



2023 KSEP International Conferences & Annual Meeting

2023 한국운동생리학회 정기국제학술대회

Exercise Science in the Era of Digital Healthcare

디지털 건강관리 시대의 운동과학

Dankook Univ., Cheonan Campus, April 6 (Thu) – 8 (Sat), 2023

Date & Time		Room 1. <u>Symposium</u>
Moderator: Soo-Hyun, Park (Korea Institute of Sports Science) & Min-Chul, Lee (CHA Univ.)		
6 (Thu)	14:00-15:00	Registration & Reception
	15:00-15:05	Symposium 1. Exercise Science in the Era of Digital Healthcare Chair: Duk-Joe Jung (Seowon Univ.) & Ji-Seok Kim (Gyeongsang Nat'l Univ.)
	15:05-15:30	1. Kyudong Han (Dankook Univ. Dept. of Microbiology) Bio-medical engineering core facility in DKU: performance and challenges
	15:30-15:50	2. Eun-Jung Yoon (Korea Nat'l Univ. of Education) Improvement of cognitive function via secretion of BDNF derived human neural stem cells and exercise in ovariectomized rats
	15:50-16:30	3. Nosaka Ken (Edith Cowan Univ., Australia) <i>Online lecture</i> Let's get eccentric!
	16:30-16:45	Coffee Break
	16:45-17:05	4. Eun-Sun Yoon (Korea Nat'l Open Univ.) Smart health care for active seniors
	17:05-17:25	5. Jungjun Lim (Sangmyung Univ.) Joint associations of physical activity and fitness with metabolic health using isotemporal substitution analysis
	17:25-17:30	Keynote Address: Cancer and Digital Therapeutics in Exercise Science Chair: Hong-Sun Song (Korea Institute of Sport Science) & Min-Jung Kim (Hankuk Foreign Studies Univ.)
	17:30-18:00	6. Yoon-Jung Bae (Med Plus Solution) Exercise-derived digital therapeutics for cancer patients

Date & Time		Room 1. Symposium	Room 2. Free Communication
		Moderator: Kwang-Seok Hong (Chung-Ang Univ.) & Dong-Min Kwak (Hanyang Univ.)	Moderator: Hyo-Yeol Moon (Seoul Nat'l Univ.) & Kyeongho Byun (Incheon Nat'l Univ.)
7 (Fri)	08:50-09:00	Panel discussion: Future Directions for Digital Healthcare and Fitness Chair: Bong-Seok Oh (Sunchon Nat'l Univ.) & Yong-Suk Jee (Hanseo Univ.)	Session 1. Graduate Students and Young Investigators Chair: Seung Kyum Kim (Seoul Nat'l Univ. of Sci. and Tech.) & Jung-Hyun Kim (Kyunghee Univ.)
	09:00-09:20	Tae-Beom Seo (Jeju Nat'l Univ.), Wook Song (Seoul Nat'l Univ.) Han-Joon Lee (Univ. of Ulsan), Ji-Hoon Cho (Dongshin Univ.)	19. Ji-Eun Lee (Dankook Univ.) Does pain relief improve cognition in elderly with chronic stroke?
	09:20-09:40	Kwang-Seok Hyun (Chungnam Nat'l Univ.) Saeyoung Jae (Univ. of Seoul), Yong-Kwan Jeon (Yonsei Univ.)	20. Yeong-Hyun Cho (Jeju Nat'l Univ.) Effects of aerobic and resistance exercise sequence according to circadian rhythms on physical capacity and sleep quality in obese women
	09:40-10:00	Kyeonglae Kim (Korea Nat'l Univ. of Education) Hyuk-Ki Chang (Seoul Women's Univ.), Seong-Hoon Kang (Kangwon Nat'l Univ.)	21. Won-Il Park (Chung-Ang Univ.) Effects of non-fat dairy products on vascular function in middle-aged and older adults with elevated blood pressure
	10:00-10:15	Opening Ceremony • Opening Address Ho-Seong Lee (Dankook Univ.) The president of the Korean Society of Exercise Physiology • Congratulatory Speech Youn-Shin Nam (Korea Institute of Sport Science.)	
	10:15-10:20	Plenary lecture: Digital Transformation in Exercise Science Chair: Young-Pyo Kim (Jeju Nat'l Univ.) & Seung-Soo Baek (Sangmyung Univ.)	
	10:20-10:50	7. Wonjong Rhee (Seoul Nat'l Univ. & Stanford Univ., USA) <i>Online lecture</i> AI, representation learning, and exercise science	
	10:50-10:55	Symposium 2. Basic Exercise Science for Digital Health Chair: Jung-Jun Park (Pusan Nat'l Univ.) & Hyo-Bum Kwak (Inha Univ.)	Session 2. Applied Exercise Science for Digital Health Chair: Chang-Sun Kim (Dong-Duk Women's Univ.) & Sewon Lee (Incheon Nat'l Univ.)
	10:55-11:15	8. Han-Kyul Kim (UT Southwestern Medical Center, USA) <i>Online lecture</i> The role of brain FGFR signaling in high phosphate diet-induced sympathoexcitation during exercise	22. Saejong Park (Korea Institute of Sport Science) Accuracy of wearable watches for steps, heart rate and energy expenditure during treadmill walking in Korean old adults
	11:15-11:35	9. Yuho Kim (Univ. of Massachusetts, USA) <i>Online lecture</i> Effects of exercise on muscle mitochondrial turnover	23. Jung-Hoon Koo (Korea Nat'l Sport Univ.) Whole-body cryotherapy as a recovery technique after exercise-induced muscle damage in elite weightlifter
	11:35-11:55	10. Junchul Shin (Cleveland Clinic, USA) <i>Online lecture</i> Exercise-induced endothelial mitochondrial remodeling mitigates hypertension in a p53-dependent manner	24. Incheol Jung (Hallym Univ. Dept. of Population Health Science and Policy) Remote monitoring systems for individualized health state

