ARIHHP SCHOLARLY ACTIVITIES 2018

- Research Articles: 113
- Book Chapters: 5
- Distinctions/Awards: 12

A. Department of **Mind**

Research Articles

Kujach S, Byun K, Hyodo K, Suwabe K, Fukuie T, Laskowski R, Dan I, Soya H. A transferable high-intensity intermittent exercise improves executive performance in association with dorsolateral prefrontal activation in young adults. *Neuroimage*, 169: 117-125, 2018.

Lee HJ, Kim KJ, Lee MC, Byun K, Kim JS. Mitochondria, a therapeutic target of aerobic exercise for the vascular homeostasis. *Exer Sci*, 27(3): 177-183, 2018.

Okamoto M., Gray JD, Larson CS, Kazim SF, Soya H, McEwen BS, Pereira AC. Riluzole reduces amyloid beta pathology, improves memory, and restores gene expression changes in a transgenic mouse model of early-onset Alzheimer's disease. *Transl Psychiatry*, 8(1): 153, 2018.

Saiki M, Matsui T, Soya M, Kashibe T, Shima T, Shimizu T, Naruto T, Kitayoshi T, Akimoto K, Ninomiya S, Soya H. Thiamine tetrahydrofurfuryl disulfide promotes voluntary activity through dopaminergic activation in the medial prefrontal cortex. *Scientific Reports,* 8: 10469, 2018.

Suwabe K, Byun K, Hyodo K, Reagh ZM, Roberts JM, Matsushita A, Saotome K, Ochi G, Fukuie T, Suzuki K, Sankai Y, Yassa MA, Soya H. Rapid stimulation of human dentate gyrus function with acute mild exercise. *Proc Natl Acad Sci U S A.*, 115: 10487-10492, 2018.

Ochi G, Kanazawa Y, Hyodo K, Suwabe K, Shimizu T, Fukuie T, Byun K, Soya H. Hypoxia-induced lowered executive function depends on arterial oxygen desaturation. *The Journal of Physiological Sciences*, 68(6): 847-853, 2018.

Ochi G, Yamada Y, Hyodo K, Suwabe K, Fukuie T, Byun K, Dan I, Soya H. Neural basis for reduced executive performance with hypoxic exercise. *NeuroImage*, 171: 75-83, 2018.

Soya M, Matsui T, Shima T, Subrina J, Omi N, Soya H. Hyper-hippocampal glycogen induced by glycogen loading with exhaustive. *Scientific Reports*, 8(1): 1285, 2018.

Cunningham T, Leal SL, Yassa MA. Post-encoding stress enhances mnemonic discrimination of negative stimuli. *Learning and Memory,* 25(12): 611-619, 2018.

Risbrough VB, Glynn LM, Davis EP, Sandman CA, Obenaus A, Stern HS, Keator DB, Yassa MA, Baram TZ, Baker DG. Does anhedonia presage increased risk of posttraumatic stress disorder? Adolescent Anhedonia and posttraumatic disorders. *Curr Top Behav Neurosci*, 38: 249-265, 2018.

Sinha N, Berg CN, Tustison NJ, Shaw A, Hill D, Yassa MA, Gluck MA. APOE e4 status in healthy older African Americans is associated with deficits in pattern separation and hippocampal hyperactivation. *Neurobiology of aging*, 69: 211-229, 2018.

Sinha N, Reagh ZM, Tustison NJ, Berg CN, Shaw A, Myers CE, Hill D, Yassa MA, Gluck MA. ABCA7 risk variant in healthy older African Americans is associated with a functionally isolated entorhinal cortex mediating deficient generalization of prior discrimination training. *Hippocampus*, 29(6): 1-12, 2018

Stevenson RF, Zheng J, Mnatsakanyan L, Vadera S, Knight RT, Lin JJ, Yassa MA. Hippocampal CA1 gamma power predicts the precision of spatial memory judgments. *Proc Natl Acad Sci*, 150(40): 10148-10153, 2018.

Yassa MA. Brain Rhythms: Higher-frequency theta oscillations make sense in moving humans. *Current Biology*, 28: R66-R88, 2018.

Leal SL, Yassa MA. Integrating new findings and examining clinical applications of

pattern separation. *Nat Neurosci*, 21: 163-173, 2018.

