

Postgraduate Training:

- 1987-89 Surgery Residency, Georgetown University Medical Center, Washington, DC.
- 1989-91 Surgical Research Fellowship, VA Medical Center, Washington, DC.
- 1991-94 Surgery Residency, Georgetown University Medical Center, Washington, DC.

Professional Experience and Appointments:

- 1994-96 Staff Surgeon, Veterans Affairs Medical Center, Washington, DC.
- 1995-96 Instructor in Surgery, Georgetown University Medical Center, Washington, DC.
- 1996-2001 Assistant Professor of Surgery, Johns Hopkins University School of Medicine.
- 1997-2003 Guest Researcher, Laboratory of Molecular Genetics, NIA, NIH.
- 1998 - Chief of Surgical Oncology, Johns Hopkins Bayview Medical Center.
- 2000-2001 Assistant Professor of Oncology, Johns Hopkins University School of Medicine.
- 2001 - Associate Professor of Surgery, Johns Hopkins University School of Medicine.
- 2001 - Associate Professor of Oncology, Johns Hopkins University School of Medicine.
- 2004-2005 Interim Chairman, "Surgeon-in Chief," Department of Surgery, Johns Hopkins Bayview Medical Center. (1 ½ years)

PUBLICATIONS:

Peer-reviewed scientific articles

1. Dziki AJ, **Duncan MD**, Harmon JW, Saini N, Malthaner RA, Fernicola MT, Hakki FW, Trad KS, Ugarte R. Advantages of handsewn over stapled anastomoses. Dis Col Rect 34:442-8, 1991.
2. Benya RV, **Duncan MD**, Mishra L, Bass BL, Voyles NR, Korman LY. Extracellular matrix composition influences insulin-like growth factor I receptor expression in a rat IEC-18 cells. Gastroenterology 104:1705-11, 1993.
3. **Duncan MD**, Korman LY, Bass BL. Epidermal growth factor primes intestinal epithelial cells for the proliferative effect of insulin-like growth factor I. Dig Dis Sci 39:2197-201, 1994.
4. Bamberger PK, Batzri S, Molloy M, **Duncan M**, Harmon JW. Reversible bile acid-induced hypercalcemia and respiratory impairment in gastric epithelial cells. Surg Forum 46:129-31, 1995.
5. Tchorzewski MT, Qureshi FG, **Duncan MD**, Batzri S, Harmon JW. IGF-I and EGF stimulate DNA synthesis in three-dimensional esophageal explants via tyrosine kinase-dependent pathways. Surg Forum 46:122-4, 1995.
6. **Duncan MD**, Harmon JW, Duncan KLK. Actin disruption inhibits bombesin stimulation of

- focal adhesion kinase (pp125^{FAK}) in prostate carcinoma. J Surg Res 63:359-63, 1996.
7. Duncan KLK, **Duncan MD**, Alley MC, Sausville EA. Cucurbitacin E-induced disruption of the actin and vimentin cytoskeleton in prostate carcinoma cells. Biochem Pharmacol 52: 1553-60, 1996.
 8. **Duncan MD**, Duncan KLK. Cucurbitacin E targets proliferating endothelia. J Surg Res 69:55-60, 1997.
 9. Qureshi FG, Tchorzewski MT, **Duncan MD**, Harmon JW. EGF and IGF-I synergistically stimulate human esophageal epithelia. J Surg Res 69:354-8, 1997.
 10. Tchorzewski MT, Qureshi FG, **Duncan MD**, Duncan KLK, Saini N, Harmon JW. Role of insulin-like growth factor-I in esophageal mucosal healing processes. J Lab Clin Med 132:134-41, 1998.
 11. Tchorzewski MT, **Duncan MD**, Nass P, Qureshi FG, Gearhart PJ, Winchurch R, Harmon JW. Characterization of an aFGF gene expression vector with therapeutic potential. J Surg Res 77:99-103, 1998.
 12. **Duncan MD**, Donovan DM, Phung QH, Tihan T, Harmon JW, Gearhart PJ, Duncan KLK. Tumorigenesis at the squamocolumnar junction in an E1A/E1B transgenic model of esophagogastric adenocarcinoma. Surg Forum 49:141-2, 1998.
 13. Younes ZH, **Duncan MD**, Harmon JW. Role of growth factors in esophageal mucosal healing: a work in progress. J Gastroenterol Hepatol 13:S156-60, 1998.
 14. Magnuson TM, Bender JS, **Duncan MD**, Ahrendt S, Harmon JW. Utility of magnetic resonance cholangiography in the evaluation of biliary obstruction. J Am Coll Surg 189:63-72, 1999.
 15. Harmon JW, Tang DG, Gordon TA, Bowman HM, Choti MA, Kaufman HS, Bender JS, **Duncan MD**, Magnuson TH, Lillemoe KD, Cameron JL. Hospital volume can serve as a surrogate for surgeon volume for achieving excellent outcomes in colorectal resection. Ann Surg 230:404-11, 1999.
 16. **Duncan MD**, Tihan T, Donovan DM, Phung Q, Rowley DL, Harmon JW, Gearhart PJ, Duncan KLK. Esophagogastric adenocarcinoma in an E1A/E1B transgenic model involves p53 disruption. J Gastrointest Surg 4:290-7, 2000.
 17. Younes Z, **Duncan MD**, Harmon JW. Management of Barrett's esophagus. Can J Gastroenterol 14:35D-43D, 2000.
 18. Kopetz ES, Magnuson TH, **Duncan MD**, Bender JS, Lillemoe KD, Gordon TA, Cameron JL, Harmon JW. Complications of neglected cholelithiasis account for significant surgical mortality in the elderly. Surg Forum 51:489-91, 2000.
 19. Wan X, **Duncan MD**, Nass P, Harmon JW. Synthetic retinoid CD437 induces apoptosis of esophageal squamous HET-1A cells through the caspase-3-dependent pathway. Anticancer Res 21:2657-64, 2001.
 20. Wan X, Nass P, **Duncan MD**, Harmon JW. aFGF overexpression partially protects 3T3 fibroblasts from apoptosis induced by synthetic retinoid CD4437. J Mol Med 79:143-8, 2001.
 21. Byrnes CK, Nass PH, Duncan MD, Diamond S, Harmon JW. Assessment of a nuclear targeting peptide scaffold (M9) to improve plasmid DNA transfection efficiency. Surg Forum 52:538-9, 2001.
 22. Byrnes CK, Khan FH, Nass PH, Hatoum C, **Duncan MD**, Harmon JW. Success and limitations of a naked plasmid transfection protocol for keratinocyte growth factor-1 to enhance cutaneous wound healing. Wound Repair Regeneration 9:341-6, 2001.
 23. Tihan T, Harmon JW, Wan X, Younes Z, Nass P, Duncan KLK, **Duncan MD**. Evidence of

