



PESS+ ISSUESI

January 2024
Volume 10, Issue 1



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PESS+ ISSUES! is a newsletter on research, teaching, and services in Physical Education and Sports Science (PESS)

Official Launch of Motor Behaviour Lab & SMARRT-PE on 25 August 2023



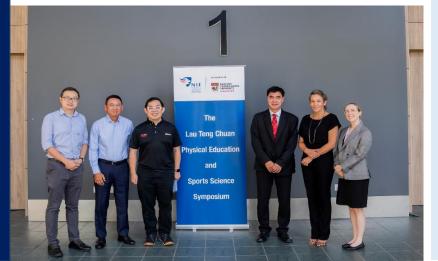
On August 25, 2023, we celebrated the launch of the Motor Behaviour Lab (MBL) and the System for Multi-Angle Recording and Replay in Teaching Physical Education (SMARRT-PE) at NIE. MBL combines neuroscience research with education, unveiling insights into movement guided by the brain. SMARRT-PE transforms lessons through multi-angle video and realtime feedback. We are excited about the innovative future of physical education!

12th EW Barker Professorship and Challenge



The 12th E.W. Barker Visiting Professor, Prof Kenneth Hodge delivered his public lecture on "Motivational Climate in Sport: Benefits for Commitment, Athlete Engagement, Prosocial Behaviour, and LifeSkill Development" on 8 September 2023, at NIE. PESS is honoured to have Guest-of-Honour, Ms Deborah Barker, daughter of the late Mr E.W. Barker, to grace the occasion. Prof Kenneth Poon, Dean of Education Research and Centre Director of the Centre for Research in Child Development, was in attendance to give a welcome address. The E.W. Barker Challenge 2023 was also held in conjunction with the final public lecture.

12th Lau Teng Chuan (LTC) PE and Sports Science **Symposium**



The 12th LTC PE and Sports Science Symposium, hosted by PESS, was held on 3 November 2023. We are thrilled to have Mr Alan Goh, CEO of SportSG, as our Guest of Honour and keynote speaker. Prof Andrea Maier, Oon Chiew Seng Professor in Medicine, Healthy Ageing and Dementia Research was our other keynote speaker for the event. During the symposium, Mr Lau Cheng Soon, the son of the late Dr Lau Teng Chuan, also shared his insights and thoughts on this occasion.

Recent Happenings!

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Notable Services

People &



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PESS & SSM Students & Alumni

SSM and PESS alumni committee successfully convened an alumni gathering on 17 November 2023, with an approximate turnout of 63 attendees. The event featured a delightful buffet dinner, interactive games, and a lucky draw, fostering a vibrant atmosphere. Alumni and staff connected, sharing insights and exploring potential collaborations.

Assoc Prof Adrian Kee

- Appointment
- Head PESS, National Institute of Education, Nanyang Technological University, Singapore with effect from 1 January 2024

Prof Michael Chia

- □ Contribution to International Community
- Participated in the International Visiting Professor Programme (2023, July 1 ~ August 8) to East China Normal University under the special High-End Foreign Expert Scheme 2023. Professor Chia conducted a talk entitled "Physical activity across different schooling years". He also engaged researchers, graduate and post-graduate students, in-service teachers, and government education officials.



Prof Michael Chia [Cont.]

- ☐ Contribution to International Community
- External PhD examiner
 (2023, November 7) on the
 topic "The effect of
 exergames on immune
 response among high school
 students in Pulau Pinang,
 Malaysia" at the Advanced
 Medical & Dental Institute of
 University Sains Malaysia,
 Malaysia
- □ Conference
- Keynote speaker (2023, December 23) on the topic "Leave no child indoors harnessing the benefits of outdoor play" at the 3rd International Conference on Information Technology and Contemporary Sports, Guangdong, China











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Prof Michael Chia [Cont.]

