

Poster Programme

Poster Session 1

[P1.001]	Physical Exercise prevents the loss of dendritic spines in mouse barrel cortex and improves memory function via BDNF-TrkB signal pathway K. Chen ¹ , L. Zhang ^{*1} , M. Tan ¹ , C. Lai ² , A. Li ¹ , C. Ren ¹ , K.F. So ^{1,2} , ¹ Jinan University, China, ² The University of Hong Kong, Hong Kong
[P1.002]	Nuclear envelope protein lamin AC is a crucial mechanosensory component of human skeletal muscle D.J. Owens*, J. Messeant, A. Ferry, A. Bertrand, G. Bonne, C. Coirault, <i>Institut de Myologie, Universite Pierre et Marie Curie, France</i>
[P1.003]	Dynamic changes in genome-wide enhancer usage during skeletal muscle adaptation to exercise T. Fu ¹ , Y. Zeng ² , Q. Zhou ¹ , X. Dou ² , X. Liang ¹ , L. Liu ¹ , J. Han ² , Z. Gan ^{*1} , ¹ Nanjing University, China, ² Institute of Computing Technology Chinese Academy of Sciences, China
[P1.004]	The combined effect of high intensity intermittent training and vitamin D supplementation on glycaemic control in overweight and obese males and females H. Lithgow*, M. Leggate, G. Florida-James, <i>Edinburgh Napier University, UK</i>
[P1.005]	Spreading of mitochondrial membrane potential is involved in Ca²⁺-dependent increased O₂ consumption after skeletal muscle stimulation A. Díaz-Vegas ^{*1} , A. Cordova ¹ , C. Hidalgo ¹ , ¹ Universidad de Chile, Chile, ² Universidad Finis Terrae, Chile
[P1.006]	Adiponectin is required for physical exercise to restore hippocampal neurogenesis in streptozotocin-induced diabetic mice S.Y. Yau ^{*1} , A. Li ² , A.M. Xu ³ , K.F. So ^{2,3} , ¹ Hong Kong Polytechnic University, Hong Kong, ² Jinan University, China, ³ University of Hong Kong, Hong Kong
[P1.007]	Predictive genetic markers for racing durability and the identification of an exercise-mediating behavioural response gene E.W. Hill ^{1,2} , B.A. McGivney ¹ , H.L. Wiencko ¹ , A.C. Parnell ^{2,3} , G. Farries ² , K. Bryan ² , L.M. Katz ² , D.E. MacHugh ² , M. Weiser ^{*1} , ¹ Plusvital Ltd, Ireland, ² University College Dublin, Ireland, ³ Irish Data Analytics, Ireland
[P1.008]	The diet and exercise-microbiome paradigm: Distinct functional profiles of the athlete microbiome revealed by metagenomic and metabolomic analysis W. Barton ^{*1,2} , N.C. Penney ⁴ , O. Cronin ^{1,3} , I.G. Perez ⁴ , M.G. Molloy ^{1,3} , E. Holmes ⁴ , F. Shannahan ^{1,3} , P.D. Cotter ^{1,2} , O. O'Sullivan ^{1,2} , ¹ Alimentary Pharmabiotic Centre Microbiome Institute, Ireland, ² Teagasc Food Research Centre, Ireland, ³ University College Cork, Ireland, ⁴ Imperial College London, UK
[P1.009]	Effects of moderate exercise training on muscle wasting in tumor-bearing mice exposed to chemotherapy R. Ballarò ^{*1,2} , M. Beltrà ^{1,2} , F. Pin ^{1,2} , K. Ranjbar ³ , P. Costelli ^{1,2} , F. Penna ^{1,2} , ¹ University of Torino, Italy, ² Interuniversity Institute of Myology, Italy, ³ Tarbiat Modares University, Iran
[P1.010]	Integrated analysis of metabolome and transcriptome reveals activation in pentose phosphate pathway after high-frequency electrical stimulation in C2C12 myotubes D. Hoshino ^{*1} , K. Kawata ¹ , K. Kunida ¹ , A. Hatano ¹ , K. Yugi ² , Y. Suzuki ¹ , N. Fujii ⁴ , T. Soga ³ , S. Kuroda ¹ , ¹ The University of Tokyo, Japan, ² RIKEN, Japan, ³ Keio University, Japan, ⁴ Tokyo Metropolitan University, Japan
[P1.011]	Pre-exercise fasting attenuates post-exercise skeletal muscle glycogen depletion in mice Y. Takahashi*, Y. Matsunaga, Y. Tamura, H. Hatta, <i>The University of Tokyo, Japan</i>
[P1.012]	Effects on metabolism and whole-body fat oxidation following post-exercise carbohydrate or protein intake U. Andersson-Hall ^{*1,2} , S. Pettersson ¹ , F. Edin ¹ , A. Pedersen ¹ , A. Holmäng ¹ , K. Madsen ^{1,2} , ¹ University of Gothenburg, Sweden, ² Arhus University, Denmark
[P1.013]	Rac1 is an essential regulator of exercise-induced redox signaling: Effects on glucose metabolism C. Henriquez-Olguin ^{*1,2} , J. Knudsen ¹ , Z. Li ¹ , L. Sylow ¹ , E. Richter ¹ , E. Jaimovich ² , T. Jensen ¹ , ¹ University of Copenhagen, Denmark, ² Universidad de Chile, Chile
[P1.014]	Cellular signaling induced by extracellular lactate in adult skeletal muscle: Possible alterations in insulin-resistant state H. Cerda-Kohler*, C. Henríquez-Olguín, D. Valladares, C. Campos, P. Llanos, E. Jaimovich, <i>Universidad de Chile, Chile</i>
[P1.015]	Lack of activation of mitophagy during endurance exercise in human skeletal muscle C. Schwalm*, L. Deldicque, M. Francaux, <i>IoNS, Belgium</i>
[P1.016]	Patients with intermittent claudication decrease or increase walking performance after an exercise intervention and this response relates to mitochondrial function M. van Schaardenburgh ^{*1} , M. Wohlwend ¹ , O. Rognmo ¹ , E. Mattsson ^{1,2} , ¹ Norwegian University of Science and Technology, Norway, ² St Olavs Hospital, Norway
[P1.017]	Deletion of NADPH oxidase 4 ameliorates skeletal muscle atrophy in angiotensin II-infusion mice T. Kadoguchi*, K. Shimada, T. Shiozawa, S. Takahashi, H. Al Shahi, T. Aikawa, S. Ouchi, K. Kitamura, T. Miyazaki, H. Daida, <i>Juntendo University Graduate School of Medicine, Japan</i>