androgen receptor expression in squamous and adenocarcinoma of the esophagus. Anticancer Res 21:3107-14, 2001.

24. Byrnes CK, Nass PH, Shim JK, **Duncan MD**, Lacy BE, Diamond SL, Harmon JW. Novel nuclear shuttle peptide to increase transfection efficiency in esophageal mucosal cells. J Gastrointest Surg 6:37-42, 2002.

25. Olnes MJ, Nicol T, **Duncan M**, Bohlman M, Erlich R. Interdigitating dendritic cell sarcoma: a rare malignancy responsive to ABVD chemotherapy. Leuk Lymphoma 43:817-21, 2002.

26. Byrnes CK, Nass PH, **Duncan MD**, Harmon JW. A nuclear targeting peptide-M9 improves transfection efficiency in fibroblasts. J Surg Res 108:85-90, 2002.

27. Bender JS, **Duncan MD**, Freeswick PD, Harmon JW, Magnuson TH. Increased laparoscopic experience does not lead to improved results with acute cholecystitis. Am J Surg 184:591-4, 2002.

28. Byrnes CK, Bahadursingh A, Akhter N, Parindandi NL, Natarajan V, Montgomery E, Tihan T, **Duncan MD**, Nass PH, Harmon JW. Duodenal reflux produces hyperproliferative epithelia esophagitis - a possible precursor to esophageal adenocarcinoma. J Gastrointest Surg 7:172-80, 2003.

29. Byrnes CK, Malone RW, Akhter N, Nass PH, Wetterwald A, Cecchini MG, **Duncan MD**, Harmon JW. Electroporation enhances transfection efficiency in murine cutaneous wounds. Wound Repair Regen, 12:397-403, 2004.

30. Marti GP, Lin MP, Dieb R, Qaiser R, Ferguson M, Bonde P, Wang J, **Duncan M**, Harmon JW. KGF-1 plasmid delivered with electroporation accelerates wound closure in diabetic mice. Surg Forum 55: , 2004.

31. Marti G, Ferguson M, Wang J, Byrnes C, Dieb R, Qaiser R, Bonde P, **Duncan MD**, Harmon JW. Electroporative transfection with KGF-1 DNA improves wound healing in a diabetic mouse model. Gene Ther, 11, 1780-5, 2004.

32. Makary MA, **Duncan MD**, Harmon JW, Freeswick PD, Bender JS, Bohlman M, Magnuson TH. The role of magnetic resonance cholangiography in the management of gallstone pancreatitis. Ann Surg 241:119-24, 2005.

33. Ferguson M, Byrnes C, Sun E, Marti G, Bonde P, **Duncan M**, Harmon JW. Wound healing enhancement: electroporation to address a classic problem of military medicine. World J. Surg 29:S55-9, 2005.

34. Sui G, Bonde P, Dhara S, Broor A, Wang J, Marti G, Feldmann G, **Duncan M**, Montgomery E, Maitra A, Harmon JW. Epidermal growth factor receptor and hedgehog signaling pathways are active in esophageal cancer cells from rat reflux model. J Surg Res, 134:1-9, 2006.

35. Lin MP, Marti GP, Dieb R, Wang J, Ferguson M, Qaiser R, Bonde P, **Duncan M**, Harmon JW. Delivery of plasmid DNA expression vector for keratinocyte growth factor-1 using electroporation to improve cutaneous wound healing in a septic rat model. Wound Repair Regen 14:618-24, 2006.

