



Ernest Kwek Beng Kee

Chief and Senior Consultant, Department of Orthopaedic Surgery, WH
Clinical Director of Research, WH
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Research Interests:

- Orthopaedic Trauma
- Hip Fractures
- Musculoskeletal Research

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Biography

Ernest's interests in research were kindled after his fellowship training in the University of Calgary, Canada. After returning to Singapore, Ernest set out to establish a vibrant research culture within the Orthopaedic Surgery Department of Tan Tock Seng Hospital. His emphasis on evidence-based medicine and research methodology saw the department initiate a number of clinical trials, with and without grant funding. Within a span of 5 years, the department eventually became one of the most productive orthopaedic departments in research under his direction as Research Lead. Ernest also developed a strong focus on research within the orthopaedic surgery residency programme when he assumed the position of NHG Orthopaedic Surgery Residency Program Director. He has mentored a number of medical students and residents to several grants, research awards and publications. Whilst his focus has now shifted to administration in his new role as Chief of Orthopaedic Surgery at the Woodlands Health, he remains dedicated to establishing research and academia as a foundation for clinical practice. His appointment as Clinical Director of Research will also see him striving to establish a hospital firmly grounded in scholarly practices and committed to research growth when the campus opens in 2022.

Selected Publications

- Kwek EBK, Goh SK, Koh JS, Png MA, Howe TS. An emerging pattern of subtrochanteric stress fractures: A long term complication of alendronate therapy? *Injury*. 2008; 39(2):224-31.
- Kau CY, Kwek EBK. Can preoperative scoring systems be applied to Asian Hip Fracture Populations? Validation of the Nottingham Hip Fracture Score and identification of preoperative risk factors in the Asian Population. *Ann Acad Med Singapore*. 2014; 43:448-53.
- Lee JYY, Soh T, Howe TS, Koh JSB, Kwek EBK, Chua DTC. Bisphosphonate-associated Peri-Implant Fractures: A New Clinical Entity? *Acta Orthopaedica*. 2015; 30:1-5.
- Zhang J, Ang ML, Kwek EBK. Who will walk again? Effects of rehabilitation on the ambulatory status in elderly patients undergoing hemiarthroplasty for femoral neck fractures. *Geriatric Orthopaedic Surgery & Rehabilitation*. 2015; 6(3):168-72.

- WX Ng, Kwek EBK. Too old for surgery? Outcomes of hip fracture surgery in centenarians. *Ann Acad Med Singapore*. 2017; 46(3):115-117.
- Yam M, Chawla A, Kwek E. Rewriting the tip apex distance for the proximal femoral nail anti-rotation. *Injury*. 2017; 48(8):1843-1847.
- Lester Chan, Antony Gardner, Wong MK, Kenon Chua, Ernest BK Kwek, on behalf of the Singapore Orthopaedic Research Collaborative (SORCE). Non-prosthetic peri-implant fractures: classification, management and outcomes. *Arch Orthop Trauma Surg*. 2018; 138(6):791-802.
- Buckley, RE, Kwek E, Duffy P, Korley R, Puloski S, Buckley A, Martin R, Rydberg-Moller E, Schneider P. Single screw fixation compared with double screw fixation for treatment of medial malleolar fractures: A prospective randomized trial. *J Orthop Trauma*. 2018; 32(11):548-553.
- GL Foo, EBK Kwek. Are Three-Dimensional Printed Models Useful for Preoperative Planning of Tibial Plafond Fractures? *J Foot Ankle Surg*. 2019; 58(4):723-729.
- Chua MJ, Foo GL, Kwek EBK. A tiered mentoring framework in an Orthopaedic Surgery Residency Programme. *TAPS*. 2020; 5(1):54-60.

Notable Research Awards & Grants From Past 5 Years

Name of Awards & Grants	Year Obtained
A*STAR-NHG-NTU 2 nd Skin Research Grant for “Development of sustained drug release from scaffolds to promote chronic wound healing”	2016

Translating Research Into Healthcare

- Too old for surgery? Outcomes of hip fracture surgery in centenarians. *Ann Acad Med Singapore*. 2017.
- Hip operations – at age 100 and older. *The Straits Times*. Published 22 August 2017.
<https://www.straitstimes.com/singapore/health/never-too-old-for-surgery-say-doctors>