Kraguljac NV, Carle M, Frolich MA, Tran S, Yassa MA: White DM, Reddy A, Lahti AC. Mnemonic discrimination deficits in first-episode psychosis and a ketamine model suggests dentate gyrus pathology linked to N-Methyl-D-Aspartate receptor hypofunction. *Biological Psychiatry: CNNI*, 3: 231-238, 2018.

Reagh ZM, Noche JA, Tustison NJ, Delisle D, Murray EA, Yassa MA. Functional Imbalance of Anterolateral Entorhinal Cortex and Hippocampal Dentate/CA3 Underlies Age-Related Object Pattern Separation Deficits. *Neuron*, 97(5): 1187-1198, 2018.

Inagaki K, Shimizu T, Sakairi Y. Effects of posture regulation on mood states, heart rate, and test performance in children. *Educational Psychology*, 38: 1129-1146, 2018.

+6 articles

Books

4 books

Distinctions/Awards

Amemiya R, Sakairi Y: Excellent Oral Presentation Award, 2018.

Takahashi K, Shima T, Yook J, Soya M, Koizumi H, Okamoto M, Jesmin S, Soya H: 2018 ACSM Annual Meeting International Student Award Evidence for Hypothalamic Regulation by AVP and CRH in Running-Induced Stress Response, 2018.

+1 award

B. Department of **Body**

Research Articles

Fujii N, Danquah MO, Meade RD, Nishiyasu T, Kenny GP. The effect of exogenous activation of protease-activated receptor 2 on cutaneous vasodilatation and sweating in young males during rest and exercise in the heat. *Temperature*, 5: 257-266, 2018.

Fujii N, Halili L, Nishiyasu T, Kenny GP. Voltage-gated potassium channels and NOS contribute to a sustained cutaneous vasodilation elicited by local heating in an interactive manner in young adults. *Microvascular Research*, 117: 22-27, 2018.

Fujii N, Nishida Y, Ogawa T, Tanigawa S, Nishiyasu T. Effects of work-matched moderate- and high-intensity warm-up on power output during 2-min supramaximal cycling. *Biology of Spor*t, 35: 223-228, 2018.

Fujii N, Nishiyasu T, Sigal RJ, Boulay P, McGarr GW, Kenny GP. Aging attenuates adenosine triphosphate-induced, but not muscarinic and nicotinic, cutaneous vasodilation in men. *Microcirculation*, 25: e12462, 2018.

Fujii N, Pastore OL, McGarr GW, Meade RD, McNeely BD, Nishiyasu T, Kenny GP. Cyclooxygenase-1 and -2 modulate sweating but not cutaneous vasodilation during exercise in the heat in young men. *Physiological Report*, 6: e13844, 2018.

Ichinose M, Matsumoto M, Fujii N, Yoshitake N, Nishiyasu T. Voluntary apnea during dynamic exercise activates the muscle metaboreflex in humans. *American Journal of Physiolgy-Heart and Circulatory Physiology*, 314(3): H434-H442, 2018.

Fujii N, Meade RD, McNeely BD, Nishiyasu T, Sigal RJ, Kenny GP. Type 2 diabetes specifically attenuates purinergic skin vasodilatation without affecting muscarinic and nicotinic skin vasodilatation and sweating. *Experimental Physiology*, 103(2): 212-221, 2018.

Tsuji B, Filingeri D, Honda Y, Eguchi T, Fujii N, Kondo N, Nishiyasu T. Effect of hypocapnia on the sensitivity of hyperthermic hyperventilation and the cerebrovascular response in resting heated humans. *Journal of Applied Physiology*, 124(1): 225-233, 2018.

Kumagai H, Zempo-Miyaki A, Yoshikawa T, Eto M, So R, Tsujimoto T, Nishiyasu T, Tanaka K, Maeda S. Which cytokine is the most related to weight loss-induced decrease in arterial stiffness in overweight and obese men? *Endocrine journal*, 65(1): 53-61, 2018.

Amano T, Fujii N, Inoue Y, Kondo N. Cutaneous adrenergic nerve blockade attenuates sweating during incremental exercise in habitually trained men. *J Appl Physiol*, 125: 1041-1050, 2018.

Fujii N, Meade RD, Louie JC, Pegah A, Boulay P, Sigal RJ, Kenny GP. Effect of P2 receptor blockade on cutaneous vasodilation during rest and exercise in the heat in young men. *Applied Physiology, Nutrition, and Metabolism*, 43(3): 312-315, 2018.

