

**Southern Cross University Student-led Exercise Physiology clinic now open at
Bilinga: Preventative and Rehabilitative Exercise**

Dr Mike Climstein (PhD, FASMF, FACSM, FAAESS)

The medical management of chronic disease and chronic conditions typically focuses upon pharmacological and/or surgical (procedural) interventions. However, there is substantial evidence from high quality studies (ie., RCT's, systematic reviews and meta-analyses) that has shown evidence-based exercise can significantly offset the many adverse effects associated with a number of chronic diseases and conditions (ie., chronic low back pain, CHD, CHF, cancer, knee OA, COPD, T2dm and others) and assist in the management of these conditions.

For example, exercise (aerobic and resistance training) has been shown to significantly reduce HbA1c ⁽¹⁾, improve pain levels in chronic low back pain ⁽²⁾ and knee OA ⁽³⁾ and reduces CV ⁽⁴⁾ and COPD mortality ⁽⁵⁾. Exercise has also been shown to significantly reduce falls in older adults. More recently, Hayes and colleagues ⁽⁶⁾ reported that exercise was found to reduce morbidity, improved function and QoL, and potential for improved survival, with very low risk of harm to cancer patients. The Clinic Oncology Society of Australia (COSA) recent position statement on exercise in cancer care ⁽⁷⁾ promotes exercise and physical activity in all people with cancer as soon as possible following their diagnosis and embedded part of their standard cancer care.

Despite the wealth of evidence, GPs play a critical role in the promotion of evidence-based exercise with their patients. Particularly where the patient is not motivated to initiate exercise/physical activity or where they have reduced health status and believe exercise may not be safe/appropriate for them. GPs should assess potential patients that would benefit from preventative or rehabilitative exercise interventions. To help ensure your patients attain improved outcomes (physiological and/or psychological) they should be referred to appropriate exercise professionals, such as accredited exercise physiologists. Furthermore, programs should specialize in aerobic capacity and musculoskeletal assessments and exercise prescription for a wide array of chronic diseases and conditions.

One such clinic is Southern Cross University's Health Clinic (Gold Coast campus) which has recently added Exercise Physiology to their student led clinics which also includes podiatry, osteopathy and speech pathology.

The SCU Exercise Physiology clinic supports individuals with chronic diseases/conditions such as diabetes, CVD, cancer, chronic fatigue, osteoporosis, OA/RA, asthma, LBP, Parkinson's, CVD, COPD, chronic fatigue, anxiety/depression,

dyslipidemia, HTN, falls prevention, overweight/obesity and other diseases/disorders. Our Exercise Physiology students (under direct supervision by accredited Exercise Physiologists) advise, design and deliver safe and effective evidence-based exercise interventions (preventative and rehabilitative) that are individualized and in line with the GPs treatment goals. The clinic is equipped with wireless 12 lead ECGs for submax graded exercise testing (treadmill or cycle ergometer), spirometry, musculoskeletal assessments and exercise equipment. Reports are sent to the referring GP/ Specialist.

As the clinic is supported by Southern Cross University, the first and follow-up appointments are free, with subsequent appointments \$10. The clinic operates on Tuesdays and Thursday's from 8am to 4pm. Appointments can be made by calling 07 5589 3252.

GPs are integral in the promotion of exercise ⁽⁸⁾, it is therefore important to identify patients that would benefit from exercise interventions and promote preventative or rehabilitative exercise for improved patient outcomes.

References

1. Umpierre D, Ribeiro PA, Kramer CK, Leitao, C., Zucatti, A., Azevedo, M., Gross, J., Ribero, J., & Schaan, B. (2011). Physical activity advice only or structured exercise training and association with HbA1c levels in type 2 diabetes: a systematic review and meta-analysis. *JAMA*. 305(17):1790-1799
2. Hayden, J., van Tulder, M., Malmivaara, A., & Koes, B. (2005). Exercise therapy for treatment of non-specific low back pain. *Cochrane Database Systematic Reviews*. 20 (3): CD000335
3. Owens, C., & Conaghan, P. (2016). *Practitioner*. 260 (1799): 17-20.
4. Lanier, J., Bury, D., & Richardson, S. (2016). Diet and Physical Activity for Cardiovascular Disease Prevention. *American Family Physician*. 93 (11): 919-924.
5. Cheng, S., McKeough, Z., Alison, J., Dennis, S., Hamer, M., & Stamatakis, E. (2018). Associations of total and type-specific physical activity with mortality in chronic obstructive pulmonary disease: a population-based cohort study. *BMC Public Health*. 18 (1): 268
6. Hayes, S., Newton, R., Spence, R., & Galvao, D. (2019) The Exercise and sports Science Australia position statement: Exercise medicine in cancer management. *Journal of Science and Medicine in Sport*. ePub before print [https://www.jsams.org/article/S1440-2440\(18\)31270-2/p](https://www.jsams.org/article/S1440-2440(18)31270-2/p)
7. Cormie, P., Atkinson, L., Bucci, A., Cust, A., Eakin, E., Hayes, S., McCarthy, A., Murnane, A., Patchell, S., & Adams, D. (2018). COSA Position statement on exercise in cancer care. *Medical Journal of Australia*. 209 (4): 184-187.
8. Leemrijse, C., de Bakker, D., Ooms, L., & Veenhof, C. (2015). *BMC Family Practice*. 16 (96): 1-9.

About the author: Mike is an accredited exercise physiologist with 27 years clinical experience (hospital, medical center and Director of a community chronic disease clinic) and is the Course Coordinator for the Master of Clinical Exercise Physiology at Southern Cross University. GPs and Specialists can contact Mike at michael.climstein@scu.edu.au or via phone (office 07 5589 3330) if they have any questions regarding the suitability of rehabilitative exercise for their patients or questions about the SCU Exercise Physiology clinic.