11:55-13:15	Lunch time		
13:15-13:20	Symposium 3. Joint Symposium between JSPFSM and KSEP Chair: Takayuki Akimoto (Waseda Univ. Japan) & Hyuntae Park (Dong-A Univ.)		Session 3. New Approached Studies in Exercise Science Chair: Tae-Beom Seo (Jeju Nat'l Univ.) & Min-Chul, Lee (CHA Univ.)
13:20-13:40	11. Mitsuharu Okutsu (Nagoya City Univ., Japan) Exercise-mediated regulation of antioxidants expression in oxidative muscle requires p62 phosphorylation		25. Jong-Hwa Won (Gyeongsang Nat'l Univ.) Effects of exercise intensity on the expression of MOGAT1 in non-alcoholic fatty liver of obese mice
13:40-14:00	12. Minsuk Oh (Yonsei Univ., Korea) Long-term associations of physical activity and TV viewing with pericardial adipose tissue: CARDIA		26. Jae-Yeon Park (Seoul Nat'l Univ.) Exercise-induced neutrophil facilitates the muscle cell regeneration.
14:00-14:20	13. Kayoko Kamemoto (Osaka Metropolitan Univ., Japan) Appetite and energy intake across the menstrual cycle in athletes		27. Sanghee Park (Gachon Univ.) Essential amino acid supplementation can ameliorate metformin-induced loss of exercise capacity via enhancement of muscle quality
14:20-14:40	14. Seung-Yong Lee (Incheon Nat'l Univ., Korea) Bone, bone-associated skeletal nerve, and bone blood vessel phenotypes in high and low intrinsic aerobic-capacity rats		28. Sung-Woo Kim (Konkuk Univ.) A study on the development of algorithms for health promotion and disease prevention: aspects of exercise physiology
14:40-15:30	Poster session Moderators 1. Ji-Seok Kim (Gyeongsang Nat'l Univ.), Tae-Woon Kim (Gyeongsang Nat'l Univ.), Dae-Yeol Kim (Chonnam Nat'l Univ.), Sang-Seo Park (Kyunghee Univ.) 2. Young-Min Park (Inchon Nat'l Univ.), Dong-Min Kwak (Hanyang Univ.), Jung-Hyun Kim (Kyunghee Univ.), Seung Kyum Kim (Seoul Nat'l Univ. of Science and Technology) 3. Ho-Kyung Choi (Korea Institute of Sports Science), Jae-Seung Jang (Hannam Univ.), Hyun-Chul Jung (Kyunghee Univ.), Chan-Sol Huh (Jeonbuk Nat'l Univ.)		
15:30-15:40	Symposium 4. Injury & Rehabilitation in Sport Chair: Tae-Woon Kim (Gyeongsang Nat'l Univ.) & Young-Min Park (Inchon Nat'l Univ.)		Session 4. Joint Session between KISS and KSEP: Digital Transformation for a New Intelligent Sports Planning Chair: Kwang- Joon Kim (Korea Institute of Sports Science) & Eun-Ju Choi (Catholic Univ. of Deagu)
15:40-16:00	15. Junyoung Hong (Univ. of California-Davis, USA) <i>Online lecture</i> Pannexin 1 channels and vascular reactivity in diabetic hyperglycemia: Potential implication of exercise		29. Jinkyung Cho (Korea Institute of Sport Science) Exploring the functions of regional sports science centers for the local elite athletes
16:00-16:20	16. Saeyong Lee (Yonsei Univ.) Biomechanical characteristics of CAI and coper for gait retraining		30. Ji Young Kim (Korea Institute of Sport Science) How can sports science help the performance of athletes with disabilities?
16:20-16:40	17. Kyungmin Kim (Sungkyunkwan Univ.) Advancing chronic ankle instability care: beyond conventional methods		31. Sang-Heon Park (Korea Institute of Sport Science) Artificial intelligence in musculoskeletal screening: application and technique
16:40-17:00	18. Xin, Li (Henyang Univ. Dept. of Pain, China) Assessing the efficacy of the early rehabilitation pathway in combination with morita therapy after hip and knee arthroplasty		32. Hyongjun Choi (Dankook Univ.) Cluster Analysis of Sports data using AI
17:00-18:00	Awards & Annual Meeting		