutrophic adolescents</b> <b>with excess or appropriate body fat</b> Silvia E. Priore, Sylvia C. Franceschini, Valter N. Miranda, Patrícia F. Pereira, Franciane R. Faria, & Eliane R. Faria (Brazil)
<b>Triceps skinfold time response and compressibility</b> Teresa F. Amaral, Manuel R. Quintas, Tiago F. Andrade, Fátima Chouzal, & Maria T. Restivo (Portugal)
<b>Comparison of ultrasound skinfolds and bioelectrical</b> <b>impedance spectroscopy to predict body composition</b> <b>in breastfed term infants</b> Zoya Gridneva, Leigh C. Ward, Anna R. Hepworth, Ching T. Lai, Peter E. Hartmann, & Donna T. Geddes (Australia)
Effect of the waist circumference measurement protocol on the relation between waist-to-hip ratio and body content and distribution in non-alcoholic fatty liver disease patients Nuno M. Pimenta, Helena Santa-Clara, Helena Cortez-Pinto, José Silva-Nunes, Xavier Melo, & Luís B. Sardinha (Portugal)
Hematocrit variations mediates the association between aerobic capacity and fat-free changes Cristina P. Monteiro, Catarina N. Matias, Diana A. Santos, & Mário Jesus (Portugal)

	Tracing of coordinates of fat mass index on body compos	
	<b>diabetes girls</b> Sochung Chung, Hye W. Park, By	ung O. Kwak, Chul H. Kim,
	Hyeoijin Kim, & Kyo S. Kim (Korea	
	Morphological changes in ar	
	within a sportive season: are	e these related to aerobic
	capacity enhancement? Pedro G. Morouço, Valdemar A. S	antos, & Ruben J. Ferreira
	(Portugal)	
	Skinfold thickness measuren	
	comparison between Lohma	
	Diana A. Santos, Catarina N. Mati M. Silva (Portugal)	as, Luis B. Sardinna, & Analiza
	Reliability in the assessment skinfolds measurements	of body composition by
	Mauro A. Pascoa, Denise V. Mace (Brazil)	do, & René Brenzikofer
	Effect of obesity on pulmona	ary and cardiorespiratory
	function in children	Nelente Chiliane Dames
	João Brito, Rafael Oliveira, Nelsor (Portugal)	i Valente, & Lillana Ramos
	Results of weight regain afte	
	<b>multidisciplinary weight los</b> s Teresa Branco, Sandra Martins, &	
	Associations of sedentary be	
	<b>abdominal obesity in older a</b> Pedro B. Júdice, Analiza M. Silva,	
тни	Lecture #3	14H30-15H15
	Why functional body com Manfred J. Muller (Germany)	position?
THU	Symposium #2	15H15-16H45
	Body composition assess the International Olympic program Chair: Wolfram Müller (Austria)	
1 <sup>st</sup> talk	Why is body composition so athletes? How to identify at weight and body composition Jorunn Sundgot-Borgen (Norway	hletes struggling with on issues?

2 <sup>nd</sup> talk	The utility of skinfolds to describe fatness: answered and unanswered questions Arthur Stewart (UK)
3 <sup>rd</sup> talk	<b>Body composition assessment practices around the world: problems, solutions, and lingering issues</b> Nanna Meyer (USA)
4 <sup>th</sup> talk	<b>Collating effective body composition normative data</b> <b>for elite athlete monitoring – what are the issues?</b> Timothy Ackland (Australia)
5 <sup>th</sup> talk	Ultrasound applied for measuring uncompressed SAT: accuracy and inter-observer reliability obtainable with a semi-automatic image segmentation software Wolfram Müller (Austria)