36. **Duncan MD**, Williams JB. X-ray holds key. Surgery (in preparation).

37. Bonde P, Gao D, Chen L, **Duncan M**, Miyashita T, Montgomery E, Harmon JW, Wei C. Selective decrease in the DNA base excision repair pathway in squamous cell cancer of the esophagus. J Thor Cardiovasc Surg 133:74-81, 2007.

37. Bonde P, Sui G, Dhara S, Wang J, Broor A, Kim IF, Wiley JE, Marti G, **Duncan M**, Jaffee E, Montgomery E, Maitra A, Harmon JW. Cytogenic characterization and gene expression profiling in the rat reflux induced esophageal tumor model. J Thor Cardiovasc Surg 133:763-9, 2007.

Editorials, Reviews

1. **Duncan MD**, Review of "Nutrition for the hospitalized patient," Torosian MH, ed, 1995 in J Parenter Enteral Nutr 20:167, 1996.
2. **Duncan MD**. Pathogenesis and management of malignant colorectal polyps. Materia y Naukwe II Mi dzynarodowego Sympozjum Proktologicznego (Poland) 118-26, 1997.
3. Moesinger RC, Bender J, **Duncan M**, Magnuson T, Harmon JW. Surgical management of diseases of the stomach and duodenum, Current Opinion Gastroenterol 14:458-66, 1998.
4. **Duncan MD**. The role of pelvic exenteration in primary and recurrent colorectal cancer. Materia y Naukwe III Mi dzynarodowego Sympozjum Proktologicznego (Poland), 44-8, 1999.
5. Crowell MD and **Duncan MD**. Selection of patients for surgical treatment of colonic dysmotility: Antroduodenal manometry to predict outcomes following total abdominal colectomy. Materia y Naukwe III Mi dzynarodowego Sympozjum Proktologicznego (Poland), 111-7, 1999.
6. Moesinger RC, Bender J, **Duncan M**, Magnuson T, Harmon JW. Update: surgical intervention and understanding of diseases of the stomach and duodenum, Current Opinion Gastroenterol 15:509-15, 1999.
7. **Duncan MD**. Endoprosthetic stents for obstructing colonic tumors. Proktologia 2:151, 2001.
8. Eckhauser FE, **Duncan M**. Review of "Evaluation of regional node status in gastric cancer using radio-guided sentinel node detection." Am J Onc Rev 2:34,41, 2003.
9. Eckhauser FE, **Duncan M**, Harmon J. Review of "Concurrent cisplatin, paclitaxel, and radiotherapy as preoperative treatment for patients with locoregional esophageal carcinoma." Am J Onc Rev 3:270-275, 2004.
10. **Duncan MD**. Commentary: Chemoradiation with and without surgery in patients with locally advanced squamous cell carcinoma of the esophagus. Am J Hem Onc 5:2-8, 2006.
11. **Duncan MD**. Review of "Modern surgical care: physiologic foundations and clinical applications, 3rd ed," Miller T ed., 2006 in Arch Surg (in print), 2007.
12. Bose D, **Duncan MD**. Perioperative chemotherapy for resectable gastroesophageal cancer: the results of the MAGIC trial. Am J Hem Onc 6:1-4, 2007.
13. Bose D, **Duncan MD**. Neoadjuvant chemoradiation for gastric cancer: another contender in the ring. Am J Hem Onc (in print), 2007.

Book Chapters

1. **Duncan MD**, "Oral cholecystography, endoscopic retrograde cholangio-pancreatography, other imaging techniques," in *Hepatobiliary and pancreatic surgery: imaging strategies and surgical decision making*; Evans, SRT, and Ascher, SM, eds. John Wiley & Sons, 55-70, 1998.
2. **Duncan MD**, Bender JS, "Abdominal hernias," in *Principles of ambulatory medicine*, fifth edition; Barker LR, Burton JR, and Zieve PD, eds. Williams & Wilkins, 1400-7, 1998.
3. **Duncan MD**, Magnuson TH, "Gastrointestinal bleeding of obscure origin," in *The practice of general surgery*, Bland, KI, ed. W.B. Saunders Co, 828-31, 2001.
4. **Duncan MD** and Younes Z, "Barrett's Esophagus," in *Current Surgical Therapy*; Cameron, JL, ed. Mosby, 37-40, 2001.
5. Bender JS, **Duncan MD**, "Benign conditions of the anus and rectum," in *Principles of ambulatory medicine*, sixth edition; Barker LR, Burton JR, and Zieve PD, et. al., eds. Williams &

Wilkins, 1542-54, 2003.

6. **Duncan MD**, Bender JS, “Abdominal hernias,” in Principles of ambulatory medicine, sixth edition; Barker LR, Burton JR, and Zieve PD, et. al., eds. Williams & Wilkins, 1534-41, 2003.
7. Melton-Meaux G, **Duncan MD**, “Acute appendicitis,” in Current Surgical Therapy; Cameron, JL, ed. Mosby, 2007 (in print).
8. Melton-Meaux G, **Duncan MD**, Magnuson TH, “Obscure gastrointestinal bleeding,” in The practice of general surgery, Bland, KI, ed. W.B. Saunders Co, 2007 (in print).

