SPHPM Summer Vacation Scholarship Program

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Bachelor of Health Science

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Career goals

- To make a difference to someone’s life.
- To love my job.

Topics of investigation

- Correlates and predictors of chronic knee pain;
- Poor patient-reported outcomes following total knee arthroplasty;
- Associations between peri-operative pain management and post-operative outcomes;
- Pain sensitisation as a determinant of chronic knee pain/post-TKA chronic pain.

Pain sensitisation

- Reduced pain threshold (allodynia);
- Pain in the absence of noxious stimuli (spontaneous pain);
- Increased and prolonged responsiveness to noxious stimuli (hyperalgesia);
- Receptive field expansion that enables the spread of pain to non-injured tissue (secondary hyperalgesia).

Some notable studies

- Buvanendran A, Kroin JS, Della Valle CJ, Kari M, Moric M, Tuman KJ. **Perioperative oral pregabalin reduces chronic pain after total knee arthroplasty: a prospective, randomized, controlled trial.** Anesth Analg. 2010;110(1):199.
- Carmichael NME, Katz J, Clarke H, Kennedy D, Kreder HJ, Gollish J, et al. **An intensive perioperative regimen of pregabalin and celecoxib reduces pain and improves physical function scores six weeks after total hip arthroplasty: a prospective randomized controlled trial.** Pain research & management. 2013;18(3):127.

Thank you!