Meade RD, Fujii N, Poirier MP, Boulay P, Sigal RJ, Kenny GP. Oxidative stress does not influence local sweat rate during high intensity exercise. *Experimental Physiology*, 103(2): 172-178, 2018.

Akazawa N, Hamasaki A, Tanahashi K, Kosaki K, Yoshikawa T, Myoenzono K, Maeda S. Lactotripeptide ingestion increases cerebral blood flow velocity in middle-aged and older adults. *Nutr Res*, 53: 61-66, 2018.

Akazawa N, Tanahashi K, Kosaki K, Ra SG, Matsubara T, Choi Y, Zempo-Miyaki A, Maeda S. Aerobic exercise training enhances cerebrovascular pulsatility response to acute aerobic exercise in older adults. *Physiological Report*, 6: e13681, 2018.

Hamasaki A, Akazawa N, Yoshikawa T, Myoenzono K, Tagawa K, Maeda S. Age-related declines in executive function and cerebral oxygenation hemodynamics. *Tohoku J Exp Med*, 245: 245-250, 2018.

Hamasaki A, Akazawa N, Yoshikawa T, Myoenzono K, Tagawa K, Sawano Y, Nishimura M, Maeda S. Central artery stiffness is related to cerebral oxygenation hemodynamics during executive function tasks in healthy middle-aged and older adults. E*xp Gerontol*, 114: 93-98, 2018.

Igarashi Y, Akazawa N, Maeda S. Regular aerobic exercise and blood pressure in East Asians: A meta-analysis of randomized controlled trials. *Clin Exp Hypertens*, 40: 378-389, 2018.

Igarashi Y, Akazawa N, Maeda S. The required step count for a reduction in blood pressure: A systematic review and meta-analysis. *J Human Hypertens*, 32: 814-824, 2018.

Kosaki K, Kamijo-Ikemori A, Sugaya T, Tanahashi K, Akazawa N, Hibi C, Nakamura T, Kimura K, Shibagaki Y, Maeda S. Habitual exercise decreases plasma xanthine oxidoreductase activity in middle-aged and older women. *J Clin Biochem Nutr*, 62: 247-253, 2018.

Kumagai H, Yoshikawa T, Myoenzono K, Kosaki K, Akazawa N, Zempo-Miyaki A, Tsujimoto T, Kidokoro T, Tanaka K, Maeda S. Sexual function is an indicator of central arterial stiffness and arterial stiffness gradient in Japanese adult men. *J Am Heart Assoc*, 7: e007964, 2018.

Oikawa S, Wada S, Lee M, Maeda S, Akimoto T. Role of endothelial microRNA-23 clusters in angiogenesis in vivo. *Am J Physiol Heart Circ Physiol*, 315: H838-H846, 2018.

Ra SG, Tagawa K, Choi Y, Maeda S. Hemodynamic response to unilateral resistance exercise with lactotripeptides. *Gazzetta Medica Italiana*, 177: 277-283, 2018.

Tagawa K, Choi Y, Ra SG, Yoshikawa T, Kumagai H, Maeda S. Resistance training-induced decrease in central arterial compliance is associated with decreased subendocardial viability ratio in healthy young men. *Appl Physiol Nutr Metab*, 43: 510-516, 2018.

Tagawa K, Ra SG, Choi Y, Maeda S. Lactotripeptides supplementations alleviate the decrease in maximal isometric force following high-intensity eccentric exercise: a randomized, placebo-controlled, double-blinded clinical trial. *Am J Phys Med Rehabil*, 97: 370-374, 2018.

Tagawa K, Ra SG, Kumagai H, Sawano Y, Yamamoto K, Yoshikawa T, Choi Y, Yoshida Y, Takekoshi K, Maeda S. Resistance training-induced decreases in central arterial compliance is associated with increases in serum thromboxane B2 concentrations in young men. *Artery Res*, 23: 63-70, 2018.

Tagawa K, Ra SG, Kumagai H, Yoshikawa T, Yoshida Y, Takekoshi K, Sakai S, Miyauchi

T, Maeda S. Effects of resistance training on arterial compliance and plasma endothelin-1 levels in healthy men. *Physiol Res*, 67: S144-S166, 2018.

Kosaki K, Kamijo-lkemori A, Sugaya T, Tanahashi K, Kumagai H, Sawano Y, Akazawa N, Osuka Y, Kimura K, Shibagaki Y, Maeda S. Urinary liver-type fatty acid-binding protein is associated with subendocardial viability ratio in middle- and older-aged adults. *Clinical and Experimental Hypertension*, 40(3): 244-250, 2018.