Published Abstracts

1. **Duncan MD**, Harmon JW, Korman LY, Bass BL. Insulin and insulin like growth factors enhance the proliferative effect of EGF on cultured human intestinal epithelial cells. Gastroenterology 98:A410, 1990.
2. Dziki AJ, Malthaner RA, Harmon JW, Saini N, **Duncan MD**, Fernicola MT, Fischer BA, Hakki FZ, Trad KS, Ugarte R. Advantages of handsewn over stapled anastomoses. Dis Colon Rectum 33:P17-18, 1990.
3. **Duncan MD**, Korman LY, Bass BL. The IGF-I receptor mediates both insulin and IGF-I proliferative response in human enterocytes. Gastroenterology 100:A638, 1991.
4. **Duncan MD**, Voyles NR, Korman LY, Bass BL. IGF-I and EGF promote intestinal epithelial growth without altering glucose transport. Gastroenterology 100:A638, 1991.
5. Benya RV, **Duncan MD**, Bass BL, Korman LY. Extracellular matrix influences IGF-I receptor binding in cultured human fetal epithelial cells. Gastroenterology 100:A630, 1991.
6. Dziki AJ, **Duncan MD**, Harmon JW, Saini N, Malthaner RA, Fernicola MT, Hakki FZ, Trad KS, Ugarte RM. Comparison of three techniques in bowel anastomoses. Dis Colon Rectum 34:P37, 1991.
7. **Duncan MD**, Korman LY, Bass BL. EGF primes human enterocytes for IGF-I proliferative effect. European Surg Res 23 (S1): 102-3, 1991.
8. Bamberger PK, **Duncan MD**, Molloy M, Batzri S, Goldberg WJ, Harmon JW. Transient, deoxycholate induced, hypercalcemia in human colon cancer cells. Gastroenterology 108:A447,1995.
9. Tchorzewski MT, Qureshi F, **Duncan MD**, Batzri S, Harmon JW. IGF-I stimulates DNA synthesis in esophageal mucosa. Gastroenterology 108:A237, 1995.
10. Qureshi FG, Tchorzewski MT, **Duncan MD**, Harmon JW. IGF-I promotes healing of experimental acid-pepsin induced erosive esophagitis. Gastroenterology 112:A263,1997.
11. Tchorzewski MT, Qureshi FG, **Duncan MD**, Harmon JW. Specific inhibition of IGF-I induced DNA synthesis in esophageal explants. Gastroenterology 112:A311, 1997.
12. Qureshi FG, Maheshwari S, Saleem R, Saleem A, Tchorzewski MT, **Duncan MD**, Harmon JW. Acidic FGF stimulates proliferation of human esophageal epithelia. Gastroenterology 112:A900, 1997.
13. Younes Z, Nass P, Tihan T, Dicker M, **Duncan MD**, Harmon JW. Endoscopic transfection of the rabbit esophageal mucosa with a pMexneo vector for the human acidic fibroblast growth factor: a preliminary study. Am J Gastro 93:1627, 1998.
14. Younes Z, **Duncan MD**, Tihan T, Harmon JW, Duncan KLK. Esophageal cancer: do sex hormones play a role? Am J Gastro 93:1627, 1998.
15. **Duncan MD**, Tihan T, Donovan DM, Phung Q, Harmon JW, Gearhart PJ, Duncan KLK. Esophagogastric adenocarcinoma in an E1A/E1B transgenic model involves p53 disruption.

Gastroenterology 116:A1308, 1999.

16. Wan X, **Duncan MD**, Nass P, Harmon JW. Epidermal growth factor and fibroblast growth factor protect partially HET-1A cells from CD437-induced apoptosis. Gastroenterology 116:A526, 1999.

17. Younes Z, **Duncan MD**, Bender JS, Zayat EN, Regan F, Magnuson TH. Magnetic resonance cholangiopancreatography and angiography with conventional MRI for preoperative evaluation of pancreatic cancer. Gastroenterology 116:A1178, 1999.

18. Bahadursingh A, Khan F, Nass P, **Duncan M**, Harmon J. Transfection of esophageal tissue in vivo using the reporter gene beta-galactosidase. Gastroenterology 116:A181, 1999.

19. Younes ZH, Duncan MD, Harmon JH: Role of growth factors in oesophageal mucosal healing: A work in progress. J of Gastroenterol and Hepato 13:S156-S160, 1999.

20. Tihan T, **Duncan MD**, Harmon JW, Duncan KLK. Pathological observations and evidence for the influence of gender on esophagogastric carcinoma in a transgenic murine model. Mod Path 13:89A, 2000.

21. Diamond MS, Younes Z, Nass PH, Wu TT, Nikoomanesh P, **Duncan MD**, Crowell MD, Harmon JW. Telomerase activity in Barrett's esophagus and esophageal adenocarcinoma. Gastroenterology 118:A1030, 2000.