#### **Coffee break**

16H45-17H15



#### **ORAL SESSION #2** 17H15-18H30

**Technologies for body composition assessment Chair:** Anja Bosy-Westphal (Germany)

17H15-17H30	Digital photography for the assessment of human body composition
	Olivia Affuso, Ligaj Pradhan, Chengcui Zhang, Song Gao,
	Howard W. Wiener, Barbara Gower, & David B. Allison (USA)
17H30-17H45	Accuracy and precision of the EchoMRI-Infants™ system for water and fat measurements using phantoms and newborns
	Tatiana Toro-Ramos, Charles W. Paley, Susan Lin, Wenwen Yu, Xavier Pi-Sunyer, & Dympna Gallagher (USA)
17H45-18H00	Preliminary evaluation of a prototype hybrid impedance spectrometer: the VALBIO trial
	Lindsay D. Plank, Sally D. Poppitt, Wilson Yip, & Leigh C. Ward (New Zealand, & Australia)
18H00-18H15	Evaluation of new advanced bioimpedance spectroscopy models for measuring body composition in healthy individuals and those undergoing massive weight loss
	Carrie P. Earthman, Abigail J. Cole, James R. Matthie, Adam Kuchnia, Jennifer Mager, Shalamar D. Sibley, & Lauren M. Beckman (USA)
18H15-18H30	Non-destructive elemental analysis of biological samples using portable energy dispersive X-ray fluorescence (XRF) for extracellular water
	<b>measurements and micro-nutrient deficiencies</b> Joseph J. Kehayias, Christopher E. Kehayias, Anna V. Roto, & Carrie A. Brown (USA)

# THU

## TRIENNIAL GENERAL MEETING OF THE ISBCR

18H30-20H00

FRI	Lecture #4	09H00-09H45
	The functional impact of cal body composition	loric restriction on
	Sharon E. Mitchell, & John Speakma	n (Scotland, & China)
FRI	Symposium #3	09H45-11H15
	Modeling weight changes the exercise – how much energy and fat-free mass componer Chair: Timothy G. Lohman (USA)	y for changing fat nts
1 <sup>st</sup> talk	Comparing the energy density mass developed from first prin observed from four-compartme Dale A. Schoeller (USA)	ciples with that
2 <sup>nd</sup> talk	Application of mathematical models to guide patient weight loss through a smart phone intervention Diana Thomas (USA)	
3 <sup>rd</sup> talk	<b>Computational modeling of bo dynamics in response to diet a interventions</b> Kevin Hall (USA)	
	Coffee break	11H15-11H45
FRI		
	ORAL SESSION #3 Body composition in childre Chair: Dympna Gallagher (USA)	11H45-13H00
11H45-12H00	Relative fatness definition and the study of Health- related Quality of Life when considering the maturity status of Lisbon adolescents Isabel Fragoso, Luís Massuça, João Albuquerque, & Carlos Barrigas (Portugal)	
12H00-12H15	Identification of clusters of body composition and time changes from 4 to 7 years old in children from Generation XXI Susana Santos, Milton Severo, Ana C. Santos, Carla Lopes, Henrique Barros, & Andreia Oliveira (Portugal)	

12H15-12H30	<b>Body cell mass in children w</b> Alexia J. Murphy, Rebecca J. Hill, (Australia)	
12H30-12H45	<ul> <li>Single and combined influences of body composition phenotypes on IMT among 11-12 years-old children Xavier Melo, Helena Santa-Clara, Nuno M. Pimenta, Diana A. Santos, Rita Pinto, Sandra S. Martins, Cláudia S. Minderico, Bo Fernhalld, &amp; Luís B. Sardinha (Portugal, &amp; USA)</li> <li>Body composition in children on treatment and post treatment for cancer Alexia J. Murphy, Melinda White, Liane Lockwood, Andrew Hallahan, &amp; Peter W. Davies (Australia)</li> </ul>	
12H45-13H00		
	LUNCH	13H00-13H45
FRI	CHAIRMEN-LED PO Chairs: Diana Thomas (USA) Nanna Meyer (USA) Ulf Ekelund (Norway)	<b>STER SESSION #2</b> 13H45-14H30
	Specific bioelectrical impeda values for assessing body co Spanish young population Elena Mereu, María E. Ibáñez, Ro Muñoz, Emanuela G. Russo, Lucia Esther Rebato, & Elisabetta Marin	<b>emposition in the Italian-</b> berto Buffa, María Jesús a Zaccagni, Stefano Cossu,
	<b>Consistency of lean mass de</b> <b>methods in COPD studies</b> Malwina M. Wojtas, Steve A. Wo	-
	<b>Correlation between body n</b> <b>circumference with body fat</b> <b>years</b> Sylvia C. Franceschini, Sarah V. R Taís A. Magalhães, Silvia E. Priore	t <b>in children aged 4 to 7</b> ibeiro, Luciana R. Sant'Ana,
	Project PANK: Prediction of cardiorespiratory fitness eve disciplinary school-based in with cardiovascular and me Rui Batalau, Joana Cruz, Paulo Ca Guerreiro, Magda Santos, Ricardo António L. Palmeira (Portugal)	olution in a multi- tervention with children tabolic risk factors abrita, Pedro Gonçalves, Tânia
	Influence of lifestyle habits body composition in childre Sylvia C. Franceschini, Sarah V. R Taís A. Magalhães, Silvia E. Priore	<b>n 4-7 years of age</b> ibeiro, Luciana R. Sant'Ana,