[P1.018]	Acute high-intensity exercise in hypoxia down-regulates mitochondrial biogenesis in equine skeletal muscle K. Mukai* ¹ , H. Ohmura ¹ , A. Matsui ¹ , H. Aida ¹ , J.H. Jones ² , T. Takahashi ¹ , ¹ Japan Racing Association, Japan, ² University of California, Davis, USA
[P1.019]	Intrinsic fibre type and limb differences in skeletal muscle intramyocellular lipid content N. Ørtenblad* ^{1,2} , H.C.E. Koh ¹ , H.C. Holmberg ² , J. Nielsen ¹ , ¹ University of Southern Denmark, Denmark, ² Mid Sweden University, Sweden
[P1.020]	Regulation of PGC-1α gene expression in trained and untrained human skeletal muscle D.V. Popov* ^{1,2} , E.A. Lysenko ^{1,2} , A.D. Butkov ¹ , P.A. Makhnovskii ^{1,2} , O.L. Vinogradova ^{1,2} , ¹ SSC RF Institute of biomedical problems RAS, Russia, ² M.V. Lomonosov Moscow State University, Russia
[P1.021]	Exercise blunts aging-induced deterioration of skeletal muscle function and improves health span in a PGC-1α-dependent manner J. Gill ¹ , G. Santos ¹ , S. McGuirk ² , S. Schnyder ¹ , J. St-Pierre ² , C. Handschin* ¹ , ¹ University of Basel, Switzerland, ² McGill University, Canada
[P1.022]	Quantitative proteomic analysis of the exercise-induced extracellular vesicle proteome reveals a marked upregulation of circulating exosomes M. Whitham* ¹ , B.L. Parker ³ , B. Kiens ² , L.N.N. Cron ¹ , N. Jayasooriah ⁴ , C.M. Suter ⁴ , E.A. Richter ² , D.E. James ³ , J.F.P. Wojtaszewski ² , M.A. Febbraio ¹ , ¹ Garvan Institute of Medical Research, Australia, ² University of Copenhagen, Denmark, ³ University of Sydney, Australia, ⁴ Victor Chang Cardiac Research Institute, Australia
[P1.023]	Lipid droplet size and location in human skeletal muscle fibers are linked to insulin sensitivity J. Nielsen* ¹ , A.E. Christensen ¹ , B. Nellesmann ² , B. Christensen ² , ¹ University of Southern Denmark, Denmark, ² Aarhus University Hospital, Denmark
[P1.024]	Statins affect skeletal muscle performance: Evidence for disturbances in energy metabolism N. Allard* ¹ , T. Schirris ¹ , R. Verheggen ¹ , F. Russel ¹ , R. Rodenburg ¹ , J. Smeitink ¹ , P. Thompson ² , M. Hopman ¹ , S. Timmers ¹ , ¹ Radboud University Medical Center, The Netherlands, ² Hartford Hospital, USA
[P1.025]	Impact of high intensity interval or moderate intensity continuous training program on body composition changes in type 2 diabetes postmenopausal females: A randomized crossover study F. Maillard ¹ , S. Rousset ^{2,4} , Y. Boirie ^{3,2} , M. Duclos ^{3,2} , N. Boisseau* ^{1,4} , ¹ Clermont Auvergne University, France, ² UMR, France, ³ University Hospital, France, ⁴ CRNH Auvergne, France
[P1.026]	Maternal Western diet promotes age-specific alterations in female offspring voluntary wheel running G.N. Ruegsegger*, K.B. Grigsby, T.J. Kelty, T.E. Childs, F.W. Booth, University of Missouri, USA
[P1.027]	Left ventricular molecules associated with the initiation of the start of lifetime's decline in maximal cardiorespiratory fitness F. Booth*, R. Toedebusch, T. Childs, G. Ruegsegger, University of Missouri, USA
[P1.028]	Visualizing spatiotemporal and quantitative dynamics of ATP levels in mouse Y. Ishihara ¹ , G. Ohtsuki ¹ , H. Miwa ³ , H. Aoki ¹ , H. Tsuchida ¹ , R. Ogasawara ⁴ , K. Sakamoto ⁵ , M. Yanagita ¹ , H. Imamura ¹ , M. Yamamoto* ^{1,2} , ¹ Kyoto University, Japan, ² PRESTO, Japan, ³ Harverd University, USA, ⁴ Nagoya Institute of Technology, Japan, ⁵ Nestle Institute of Health Sciences, Switzerland
[P1.029]	Reduced mitochondrial respiration in abdominal subcutaneous adipose tissue in women with polycystic ovary syndrome T. Moholdt* ¹ , I. Almending ¹ , S. Larsen ² , F. Bækkerud ¹ , ¹ Norwegian University of Science and Technology, Norway, ² University of Copenhagen, Denmark
[P1.030]	Increased insulin-stimulated glucose uptake in both leg and arm muscles after sprint interval and moderate intensity training in subjects with type 2 diabetes or prediabetes T.J. Sjöros* ^{1,2} , M.A. Heiskanen ¹ , K.K. Motiani ¹ , E. Löyttyniemi ¹ , J.-J. Eskelinen ¹ , K.A. Virtanen ^{1,3} , N.J. Savisto ¹ , O. Solin ^{1,4} , J.C. Hannukainen ¹ , K.K. Kalliokoski ¹ , ¹ University of Turku, Finland, ² University of Jyväskylä, Finland, ³ Turku University Hospital, Finland, ⁴ Åbo Academi University, Finland
[P1.031]	Preferential utilisation of intermyofibrillar lipid droplets during exhaustive exercise in highly-trained athletes: A semi-quantitative electron microscopic study H.C.E. Koh* ¹ , J. Nielsen ¹ , H.C. Holmberg ² , N. Ørtenblad ^{1,2} , ¹ University of Southern Denmark, Denmark, ² Mid Sweden University, Sweden
[P1.032]	The interaction between circadian rhythm and mitochondrial function in skeletal muscle B.M. Gabriel* ¹ , A.L. Basse ² , R. Barrès ² , A. Krook ¹ , J.R. Zierath ^{1,2} , ¹ Karolinska Institutet, Sweden, ² University of Copenhagen, Denmark
[P1.033]	Time-course Effects of Exercise on Anxiety-like Behaviors and Hippocampal Neuronal Nitric Oxide Synthase in High Fat Diet-induced Obese Mice Y. Tomiga*, S. Yoshimura, Y. Takahashi, R. Goto, I. Kugimoto, Y. Uehara, K. Kawanaka, H. Tanaka, Y. Higaki, Fukuoka University, Japan
[P1.034]	Autonomous regulation of skeletal muscle mass by the Vitamin D receptor J.J. Bass* ¹ , A. Kazi ² , A. Nakhuda ¹ , C.S. Deane ³ , D.J. Wilkinson ¹ , B.E. Phillips ¹ , K. Smith ¹ , D. Andersen ⁶ , A. Philp ⁴ , J. Tarum ⁵ , ¹ University of Nottingham, UK, ² Pennsylvania State University College of Medicine, USA, ³ University of Exeter, UK, ⁴ University of Birmingham, UK, ⁵ Örebro University, Sweden, ⁶ Royal Veterinary College, UK
[P1.035]	Irisin, physical activity and fitness status in healthy humans: No association under resting conditions in a cross-

	<p>sectional study N. Siegel^{*1}, S. Bandt², A. Roth², S. Haertel¹, R. Neumann¹, A. Bub^{1,2}, ¹Karlsruhe Institute of Technology, Germany, ²Max Rubner-Institut, Germany</p>
[P1.036]	<p>Glucose effectiveness, but not insulin sensitivity, is improved after 2 weeks of interval training in subjects with type 2 diabetes K. Karstoft¹, M.A. Clark¹, I. Jakobsen¹, S.H. Knudsen¹, G. van Hall¹, B.K. Pedersen¹, T.P.J. Solomon^{*2}, ¹University of Copenhagen, Denmark, ²University of Birmingham, UK</p>
[P1.037]	<p>Single muscle fiber proteomics reveals fiber type-specific features of human muscle aging M. Murgia^{*1,2}, L. Toniolo², N. Nagaraj¹, S. Ciciliot³, V. Vindigni², S. Schiaffino³, C. Reggiani², M. Mann¹, ¹Max-Planck-Institute of Biochemistry, Germany, ²University of Padova, Italy, ³Venetian Institute of Molecular Medicine, Italy</p>
[P1.038]	<p>Metformin up-regulates the expression of β2-adrenergic receptor in skeletal muscle J-W. Son[*], O-K. Hong, S-S. Lee, S-R. Kim, S-J. Yoo, <i>The Catholic University of Korea, Republic of Korea</i></p>
[P1.039]	<p>Hypoxia-inducible factor-2 alpha mediates exercise-induced hypothalamic glucose sensing V.R.R. Silva[*], C.K. Katashima, L. Lenhare, L.D.M. Dantas, A.V. Cordeiro, R.C. Gaspar, V.R. Munhoz, D.E. Cintra, J.R. Pauli, E.R. Ropelle, <i>University of Campinas, Brazil</i></p>
[P1.040]	<p>Co-ingestion of protein hydrolysate with carbohydrate enhances anabolic signaling, but not glycogen resynthesis, following recovery from endurance exercise in trained cyclists K.E. Cogan^{*1}, M. Evans¹, A. Melvin¹, E. Iuliano¹, G. De Vito^{1,2}, B. Egan^{1,2}, ¹University College Dublin, Ireland, ²Dublin City University, Ireland</p>
[P1.041]	<p>Phosphoproteomic screening of exercise mimetics reveal extensive drug interactions and signalling networks E. Needham, R. Chaudhuri, S. Humphrey, D. James, B. Parker[*], <i>The University of Sydney, Australia</i></p>
[P1.042]	<p>Multiplexed temporal quantification of the exercise-regulated plasma peptidome B. Parker^{*1}, J. Burchfield¹, D. Clayton¹, R. Payne¹, B. Kiens², J. Wojtaszewski², E. Richter², D. James², ¹The University of Sydney, Australia, ²The University of Copenhagen, Denmark</p>
[P1.043]	<p>Long-term moderate exercise increases lactate metabolism and hippocampal neuroplasticity Y.W. Chen^{*1,2}, Y.M. Kuo^{1,2}, ¹National Cheng Kung University, Taiwan, ²College of Medicine, Taiwan</p>
[P1.044]	<p>Metabolomic analysis of skeletal muscle before and 4 hours after normoxic and hypoxic exercise in horses H. Ohmura^{*1}, K. Mukai¹, Y. Takahashi¹, T. Takahashi¹, J.H. Jones², ¹Japan Racing Association, Japan, ²University of California, USA</p>
[P1.045]	<p>Regulation of muscle mitochondrial respiration by TGFβ C. Hoffmann^{*1}, S. Hoeckele^{2,3}, A. Böhm^{1,3}, M. Hrabe de Angelis^{2,3}, H-U. Häring^{1,2}, C. Weigert^{1,4}, ¹University Hospital Tübingen, Germany, ²German Research Center for Environmental Health Neuherberg, Germany, ³German Center for Diabetes Research (DZD), Germany, ⁴University of Tübingen, Germany</p>
[P1.046]	<p>Impact of maternal nutrition on offspring exercise performance and skeletal muscle energy metabolism J. Kasch[*], S. Schumann, K. Haase, I. Lasik, S. Klaus, <i>German Institute of Human Nutrition Potsdam Rehbruecke, Germany</i></p>
[P1.047]	<p>ASK1 signaling regulates brown adipocyte function K. Hattori[*], H. Wakatsuki, H. Ichijo, <i>The University of Tokyo, Japan</i></p>
[P1.048]	<p>Combined pharmacological inhibition of PAK1 and PAK2, but not knockout of PAK1 reduces glucose transport induced by stretch and contraction L.L.V. Møller[*], L. Sylow, I.L. Nielsen, T.E. Jensen, E.A. Richter, <i>University of Copenhagen, Denmark</i></p>
[P1.049]	<p>Panax Ginseng intake improves post-prandial lipid metabolism in recreational athletes D.H. García[*], A. Naudí, J. Serrano, <i>Dublin City University, Spain</i></p>
[P1.050]	<p>Exercise regulates expression of long noncoding RNAs M. Wohlwend[*], K. Chawla, U. Wisløff, J.B. Moreira, <i>Norwegian University of Science and Technology, Norway</i></p>
[P1.051]	<p>Asb2 mediated loss of muscle mass is accompanied by impaired muscle metabolism L. Sylow^{*1}, J. Davey², L.L.V. Moller¹, B.L. Parker³, D.E. James³, P. Gregorevic², ¹University of Copenhagen, Denmark, ²Baker Heart and Diabetes Institute, Australia, ³Charles Perkins Centre, Australia</p>
[P1.052]	<p>Voluntary wheel running induction of ΔFosB in nucleus accumbens promotes resilience to chronic social defeat stress J. Mul^{*1,5}, M. Soto¹, M. Cahill², R. Ryan¹, H. Takahashi¹, K. So¹, J. Zheng¹, D. Croote¹, M. Hirshman¹, S. la Fleur^{5,3}, ¹Joslin Diabetes Center, USA, ²Icahn School of Medicine at Mount Sinai, USA, ³Netherlands Institute for Neuroscience, The Netherlands, ⁴Brigham and Women's Hospital, USA, ⁵Academic Medical Center, The Netherlands</p>
[P1.053]	<p>Already two weeks of interval training alters brain glucose metabolism in subjects with pre-diabetes or type 2 diabetes S.M. Honkala^{*1}, J.J. Johansson¹, K.K. Motiani¹, J.J. Eskelinen¹, K.A. Virtanen¹, E. Löyttyniemi², J. Knuti¹, P. Nuutila¹, K.K. Kalliokoski¹, J.C. Hannukainen¹, ¹Turku PET Centre, Finland, ²University of Turku, Finland</p>
[P1.054]	<p>Molecular Transducers of Physical Activity Consortium (MoTrPAC): Creating a comprehensive map of molecular changes in response to physical activity A. Boyce^{*1}, B. Goodpaster², W. Kohrt¹, M. Laughlin¹, N. Musi³, ¹NIH, USA, ²Sanford Burnham Prebys Medical Discovery Institute, USA, ³University of Texas Health Science Center, USA</p>