22. Khan FH, Nass PH, Mathis C, **Duncan MD**, Harmon JW, Crowell MD. Transfection of murine gastrointestinal tissue in vivo using a reporter gene: a work in progress. Gastroenterology 118:A520, 2000.

23. Magnuson TH, **Duncan MD**, Freeswick PD, Harmon JW, Bender JS. Utility of magnetic resonance cholangiography in the evaluation of patients with gallstone pancreatitis. Gastroenterology 118:A1062, 2000.

24. Kopetz ES, Magnuson TH, **Duncan MD**, Bender JS, Lillemoe KD, Gordon TA, Cameron JL, Harmon JW. Complications of neglected cholelithiasis account for significant surgical mortality in the elderly. J Am Coll Surg 191:S14, 2000.

25. Byrnes CK, Nass PH, Shim JK, **Duncan MD**, Lacy BE, Diamond SL, Harmon JW. Novel nuclear shuttle peptide to increase transfection efficiency in esophageal mucosal cells. Gastroenterology 120:A345, 2001.

26. Nass PH, Byrnes CK, Shim J, **Duncan MD**, Lacy BE, Crowell MD, Harmon JW. Phytoestrogens inhibit cell proliferation and induce apoptosis in esophageal adenocarcinoma cell lines expressing the androgen receptor. Gastroenterology 120:A616, 2001.

27. **Duncan MD**. Endoprosthetic stents for obstructing colonic tumors. Proktologia 2:151, 2001.

28. Shim J, Byrnes K, Nass PH, Harmon JW, Bahadursingh A, **Duncan MD**. Esophagogastric adenocarcinoma in a transgenic model expresses cyclooxygenase-2. J Surg Res 100:302, 2001.

29. **Duncan MD**, Bahadursingh A, Shim J, Wang J, Byrnes CK, Nass PH, Harmon JW. Cyclooxygenase-2 expression in glandular mucosa precedes tumor in a transgenic model of esophagogastric adenocarcinoma. J.Clin Gastro 37: 2003.

30. Marti GP, Lin MP, Dieb R, Qaiser R, Ferguson M, Bonde P, Wang J, **Duncan M**, Harmon JW. A bioengineered system of gene therapy and electroporation to improve wound healing, US Department of Defense, peer reviewed medical research program military health forum, San Juan, Puerto Rico April 2004.

31. Sui G, Bonde P, Dhara S, Wang J, **Duncan M**, Montgomery E, Maitra A, Harmon J. Inhibition of the EGFR and hedgehog signaling pathways demonstrate potent growth inhibition in an animal model of esophageal carcinogenesis. J Surg Res, 2004.

32. Marti, G, Ferguson M, DiebF, Wang J, Marie, Lin MP, Bonde P, **Duncan MD**, Harmon J.

Transfection with keratinocyte growth factor 1 cDNA with electroporation improves wound healing in an aged mouse model. J Surg Res, 2004.

33. Lin MP, Marti GP, Dieb R, Wang J, Qaiser R, Bonde P, **Duncan MD**, Harmon JW. Electroporation improves transfection efficiency in rat wound healing model. J Am Coll Surg 199:S58-9, 2004.

34. Marti GP, Lin MP, Qaiser R, Dieb R, Wang J, Parth S, Bonde P, **Duncan MD**, Harmon JW. KGF-1 plasmid delivery with electroporation accelerates wound closure in diabetic mice. J Am Coll Surg 199:S59, 2004.

35. Bonde P, Gao D, Chen L, Broor A, Marti G, Ferguson M, **Duncan M**, Harmon JW, Wei C. "Duodenal reflux leads to down regulation of DNA mismatch repair pathway in an animal model of esophageal cancer." Ann Thor Surg, 2005.

RESEARCH GRANTS and AWARDS:

2000 - 2007 Principle Investigator, "Esophago-gastric tumorigenesis in a transgenic model." NIH Mentored Clinical Scientist Development Award K08 CA76034-01A2, \$684,286.

2005 - Subinvestigator, NSABP Protocol R-04 "A clinical trial comparing pre-operative radiation therapy and capecitabine with pre-operative radiation therapy and continuous infusion (CVI) of 5-Flourouracil (5F-U) in the treatment of patients with operable carcinoma of the rectum. Principal Investigator: Dr. Susan Gearhart.

2004 - 2005 Co-investigator, "Phase II Study of ZD1839 (IRESSA) Combined with Preoperative Chemoradiation and Adjuvant Chemotherapy in Patients with Resectable Rectal Cancer;" Principal Investigator: Dr. Manuel Hidalgo.

1999 - 2001 Principle Investigator, "Esophagogastric tumorigenesis in a transgenic model." Johns Hopkins University School of Medicine Richard S. Ross Clinician Scientist Award, \$97,500.

1999 - 2000 Principle Investigator, "Androgen receptor immunohistochemistry in adenocarcinoma and squamous cell carcinoma of the esophagus." Johns Hopkins Bayview Physicians Research and Education Committee, \$5,000.