- Workshops & Seminars
- Delivered a series of online workshops (2023, October 4, 11, 18, & 25) with Mr Terence Chua on various health-related topics, e.g., "Energy drinks - Hype or help", "Color your pee - Are you euhydrated or dehydrated", and "To fast or not to fast - Intermittent fasting & exercise". The workshops were organised by the Department of Sports Science within the Faculty of Sports Science at Universitas Negeri Yogyakarta in Sleman, Indonesia

Assoc Prof Govindasamy Balasekaran

- Appointment
- Editor-in-Chief (Physical Activity), The Official Journal of Asian Society of Kinesiology (ASK) with effect from 2023 to 2024
- Associate Editor, The Asian Journal of Kinesiology with effect from 2023 to 2024
- Conference
- Keynote speaker (2023, October 20 ~ 22) on the topic "Development of the Running Energy Reserve Index (RERI) to accurately predict human running performances in all sports utilising maximal aerobic speed" at the International Sports Science Conference 2023, Hanoi, Viet Nam
- Workshops & Seminars
- Keynote Speaker (2023, November 7 ~ 10) on various topics, e.g., "Introduction to Nanyang Technological University's promotion system", "Current status of international sports management", "The analysis of Singapore's track and field and fencing at Olympic level", and "Singapore Formula 1 racing". These seminars were organised by National Taiwan Normal University, Taipei, Taiwan

Chair, PESS Newsletter

Dr Chung Ho Jin hojin.chung@nie.edu.sg **Editorial Team** Samantha Tang, Erny Yunelis Noorman, Julisa Binti Sulaiman, Marshall Lee

Assoc Prof Veni Kong

- Conference
- Keynote speaker (2023, July 6) on the topic "Biomechanics research on low back pain in Singapore" at the International Scientific Conference of the Arab Society of Biomechanics in Sports, Amman, Jordan
- Invited speaker (2023, August 30) on the topic "Mentoring graduate and undergraduate students in sports biomechanics research" at the 9th Asian Society of Sports Biomechanics Conference and the 2nd SAT International Conference on Sports Science, organised by Mahidol University, Bangkok, Thailand



Assoc Prof Koh Koon Teck

- Workshops & Seminars
- Teaching consultant (2023, July 9 ~ 15) on the topic "Effective coaching/teaching strategies in quality sports and physical education programmes", organised by China University of Petroleum, China.
- Invited speaker (2023, October 30) on the topic "Coaching values and life skills through basketball", organised by ASEAN Council of Physical Education and Sports
- Teaching consultant (2023, November 27) ~ December 6) on the topic "The use of ICT in PE and coaching values and life skills through sports and PE lessons", organised by Yunnan and Guangxi Provinces, China.



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Assoc Prof Koh Koon Teck [Cont.]

- Contribution to International Community
- Attended the FIBA World Congress (2023, August 22 ~ 24) as the President of the Basketball Association of Singapore in Manila, Philippines
- · Appointed by the Singapore National Olympics Council to lead Team Singapore as the Chef De Mission at the Hangzhou 2022 Asian Games in China (2023, September 18 ~ October 9)





Planned and facilitated the 2nd Southeast Asian Basketball Association's Council Meeting (2023, November 19 \sim 21) as the Secretary-General



Conference

- Invited speaker (2023, July 30) on the topic "The effects of values and principles in sports coach education course designed to promote valuesdriven coaching styles" at the Chengdu FISU World Conference, China
- Invited speaker (2023, November 30) on the topic "Coaching of Values and Life Skills in Physical Education and Sports - A Singaporean Context" at the International Council of Coach Education Conference, organised by CoachSG in Singapore



Presenter (2023, November 30) on the topic "A mobile application for effective coaching: Strengthen the coaching of values, life skills and sports skills" at the International Council of Coach Education Conference, organised by CoachSG in Singapore







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Assoc Prof Swarup Mukherjee

- Workshops & Seminars
- Invited speaker (2023, October 5) on the topic "Enhancing sports & exercise safety amongst students in the institutes of higher learning" at the Safety and Health in Higher Education Forum, Singapore

Dr Chung Ho Jin

- Contribution to International Community
- · Visited Chosun University and Jeju Provincial Council (2023, December 12 ~ 17) as a consultant for the research project associated with the redevelopment of the old Jeju Sports Complex funded by Jeju Provincial Council