[P1.055]	Skeletal muscle to pancreatic beta cell crosstalk: The effect of mediators liberated by muscle contraction on cytokine-induced pancreatic beta cell dysfunction J. Barlow* ¹ , S. Carter ¹ , C. Affourtit ² , T. Solomon ¹ , ¹ University of Birmingham, UK, ² Plymouth University, UK
[P1.056]	Does contractile activity of skeletal muscle protect against hyperglycaemia-induced insulin resistance? S. Carter*, J. Barlow, T. Solomon, <i>University of Birmingham, UK</i>
[P1.057]	Human sperm telomere dynamics after 6-weeks of sprint interval training (SIT) J. Denham, <i>University of New England, Australia</i>
[P1.058]	Reduced blood insulin stimulates resistance exercise-induced AMPK pathway activation concomitant with AMPKα Ser485/491 inhibitory phosphorylation in rat skeletal muscle K. Kido* ¹ , T. Yokokawa ² , S. Ato ¹ , K. Sato ³ , S. Fujita ¹ , ¹ Ritsumeikan University, Japan, ² Kyoto University, Japan, ³ Kobe University, Japan
[P1.059]	The effect of exercise training type on skeletal muscle regeneration after Ischemia - reperfusion in rat C.H. Lim* ¹ , S.Y. Kim ² , C.K. Kim ¹ , ¹ Korea National Sport University, Republic of Korea, ² Ansan University, Republic of Korea
[P1.060]	Microglial activation, BDNF signaling pathway and dopaminergic neuron survival in the substantia nigra: The countering effects between aging and exercise W.T. Lee*, S.Y. Wu, Y.M. Kuo, <i>National Cheng Kung University, Taiwan</i>
[P1.061]	Sex-selective regulation of muscle mass by western-style diet M. Shimizu*, R. Sato, <i>The University of Tokyo, Japan</i>
[P1.062]	The effect of a single aerobic exercise and of aerobic training on regulation of protein synthesis and degradation in human skeletal muscle O. Vinogradova*, E. Lysenko, A. Bytkov, D. Popov, <i>SSC RF Institute of biomedical problems RAS, Russia</i>
[P1.063]	Assessing the effects of moderate exercise on a mouse model of chronic inflammation A. Bianchi*, B. Elliott, D. Mann, C. Wilson, <i>Newcastle University, UK</i>
[P1.064]	Exercise rescues early distal insulin signalling in muscle but not whole body insulin sensitivity in Polycystic Ovary Syndrome N.K. Stepto* ^{1,2} , D.S. Hiam ^{1,3} , C.L. Harrison ³ , A. Joham ³ , S. Cassar ^{1,3} , M. Gibson-Helm ³ , N. Hatzirodos ⁴ , R.J. Rodgers ⁴ , H.J. Teede ³ , ¹ Victoria University, Australia, ² Melbourne University and Western Health, Australia, ³ Monash University, Australia, ⁴ University of Adelaide, Australia
[P1.065]	The AMPK and mechanical stress-stimulated phosphoproteome reveals important sites controlling metabolic switching A.B. Madsen* ^{1,2} , B. Parker ² , P. Yang ² , E.A. Richter ¹ , D.E. James ² , T.E. Jensen ¹ , ¹ University of Copenhagen, Denmark, ² Charles Perkins Centre, Australia
[P1.066]	Angiopoietin-like protein 4 is an exercise-induced hepatokine in humans J.S. Hansen* ¹ , B. Ingerslev ¹ , J.O. Clemmesen ¹ , N.H. Secher ¹ , C. Hoffmann ² , M. Scheler ³ , M.H. de Angelis ⁴ , H.U. Häring ² , B.K. Pedersen ¹ , C. Weigert ² , ¹ Rigshospitalet, Denmark, ² University of Tuebingen, Germany, ³ Helmholtz Center Munich, Germany, ⁴ Technical University Munich, Germany
[P1.067]	Contribution of the liver to exercise-induced changes in plasma metabolites: A metabolomics approach P. Plomgaard* ¹ , J.S. Hansen ¹ , X.J. Zhao ² , M. Hoene ³ , X.L. Wang ² , J.O. Clemmesen ¹ , N.H. Secher ¹ , H.U. Häring ³ , B.K. Pedersen ¹ , R. Lehmann ³ , ¹ Rigshospitalet, Denmark, ² Dalian Institute of Chemical Physics, China, ³ University Tuebingen, Germany
[P1.068]	Exercise increases GLUT4 promoter histone acetylation in human skeletal muscle M. Hargreaves* ¹ , M. Flores-Opazo ¹ , A. Garnham ² , M. Ziemann ³ , K. Harikrishnan ³ , I. Khurana ³ , A. Kapsi ³ , A. El-Osta ³ , ¹ The University of Melbourne, Australia, ² Deakin University, Australia, ³ Monash University, Australia
[P1.069]	Ischaemia promotes the exercise-stimulated muscle gene response associated with mitochondrial protein content and glucose transport in healthy men D. Christiansen* ¹ , R.M. Murphy ² , J. Bangsbo ³ , D.J. Bishop ¹ , ¹ Victoria University, Australia, ² La Trobe University, Australia, ³ University of Copenhagen, Denmark
[P1.070]	Unfolded protein response after a single resistance training bout and long-term resistance training period in young and older men J. Hentilä* ¹ , J.P. Ahtiainen ¹ , H. Selänne ² , K. Häkkinen ¹ , A.A. Mero ¹ , J.J. Hulmi ^{1,3} , ¹ University of Jyväskylä, Finland, ² LIKES Research Center for Sport and Health Sciences, Finland, ³ University of Helsinki, Finland
[P1.071]	The relationship between locomotive syndrome and oxidative stress - Cross sectional study of 66 patients with locomotive symptoms S. Banno* ^{1,2} , H. Nojiri ^{1,2} , M. Koike ^{1,2} , K. Miyagawa ^{1,2} , Y. Iwase ^{1,2} , H. Kurosawa ¹ , K. Kaneko ² , ¹ Juntendo Tokyo Koto geriatric medical center, Japan, ² Juntendo University, Japan
[P1.072]	Effects of experimental cancer cachexia and activin receptor ligand blocking on physical activity and oxidative properties of skeletal muscle T. Nissinen* ¹ , J. Hentilä ¹ , F. Penna ² , J. Lautaoja ¹ , M. Silvennoinen ¹ , T. Holopainen ³ , A. Pasternack ³ , O. Ritvos ³ , R. Kivelä ³ , J. Hulmi ^{1,3} , ¹ University of Jyväskylä, Finland, ² University of Turin, Italy, ³ University of Helsinki, Finland
[P1.073]	Deciphering the association networks of mycobiome communities among the elderly Danes H.F. Ahmad* ^{1,5} , K. Faust ² , J.L. Castro-Mejia ¹ , W. Kot ³ , R.L. Bechshøft ⁴ , S. Reitelseder ⁴ , L. Holm ^{1,4} , D.S. Nielsen ¹ ,