1999 - 2000 Co-investigator, "A phase 2 study to evaluate the safety and efficacy of recombinant human platelet activating factor acetylhydrolase (rPAF-AH) for the treatment of patients with severe acute pancreatitis." Sponsor: ICOS Corporation.

1998 - 1999 Principle Investigator, "Transgenic model of esophagogastric adenocarcinoma." Johns Hopkins University Fund for Medical Discovery, \$10,000.

- 1997 - 1998 Principle Investigator, "Molecular characterization of neuropeptide receptor expression in malignant tumors of the alimentary tract." Chesapeake Research and Education Mini Grant, \$5,000.
- 1996-1997 Co-investigator, "A double-blind, randomized, placebo-controlled, multi-center trial to evaluate the efficacy and safety of two doses of lexipifant for the treatment of acute pancreatitis (D06/IVB/215). Sponsor: British Biotech.

EDUCATIONAL ACTIVITIES:

Teaching:

Classroom instruction:

Preceptor and Lecturer, Surgery Curriculum, Johns Hopkins University School of Medicine (MS II, III, IV), 1996-present.

Clinical instruction:

Daily ward rounds, conferences, intraoperative teaching of residents (PGY1-6), and medical students.

Departmental recognition for excellence in resident education, 2000, 2003.

Course instructor:

"Introduction to Clinical Medicine," JHU School of Medicine (PGY 1), 2001-present.

One student per year for weekly tutorial

"Tutorial - Cancer Surgery," The Johns Hopkins University (undergraduate), 2001- present.

One students per semester for weekly tutorial

Host / mentor - National Youth Leadership Forum (high-achieving high school students); 2004, 2005, 2006.

CME instruction:

Director of weekly Tumor Board, 1999-present.

"Surgery for Barrett's esophagus" 32nd Topics in Gastroenterology and Liver Disease, October 5, 2006.

Surgical Skills Training:

Vascular access/PA catheters/Ultrasound guidance PGY-I; 3 hours, 17 Aug, 2006.

Mentoring:

Advisees: Benny Tan, M.D., - Placed in categorical program Harvard/MGH.
Kurt Roberts, M.D., - Placed in categorical program U. Washington, Seattle.
Alex Aurora, M.D. - *currently* PGY 2 preliminary surgery resident at JHU; placed in

categorical program Sinai Hospital, Baltimore, MD.

Training:

Director of Surgical Oncology Fellowship Training Bayview Hospital (PGY6), 1999-2005.

CLINICAL ACTIVITIES:

Certification:

Licensed in Maryland No. D51208, issued October 1, 1996.

Licensed in the District of Columbia No. MD18022, issued August 9, 1989.

American Board of Surgery, #42659, 1997; recertified 2006.

Advanced Trauma Life Support, 2001-2005.

Service Responsibilities:

Surgical Oncology, General Surgery.

330 operations/year (most clinically active surgeon at JHBMC)

2 clinic locations

ORGANIZATIONAL ACTIVITIES:

Institutional Administrative Appointments:

Cancer Committee, Johns Hopkins Bayview

Chairman, 1999 - present.

Associate Professorial Promotions Committee, Johns Hopkins University, 2004 - present.

Vice Chair, 2006 - present.

Operating Room Governance Committee, Johns Hopkins Bayview

Chairman, 2004 - 2006.

Risk Management Committee, Johns Hopkins Bayview, 2004-present.

Bylaws Committee, Johns Hopkins Bayview, 2003-present.

Tissue Review Committee, Johns Hopkins Bayview, 2007-present.

Information Services Advisory Committee, Johns Hopkins Bayview, 2005-present.

Medical Board, Johns Hopkins Bayview, 2001-2006

Vice Chair, 2003 - 2006.

Operating Room Committee, Johns Hopkins Bayview

Chairman, 2004 - 2006.

Operating Room Design & Expansion, Johns Hopkins Bayview, 2005-2006.

Executive Council, Johns Hopkins Bayview, 2004 - 2006.

Advisory Board, Johns Hopkins Bayview, 2004-2006.

Surgical Joint Practice Committee, Johns Hopkins Bayview, 1999-2005.

Chairman, 2004-2005.

Surgery Dept. Executive Committee, Johns Hopkins Hospital, 2004-2005.

Education Committee, Dept. Surgery, Johns Hopkins University, 2003-2004.

Ethics Committee, Johns Hopkins Bayview, 2001-2004.

Governance task force, H*Works advisory committee, JHBMC, 2003-2004.
Preoperative standardization, H*Works advisory committee, JHBMC, 2003-2004.
Surgical Infection Prevention Planning (SIPP) Team, JHBMC, 2002-2004.

Clinical champion

Cancer Liaison Physician, Johns Hopkins Bayview, 2001-2004.
Clinical Practice Committee, Johns Hopkins Bayview, 1999-2004.
Investigative Action Committee, JHBMC
Chairman, 2004.

Investigative Action Committee, JHBMC, 2003.
Ad-hoc Special Review Committee, JHBMC, 2003.
Sentinel event root cause analysis team, JHBMC, 2002.
Bayview Research Advisory Committee, 2001- 2003.
Committee for Procedure Review, Johns Hopkins Bayview
Chairman, 1996-2000.