<b>Reference values of normal bone mineral content and density in Korean adolescents</b> Sochung Chung, Hye W. Park, Ann Y. Kyung, Byung O. Kwak, & Kyo S. Kim (Korea)
Trends in the prevalence of overweight, obesity, risk and excess abdominal adiposity in Brazilian 7-10-y- old schoolchildren (2002-2007) Danielle B. Leal, Maria A. Assis, David A. González-Chica, & Filipe F. Costa (Brazil)
Lower limbs lean soft tissue in circumpubertal boys: agreement between DXA assessment and a new model derived from anthropometry and maturation Manuel J. Coelho-e-Silva, João Valente-dos-Santos, Aristides Machado-Rodrigues, Marije T. Elferink-Gemser, Robert M. Malina, Édio L. Petroski, Cláudia S. Minderico, Analiza M. Silva, Fátima Baptista, & Luís B. Sardinha (Portugal, USA, The Netherlands, & Brazil)
<b>Diagnostic accuracy of body mass index, waist</b> <b>circumference, and waist-to-height ratio in detecting</b> <b>excess body fatness in 7-10-y-old schoolchildren</b> Maria A. Assis, Edineia Ribeiro, Danielle B. Leal, & Adriana S. Lobo (Brazil)
Development and application of new Adiposity Index Adjusted for Fat Mass (BMIfat) through the use of bioelectrical impedance Mirele S. Mialich, Edson Z. Martinez, & Alceu J. Junior (Brazil)
The relationship between anthropometric measurements and diagnosis of pre-diabetes mellitus among United Arab Emirates University female students Ayesha S. Al Dhaheri, Maysm N. Mohamad, & Amjad H. Jarrar (United Arab Emirates)
<b>Relation between android and gynoid fat with blood</b> <b>pressure in adolescent girls</b> Silvia E. Priore, Patrícia F. Pereira, Roberta S. Cecon, Valter N. Miranda, Franciane R. Faria, Eliane R. Faria, Pedro P. Junior, & Sylvia C. Franceschini (Brazil)
The ultrasound-derived prediction equation for adults is limited availability for estimating total and regional skeletal muscle mass in Japanese prepubertal children Taishi Midorikawa, Megumi Ohta, Yuki Hikihara, Suguru Torii, & Shizuo Sakamoto (Japan)
Effect of elliptical aerobic interval training on metabolic risk factor and Body Composition in pre- and type 2 diabetes patients: A pilot study Antony D. Karelis, Annie Fex, Jean-Philippe Leduc-Gaudet, Marie-Eve Filion, & Mylène Aubertin-Leheudre (Canada)