	¹ University of Copenhagen, Denmark, ² KU Leuven, Belgium, ³ Aarhus University, Denmark, ⁴ Bispebjerg Hospital, Denmark, ⁵ Universiti Malaysia Pahang, Malaysia
[P1.074]	A Fast Skeletal Troponin Activator (FSTA), CK-2066260, counteracts the fatigue-induced decline in skeletal muscle contractile force by lowering the metabolic cost A. Cheng* ¹ , D. Hwee ² , L. Kim ² , N. Durham ² , A. Hinken ² , A. Kennedy ² , R. Terjung ³ , J. Jasper ² , F. Malik ² , H. Westerblad ¹ , ¹ Karolinska Institutet, Sweden, ² Cytokinetics Inc., USA, ³ University of Missouri, USA
[P1.075]	Skeletal muscle cells display circadian rhythmicity associated with promoter methylation and is modulated by contractile activity R.C. Laker* ¹ , C. Garde ¹ , B. Gabriel ² , R. Barrès ¹ , J.R. Zierath ^{2,1} , ¹ University of Copenhagen, Denmark, ² Karolinska Institute, Sweden
[P1.076]	Exercise training diminishes the effect of acute exercise on insulin sensitivity in man D.E. Steenberg*, N.B. Jørgensen, K.A. Sjøberg, B. Kiens, E.A. Richter, J.F.P. Wojtaszewski, <i>University of Copenhagen, Denmark</i>
[P1.077]	Exercise recovery is associated with distinct metabolite profiles in healthy volunteers: a metabolomics approach M. Armbruster, M. Rist, P.G. Ferrario, A. Bub*, <i>Max Rubner-Institut, Germany</i>
[P1.078]	Short-term AMPK activation lowers glucose in rodent models of T2DM and phenocopies many of the metabolic and transcriptional effects of exercise E. Muise*, H-P. Guan, J. Liu, A. Nawrocki, X. Yang, C. Wang, D. Kelley, D. Kemp, R. Myers, I. Sebhat, <i>Merck Research Labs, USA</i>
[P1.079]	Ingestion of B-hydroxybutyrate alters metabolic responses to exercise in trained cyclists M. Evans* ¹ , E. Patchett ² , R. Nally ² , R. Kearns ² , M. Larney ² , B. Egan ^{1,2} , ¹ Dublin City University, Ireland, ² University College Dublin, Ireland
[P1.080]	Effect of adaptation to strength training on basal and exercise-induced signaling in skeletal muscle E.A. Lysenko*, D.V. Popov, T.F. Vepkhvadze, A.D. Butkov, O.L. Vinogradova, <i>SSC RF Institute of biomedical problems RAS, Russia</i>
[P1.081]	Single bout of electroacupuncture causing muscle contractions causes epigenetic and transcriptional changes in skeletal muscle mimicking acute exercise E. Nilsson ¹ , A. Benrick ^{2,3} , A. Perilyev ¹ , T. Källman ⁴ , M. Kokosar ² , K. Højlund ⁵ , N. Pillon ⁶ , A. Krook ⁶ , C. Ling ¹ , E. Stener-Victorin ⁶ , ¹ Lund University, Sweden, ² University of Gothenburg, Sweden, ³ University of Skövde, Sweden, ⁴ Uppsala University, Sweden, ⁵ Odense University, Denmark, ⁶ Karolinska Institutet, Sweden
[P1.082]	Maternal diet-induced obesity leads to cardiovascular defects in three successive generations of offspring J. Ferey*, A. Boudoures, T. Pietka, M. Reid, A. Kovacs, K. Moley, <i>Washington University, USA</i>
[P1.083]	Improvement in metabolic flexibility and skeletal muscle acetylcarnitine formation upon carnitine supplementation Y.M.H. Bruls*, M. de Ligt, L. Lindeboom, E. Phielix, B. Havekes, J.E. Wildberger, M.K. Hesselink, P. Schrauwen, V.B. Schrauwen, <i>Maastricht University Medical Center, The Netherlands</i>
[P1.084]	A miRNA screening in muscle cells identifies miR-320a, miR-150, miR-196b and miR-34c as regulators of human skeletal muscle mitochondrial metabolism D. Dahlmans ¹ , A. Houzelle* ¹ , P. Andreux ² , J.A. Jorgensen ¹ , X. Wang ² , L.J. de Windt ¹ , P. Schrauwen ¹ , J. Auwerx ² , J. Hoeks ¹ , ¹ Maastricht University, The Netherlands, ² Ecole polytechnique federale de Lausanne, Switzerland
[P1.085]	High-intensity interval training is as efficient as moderate intensity training for cardiac function M. Verboven*, D. Deluyker, B.O. Eijnde, D. Hansen, V. Bito, <i>Hasselt University, Belgium</i>
[P1.086]	Transcriptional programming of lipid and amino acid metabolism by the skeletal muscle circadian clock K.A. Dyar* ^{1,2} , S. Schiaffino ² , N.H. Uhlénhaut ¹ , ¹ Helmholtz Zentrum München, Germany, ² Venetian Institute of Molecular Medicine (VIMM), Italy
[P1.087]	Effects of endurance exercise and changes in muscle activity on a Huntington's disease mouse model S. Corrochano* ¹ , A. Acevedo-Arozena ¹ , ¹ Medical Research Council, UK, ² Hospital Universitario de Canarias, Spain
[P1.088]	A comparison of high-intensity interval versus moderate-intensity continuous running after 8 weeks of outdoor training and 4 weeks of detraining F. Gripp ¹ , T. Moriarty ² , M. Dias-Peixoto ¹ , R. Cassilhas ¹ , F. Magalhães ¹ , F. Amorim* ^{1,2} , ¹ Universidade Federal dos Vales do Jequitinhonha e Mucuri, Brazil, ² University of New Mexico, USA
[P1.089]	High intensity interval training changes skeletal muscle insulin signaling pathway of obese individuals M.A. Aguiar ¹ , T. Moriarty* ² , F. Magalhães ¹ , D.V. Vieira ¹ , K. Pinhal ¹ , M. Dias-Peixoto ¹ , E. Rocha-Vieira ¹ , F. Amorim ^{1,2} , ¹ Universidade Federal dos Vales do Jequitinhonha e Mucuri, Brazil, ² University of New Mexico, USA
[P1.090]	An acute bout of prolonged sitting impairs endothelial function and increases plasma concentrations of endothelin-1 and sVCAM-1 in overweight/obese insulin-resistant adults M.S. Grace* ^{1,2} , R.E.D. Climie ¹ , J. Carr ^{1,2} , M. Wheeler ^{1,3} , F. Dillon ¹ , N. Eikelis ¹ , N. Owen ^{1,2} , D.J. Green ³ , B.A. Kingwell ¹ , D.W. Dunstan ^{1,2} , ¹ Baker Heart and Diabetes Institute, Australia, ² Monash University, Australia, ³ University of Western Australia, Australia
[P1.091]	Circulating microRNAs are potential biomarkers of cardiorespiratory fitness J. Denham* ¹ , P.R. Prestes ² , ¹ University of New England, Australia, ² Federation University Australia, Australia
[P1.092]	Metabolic and physiological roles of AMPK β1 glycogen binding

	N. Hoffman ^{*1} , S. Galic ² , J. Oakhill ^{1,2} , J. Scott ^{1,2} , G. Steinberg ³ , B. Kemp ^{1,2} , J. Hawley ^{1,4} , ¹ Australian Catholic University, Australia, ² St Vincent's Institute of Medical Research, Australia, ³ McMaster University, Canada, ⁴ Liverpool John Moores University, UK
[P1.093]	Mitochondrial superoxide regulates ATP metabolism and exercise capacity in skeletal muscle I. Sakamoto ^{*1,2} , H. Nojiri ² , K. Kaneko ² , T. Shimizu ¹ , ¹ Chiba University, Japan, ² Juntendo University, Japan
[P1.094]	Cardiovascular and metabolic responses of high intensity sprint protocols on the cybex spark™ trainer T. Moriarty [*] , K. Escobar, T. Nunez, F. Amorim, L. Kravitz, <i>University of New Mexico, USA</i>
[P1.095]	Exercise induces expression of HDL major protein component, ApoA1, in skeletal muscle M. Lehti ^{*1} , T. Nissinen ² , H. Kainulainen ² , S. Hofmann ³ , ¹ LIKES Research Centre, Finland, ² University of Jyväskylä, Finland, ³ Helmholtz Zentrum München, Germany
[P1.096]	Increased respiratory chain supercomplex formation and mitochondrial respiration in response to exercise training in human skeletal muscle D. Bishop ^{*1} , C. Granata ^{1,2} , J. Kuang ¹ , J. Botella ¹ , N. Jamnick ¹ , ¹ Victoria University, Australia, ² Monash University, Australia
[P1.097]	Enzymatic dissociated skeletal muscle fibers show an artificially facilitated mitochondrial Ca²⁺ uptake H. Westerblad ^{*1} , C. Gineste ² , J.D. Bruton ¹ , A.J. Cheng ¹ , N. Ivarsson ¹ , ¹ Karolinska Institutet, Sweden, ² Aix Marseille University, France
[P1.098]	Pantothenate kinase 4 is a novel exercise-responsive protein that regulates lipid oxidation in skeletal muscle M. Kleinert ^{*1,2} , A. Fritzen ¹ , L. Sylow ¹ , L. Moller ¹ , J. Knudsen ¹ , R. Kjobsted ¹ , K. Dyar ² , J. Davey ³ , H. Qian ³ , P. Gregorevic ³ , ¹ University of Copenhagen, Denmark, ² Helmholtz Zentrum München, Germany, ³ Baker IDI Heart and Diabetes Institute, Australia
[P1.099]	Dietary preferences and body weight loss in response to exercise are sex dependent R.Z. Tom ^{*1} , S. Cucuruz ¹ , C. Striese ¹ , S. Schriver ¹ , D. Lutter ¹ , B. Lam ² , G. Yeo ² , M. Tschöp ¹ , S. Hofmann ¹ , ¹ Helmholtz Zentrum, Germany, ² University of Cambridge, UK
[P1.100]	Differential changes in myocellular lipid droplet morphology between type 2 diabetes patients responsive or irresponsive to exercise training S. Daemen [*] , A. Gemmink, B. Brouwers, R.C.M. Meex, G. Schaart, P. Schrauwen, M.K.C. Hesselink, <i>Maastricht University, The Netherlands</i>
[P1.101]	Moderate-intensity exercise results in preferential translocation of hormone sensitive lipase to perilipin-5 associated lipid droplets in human skeletal muscle K.L. Whytock, S.O. Shepherd, A.J.M. Wagenmakers, J.A. Strauss [*] , <i>Liverpool John Moores University, UK</i>
[P1.102]	MAFF is a novel molecular target of exercise J.B.N. Moreira [*] , M. Wohlwend, I. Åmellem, A. Flatberg, S.B. Andersen, G. Bjørkøy, U. Wisløff, <i>Norwegian University of Science and Technology, Norway</i>
[P1.103]	Relationship of longitudinal physical activity behavior with anthropometric and metabolic parameters in patients with recent-onset type 1 and 2 diabetes D. Pesta [*] , P. Bobrov, O.P. Zaharia, K. Bodis, Y. Karusheva, K. Strassburger, J. Szendrödi, M. Roden, G.D.S. Cohort, <i>German Diabetes Center, Germany</i>
[P1.104]	High-density lipoprotein increases cellular mitochondrial function Y. Goto [*] , S. Nakashima, S. Abe, Y. Higaki, Y. Uehara, <i>Fukuoka University, Japan</i>
[P1.105]	Fat accumulation processes in the liver of trained mice and untrained S. Yoshimura [*] , Y. Tomiga, S. Nakashima, R. Goto, I. Kugimoto, Y. Takahashi, Y. Uehara, Y. Higaki, <i>Fukuoka University, Japan</i>
[P1.106]	Mitochondrial function in adipose tissue and skeletal muscle: Adaptations to exercise training in obese black women A.E. Mendham ^{*1} , C. George ² , K. Adams ¹ , J. Goedecke ^{1,2} , ¹ University of Cape Town, South Africa, ² South African Medical Research Council, South Africa

