# Elijah Dixon, MD, BSc, MSc(Epi), FRCSC, FACS

Associate Professor, Departments of Surgery, Oncology and Community Health Sciences CIHR New Investigator

# **RESEARCH INTERESTS AND ACTIVITIES**

Key Words: outcomes, health services research, patient safety, health technology assessment, quality improvement, clinical trials, general surgery

Dr. Dixon's research interests include the development of quality indicators of care for patients undergoing hepatic resection for metastatic colorectal cancer. He conducts clinical research, particularly in the area of hepato-pancreatico-biliary surgery. He uses administrative data to investigate issues such as disparities in access to care and surgical outcomes in different patient populations. He is also interested in using administrative data to measure wait times for cancer surgery in Canada.

# **RESEARCH IN PROGRESS**

<u>RESEARCH INTROGRESS</u>			
ROLE	FUNDING AGENCY	TITLE OF PROJECT	2010/11 ALLOCATION
Principal Investigator	Calgary Surgical Research Development Fund	Laparoscopic cholecystectomy for acute calculous cholecystitis: How urgent is 'urgent'?	2,300
	M.S.I. Foundation	Postoperative outcomes following colectomy in elderly ulcerative colitis patients	ongoing
	Canadian Institutes for Health Research	Rates and waits for cancer surgery in Canada: Mixed method assessment	82,338
	Canadian Institutes for Health Research	The development of a multi method template for health technology assessment of surgical procedures: Application to the case study of hepatic resection for colorectal metastatic disease	ongoing
	Calgary Surgical Research Development Fund	The effects of call and call scheduling on general surgeons' and general surgery residents' perceived quality of life	1,230
Co- Investigator	M.S.I. Foundation	Improving safety in the operating room: Evaluating implementation of the safe surgery checklist	ongoing
	Canadian Institutes for Health Research	Effect of physician alternative payment plans on the completeness and validity of administrative data	ongoing
	Calgary Surgical Research Development Fund	Harmonic scalpel vs. electrocautery in modified radical neck dissection: A single blinded prospective randomized trial	ongoing



### **PUBLICATIONS**

#### **Peer-Reviewed Journal Articles**

- Sahajpal AK, Chow SC, **Dixon E**, Greig PD, Gallinger S, Wei AC. <u>Bile duct injuries associated with</u> <u>laparoscopic cholecystectomy: timing of repair and long-term outcomes.</u> *Archives of Surgery* 2010;145(8):757-63.
- Brasel KJ, Gottesman L, Vasilevsky CA; Members of the Evidence-Based Reviews in Surgery Group (including **Dixon E**). <u>Meta-analysis comparing healing by primary closure and open healing after</u> <u>surgery for pilonidal sinus</u>. *Journal of the American College of Surgeons* 2010;211(3):431-4.
- Ball CG, Pitt HA, Kilbane ME, **Dixon E**, Sutherland FR, Lillemoe KD. <u>Peri-operative blood transfusion</u> <u>and operative time are quality indicators for pancreatoduodenectomy</u>. *HPB (Oxford)* 2010;12(7):465-71.
- Ball CG, Sutherland F, Kirkpatrick AW, **Dixon E**, Maclean AR, Mack LA, Feliciano DV, Rajani RR, Karmy-Jones R, Buie WD, Temple WJ, Rozycki GS, Simeone A. <u>Dramatic innovations in modern</u> <u>surgical subspecialties</u>. *Canadian Journal of Surgery* 2010;53(5):335-41.
- Mastracci TM, Aarts MA, Cassivi SD, Garcia SA, McLean RF, McFalls EO; Members of the Evidence Based Reviews in Surgery Group (including **Dixon E**). <u>CAGS and ACS Evidence Based Reviews in</u> <u>Surgery. 34: effects of β-blockers in patients undergoing noncardiac surgery</u>. *Canadian Journal of Surgery* 2010;53(5):342-4.
- Drolet S, Maclean AR, Myers RP, Shaheen AA, **Dixon E**, Donald Buie W. <u>Morbidity and mortality</u> <u>following colorectal surgery in patients with end-stage renal failure: A population-based study.</u> *Diseases of the Colon and Rectum* 2010;53(11):1508-16.
- Chambers AJ, Pasieka JL, **Dixon E**, Rorstad O. <u>Role of imaging in the preoperative staging of small</u> <u>bowel neuroendocrine tumors</u>. *Journal of the American College of Surgeons* 2010;211(5):620-7.
- Ball CG, Navsaria P, Kirkpatrick AW, Vercler C, **Dixon E**, Zink J, Laupland KB, Lowe M, Salomone JP, Dente CJ, Wyrzykowski AD, Hameed SM, Widder S, Inaba K, Ball JE, Rozycki GS, Montgomery SP, Hayward T, Feliciano DV. <u>The impact of country and culture on end-of-life care for injured patients: Results from an international survey.</u> *Journal of Trauma* 2010;69(6):1323-33.
- Chaudhury P, Marshall JC, Solomkin JS; Members of the Evidence Based Reviews in Surgery Group (including **Dixon E**). CAGS and ACS evidence based reviews in surgery. 35: Efficacy and safety of low-dose hydrocortisone therapy in the treatment of septic shock. *Canadian Journal of Surgery* 2010;53(6):415-7.
- Bathe OF, Shaykhutdinov R, Kopciuk K, Weljie AM, McKay A, Sutherland FR, **Dixon E**, Dunse N, Sotiropoulos D, Vogel HJ. Feasibility of identifying pancreatic cancer based on serum metabolomics. *Cancer Epidemiology, Biomarkers and Prevention* 2011;20(1):140-7.
- Henteleff HJ, Barie PS, Hamilton SM; Members of the Evidence-Based Reviews in Surgery Group (including **Dixon E**). Universal screening for methicillin-resistant staphylococcus aureus in surgical patients. *Journal of the American College of Surgeons* 2010;211(6):833-5.

