

October 22, 2022

EM222: CESENA - Exercise Medicine in Cancer Management



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Exercise medicine is now established as a highly effective therapy for reducing side effects of cancer treatment, enhancing the effectiveness of chemotherapy and radiation therapy, improving physical function and quality of life for people with cancer, and ultimately increasing survival.

We will commence with a lecture on the latest research and clinical practice of exercise as medicine within cancer management. We will then accompany the patient from clinician referral to enrolment, assessment, exercise prescription and follow up, graduation from the fully supervised clinic program to self-management.

In this one day workshop Professor Newton will focus on practical implementation of an **exercise medicine service for cancer patients**. Health and fitness assessment of patients with cancer will be explored in detail with **practical examples**. Targeted exercise therapy to address the predominant health issues presented by patients with cancer will be discussed with **practical demonstrations**. The day will finish with a series of **case studies** and real-world scenarios.

Professor Robert Newton, PhD, DSc, AEP, CSCS * D, FACSM, FESSA, FNSCA is Professor of Exercise Medicine in the Exercise Medicine Research Institute that he established (2004) at Edith Cowan University, Perth, Western Australia. Current major clinical and research directions include: exercise medicine as neoadjuvant, adjuvant and rehabilitative cancer therapy to reduce side-effects and enhance effectiveness of surgery, chemotherapy and radiation therapy; the influence of targeted exercise medicine on tumor biology and exercise medicine for reducing decline in quality of life, strength, body composition and functional ability in cancer patients.

Is an Accredited Exercise Physiologist, Fellow of the American College of Sports Medicine, Fellow of Exercise and Sports Science Australia, Member of the American Society of Clinical Oncology, American College of Sports Medicine and Clinical Oncology Society of Australia. In 2018 he received the career achievement award from the Cancer Council WA. In 2019, Professor Newton was named the Western Australian Scientist of the Year. In 2021, The University of Queensland awarded Professor Newton a Higher Doctorate (DSc) for his research into exercise oncology.Has published over 980 scientific papers including 502 refereed scientific journal articles, 450 conference abstracts and papers, three books, 17 book chapters and has a



current Scopus h-Index of 88 with his work by him being cited over 26,500 times.



SCHEDULE

PROGRAM

- 08.30 09.00 Registration
- 09.00 10.00 Lecture Exercise Medicine within Cancer Management
- 10.00 10.10 Building clinician referrals
- 10.10 10.20 Recruiting the patient
- 10.20 10.50 Introduction to SurveyMonkey
- 10.50 11.00 Coffee Break
- 11.00 11.10 Informed consent and research participation
- 11.10 11.20 Health history
- 11.20 11.30 Pre-exercise screening
- 11.30 11.40 Absolute and relative contraindications to exercise assessment
- 11.40 11.50 Rating of perceived exertion



- 11.50 12.20 Introduction to MyWellness
- 12.20 13.20 Lunch
- 13.20 13.50 Assessments of cardiorespiratory capacity:

CPET

Steep Ramp Test

Step test

400m walk

6 minute walk

13.50 - 14.20 Assessments of neuromuscular strength:

One repetition maximum test o Chest press

o Leg press o Leg extension o Seated row o Plank

14.20 - 14.40 Assessments of functional capacity:

Timed 6 meter walk

Timed up and go

Sit to stand

Stair climb

14.40 - 14.50 Assessments of quality of life and psychosocial wellbeing - fatigue, anxiety:

SF36

HADS

DASS

14.50 - 15.00 Assessments of cancer specific health and status:

FACT

EORTC

15.00 - 15.20 Assessment of body composition:

DEXA



pQCT

bioimpedence

height

weight

hip and waist circumference

BMI

15.20 - 15.30 Coffee Break

15.30 - 17.30 Targeted exercise prescription:

cardiorespiratory

muscle hypertrophy

muscle strength

functional performance

balance

skeletal health

fat loss

lymphoedema

bone metastatic disease

pre-habilitation for surgery

chemotherapy, radiation therapy, immunotherapy, steroid therapy

- 17.30 17.40 Long term planning, prescription and periodisation
- 17.40 17.50 Nutritional considerations
- 17.50 18.00 Graduation to self-management:

Fitness centre

Home based

Group exercise

Park fit

Sport medicine



- 18.00 18.10 Clinician and patient feedback
- 18.10 18.50 Case studies and scenarios
- 18.50 19.00 Closing of the course