2013 RESEARCH REPORT
EASTERN HEALTH CLINICAL SCHOOL
EASTERN CLINICAL RESEARCH UNIT
Eastern Health Clinical School (EHCS) oversees training within Eastern Health of medical students from Monash University and Deakin University; coordinates Monash University research and higher degree students; is the conduit through which Turning Point links to the university; and coordinates clinical trials within Eastern Health for a number of the trials-active clinical units through the Eastern Clinical Research Unit (ECRU).

ECRU works closely with the Eastern Health Office for Research and Ethics. ECRU provides an overarching research governance structure, ensuring the highest quality of clinical research and best protection for trial participants. ECRU brings together researchers from multiple disciplines, providing them with necessary infrastructure support and systems that ensure confidence in the quality of work achieved. EHCS contributes substantial resources to ECRU to ensure that this work can continue in a seamless fashion to ensure that the capacity for research, both industry-sponsored and investigator-initiated, can continue to grow.

ECRU provides opportunities for training of clinicians and other staff, and additional support to units with fewer resources. Clinical research through Eastern Health and ECRU is of a very high standard and is highly regarded and sought after by trial sponsors.

EHCS has a wet laboratory program consisting primarily of researchers within nephrology and oncology. The nephrology group, led by Professor Lawrie McMahon, Professor Steve Holt and Ed Smith, works on questions relating to vascular calcification and inflammation. The uro-oncology group, led by Professor Ian Davis, performs basic and translational research in prostate cancer and moved into the laboratories in June 2013.

There continues to be growth in research through the EHCS relating to medical education, led by Associate Professor Jenepher Martin. The EHCS Medical Students Program includes a range of research projects focusing on medical education including the effects of peer involvement in learning, and the introduction of trained patients as tutors (see EHCS Medical Students Program report for further details). This research is yielding interesting results and has been rewarded with a Monash University grant.

Program Director
Professor Ian Davis
Future. Steroids on immune cells with implications to occur in men with prostate cancer often treated with hormones (sex steroids). Research outcomes have identified that the immune response is suppressed inside the cancer, giving the opportunity to grow. Evidence to date has itself and comparing with immune responses in blood. Prostate cancer microenvironment prostate tissue removed from patients at the time of surgery. This project involves studying samples of prostate cancer or non-cancerous prostate tissue removed from patients at the time of surgery.

Prostate cancer and the immune system

Sex steroids and immune function

Lead researcher: Davis ID. Co-investigators: Sluka P, Wardan H. Prostate cancer is often treated with hormones (sex steroids). Changes in immune function are known to occur in men with prostate cancer treated like this. Research outcomes have identified that there are direct effects of sex steroids on immune cells with implications for how prostate cancer might be treated in the future.

Sex steroids and immune function

Funding/Grants
Development of novel sex steroid-based PET tracers for prostate cancer Prostate Cancer Foundation of Australia New Directions Development Award Principal investigator: Davis ID. Co-investigators: Scott AM, Risbridge GP, Sluka P. $213,000 over two years (2012-2013)

LI-COR Odyssey CLX Infrared Imaging System Prostate Cancer Foundation of Australia Movember Equipment Grant (EG 0612) Davis ID. $32,000 (2013).

Projects in progress
Projects in progress by the unit during the course of the past year have included:

URO-ONCOLOGY LABORATORY
Prostate cancer microenvironment
Lead researcher: Davis ID. Co-investigators: Sluka P, Wardan H. This project involves studying the factors associated with the tendency of prostate cancer more likely to spread to bones. The research involves studying samples of prostate cancer or non-cancerous prostate tissue removed from patients at the time of surgery.

Prostate cancer and the immune system

Prostate cancer microenvironment
Lead researcher: Davis ID. Co-investigators: Sluka P, Wardan H. The immune system has effects on various cancers including prostate cancer. This project studies immune cells within the prostate tissue itself and comparing with immune responses in blood. Evidence to date has identified that the immune response is suppressed inside the cancer, giving the cancer the opportunity to grow.

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Publications for period 1 July 2012 – 30 June 2013

JOURNALS
Published


Davis ID, Chew DPB. Clinical effectiveness research: a critical need for health sector research governance capacity. The Medical Journal of Australia 2013; Vol 198. No. 4. 191-192. (DOI: 0.5694/mja2.11144)


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PEER REVIEW LETTERS


Conference including proceedings, papers, poster

INTERNATIONAL


Tafreshi A, Tafreshi A, Eapen R, Davis ID, Liew MS, Guo Y, Quaggiotto M, Boyer M, Davis ID. Efficacy of sorafenib in advanced renal cell carcinoma (RCC) independent of prior treatment, histology, or prognostic group. ANZUP Annual Scientific Meeting. Sydney, July 2012; also presented at Medical Oncology Group of Australia Annual Scientific Meeting. Brisbane, August 2012.

Tafreshi A, Sengupta S, Davis ID, Liew MS, Eapen R. Peri-operative chemotherapy improves relapse-free survival for urothelial carcinoma of the bladder treated by radical cystectomy, but remains under-utilised in an Australian tertiary referral institution. COSA Annual Scientific Meeting. Brisbane, November 2012.

LOCAL


ACCESSING PROGRAM ACTIVITY REPORTS

Eastern Health is committed to building a culture of research and ensuring such research is embedded in everyday clinical practice. Eastern Health contributes to local, national and international research activity. This document forms part of the broader sixth annual 2013 Eastern Health Research Report reflecting the high-calibre research, commitment and strength of research programs across Eastern Health. A hard copy of the complete 2013 Research Report including program activity reports is available by contacting The Office of Research & Ethics on 9895 9551 or via download from www.easternhealth.org.au

Readers note: Where projects are collaborative with our respective research partners, Eastern Health staff names are in bold.

Clinical program reports available include:

• Allied Health
• Cardiology
• Eastern Health Clinical School and Eastern Clinical Research Unit (ECRU)
• Eastern Clinical Research Unit – Translational Division (ECRU–TRD)
• Eastern Health Clinical School Research Division, Medical Student Programs
• Emergency services
• Endocrinology
• Gastroenterology and Hepatology
• Geriatric
• Haematology
• Integrated Renal and Obstetric services
• Intensive Care services
• Mental Health programs
• Neuroscience
• Nursing and Midwifery
• Oncology
• Palliative Care
• Pharmacy
• Respiratory and Sleep Medicine
• Rheumatology
• Surgical Research Group
• Turning Point