- Vollmer Jr CM, **Dixon E**. Intraductal papillary mucinous neoplasm: Coming of age. *World Journal of Gastrointestinal Surgery* 2010;2(10):299-305.
- Ball CG, **Dixon E**. The consensus statement on mixed martial arts: Emotion, not evidence-based. *Canadian Journal of Surgery* 2011;54(1):E1-2.
- Kirkpatrick AW, Papia G, McCloskey SA, Polk HC Jr, Akca O, Qadan M; Evidence Based Reviews in Surgery Group (including **Dixon E**). CAGS and ACS evidence based reviews in surgery. 36. Effect of high perioperative oxygen fraction on surgical site infection. *Canadian Journal of Surgery* 2011;54(1):67-9.
- Drolet S, Maclean AR, Myers RP, Shaheen AA, **Dixon E**, Buie WD. Elective resection of colon cancer by high-volume surgeons is associated with decreased morbidity and mortality. *Journal of Gastrointestinal Surgery* 2011;15(4):541-50.
- **Dixon E,** Cheadle WG, Khadaroo RG; Members of the Evidence-Based Reviews in Surgery Group. Preventing postoperative surgical site infection. *Journal of the American College of Surgeons* 2011;212(3):418-20.
- Temple LK, Kennedy ED, Ko CY; Evidence Based Reviews in Surgery Group (including **Dixon E**). Canadian Association of General Surgeons, the American College of Surgeons, the Canadian Society of Colorectal Surgeons and the American Society of Colorectal Surgeons: Evidence based reviews in surgery - colorectal surgery. *Diseases of the Colon and Rectum*. 2011;54(4):501-3.
- Munene G, **Dixon E**, Sutherland F. Open transgastric debridement and internal drainage of symptomatic non-infected walled-off pancreatic necrosis. *HPB (Oxford)* 2011;13(4):234-9.
- Walen SG, Rudmik LR, Dixon E, Matthews TW, Nakoneshny SC, Dort JC. <u>The utility of the harmonic scalpel in selective neck dissection: A prospective, randomized trial.</u> Otolaryngology Head and Neck Surgery 2011;144(6):894-9.
- Ho TW, Shaheen AA, **Dixon E**, Harvey A. Utilization of thyroidectomy for benign disease in the United States: A 15-year population-based study. *American Journal of Surgery* 2011;201(5):569-73.
- Drolet S, Maclean AR, Stewart DA, **Dixon E**, Paolucci EO, Buie WD. Primary colorectal lymphomaclinical outcomes in a population-based series. *Journal of Gastrointestinal Surgery* 2011;Jun 7.

### Paper in Published Conference Proceedings

Munene G, Vauthey J-N, **Dixon E**. Summary of the 2010 AHPBA/SSO/SSAT Consensus Conference on HCC. *International Journal of Hepatology* 2011;Article ID 565060.

#### **Abstracts Published in Journals**

- Maclean SR, Karanji D, **Dixon E**, Sutherland FR, Bathe OF. Effect of wait time on resectibility of pancreatic adenocarcinoma. *Canadian Journal of Surgery* 2010;53(Suppl 1):S41.
- Paun BC, Shaheen AAM, **Dixon E**, Maclean AR, Buie WD. Mortality and major morbidity following rectal cancer surgery in the United States. *Canadian Journal of Surgery* 2010;53(Suppl 1):S50.

- AlSheikh S, Ball C, Mercado M, **Dixon E**, Tiruta C, Ouellet J-F, Laupland K, Nutley M, Kirkpatrick A. Epidemiology and characteristics of traumatic aortic injuries presenting in the city of Calgary: A population-based study. *Canadian Journal of Surgery* 2011;54(3):S5.
- Roberts D, Ball C, Dixon E, Kirkpatrick A, Dingley B, Kortbeek J, Leigh-Smith S. Tension pneumothoraces: Clinical features and overall frequency in spontaneously breathing and mechanically ventilated adults: A systematic review. *Canadian Journal of Surgery* 2011;54(3):S6.

# **GRADUATE STUDENT SUPERVISION**

Paul Renfrew, MSc student, Department of Community Health Sciences (completed January 2011) Thesis Topic: Does the model for end-stage liver disease accurately predict the occurrence of ninety-day wait-list mortality in Atlantic Canadian liver transplant candidates? A validation study