<b>Biological maturation and body composition in</b> <b>Portuguese children and adolescents from 11 to 15</b> <b>years of age</b> João Albuquerque, Isabel Fragoso, Júlia Teles, Carlos Barrigas, & Cristina P. Monteiro (Portugal)
Validation of bioimpedance spectroscopy (BIS) for body composition assessment in Kuwaiti children Leigh C. Ward, Badrya Al Lahou, Fatima Al Khulaifi, Jameela Al Ghanim, & Suad Al Hooti (Australia, & Kuwait)
Total body and extracellular hydration estimates in highly active adults: validation of bioelectrical impedance based methods Catarina N. Matias, Diana A. Santos, Pedro B. Júdice, João P. Magalhães, Cláudia S. Minderico, David A. Fields, Luís B. Sardinha, & Analiza M. Silva (Portugal, & USA)
<b>Body composition and its relation with energy</b> <b>balance in Portuguese adolescents</b> Ana L. Silva, João Albuquerque, Francília Vilhena, Lara C. Silva, Cristina P. Monteiro, Carlos Barrigas, & Isabel Fragoso (Portugal)
Effect of the waist circumference measurement protocol on the relation between waist-to-height ratio and body composition in non-alcoholic fatty liver disease patients Nuno M. Pimenta, Helena Santa-Clara, Helena Cortez-Pinto, José Silva-Nunes, Xavier Melo, & Luís B. Sardinha (Portugal)
<b>Burnout: time- &amp; body-experience</b> David Duncan, Margarete Liebmann, Andrea Paletta, & Reinhold Esterbauer (Austria)
<b>Lean soft tissue and proximal femur geometry in young adults</b> Vera Zymbal, Lurdes M. Rebocho, & Fátima Baptista (Portugal)
A more appropriate body mass index threshold to identify cardiometabolic risk in Black South African Adults Herculina S. Kruger, Aletta E. Schutte, Sarah J. Moss, & Annamarie Kruger (South Africa)
 <b>Relation between the body adiposity index with the body mass index in children</b> Leticia C. Sposito, Ivair A. Danzige, Gusthavo A. Rodrigues, Amanda C. Prodócimo, Stéfani Reis, Elisângela Silva, & Wagner Z. Freitas (Brazil)
Changes in body composition during chemotherapy in women with breast cancer treated in the Netherlands Maaike van den Berg, Renate Winkels, Lisette Kamps, Paul Hulshof, Marjolein Visser, Hanneke van Laarhoven, Jeanne Vries, & Ellen Kampman (The Netherlands)

<b>Evaluation of body mass in Sardinia (Italy) from</b> <b>Neolithic to Medieval period through the analysis of</b> <b>skeletal remains</b> Patrizia Martella, Nicola Mila, Emanuele Sanna, & Valentina De Maria (Italy)
<b>Carbohydrate supplementation stabilizes sodium</b> <b>concentration during intense intermittent training</b> Norbert Maassen, Maik Schrader, Tristan Sandholtet, Benjamin Treff, Johannes Kaesebieter, Vladimir Shushakov, & Mirja Maassen (Germany)
Integrating nutrition and physical activity program: effectiveness in the treatment of obesity Tânia M. Ferreira, Maria N. Lima, Cátia M. Ferreira, Rosana Imbroise, Ana S. Ribeiro, Adriane O. Sales, & Pedro R. Martins (Brazil)
<b>A partial scanning technique for the assessment of broad individuals using DXA</b> Andreia Moço, Catarina N. Matias, Diana A. Santos, Luís B. Sardinha, & Analiza M. Silva (Portugal)
<b>Do the members of women-only gyms have a</b> <b>different perception of their body image when</b> <b>compared to members of both-genders facilities?</b> Pedro G. Morouço, Eduardo Luciano, & Marco Olival (Portugal)
Influence of childhood obesity on pulmonary function João Brito, Rafael Oliveira, Nelson Valente, & Liliana Ramos (Portugal)
Is fat-free mass a good predictor of the resting energy expenditure in patients with 21-hydroxylase deficiency? A pilot study Ezequiel M. Gonçalves, Daniel Minutt, Sofia L. Marini, Renata S. Di Pieri, Raquel D. Lange, Juliano H. Borges, Bruno Geloneze, & Gil Guerra-Júnior (Brazil)
The role of physical activity energy expenditure at light and moderate-to-vigorous intensity on obesity and abdominal obesity in elderly João P. Magalhães, Diana A. Santos, & Luís B. Sardinha (Portugal)
<b>Bone mineral density in elderly women of a regular</b> <b>program of physical activity – preliminary report</b> Luís P. Ribeiro, João P. Pinheiro, António L. Abrantes, Rui P. Almeida, Kevin B. Azevedo, Aristides M. Rodrigues, & Rômulo Fernandes (Portugal, & Brazil)
<b>Predictive validity of bioelectrical impedance equa- tions to estimate fat mass among youth militaries</b> Raquel D. Langer, Josiel A. Avila, Mauro S. Melloni, Gil Guerra- Junior, Roseane G. Czelusniak, & Ezequiel M. Gonçalves (Brazil)