Yoshikawa T, Zempo-Miyaki A, Kumagai H, Myoenzono K, So R, Tsujimoto T, Tanaka K, Maeda S. Relationships between serum free fatty acid and pulse pressure amplification in overweight/obese men: insights from exercise training and dietary modification. *J Clin Biochem Nutr*, 62: 254-258, 2018.

Sugawara J, Tomoto T, Noda N, Matsukura S, Tsukagoshi K, Hayashi K, Hieda M, Maeda S. Effects of endothelin-related gene polymorphisms and aerobic exercise habit on age-related arterial stiffening: a 10-year longitudinal study. *Journal of Applied Physiology*, 124: 312-3220, 2018.

Tomoto T, Imai T, Ogoh S, Maeda S, Sugawara J. Relationship between aortic compliance and impact of cerebral blood flow fluctuation to dynamic orthostatic challenge in endurance athletes. *Frontiers in physiology*, 25: 9-25, 2018.

Kumagai H, Yoshikawa T, Zempo-Miyaki A, Myoenzono K, Tsujimoto T, Tanaka K, Maeda S. Vigorous physical activity is associated with regular aerobic exercise-induced increased serum testosterone levels in overweight/obese men. *Hormone and Metabolic Research*, 50(1): 73-79, 2018.

Oikawa S, Maeda S, Akimoto T. Effect of endothelial microRNAs on blood pressure homeostasis. The Journal of Physical Fitness and Sports Medicine, 7(1): 41-45, 2018.

Tanahashi K, Sugawara J, Sawano Y, Maeda S. Influence of sympathetic vasoconstrictor tone on conduit artery retrograde and oscillatory shear: effects of habitual aerobic exercise in middle-aged and older adults. *The Journal of Physical Fitness and Sports Medicine*, 7(1): 19-24, 2018.

Choi Y, Sadamune R, Nakamura Y, Suita M, Miyakawa S, Maeda S. The effect of sleep

on motor skill learning in young badminton players 6-9 years. *Sleep and Biological Rhythms*, 16(1): 141-147, 2018.

Kosaki K, Kamijo-lkemori A, Sugaya T, Tanahashi K, Sawano Y, Akazawa N, Ra SG, Kimura K, Shibagaki Y, Maeda S. Effect of habitual exercise on urinary liver-type fatty acid-binding protein levels in middle-aged and older adults. *Scandinavian journal of medicine & science in sports*, 28(1): 152-160, 2018.

Kishi K, Suzuki J, Monma T, Asanuma T, Takeda F. Psychosocial and criminological factors related to recidivism among Japanese criminals at offender rehabilitation facilities. *Cogent Social Sciences*, 4: 1-13, 2018

Monma T, Ando A, Asanuma T, Yoshitake Y, Yoshida G, Miyazawa T, Ebine N, Takeda S, Omi N, Satoh M, Tokuyama K, Takeda F. Sleep disorder risk factors among student athletes. *Sleep Medicine*, 44: 76-81, 2018.

Suzuki J, Takeda F, Kishi K, Monma T. The relationship between stressors and mental health among Japanese middle-aged women in urban areas. *Women & Health*, 58: 543-547, 2018.

Watanabe T, Takeuchi T, Kubota N, Wainai T, Kataoka K, Nakaya T, Sugimoto A, Sato T, Ohira H, Tsujino I, Kumagai K, Kubota T, Hasegawa C, Tokuyama K, Ueki K, Yamauchi T, Mishina M, Kadowaki T. A transgenic mutant mouse line accompanied by the complete deletion of interleukin-33 showed insulin and leptin resistances. *bioRxiv*, 416529, 2018.

Yajima K, Iwayama K, Ogata H, Park I, Tokuyama K. Meal rich in rapeseed oil increases 24-h fat oxidation more than meal rich in palm oil. *PLoS ONE*, 13: e0198858, 2018.

Aikawa Y, Kakutani Y, Agata U, Ezawa U, Omi N. The influence of food restriction on bone in young female rats with voluntary wheel running over 5 weeks.
J Phys Fitness Sports Med, 7: 297-301, 2018.