Poster Session 2

[P2.001]	The correlation between the ability to oxidize fat and net fat oxidation during prolonged exercise H. Tabata ^{*1,2} , H-K. Kim ^{1,2} , M. Konishi ¹ , S. Sakamoto ¹ , ¹ Waseda University, Japan, ² Japan Society for Promotion of Science, Japan
[P2.002]	A single bout of low-frequency electroacupuncture causing muscle contractions increases whole-body glucose uptake in women A. Benrick ^{*1,2} , M. Kokosar ¹ , M. Maliqueo ¹ , A. Zasanova ⁴ , C-J. Behre ⁴ , K. Højlund ³ , E. Stener-Victorin ^{1,5} , ¹ University of Gothenburg, Sweden, ² University of Skövde, Sweden, ³ Odense University, Denmark, ⁴ Sahlgrenska Academy, Sweden, ⁵ Karolinska Institute, Sweden
[P2.003]	Evidence for a transcriptome-driven variant-specific functional effect of the equine <i>myostatin (MSTN)</i> performance SNP (g.66493737C>T) K. Bryan [*] , B. McGivney, G. Farries, K. Gough, C. McGivney, D. MacHugh, L. Katz, E. Hill, <i>University College Dublin, Ireland</i>

[P2.004]	Electrical pulse stimulation of isolated mouse FDB muscle fibers as an in-vitro model of exercise-induced myokine release S. Summermatter, M. Rausch, S. Brachat, F. Bello, E. Pierrel, H. Jeker, M. Steinmann, H. Keller*, <i>Novartis Institutes for BioMedical Research, Switzerland</i>
[P2.005]	Dietary acid load and renal function have varying effects on acid-base status during exercise in adolescents, young adults and the elderly E-M. Hietavala* ¹ , L.A. Frassetto ² , J.R. Stout ³ , A.A. Mero ¹ , ¹ University of Jyväskylä, Finland, ² University of California San Francisco, USA, ³ University of Central Florida, USA
[P2.006]	The plasmalemma of human skeletal muscle alters its structure to change its Ca²⁺-handling in response to heavy-load resistance exercise T.R. Cully ¹ , R.M. Murphy* ³ , L. Roberts ¹ , T. Raastad ² , R.G. Fasset ¹ , J.S. Coombes ¹ , I.D. Jayasinghe ^{1,4} , B.S. Launikonis ¹ , ¹ The University of Queensland, Australia, ² Norwegian School of Sport Sciences, Norway, ³ La Trobe University, Australia, ⁴ University of Leeds, UK
[P2.007]	Muscle PGC-1α and exercise-induced autophagy in mouse subcutaneous adipose tissue S. Ringholm*, I.F. Villesen, H. Pilegaard, <i>University of Copenhagen, Denmark</i>
[P2.008]	Follistatin overexpression improves insulin sensitivity in skeletal muscle X. Han* ¹ , E.D. Groote ² , L.L.V. Møller ¹ , T.E. Jensen ¹ , J. Davey ³ , P. Gregorevic ³ , E.A. Richter ¹ , L. Sylow ¹ , ¹ University of Copenhagen, Denmark, ² Université catholique de Louvain, Belgium, ³ Baker IDI Heart and Diabetes Institute, Australia
[P2.009]	Maternal high-fat diet induces changes in offspring skeletal muscle epigenetic profile S. Schumann*, J. Kasch, S. Saussenthaler, A. Schürmann, I. Kanzleiter, S. Klaus, <i>German Institute of Human Nutrition Potsdam-Rehbruecke (DIfE), Germany</i>
[P2.010]	NAD precursor improves aerobic performance in mice B.M. Crisol*, C.B. Veiga, R.C. Gaspar, L. Lenhare, V.R. Muñoz, R.S. Gaspar, A.V. Cordeiro, D.E. Cintra, J.R. Pauli, E.R. Ropelle, <i>University of Campinas, Brazil</i>
[P2.011]	Impact of training state on fasting-induced adipose tissue lipolysis in humans L. Bertholdt*, A. Gudiksen, T. Stankiewicz, I. Villesen, J. Tybirk, J. Bangsbo, P. Plomgaard, H. Pilegaard, <i>University of Copenhagen, Denmark</i>
[P2.012]	Acute knockout of AMPKα1α2 in adult skeletal muscle reveals unexpected metabolic phenotype R. Kjøbsted*, J.R. Hingst, J.B. Birk, S.A.S. Kjeldsen, N.O. Jørgensen, C. Frøsig, J.F.P. Wojtaszewski, <i>University of Copenhagen, Denmark</i>
[P2.013]	Prox1 transcription factor – a new regulator of skeletal muscle metabolism N.G. Yosef ¹ , H.Y. Nguyen ² , E. Mervaala ¹ , R. Kerkelä ⁴ , H. Koistinen ^{2,3} , K. Alitalo ¹ , R. Kivelä* ¹ , ¹ University of Helsinki, Finland, ² Minerva Research Institute, Finland, ³ Helsinki University Central Hospital, Finland, ⁴ University of Oulu, Finland
[P2.014]	Hyper-activated rac1 is too much of a good thing during exercise S.H. Raun* ¹ , L.L.V. Møller ¹ , C. Henriquez-Olguín ¹ , J. Davey ² , H. Qian ² , P. Gregorevic ² , T.E. Jensen ¹ , E.A. Richter ¹ , L. Sylow ¹ , ¹ University of Copenhagen, Denmark, ² Baker IDI Heart and Diabetes Institute, Australia
[P2.015]	Genetic contributions to measured speed variables in Thoroughbred racehorses during early training G. Farries*, B.A. McGivney, K.F. Gough, L.M. Katz, E.W. Hill, <i>University College Dublin, Ireland</i>
[P2.016]	Acute Effects of Eccentric and Concentric Cycling on Oxidative Stress and Inflammation Markers in Healthy Old Individuals L. Penailillo* ¹ , K. Mackay ¹ , R. Gonzalez ¹ , D. Valladares ¹ , K. Nosaka ¹ , ¹ Universidad Finis Terrae, Chile, ² Edith Cowan University, Australia
[P2.017]	Effect of acute bout of exercise on immune cell populations in adipose tissue and blood of obese and lean men M. Šiklová* ^{1,2} , E. Krauzová ^{1,2} , M. Koc ¹ , M. Štěpán ^{1,2} , V. Šrámková ¹ , L. Rossmeislová ¹ , V. Štich ^{1,2} , ¹ Charles University in Prague, Czech Republic, ² University Hospital Kralovske Vinohrady, Czech Republic
[P2.018]	Beta₂-adrenergic stimulation increases muscle protein turnover in recovery from exercise in young men S. Jessen* ^{1,2} , L. Holm ² , S. Reitzeleider ² , M. Thomassen ¹ , J. Bangsbo ¹ , M. Hostrup ^{1,2} , ¹ University of Copenhagen, Denmark, ² Bispebjerg University Hospital, Denmark
[P2.019]	The effect of resistance exercise and amino acid ingestion on complex-specific mTOR localisation in human skeletal muscle N. Hodson* ¹ , C. McGlory ² , S. Jeromson ³ , S. Oikawa ² , M. Rugg ⁴ , D.L. Hamilton ³ , S. Phillips ² , A. Philp ¹ , ¹ University of Birmingham, UK, ² McMaster University, Canada, ³ Stirling University, UK, ⁴ University of Basel, Switzerland
[P2.020]	CRFR2 agonists improve insulin sensitivity and skeletal muscle function in type 2 diabetes M.L. Borg*, M. Schönke, J. Massart, T.D.C. Barbosa, H.K.R. Karlsson, A.V. Chibalin, A. Krook, J.R. Zierath, <i>Karolinska Institutet, Sweden</i>
[P2.021]	Effects of exercise training on motor functions, cognition and glucose metabolism in patients with Parkinson's disease B. Ukropcova* ^{1,2} , L. Slobodova ^{2,1} , V. Tirpakova ¹ , P. Krumpolec ¹ , U. Dydak ⁵ , W. Bogner ⁶ , M. Krssak ⁶ , P. Valkovic ² , M. Sedliak ⁴ , J. Ukropec ¹ , ¹ Biomedical Research Center Slovak Academy of Sciences, Slovakia, ² Faculty of Medicine Comenius University, Slovakia, ³ Slovak Medical University, Slovakia, ⁴ Faculty of Physical Education and Sports