A new approach of using ultrasound to measure preterm body composition Martin Horn, Sandra Wallner-Liebmann, Berndt Urlesberger, Nicholas Morris, & Wolfram Müller (Austria)

FRI	Lecture #5	14H30-15H15
	<b>Nutrition and exercise cross-talks in body composition – myths, presumptions, and facts</b> David Allison (USA)	
FRI	<b>Symposium #4</b> Sponsored by Coca-Cola Por	<b>15H15-16H45</b> tugal
	Hydration and body composing function and modeling Chair: Ronald Maughan (UK)	sition: health,
1 <sup>st</sup> tal	A review of the hydration of fat-free mass in humans as measured by four-compartment body composition analysis Dale A. Schoeller (USA)	
2 <sup>nd</sup> tal	<b>Novel use of bioimpedance to classify hydration:</b> <b>applications and opportunities</b> Henry Lukaski (USA)	
3 <sup>rd</sup> tal	C Early changes in weight loss and role of body water Diana Thomas (USA)	nd weight gain: The
	Coffee break	16H45-17H15
FRI	ORAL SESSION #4	17H15-18H30
	Body composition in special	

#### **Body composition in special populations Chair:** Marinos Elia (UK)

17H15-17H30 **Measuring body composition in critically ill patients** Boyd J. Strauss, David J. Brewster, Sheena Gune, Gisela Wilcox, Tim M. Crozier, Craig Walker, Richard Cooper, James Ritchie, Suzanne Armitage, Claire Hart, & Christian J. Hendriksz (United Kingdom, & Australia)

17H30-17H45	A comparison of the relationship between illness markers and phase angle in healthy children and those with chronic kidney disease Caroline E. Anderson, Rodney Gilbert, & Marinos Elia (USA, & UK)
17H45-18H00	Agreement between 3- and 4-compartment estimates of fat mass in obese patients before and after bariatric surgery induced weight loss Susan X. Lin, Bret Goodpaster, Gladys Strain, Alfons Pomp, Anita Courcoulas, & Dympna Gallagher (USA)
18H00-18H15	Changes in body water distribution between intracellular and extracellular water reflects decreased body cell mass relative to FFM from before to after surgery assisted weight loss Wen Yu, Gladys Stain, Jack Wang, Bret Goodpaster, Anita Courcoulas, Alfons Pomp, Gregory Dakin, Susan Lin, & Dympna Gallagher (USA)

# FRWorkshop – International Olympic<br/>Committee18H15-19H45

### Ultrasound applied for accurate measurements of subcutaneous adipose tissue layers

**Chair:** Wolfram Müller (Austria) Contributions by: Timothy G. Lohman, Ron Maughan, Arthur Stewart, Nanna Meyer, Jorunn Sundgot-Borgen, Timothy Ackland, & Luís B. Sardinha