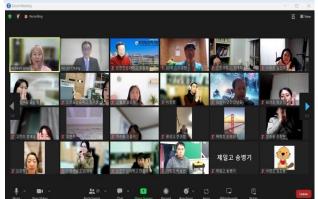






- Workshops & Seminars
- Keynote Speaker (2023, December 21) on the topic "Singapore's physical education and use of data" at the UNESCO Chair Global Lecture & Workshop organised by the Korea Institute of Sport Science, Olympic Park Hotel, Seoul, Korea
- ☐ Invited Talk (2023, December 20) on the topic "Preparing and developing teachers in a continuous teachers professional learning for the successful Singapore education system", organised by Incheon Metropolitan City Office of Education, Incheon, Korea.







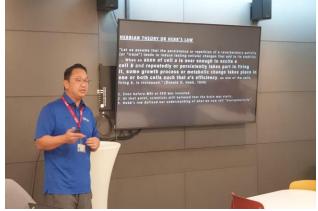


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Asst Prof Teo Wei-Peng

- Workshops & Seminars
- Invited speaker (2023, October 27) on the topic "Mind-body interactions: Implications for physical education in brain and behaviour in the classroom" to a group of PE teachers from the North Zone PE Networked Learning Communities, Singapore





Dr Ng Hock Beng Tommy

- Workshops & Seminars
- Invited speaker (2023, October 12) on the topic "The use of machine learning to enhance teaching-learning in PE" to a group of PE teachers from the North Zone PE Networked Learning Communities, Singapore





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Asst Prof Luis Calmeiro

- Conference
- Invited Speaker (2023, October 30) on the topic "Teaching styles and motivation to participate in PE: The mediating role of basic psychological needs" at the 9th ASEAN International Society of Physical Activity, Sport and Physical Education Conference, University Mahasarakham, Thailand

PESS + 2024 (Jan), Volume 10, Issue 1 **ISSUES!**





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- Amornsriwatanakul, A., Jalayondeja, C., Wattanapisit, A., Chootong, R., Saovieng, S., Nantabancha, A., Tansathitaya, V., Chua, T., & Chia, M. Y. H. (in press). Thai Preschoolers' movement behaviors outside kindergarten: prevalence of meeting individual and integrated movement quidelines. Pediatric Research.
- Taim, B. C., Lye, J., Suppiah, H. T., Chan, T. W., Chia, M. Y. H., & Clarke, A. (2023). Menstrual cycle characteristics, perceived impact on performance, and barriers to communication: Perspectives of highperformance adolescent athletes in Singapore. Scandinavian Journal of Medicine and Science in Sports, Advanced online publication. https://doi.org/10.1111/sms.14488
- Quah, P. L., Loo, B. K. G., Mettananda, S., Dassanayake, S., Chia, M. Y. H., Chua, T. B. K., ... & Tan, K. H. (2023). 24-hour activity guidelines in children and adolescents: A prevalence survey in Asia-Pacific cities. International Journal of Environmental Research and Public Health, 20(20), 6403. https://doi.org/10.3390/ijerph2014640
- Chua, T. B. K., Wong, J. X. W., Khng, K. H., & Chia, M. Y. H. (2023). Adherence to 24-hr activity guidelines and quality of life in Singapore children: A selfreported survey study. ACPES Journal of Physical Education, Sport, and Health, *3*(1), 9-20. https://doi.org/10.15294/ajpesh.v3i1.70 400
- Loo, B. K. G., Sirisena, D., Müller-Riemenschneider, F., Chia, M. Y. H., Tan, B., Tan, N. C., Teoh, O. H., Lim, E. J. K., Zainuddin, M. A., Gao, J. S., Chan, P. C., Tan, T. S. Z., Visrutha, N. K., Rajadurai, V. S., Chia, M. S., Hatib, N. A. B. A., Cai, S., Ong, J. L., ... Lee, Y. S. (2023). Consensus statement for Singapore integrated 24-hour activity quide for early childhood. *Annals of the* Academy of Medicine, Singapore, 52, 310-320. https://doi.org/10.47102/annals-