	<i>Comenius University, Slovakia, ⁵School of Health Sciences Purdue University, USA, ⁶Medical University of Vienna, Austria</i>
[P2.022]	Exercise training reverses the effect of a Paleolithic diet on liver fat and intramyocellular lipid content in patients with type 2 diabetes J. Otten*, A. Stomby, M. Waling, A. Isaksson, I. Söderström, M. Ryberg, M. Svensson, J. Hauksson, T. Olsson, <i>Umeå University, Sweden</i>
[P2.023]	Exercise regulates skeletal muscle autophagy in an intensity and PGC-1α dependent manner N. Brandt*, M. Munk Detlefsen, J. Bangsbo, H. Pilegaard, <i>University of Copenhagen, Denmark</i>
[P2.024]	Leveraging betting market data to derive accurate and heritable racing performance phenotypes in Thoroughbred horses M. Weiser*, B. McGivney, H. Wiencko, E. Hill, <i>Plusvital Ltd, Ireland</i>
[P2.025]	Changes in free and exosome-associated circulating miRNAs and myokine profile in non-professional sky-racers during the Gran Sasso d'Italia vertical run M. Faraldi* ¹ , V. Sansoni ¹ , S. Perego ¹ , R. Paone ² , F. Aielli ² , N. Rucci ² , G. Banfi ^{1,3} , G. Lombardi ¹ , ¹ IRCCS Istituto Ortopedico Galeazzi, Italy, ² University of L'Aquila, Italy, ³ Vita-Salute San Raffaele University, Italy
[P2.026]	Beta2-adrenergic stimulation increases glucose clearance of skeletal muscle at rest but reduces clearance during exercise J. Onslev* ¹ , J. Jensen ² , J. Bangsbo ¹ , M. Hostrup ¹ , ¹ University of Copenhagen, Denmark, ² Norwegian School of Sports Sciences, Norway
[P2.027]	Exercise reduces the aging associated increase in Reactive oxygen species emission potential independent of PGC-1α J. Nøhr-Meldgaard*, H. Jessen, J.F. Halling, A. Gudiksen, H. Pilegaard, <i>University of Copenhagen, Denmark</i>
[P2.028]	Dissociation between exercise-induced PGC-1α mRNA responses and training mediated oxidative adaptations T.P. Gunnarsson*, N. Brandt, M. Fiorenza, H. Pilegaard, J. Bangsbo, <i>University of Copenhagen, Denmark</i>
[P2.029]	CIC-1 expression in human skeletal muscle M. Thomassen* ¹ , M. Hostrup ¹ , R.M. Murphy ² , B. Cromer ³ , J. Bangsbo ¹ , ¹ University of Copenhagen, Denmark, ² La Trobe University, Australia, ³ RMIT University, Australia
[P2.030]	Bioavailability of orange juice (poly)phenols: The impact of short-term cessation of training by male endurance athletes G. Pereira-Caro ¹ , T. Polyviou ⁴ , I.A. Ludwig ² , A.M. Nastase ⁴ , J.M. Moreno-Rojas ¹ , A.L. Garcia ⁴ , D. Malkova* ⁴ , A. Crozier ³ , ¹ IFAPA-Alameda del Obispo, Spain, ² University of Lleida, Spain, ³ University of California, USA, ⁴ University of Glasgow, UK
[P2.031]	Loss of YY1 in macrophages induces a glycolytic switch and increased inflammation. M. Fey, F. Verdeguer*, <i>University of Zurich, Switzerland</i>
[P2.032]	Examining the role of SIRT1 in age-associated changes in the skeletal muscle metabolome. S. Joannis* ¹ , S.A. LaBarge ² , C. Roy ³ , A.J. Chetwynd ¹ , S.R. Nalbandian ² , V.F. Martins ² , W.B. Dunn ¹ , S. Schenk ² , A. Philp ¹ , ¹ University of Birmingham, UK, ² University of California San Diego, USA, ³ Institut national de santé publique du Québec (INSPQ), Canada
[P2.033]	Zmynd17 is necessary for mitochondrial quality control in fast-glycolytic muscle R. Fujita ¹ , T. Suematsu ¹ , K. Yoshioka ¹ , D. Seko ¹ , S. Mitsuhashi ² , N. Senoo ³ , I. Nishino ² , S. Miura ³ , Y. Ono* ¹ , ¹ Nagasaki University Graduate School of Biomedical Sciences, Japan, ² National Center of Neurology and Psychiatry, Japan, ³ University of Shizuoka, Japan
[P2.034]	Combination of Ubiquinol intake and moderate physical activity efficiently counteracts myocytes mitochondrial dysfunctions and apoptosis in a mouse model of sarcopenia S. Silvestri* ¹ , P. Orlando ¹ , C. Andreani ² , C. Bartolacci ² , M. Guescini ³ , F. Orlando ⁴ , M. Provinciali ⁵ , A. Amici ² , L. Tiano ¹ , ¹ Polytechnic University of Marche, Italy, ² University of Camerino, Italy, ³ University of Urbino, Italy, ⁴ I.R.R.C.S., Italy, ⁵ National Research Institute on Aging (I.N.R.C.A.), Italy
[P2.035]	Oral phosphatidic acid ingestion modulates resistance exercise-induced myofibrillar protein synthesis rates in older males B. Smeuninx* ¹ , J. McKendry ¹ , Y. Nishimura ¹ , M. Limb ^{1,2} , K. Smith ^{1,2} , P. Atherton ^{1,2} , L. Breen ¹ , ¹ University of Birmingham, UK, ² University of Nottingham, UK
[P2.036]	12,13-diHOME: A novel exercise-induced biomarker for brown adipose tissue L.A. Baer* ¹ , M.D. Lynes ² , H. Takahashi ² , N.R. Narain ³ , M.F. Hirshman ² , M.A. Kiebish ³ , Y. Tseng ² , P.M. Coen ⁴ , L.J. Goodyear ² , K.I. Stanford ¹ , ¹ The Ohio State University, USA, ² Joslin Diabetes Center, USA, ³ BERG, USA, ⁴ Translational Research Institute for Metabolism and Diabetes, USA
[P2.037]	Isoform-specific AMPK actions N. Ziegler*, D. Schmoll, <i>Sanofi, Germany</i>
[P2.038]	Physical exercise induces GPR120 modulation in muscle of obese and type 2 diabetes mice: The role of n3 fatty acid receptor C.B. Veiga ¹ , B.M. Crisol* ¹ , R.C. Gaspar ¹ , G.P. Formigari ¹ , L.P. Moura ¹ , E.R. Ropelle ¹ , A.S. da Silva ² , J.R. Pauli ¹ , D.E. Cintra ¹ , ¹ University of Campinas, Brazil, ² University of São Paulo, Brazil
[P2.039]	Effects of PGC-1α on aging and exercise training-induced regulation of mitochondrial ADP sensitivity

	H. Jessen*, J.F. Halling, J.N. Meldgaard, A. Gudiksen, H. Pilegaard, <i>University of Copenhagen, Denmark</i>
[P2.040]	Role of metabolic stress in exercise-induced signaling and mRNA responses in skeletal muscle of endurance-trained men M. Fiorenza* ^{1,2} , T.P. Gunnarsson ¹ , M. Hostrup ¹ , F.M. Iaia ³ , F. Schena ² , H. Pilegaard ¹ , J. Bangsbo ¹ , ¹ <i>University of Copenhagen, Denmark</i> , ² <i>University of Verona, Italy</i> , ³ <i>University of Milan, Italy</i>
[P2.041]	Training enables a redistribution of perilipin proteins across an expanded skeletal muscle lipid droplet pool following acute free fatty acid elevation S.O. Shepherd* ¹ , J.A. Strauss ¹ , T.A. Bosch ² , A. Bantle ² , Q. Wang ² , J.J. Dube ³ , B. Goodpaster ³ , D.G. Mashek ² , L.S. Chow ² , ¹ <i>Liverpool John Moores University, UK</i> , ² <i>University of Minnesota, USA</i> , ³ <i>University of Pittsburgh, USA</i>
[P2.042]	Exploring the mechanisms through which acute exercise affects transendothelial migration of lymphocytes in healthy and type 1 diabetes (T1D) M. Curran* ¹ , J.P. Campbell ² , M. Drayson ³ , P. Narendran ¹ , ¹ <i>University of Birmingham, UK</i> , ² <i>University of Bath, UK</i> , ³ <i>University of Birmingham, UK</i>
[P2.043]	Treadmill inclination influences inflammation, corticosterone, skeletal muscle fiber type composition, and androgen and glucocorticoid receptors in overtrained mice A.L. da Rocha ¹ , B.C. Pereira ¹ , G.R. Teixeira ² , A.P. Pinto ¹ , F.G. Frantz ¹ , L.L.K. Elias ¹ , A.S.R. Silva* ¹ , ¹ <i>Sao Paulo University, Brazil</i> , ² <i>Sao Paulo State University, Brazil</i>
[P2.044]	Aerobic exercise training increases cardiac compliance I. Heinonen* ^{1,2} , O. Sorop ² , B. Van Dalen ² , R.C.I. Wüst ^{3,4} , V.J. de Beer ² , Y. Octavia ² , R. van Duin ² , Y. Hoogstrate ² , A. Stubbs ² , L. Blonden ² , ¹ <i>University of Turku, Finland</i> , ² <i>Erasmus University Medical Center, The Netherlands</i> , ³ <i>VU University Medical Centre, The Netherlands</i> , ⁴ <i>University of Amsterdam, The Netherlands</i>
[P2.045]	Acute physical exercise increases thermogenesis and decreases food intake through hypothalamic APPL1 protein in obese mice V.R. Muñoz*, R.C. Gaspar, G.P. Formigari, B.M. Crisol, L. Lenhare, J.D. Botezelli, D.E. Cintra, L.P. de Moura, E.R. Ropelle, J.R. Pauli, <i>University of Campinas, Brazil</i>
[P2.046]	Human type II muscle fibers exhibit higher expression of proteins in the mTOR pathway as compared to type I fibers S. Edman*, K. Söderlund, E. Blomstrand, <i>The Swedish School of Sport and Health Sciences, Sweden</i>
[P2.047]	Effects of autophagy inhibition on aging-induced regulation of mitochondrial respiration and oxidant emission in inducible muscle-specific PGC-1α knockout mice J.F. Halling*, H.D. Bendixen, H. Jessen, J. Nøhr-Meldgaard, A. Gudiksen, H. Pilegaard, <i>University of Copenhagen, Denmark</i>
[P2.048]	Adipose Tissue Dicer Mediates Metabolic Adaptation in Response to Exercise Training in Mice B.B. Brandão ¹ , S. Madsen ² , A. Rabiee ² , M. Oliverio ³ , J.L. Branquinho ¹ , W.T. Festuccia ⁴ , B.A. Guerra ¹ , S.G. Vienberg ² , J.T. Treebak ² , M.A. Mori* ^{1,5} , ¹ <i>Federal University of São Paulo, Brazil</i> , ² <i>University of Copenhagen, Denmark</i> , ³ <i>Max Planck Institute for Metabolism Research, Germany</i> , ⁴ <i>University of São Paulo, Brazil</i> , ⁵ <i>University of Campinas, Brazil</i>
[P2.049]	A novel forced exercise model in zebrafish to identify the molecular mechanisms of skeletal muscle remodeling N. Umemoto*, L. Greif, S. Ekker, <i>Mayo Clinic, USA</i>
[P2.050]	Physical exercise increase Rho-kinase in skeletal muscle, and improve glucose homeostasis in Fischer rats R.C. Gaspar, V.R. Muñoz*, G.K. Kuga, R.M. Pereira, B.M. Crisol, S.C.B.R. Nakandakari, D.E. Cintra, L.P. de Moura, E.R. Ropelle, J.R. Pauli, <i>University of Campinas, Brazil</i>
[P2.051]	Exercise modulates the lipidomic profile of circulating exosomes in cancer cachexia C. Hiroux, D. Annibali, C. Poffé, P. Hespel, E. Berardi*, <i>KU Leuven, Belgium</i>
[P2.052]	Muscle PGC-1α influences exercise-induced hepatic UPR in mice C.M. Kristensen*, S. Ringholm, H. Pilegaard, <i>University of Copenhagen, Denmark</i>
[P2.053]	Exercise triggers arrhythmogenic right ventricular cardiomyopathy (ARVC) phenotype and genetic changes in mice hearts expressing a disease-causing mutated version of human plakophilin-2 (PKP2) E. Petra, F.M. Cruz, M. Roche-Molina, A. González-Guerra, C. Márquez-López, C. del Carmen-Roselló, J.A. Bernal*, <i>Centro Nacional de Investigaciones Cardiovasculares (CNIC), Spain</i>
[P2.054]	Effect of intense training on running economy and single muscle fiber adaptations C. Skovgaard*, J. Bangsbo, <i>University of Copenhagen, Denmark</i>
[P2.055]	Combined exercise and caloric restriction promotes reduction in plasma TMAO and accompanying improvements in cardiometabolic risk indices J.P. Kirwan*, S. Malin, Z. Wang, S.L. Hazen, <i>Cleveland Clinic, USA</i>
[P2.056]	Training state and fasting-induced pyruvate dehydrogenase regulation in human skeletal muscle A. Gudiksen*, L. Bertholdt, T. Stankiewicz, J. Tybirk, J. Bangsbo, P. Plomgaard, H. Pilegaard, <i>University of Copenhagen, Denmark</i>
[P2.057]	Beta₂-adrenergic stimulation augments muscle hypertrophic response to resistance training at the expense of oxidative capacity in young men A.K. Lemminger*, S. Habib, J. Onslev, J. Bangsbo, M. Hostrup, <i>University of Copenhagen, Denmark</i>
[P2.058]	LMCD1B: A novel regulator of skeletal muscle metabolism