Monma T, Ando A, Asanuma T, Yoshitake Y, Yoshida G, Miyazawa T, Ebine N, Takeda S, Omi N, Satoh M, Tokuyama K, Takeda F. Sleep disorder risk factors among student athletes. *Sleep Medicine*, 44: 76-81, 2018.

+18 articles

Distinctions/Awards

3 awards

C. Department of **Technique**

Research Articles

Kawai E, Tsunokawa T, Takagi H. Estimating the hydrodynamic forces during eggbeater kicking by pressure distribution analysis. *Heliyon*, 4: e01095, 2018.

Narita K, Nakashima M, Takagi H. Effect of leg kick on active drag in front-crawl swimming Comparison of whole stroke and arms-only stroke during front-crawl and the streamlined position. *Journal of Biomechanic*s, 76: 197-203, 2018.

Narita K, Ogita F, Nakashima M, Gonjo T, Takagi H. The relationship between active drag and swimming velocity during front crawl swimming. *XIII th International Symposium on Biomechanics and Medicine in Swimming Proceedings*, 84-90, 2018.

Sakai S, Koike S, Takeda T, Takagi H. How does centre of mass position affect the joint torques of the four limbs on the starting block? *XIII th International Symposium on Biomechanics and Medicine in Swimming Proceedings*, 115-122, 2018.

Tsunokawa T, Narita K, Mankyu H, Ogita F, Takagi H. Estimation of propulsive forces acting on a hand using pressure measurement and underwater motion capture during front crawl swimming, *XIII th International Symposium on Biomechanics and Medicine in Swimming Proceedings*: 166-172, 2018.

Wakabayashi H, Osawa M, Koga S, Li K, Sakaue H, Sengoku Y, Takagi H. Effects of muscle cooling on kinetics of pulmonary oxygen uptake and muscle deoxygenation at the onset of exercise. *Physiological Report*s, 6: e13910, 2018.

Yamakawa KK, Takagi H, Sengoku Y. Three-dimensional analysis of hip and knee joint movements during dolphin kicking and butterfly swimming. *XIII th International Symposium on Biomechanics and Medicine in Swimming Proceeding*s, 187-192, 2018.

Sengoku Y, Sano M, Narita K, Tsubakimoto S. Analysis of oxygen uptake kinetics and heart rate kinetics in competitive swimmers - On- and Off-kinetics response at lactate threshold intensity-. In: Japanese Society of Science in Swimming and Water Exercise (eds.). *XIII th International Symposium on Biomechanics and Medicine in Swimming Proceedings*, 320-324, 2018.

Takahashi K, Yoshida T, Asai T. Force and power outputs of trunk-twist during bar twist exercise – Influence of length and mass of bars. *Proceedings of 36th Congress of the International Society of Biomechanics in Sports*, Auckland, 976-979, 2018.

Goff JE, Hong S, Asai T. Aerodynamic and surface comparisons between Telstar 18 and Brazuca, Proceedings of the Institution of Mechanical Engineers, Part P. *Journal of Sports Engineering and Technology*, 232: 342-348, 2018.

Asai T, Hong S, Kimachi K, Abe K, Kai H, Nakamura A. Flow visualisation around spinning and non-spinning soccer balls using the lattice Boltzmann method. *Proceedings of ISEA*, 2: 237, 2018.

Kimachi K, Hong S, Shimonagata S, Asai T. Impact points and their effect on trajectory in soccer. Proceedings of ISEA, 2: 235, 2018.

Naito K, Hong S, Koido M, Nakayama M, Sakamoto K, Asai T. Effect of seam characteristics on critical Reynolds number in footballs. *Mechanical Engineering Journal*, 5(1): 17-00369, 2018.

Enomoto Y, Ali MJ, Aibara T, Nabekura Y. Changes in running speed and step variables measured by inertial sensors during marathon. *Proceedings of 36th Conference of the International Society of Biomechanics in Sports*, 36: 269-272, 2018.

+15 articles

Books

Takagi H, Ohgi Y, Sengoku Y, Gonjo T. Japanese Society of Science in Swimming and Water Exercise, XIIIth International Symposium on Biomechanics and Medicine in Swimming. Impress R & D, 454, 2018.

Distinctions/Awards

Kimachi K, Hong S, Asai T: International Conference on Science and Football, Best Poster Award, 2018.

Sakamoto K, Hong S, Kurokawa S, Asai T: Asian Society of Sport Biomechanics, Best

Poster Award, 2018.

+4 awards