Perioperative Committee, Johns Hopkins Bayview, 1996-1998.
Animal Studies Committee, Research and Development, VAMC, 1995-1996.
Administrative Board of Investigation, VAMC
Chairman, 1995.

Surgical Quality Improvement Committee, VAMC
Chairman, 1994-1996.

Surgical Care Maps Task Force, VAMC, 1994-1996.

Senior Leadership in Transition Seminar, Johns Hopkins University, May 26-7, 2004.
Faculty Leadership Development, Johns Hopkins University, 2007.

Editorial Activities:

Editorial Board:

The American Journal of Hematology/Oncology

Journal Peer Review:

Annals of Surgery

Clinical Cancer Research

Journal of Surgical Research

Archives of Surgery

Grant Review:

Department of Veterans Affairs

Abstract Review:

SSAT

Professional Societies:

Fellow, American College of Surgeons

Executive Committee, D.C. Chapter, American College of Surgeons, 1993-94.

Society of University Surgeons

Society of Surgical Oncology

American Board of Surgery
Associate Examiner
 Society for Surgery of the Alimentary Tract
 Association for Academic Surgery
 American Association for Cancer Research
 American Society of Clinical Oncology
 World Organization for Specialized Studies on Diseases of the Esophagus (O.E.S.O.)
 The Pancreas Club
 Baltimore Academy of Surgery
 Mayo Alumni Association
 Robert B. Wallace Society

COMMUNITY ACTIVITIES:

American Cancer Society
Board of Directors, Greater Baltimore, 2001-2005.

| | | |
|---|---------------------|---------|
| Assistant coach, soccer U-9, U-11 | Annapolis, MD | 1999-01 |
| Head coach, baseball U-12 | Arden, MD | 2002 |
| Assistant coach, T-ball/baseball | Annapolis/Arden, MD | 2002-3 |
| Volunteer assistant, Navy hockey | Annapolis, MD | 2004-7 |
| Certified USA Hockey Coaching Education Program #236065 | | 2005-8 |

AWARDS, HONORS:

Richard S. Ross Clinician Scientist Award , Johns Hopkins University; 1999.
 Johns Hopkins University Fund for Medical Discovery, 1998.
 On the Spot Award for Leadership, 1996, Veteran Affairs Medical Center, Washington, DC.
 Charles A. Hufnagel Research Forum, first prize, 1991, Georgetown University.
 Washington Academy of Surgery Research Forum, first prize, 1991.
 Charles A. Hufnagel Research Forum, second prize, 1990, Georgetown University.
 Outstanding Resident, Surgical Service, 1989, DC General Hospital.

INVITED TALKS and PRESENTATIONS:

1. "Regulation of enterocyte growth and development." The Uniformed Services University of the Health Sciences Surgical Research Forum "Young Investigators in Progress", Washington, DC; January 11, 1990.
2. "Insulin and insulin-like growth factors enhance the proliferative effect of EGF on cultured human intestinal epithelial cells." American Gastroenterological Association, San Antonio, TX; May 15, 1990.
3. "Synergy between insulin-like growth factors and EGF in human enterocytes." Charles A. Hufnagel Surgical Research Forum, Washington, DC; June 2, 1990.
4. "Synergy between insulin-like growth factor & EGF in humans," GI Hormone Symposium, Florissant, CO; June 22, 1990.