acadmedsq.2022315

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- Chong, C. T. K., Aziz, R. A., Ong, T. H. S., & Chia, M. Y. H. (2023). Making the steps count: Adult stair use- hindsight, insight & foresight. Physical Activity 1(1), 3-17 https://doi.org/00.00000/0000000
- Balasekaran, G., Mayo, M., & Ng, Y. C. (2023). Effects of large exercise-induced weight loss on insulin sensitivity and metabolic risk factors in young males with obesity. The Journal of Sports Medicine and Physical Fitness, 1(1), 1-9. https://doi.org/10.23736/S0022-4707.23.14846-8
- Balasekaran, G. (2023). Prediction of running performances for world class, elite, sub-elite, and collegiate athletes based on maximal aerobic speed and running energy reserve index. The Asian Journal of Kinesiology, 25(4), 1-2. https://doi.org/10.15758/ajk.2023.25.4.1
- Balasekaran, G., Boey, P., & Ng, Y. C. (2023). Effectiveness of modified perceived exertion scale on exercise intensity across age group, gender and exercise modalities. Physical *Activity, 1*(1), 32-42. http://physicalactivity.info/subList/320000064
- **Balasekaran, G.** (2023). Prevalence of obesity The concept of large exercise induced high energy expenditure for weight loss. Physical Activity 1(1), 1-2. http://physicalactivity.info/subList/320000064 09
- Kong P. W., Kan, T. Y. W., Mohamed Jamil, R. A. G. B., **Teo, W. P.**, Pan, J. W., Hafiz Abd Halim, M. N., Abu Bakar Maricar, H. K., & Hostler, D. (2023). Low back pain and biomechanical characteristics of back muscles in firefighters. *Ergonomics*. https://doi.org/10.1080/00140139.2023.22368
- Kong, P. W., Iskandar, M. N. S., Koh, A. H., Ho, M. Y. M., & Lim, C. X. E. (2023). Validation of in-shoe force sensors during loaded walking in military personnel. Sensors, 23(14), 6465. https://doi.org/10.3390/s23146465



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Selected Publications

Book Chapter

Mukherjee, S., & Tan, K. J. (2023). Physical activity and sedentary time distribution among adult residents during COVID-19 circuit breaker movement restrictions in Singapore: a public health perspective. Singapore Medical Journal. https://doi.org/10.4103/singaporemedi

.SMJ-2022-113

Lau, R. Y., & Mukherjee, S. (2023). Effectiveness of overuse injury prevention programs on upper extremity performance in overhead youth athletes: A systematic review. Sports Medicine and Health Science, 5, 91-100.

https://doi.org/10.1016/j.smhs.2023.0 3.001

- Abdul Rahman, A., Teo, W., Chua, T., & Chia, M. Y. H. (2023). Physical activity as a tool for enhancing learning. In D. Hung, A. Jamaludin, & A. Abdul Rahman (Eds.), Applying the science of learning to education. Singapore: Springer Nature.
- Balasekaran, G., Ng, Y. C., Jamaludin, T. I. B., & Boey, P. (2023). Resilience in the face of adversity: Examining the effects of COVID-19 on physical activity and the sporting industry in Singapore. In Leng, H. K. & Zhang, J. J. (Eds.), Sports sponsorship and branding global perspectives and emerging trends (PP. 340-345). Oxfordshire: Routledge.

Prof Ma Jiameng, Prof Michael Chia, Prof Kim Hyunshik & Asst Prof Teo Wei-Peng (Co-PI)

Project Title: Cycle & think or twist & think - How does it sit with you? (2023~2024, Sendai University Grant, 2,400,000 JPY (approximately S\$22,389)

 Prof Kim Hyunshik, Prof Michael Chia & Dr Chung Ho Jin (Co-PI)

Project Title: Physical & socio-emotional development of preschool children living in Fukushima vs. preschool children living outside of Fukushima (2023~2025, Sendai University Grant, 2,000,000 JPY (approximately S\$18,656)