	D.M.S. Ferreira ^{*1} , A.J. Cheng ¹ , D. Edsgård ² , T. Chaillou ¹ , M. Porsmyr-Palmertz ¹ , P. da Silva ¹ , M. Izadi ¹ , L.Z. Agudelo ¹ , V. Martínez-Redondo ¹ , A.T. Petersson-Klein ¹ , ¹ Karolinska Institutet, Sweden, ² Royal Institute of Technology (KTH), Sweden
[P2.059]	Beta₂-adrenergic stimulation modifies exercise training-induced changes in proteome signature of skeletal muscle in humans M. Hostrup ^{*1,3} , J. Onslev ¹ , G. Jacobson ² , R. Wilson ² , J. Bangsbo ¹ , ¹ University of Copenhagen, Denmark, ² University of Tasmania, Denmark, ³ Bispebjerg Hospital, Denmark
[P2.060]	Physical Activity Defines The Relationships Among Skeletal Muscle Mitochondrial Energetics, Muscle Quality and Physical Function In Older Adults G. Distefano ¹ , R.A. Standley ¹ , X. Zhang ¹ , E. Carnero ¹ , H.H. Cornell ¹ , B.H. Goodpaster ^{1,2} , P.M. Coen ^{*1,2} , ¹ Translational Research Institute for Metabolism and Diabetes, Florida Hospital, USA, ² Sanford Burnham Prebys Medical Discovery Institute, Lake Nona, USA
[P2.061]	Skeletal muscle exhibits enantioselective disposition of beta₂-adrenergic ligand rac-formoterol that is fibre type-specific in humans K. Eibye ^{*1} , G. Jacobson ² , M. Hostrup ¹ , ¹ University of Copenhagen, Denmark, ² University of Tasmania, Denmark
[P2.062]	Liquid-liquid extraction of capillary blood droplets as a reliable method of measuring metabolic effects with exercise T. Opialla ^{*1,2} , B. Gollasch ¹ , P.H.J.L. Kuich ³ , A. Busjahn ⁴ , M. Boschmann ² , J. Kirwan ¹ , F.C. Luft ² , S. Kempa ^{3,1} , ¹ Berlin Institute of Health, Germany, ² Experimental and Clinical Research Center MDC/Charité, Germany, ³ Berlin Institute for Medical Systems Biology, Germany, ⁴ HealthTwiSt Berlin, Germany
[P2.063]	Effect of endurance training on insulin resistance and TLR-signaling pathways in obese subjects H. Zbinden-Foncea [*] , D. Valladares, I. Rada, L. Peñailillo, A. Contreras-Ferrat, <i>Universidad Finis Terrae, Chile</i>
[P2.064]	Comparison of the serum metabolic fingerprint of different exercise modes in men with and without metabolic syndrome A. Siopi ^{*1} , V. Manou ¹ , O. Deda ¹ , D. Komninou ² , S. Kellis ¹ , N. Raikos ¹ , K. Christoulas ¹ , G.A. Theodoridis ¹ , V. Mougios ¹ , ¹ Aristotle University of Thessaloniki, Greece, ² Alexander Technological Educational Institute of Thessaloniki, Greece
[P2.065]	Activation of hypertrophy and inflammatory signalling pathways after repeated bouts of eccentric cycling in humans D. Valladares [*] , L. Peñailillo, I. Rada, A. Contreras-Ferrat, H. Zbinden-Foncea, <i>Universidad Finis Terrae, Chile</i>
[P2.066]	Spreading of mitochondria membrane potential is involved in calcium-dependent increase oxygen consumption after skeletal muscle depolarization A. Díaz-Vegas ² , D. Valladares ¹ , C. Hidalgo ² , G. Gherardi ³ , D. DeStefani ³ , C. Mammucari ³ , E. Jaimovich ² , A. Contreras-Ferrat ^{*1} , ¹ University Finis Terrae, Chile, ² University of Chile, Chile, ³ University of Padova, Italy
[P2.067]	Insulin-dependent glucose uptake is regulated by mitochondrial calcium handling in skeletal muscle fibers A. Díaz-Vegas ^{*2} , C. Campos ² , D. Valladares ¹ , L. Peñailillo ¹ , H. Zbinden-Foncea ¹ , G. Rosales ² , E. Jaimovich ² , A. Contreras-Ferrat ¹ , ¹ University Finis Terrae, Chile, ² University of Chile, Chile
[P2.068]	Effects of microRNA-34c* inhibition on cardiomyocytes hypertrophy C. Nobrega, E.M. Oliveira [*] , <i>University of Sao Paulo, Brazil</i>
[P2.069]	Is the energy equivalent of human intracellular lipid loss equal to gross changes in body weight, adipose tissue or fat mass? N. Gwerder, R. Quintana [*] , <i>IE Faria Exercise Physiology Laboratory, USA</i>
[P2.070]	Contractile C2C12 myotube model for studying exercise-induced release of extracellular vesicles M. Guescini [*] , S. Maggio, P. Ceccaroli, G. Annibali, F. Lucertini, V. Stocchi, <i>University of Urbino, Italy</i>
[P2.071]	Exercise and IL-15 therapy attenuate hallmarks of skin aging by reducing cellular growth arrest W. Wong ^{*1} , E. Crane ¹ , M. Tarnopolsky ² , J. Crane ¹ , ¹ Northeastern University, USA, ² McMaster University, Canada
[P2.072]	Mitochondrial morphological changes differ between skeletal muscle types and in the different phases of the menstrual cycle in response to acute exercise D. Nakano [*] , S. Machida, <i>Juntendo, Japan</i>
[P2.073]	High frequency resistance training does not cause skeletal muscle hypertrophy due to activation of proteolytic systems in rat skeletal muscle J. Takegaki ^{*1} , R. Ogasawara ² , A. Tsutaki ³ , K. Nakazato ³ , N. Ishii ¹ , ¹ The University of Tokyo, Japan, ² Nagoya Institute of Technology, Japan, ³ Nippon Sport Science University, Japan
[P2.074]	Mitochondrial DNA variation dictates expressivity and progression of nuclear DNA mutations causing cardiomyopathy and exercise intolerance M.J. McManus [*] , H.W. Chen, D.C. Wallace, <i>Children's Hospital of Philadelphia, USA</i>
[P2.075]	siRNA-induced silencing of hypoxia-inducible factor 3α (HIF3α) increases endurance capacity in rats S. Drozdovska ^{*1} , V. Dosenko ¹ , ¹ NUPEU, Ukraine, ² Biph, Ukraine
[P2.076]	Contribution of β₂-adrenoceptors for skeletal muscle mitochondrial function and morphology in response to aerobic exercise V.A. Voltarelli ¹ , M. Coronado ² , L.G. Fernandes ¹ , J.C. Campos ¹ , P. Jannig ¹ , J.C.B. Ferreira ¹ , D. Bernstein ² , P.C. Brum ^{*1} , ¹ University of Sao Paulo, Brazil, ² Stanford University, USA