FRI CLOSING DINNER 20H30

SAT	Lecture #6	09H00-09H45
	Sarcopenia in the presence of overweight – do we need a new definition? Dympna Gallagher (USA)	
SAT	Symposium #5	09H45-11H15
	Sedentary behavior, physica composition – energy regula outcomes Chair: Robert Ross (Canada)	
1 <sup>st</sup> talk	<b>Physical activity, sedentary time and body</b> <b>composition from an epidemiological perspective</b> Ulf Ekelund (Norway)	
2 <sup>nd</sup> talk	<b>Patterns of sedentary behavior and body</b> <b>composition</b> Marc T. Hamilton (USA)	
3 <sup>rd</sup> talk	<b>Inactivity-induced disability ar</b> Marinos Elia (UK)	nd body composition
	Coffee break	11H15-11H45
SAT	ORAL SESSION #5 Body composition methodo Chair: John Speakman (UK)	11H45-13H00 logy
11H45-12H00	The effects of hydration status on the measurement of lean tissue mass by dual energy X-ray absorptiometry Alexandra Cremona, Clodagh Toomey, Will McCormack, Conor Hurley, Ross McLynn, Robert Davies, Katie Hughes, & Phil Jakeman (Ireland)	
12H00-12H15	Is dual energy X-ray absorption	metry related to

12H00-12H15	Is dual energy X-ray absorptiometry related to functional body composition?
	Aldo Scafoglieri, Ivan Bautmans, Johan De Mey, & Jan P. Clarys (Belgium)

12H15-12H30	The use of off-axis integrated-cavity output spectroscopy for rapid analysis of D/H and 18O/16O: applications to body composition and energy expenditure Joseph J. Kehayias, Carrie A. Brown, Anna V. Roto, Christopher E. Kehayias, & Gregory G. Dolnikowski (USA)Suitability of bioimpedance as a predictor of extracellular water (ECW) Ruben Buendia, & Leigh C. Ward (Australia)Field-based estimates of central adiposity in multiracial populations Leslie J. Brandon (USA)	
12:30-12:45		
12:45-13:00		
	LUNCH	13H00-14H00
SAT	Lecture #7	14H00-14H45
	The role of exercise intens functional body compositi related biomarkers Robert Ross (Canada)	
SAT	Symposium #6	14H45-16H15
	New trends in bioimpedar clinical nutrition and exer- outside to inside cells Chair: Dympna Gallagher (USA)	
1 <sup>st</sup> talk	Advancing bioimpedance applications in clinical nutrition with whole-body and localized measurements Henry Lukaski (USA)	
2 <sup>nd</sup> talk	<b>Usefulness of bioimpedance outcomes</b> Ronald Maughan (UK)	in exercise-related
3 <sup>rd</sup> talk	<b>Is BIA an accurate tool in clir</b> Anja Bosy-Westphal (Germany)	nical practice?
	Coffee break	16H15-16H45

SAT	ORAL SESSION #6 16H45-17H45 Body composition in athletes and physical active populations Chair: Marc T. Hamilton (USA)	
16H45-17H00	<b>Body cell mass during long-term training in elite male</b> water polo players Angela Andreoli, Valerio Viero, Roberto Sorge, Triossi Tamara, Alessandro Campagna, & Giovanni Melchiorri (Italy)	
17H00-17H15	Leg muscle mass predicts knee extension power, usual and maximal walking speed, but not chair stand performance, in trained obese older adults Robert G. Memelink, & Peter M. Weijs (The Netherlands)	
17H15-17H30	A longitudinal study of body composition in elite male Gaelic athletic association (GAA) hurlers Katie Hughes, Robert Davies, Clodagh Toomey, Will McCormack, Alexandra Cremona, Cian O'Neill, Siobhan Leahy, Peter Francis, & Phil Jakeman (Ireland)	
17H30-17H45	Skinfolds compressibility and calliper's time response in male elite athletes Alessandro Bini, Teresa F. Amaral, Bruno M. Oliveira, Pedro Carvalho, & Vitor H. Teixeira (Portugal)	

SAT

Lecture #8

17H45-18H15

**Body composition, physical activity, nutrition, and energy balance** Klaas Westerterp (The Netherlands)

SAT

#### **Highlighted Session**

18H15-19H00

#### **The expert view for the future of body composition: from atoms to anthropometry** Contributions by: Timothy G. Lohman, Marinos Elia, Manfred J. Müller, Dale A. Schoeller, Arthur Stewart, & Zimian Wang

Müller, Dale A. Schoeller, Arthur Stewart, & Zimian Wang (USA, UK, & Germany)

SAT

CLOSING CEREMONY 19H15-19H30