5. "Synergy between EGF and insulin-like growth factors in an human enterocyte cell line." The Washington Academy of Surgery, Washington, DC; January 24, 1991.
6. "Epidermal growth factor primes human enterocytes for the proliferative effect of insulin-like growth factor I." The Society of University Surgeons, Galveston, TX; February 8, 1991.
7. "Somatostatin fails to inhibit human enterocyte proliferation in vitro," The Society for Surgery of the Alimentary Tract, New Orleans, LA; May 20, 1991.
8. "The IGF-I receptor mediates both insulin and IGF-I proliferative response in human enterocytes," American Gastroenterological Association, New Orleans, LA; May 21, 1991.
9. "Extracellular matrix down-regulates epidermal growth factor receptors in intestinal epithelial cells," Association for Academic Surgery, Colorado Springs, CO, November 21, 1991.
10. "Extracellular matrix down regulates IGF-I and EGF receptors in human intestinal epithelial cells." Charles A. Hufnagel, MD Surgical Research Forum, Washington, DC; June 1992.
11. "GI peptides and cancer." Grand Rounds, Department of Surgery, Georgetown University Medical Center, Washington, DC; December 10, 1994.
12. "Antibiotic prophylaxis in the operating room." Surgical Nursing CME, VAMC, Washington, DC; June 5, 1995.
13. "Bombesin stimulation of focal adhesion kinase in tumor cells." GI Hormone Symposium, Florissant, CO; July 29, 1995.
14. "New strategies to disrupt neuropeptide signaling in cancer." Grand Rounds, Department of Surgery, Georgetown University Medical Center, Washington, DC; August 19, 1995.
15. "Decentralized hospital computer program (DHCP) imaging in surgery." Washington, DC; September 28, 1995.
16. "Actin disruption inhibits neuroendocrine stimulation of focal adhesion kinase in prostate carcinoma." Association for Academic Surgery, Ann Arbor, MI; November 11, 1995.
17. "A novel strategy to identify agents targeting neuropeptide responsive tumors." GI Hormone Symposium, Florissant, CO; July 25, 1996.
18. "Cucurbitacin E targets proliferating endothelia." Association for Academic Surgery, Chicago, IL; November 15, 1996.
19. "Pathogenesis and management of malignant colorectal polyps." 2nd Colorectal Symposium, ód , Poland; June 6, 1997.
20. "A transgenic model for esophageal adenocarcinoma." Surgical Gut Hormone Symposium, Florissant, CO; July 27, 1997.
21. "Characterization of an aFGF gene expression vector with therapeutic potential." Association for Academic Surgery, Dallas, TX; November 7, 1997.
22. "Tumorigenesis at the squamocolumnar junction in an E1A/E1B transgenic model of esophagogastric adenocarcinoma." American College of Surgeons, Surgical Forum, Orlando, FL; October 26, 1998.
23. "Esophagogastric adenocarcinoma in an E1A/E1B transgenic model involves p53 disruption." The Society for Surgery of the Alimentary Tract, Orlando, FL; May 18, 1999.
24. "The role of pelvic exenteration in primary and recurrent colorectal cancer." 3rd Colorectal Symposium, Zakopane, Poland; June 10, 1999.
25. "Selection of patients for surgical treatment of colonic dysmotility: Antroduodenal manometry to predict outcomes following total abdominal colectomy." 3rd Colorectal Symposium, Zakopane, Poland; June 10, 1999.
26. "A transgenic model of esophagogastric adenocarcinoma." Oncology Research Grand Rounds, Baltimore, MD; February 29, 2000.

27. "Complicated gastrointestinal surgery." CME for ICU Nursing, May 30, 2000.
28. "Genetics of colon cancer." Grand Rounds, Department of Surgery, Saint Joseph's Medical Center, Baltimore, MD; July 21, 2000.
29. "Surgical aspects of gastrointestinal bleeding." CME for ICU Nursing, August 8, 2000.
30. "Transgenic model of esophagogastric adenocarcinoma." International Organization for Statistical Studies on Diseases of the Esophagus, Paris, France; September 4, 2000.
31. "Endoprosthesis stents for obstructing colonic tumors." 4th Colorectal Symposium, Gdansk, Poland; June 21, 2001.
32. "Gastrointestinal bleeding of undetermined origin." 4th Colorectal Symposium, Gdansk, Poland; June 21, 2001.
33. "Esophageal adenocarcinoma: pathophysiology and early detection," Surgery Grand Rounds, Johns Hopkins Hospital, Baltimore, MD; January 19, 2002.
34. Moderator, SSAT Research Forum - small intestine, The Society for Surgery of the Alimentary Tract, San Francisco, CA; May 21, 2002.
35. "Gastrointestinal malignancy - the medical/surgical interface." Medicine house staff teaching conference, November 1, 2002.
36. "Primary management of colon cancer," Surgery Grand Rounds, Johns Hopkins Hospital, Baltimore, MD; March 1, 2003.
37. "Surgery for colon cancer: What are the options?" Current concepts in the multidisciplinary management of colorectal cancer, Johns Hopkins University School of Medicine, Baltimore, MD; April 3, 2003.
38. "Women and colon cancer." White Marsh women's health fair, Baltimore, MD May 7, 2003.
39. "Gastrointestinal surgery - what the surgeon wants the internist to know." Medicine house staff teaching conference, August 8, 2003.
40. "Lessons learned from animal models of esophageal cancer." 7th polydisciplinary congress on diseases of the esophagus O.E.S.O., Paris, France; September 2, 2003.
41. "Retroperitoneal tumor surgery," Surgery Grand Rounds, Johns Hopkins Hospital, Baltimore, MD; December 11, 2003.
42. "Open esophageal procedures." SCOPE core curriculum lecture to senior residents, Johns Hopkins Hospital, Baltimore, MD; January 27, 2005.
43. "Is surgery necessary after neoadjuvant combined chemoradiotherapy for esophageal cancer?" Surgery Grand Rounds, Johns Hopkins Hospital, Baltimore, MD; June 1, 2006.
44. "Surgery for Barrett's esophagus" 32nd Topics in Gastroenterology and Liver Disease, Baltimore, MD; October 5, 2006.
45. "Pathophysiology of the surgical abdomen." Medicine housestaff teaching conference, January 2, 2007.
46. "Retroperitoneal sarcoma," Tumor Board didactic lecture, January 11, 2007.
47. "Gastric cancer," combined GI & Surgery lecture, January 31, 2007.
48. "Benign and malignant disease of the esophagus," student lecture, February 6, 2007.
49. "Chemoradiation for gastric cancer," Tumor Board didactic lecture, March 8, 2007.