[P2.077]	Do alterations in mitochondrial remodeling underlie impaired recovery following disuse in old skeletal muscle? W. Apró* ¹ , J.R. Dent ¹ , L.M. Baehr ² , D.W. West ³ , K. Baar ² , S.C. Bodine ² , A. Philp ¹ , ¹ University of Birmingham, UK, ² University of California Davis, USA, ³ University of Toronto, Canada
[P2.078]	Response of Pol II distribution to acute running in fast- and slow-twitch muscles of adult rats R. Masuzawa* ¹ , D. Tagawa ² , K. Takemoto ² , I. Ohsawa ² , A. Watanabe ¹ , F. Kawano ^{1,2} , ¹ Graduate School of Health Sciences, Matsumoto University, Japan, ² School of Human Health Sciences, Matsumoto University, Japan
[P2.079]	Effects of regular exercise on body weight and body composition during muslim holiday season H. Tutumlu*, Z. Goktas, Hacettepe University, Turkey
[P2.080]	Aging induces SIRT1 S-nitrosylation in the hepatic tissue of mice: The reversal effect of exercise. L. Lenhare, V.R.R. Silva, C.K. Katashima, T.O. Micheletti, J.D. Botezelli, R.C. Gaspar, R.S. Gaspar, V.R. Muñoz, B.M. Crisol*, E.R. Ropelle, University of Campinas, Brazil
[P2.081]	Effects of long term running training on the responsiveness of genes to unloading in hindlimb muscles of rats F. Kawano* ¹ , K. Nakamura ¹ , I. Ohsawa ¹ , R. Masuzawa ¹ , A. Watanabe ¹ , K. Nakata ¹ , ¹ Matsumoto University, Japan, ² Osaka University, Japan
[P2.082]	Timing of acute exercise affects the regulation of metabolism in adipose tissue M. Schönke* ¹ , A.L. Basse ² , S. Sato ³ , P. Sassone-Corsi ³ , J.T. Treebak ² , J.R. Zierath ^{1,2} , ¹ Karolinska Institutet, Sweden, ² Novo Nordisk Foundation Center for Basic Metabolic Research, Denmark, ³ University of California Irvine, USA
[P2.083]	Effect of lifelong exercise-training on age associated changes in p53 regulators M.M. Dethlefsen* ¹ , J.F. Halling ¹ , H. Møller ¹ , P. Plomgaard ² , B. Regenberg ¹ , H. Pilegaard ¹ , ¹ University of Copenhagen, Denmark, ² Rigshospitalet, Denmark
[P2.084]	Rev-erb co-regulates muscle regeneration via tethered interaction with the nf-γ cistrome R.D. Welch ¹ , C. Guo ¹ , M. Sengupta ¹ , K.J. Carpenter ¹ , N.A. Stephens ² , L.M. Sparks ² , S.R. Smith ² , J. Zhang ¹ , T.P. Burris ¹ , C.A. Flaveny* ¹ , ¹ Saint Louis University School of Medicine, USA, ² Translational Research Institute for Metabolism and Diabetes, USA
[P2.085]	Pharmacological targeting of estrogen receptor-related receptors improves muscle metabolic function in vivo C. Billon*, S. Bannerjee, A. Avdagic, A. Chatterjee, J.K. Walker, T.P. Burris, St Louis University, School of Medicine, USA
[P2.086]	Exercise remodels small RNA expression and methylation of neurological gene hotspots in sperm L.R. Ingerslev, I. Donkin, E. Andersen*, O. Fabre, S. Verstejhe, R. Barrès, University of Copenhagen, Denmark
[P2.087]	Post-exercise skeletal muscle signalling responses to high-intensity steady-state exercise in the fed or fasted state B. Stocks*, J.R. Dent, M. Zemp, J. Worthington, A. Philp, University of Birmingham, UK
[P2.088]	Acetaminophen consumption alters the signaling and intracellular localization of mTOR in human skeletal muscle following resistance exercise A. D'Lugos* ¹ , C. Fry ² , S. Patel ³ , C. Carroll ³ , J. Dickinson ¹ , ¹ Arizona State University, USA, ² University of Texas Medical Branch, USA, ³ Purdue University, USA
[P2.089]	Short-term exercise training improves intestinal glucose uptake and gut microbiota profile in subjects with insulin resistance K.K. Motiani* ¹ , M.C. Collado ^{2,3} , J.J. Eskelinen ¹ , K. Virtanen ¹ , E. Löyttyniemi ¹ , S. Salminen ³ , P. Nuutila ¹ , K.K. Kalliokoski ¹ , J.C. Hannukainen ¹ , ¹ University of Turku, Finland, ² IATA-CSIC, Spain, ³ Turku University Hospital, -
[P2.090]	Myo-exosomes in health and disease L. Ketscher*, J.L. Ruas, Karolinska Institutet, Sweden
[P2.091]	Post-translational regulation of PGC-1α1 protein stability by HECTD1 and its role in metabolism I. Cervenka*, A. Klein, M. Izadi, J. Ruas, Karolinska Institutet, Sweden
[P2.092]	Aerobic training remodels muscle lipid composition and improves intrinsic mitochondrial function in men with type 2 diabetes M. Pino ¹ , N. Stephens ¹ , A. Eroshkin ² , A. Hodges ² , S. Smith ^{1,2} , X. Han ² , B. Goodpaster ^{1,2} , L. Sparks* ^{1,2} , ¹ Translational Research Institute for Metabolism and Diabetes, USA, ² Sanford Burnham Prebys Medical Discovery Institute, USA
[P2.093]	High-intensity interval exercise preconditioning protects against doxorubicin mediated cardiotoxicity S.S. Angadi* ^{1,3} , C.L. Jarrett ¹ , T. Panknin ¹ , A. D'Lugos ¹ , T. Hale ² , R. Gonzales ² , C. Carroll ⁴ , J.M. Dickinson ^{1,3} , ¹ Arizona State University, USA, ² University of Arizona - College of Medicine Downtown Phoenix, USA, ³ Mayo Clinic - Scottsdale, USA, ⁴ Purdue University, USA
[P2.094]	Estrogen receptor-β deficiency in skeletal muscle influences muscle mass and strength in female mice Y. Tsuchiya* ^{1,3} , D. Seko ^{1,3} , Y. Kitajima ¹ , R. Fujita ^{1,3} , I. Sakakibara ² , Y. Imai ² , Y. Ono ¹ , ¹ Nagasaki University, Japan, ² Ehime University, Japan, ³ Japan Society for the Promotion of Science, Japan
[P2.095]	Aerobic and resistance exercise elicit unique transcriptome responses in human skeletal muscle J. Dickinson* ¹ , A. D'Lugos ¹ , M. Naymik ² , M. De Both ² , A. Siniard ² , A. Wolfe ² , M. Huentelman ² , C. Carroll ³ , ¹ Arizona State University, USA, ² Translational Genomics Research Institute, USA, ³ Purdue University, USA
[P2.096]	Effects of difference in exercise intensity under the same energy consumption on the phospholipid composition in muscle S. Kakehi*, Y. Tamura, T. Funayama, H. Kaga, Y. Furukawa, R. Kawamori, H. Watada, Juntendo University, Japan
[P2.097]	Acute exercise reveals discrete differences in skeletal muscle immunometabolic signalling in healthy and type 2

	<p>diabetic individuals N.J. Pillon*, A. Krook, J.R. Zierath, <i>Karolinska Institutet, Sweden</i></p>
[P2.098]	<p>Impact of different exercise programs on body fat mobilization in DUhTP mice J. Brenmoehl*¹, J. Buchholtz¹, D. Ohde¹, C. Walz¹, J. Schultz², A. Tuchscherer¹, M. Langhammer¹, A. Höflich¹, ¹<i>Leibniz Institute for farm animal biology, Germany</i>, ²<i>University of Rostock, Germany</i></p>
[P2.099]	<p>Knockout of the stress kinase S6k1 mimics the effect of chronic endurance exercise on glucose tolerance and enhances running performance C. Binsch*^{1,2}, T. Jelenik^{1,2}, M. Dille^{1,2}, A. Pfitzer¹, S. Müller-Lühlhoff¹, S. Karpinski¹, A. Chadt^{1,2}, M. Roden^{1,2}, T.R. Castaneda¹, H. Al-Hasani^{1,2}, ¹<i>German Diabetes Center, Germany</i>, ²<i>German Center for Diabetes Research, Germany</i></p>
[P2.100]	<p>Proteomic analysis of skeletal muscle reveals estrogen as a key regulator of muscle signaling in women E.K. Laakkonen*¹, R. Soliymani², S. Karvinen^{1,3}, P. Rintala¹, J. Kaprio², U.M. Kujala¹, M. Baumann², S. Sipilä¹, V. Kovanen¹, M. Lalowski², ¹<i>University of Jyväskylä, Finland</i>, ²<i>University of Helsinki, Finland</i>, ³<i>University of Minnesota, USA</i></p>
[P2.101]	<p>Development of an in vitro model to study skeletal muscle/adipose tissue crosstalk during exercise L. Dollet*, N. Pillon, J. Zierath, A. Krook, <i>Karolinska Institutet, Sweden</i></p>
[P2.102]	<p>Effects of exercise training on the fate of dietary tryptophan supplementation P. Valente-Silva*, D.M.S. Ferreira, J.C. Correia, I. Cervenka, J.L. Ruas, <i>Karolinska Institutet, Sweden</i></p>
[P2.103]	<p>Family Feud: Chronically elevated PGC-1α3 in skeletal muscle impairs exercise performance V. Martinez-Redondo*, W. Jonsson, I. Cervenka, J.C. Correia, M. Porsmyr-Palmertz, P. da Silva, D.M.S. Ferreira, J.L. Ruas, <i>Karolinska Institutet, Sweden</i></p>
[P2.104]	<p>Fecal microbiota transplantation(FMT) from anaerobic-exercised rats improved metabolic phenotype in type 2 diabetic model, ZDF rats J.K. Seong*¹, Y. Son¹, W. Song¹, J.W. Bae², W.R. Kang², ¹<i>Seoul National Univeristy, Republic of Korea</i>, ²<i>Kyung Hee University, Republic of Korea</i></p>
[P2.105]	<p>Tetraplegia: Adaptive response to stationary armcrank pedaling exercise, comparing different lesion levels in persons with a tetraplegia S. Sinz*, G. Brizuela, <i>Universidad de Valencia, Spain</i></p>