Prof Michael Chia (Co-PI)

Project Title: Increasing physical activity through physical education in ASEAN countries (2023~2025, ASEAN Universities Network Research Grant, 5,367,050 THB (approximately S\$205,488)

Assoc Prof Koh Koon Teck (PI)

Project Title: AI-powered sports Coaching Observation Tool (COT) - A Mobile Application (2023~2025, I3G Grant, S\$119,520)

Asst Prof Phillis Teng (PI)

Project Title: Screening and biomechanical risk factors for early knee osteoarthritis (2023~2026, NIE AcRF Tier 1, S\$73,920)

Asst Prof Phillis Teng

Inauguration Grant under Singapore Teaching and Academic Research Talent (START) Scheme. The Inauguration Grant is offered at the four local universities which are participating in START - NUS, NTU, SMU and SUTD. This scheme aims to develop and nurture young researchers to be future world-class researchers and leaders.



Prof Michael Chia, Prof John Wang & Assoc Prof Chow Jia Yi, Sports Science in Sporting Success® (T0315772Z) until 7 October 2033

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- Prof Wang Chee Keng, John, NIE Staff Award 2023 (Long Service Award) - 25 Years in Service
- Assoc Prof Tan Kwang San, Steven, NIE Staff Award 2023 (Long Service Award) -30 Years in Service
- Assoc Prof Chow Jia Yi, Top 2% scientists worldwide by Stanford University 2023
- Assoc Prof Chow Jia Yi, NIE Staff Award 2023 (Team) - Archetype of the Futureready Teacher (Review of V3SK and GTCs)
- Assoc Prof Chow Jia Yi, MOE Service to Education Pewter Award
- Assoc Prof Koh Koon Teck, NTU Sports Award 2023
- Dr Chung Ho Jin, NIE Staff Award 2023 (Long Service Award) - 10 Years in Service
- Dr Chung Ho Jin, NIE Staff Award 2023 (NIE Website Revamp)
- Asst Prof Komar John, NIE Staff Award 2023 (NIE Staff Welfare Committee for FY2021/2022)
- Asst Prof Teo Wei-Peng, NIE Staff Award 2023 (Excellence in Research Award)
- Asst Prof Teo Wei-Peng, NIE Staff Award 2023 (Excellence in Teaching Award)
- **Dr Tommy Ng,** NIE Staff Award 2023 (Excellence in Teaching Award)
- Ms Karen Heng, NIE Staff Award 2023 (Team) - Archetype of the Future-ready Teacher (Review of V3SK and GTCs)
- Dr Kang Heon Jin, NIE Staff Award 2023 (NIE Website Revamp)
- Mdm Ong Lee Choo, NIE Staff Award 2023 (Long Service Award) - 25 Years in Service
- Mr Muhammad Farihin Fawwaz, NTU Service Ambassador Award 2023



- Mdm Tang Tsou-Tinn, Samantha, NIE Staff Award 2023 (NIE Staff Welfare Committee)
- Ms Erny Yunelis Noorman, NIE Staff Award 2023 (NIE Website Revamp)
- Ms Julisa Binti Sulaiman, NIE Staff Award 2023 (NIE Staff Welfare Committee)
- Ms Julisa Binti Sulaiman, NIE Staff Award 2023 (NIE Website Revamp)



Students' Achievements

 Ms Nasha Jeffri (SSM Student), Debut at the Women's World Championship (2023, December 2 ~ 10)



Seven PESS (Class of 2023) students were awarded the following Book Prizes:

- Ms Lynette Krystall G Aviado & Mr Nur Ashriq Firdaus Bin Zul'kepli, Singapore National Olympic Council Book Prize
- Mr C T Karuppiah Arasu & Mr
 Mohammed Jumaeen Bin Amat Kamsin,
 Sport Singapore Book Prize
- Ms Sherman Lim Jun Yan, The Tan Poey Quee Practicum Book Prize
- Mr Sean Lim Zhong Sheng, C. Kunalan Book Prize
- Ms Choo Min Elizabeth, Singapore Teacher's Union Book Prize