

Curriculum Vitae
Whitney Morgan Burrows, MD
Assistant Professor of Surgery
University of Maryland School of Medicine

Contact Information

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Education

1984-1988 A.B., English, Magna cum laude, Honors in Creative Writing, Brown University, Providence, RI
1989-1993 M.D., New York University School of Medicine, New York, NY

Post Education and Training

1993-1994 Internship, General Surgery, The Mount Sinai School of Medicine, New York, NY
1994-1998 Residency, General Surgery, The Mount Sinai School of Medicine, New York, NY
1998-2000 Residency, Cardiothoracic Surgery, Washington University School of Medicine, Barnes-Jewish Hospital, St. Louis, MO
2000-2001 Fellowship, General Thoracic Surgery, Mayo Clinic, Rochester, MN

Certification

2012 American Board of Surgery (recertified)
2006 American Board of Thoracic Surgery

Medical Licensures:

Maryland Active
New York Inactive
Minnesota Inactive

Employment History

Academic Appointments

1997-1998 Associate, Department of Surgery, The Mount Sinai School of Medicine, New York, NY
2001-present Assistant Professor of Surgery, Dept. of Surgery, Division of Thoracic Surgery, UMSOM

Professional Society Memberships

1993-present Alpha Omega Alpha Medical Society
2001-2002 The Priestly Society
2009-present Society of Thoracic Surgeons

Honors and Awards

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| 1991 | James Ewing Foundation Fellowship |
| 1992-1993 | American Cancer Society Scholarship |
| 1993 | Alpha Omega Alpha |
| 1998 | The Arthur H. Aufses, Sr. Outstanding Chief Resident, Mount Sinai School of Medicine |
| 2000 | St. Louis Thoracic Society Annual Case Presentation Award |

Clinical Activities

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| 2001-present | Faculty, Division of Thoracic Surgery Core interest/expertise: Anterior Mediastinal/Thymic Malignancies, Myasthenia Gravis, Locally-advanced esophageal cancer; Locally-advanced non-small lung cancer; Thoracic cancer surgery following induction therapy; Minimally invasive surgical staging of esophageal cancer ; Hiatal Hernia surgery (redo; intrathoracic stomach); Emphysema Surgery (Lung Volume Reduction Surgery) Hyperhidrosis |
| 2001-present | Multidisciplinary Thoracic Oncology Program, Greenebaum Cancer Center, UMSOM |
| 2002-2004 | Founding representative, Thoracic Surgery, Aerodigestive Center, UMSOM |
| 2003-2006 | Founder and Leader, Multidisciplinary Lung Cancer Program, Tate Cancer Center, Baltimore-Washington Medical Center |
| 2006-present | Hyperhidrosis surgery, sole provider |
| 2010-present | Co-Founder, Multidisciplinary Myasthenia Gravis Clinic |
| 2013-present | Co-Principal Investigator, IBV® Valve for Emphysema to Improve Lung Function (EMPROVE) |
| 2014-present | Co-Founder, University of Maryland Lung Cancer Screening Program |

Institutional Service

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| 1997-1998 | The Mount Sinai Medical Board |
| 1997-1998 | Mount Sinai Committee for Quality Assurance |
| 1997-1998 | Steering Committee for Surgical Re-engineering at The Mount Sinai Hospital |
| 1997-1998 | Chief Resident Association, Mt. Sinai School of Medicine |
| 2001-present | Mayo Alumni Association |
| 2005-present | Faculty Member, Judicial Board, UMSOM |
| 2012-present | Vice Chairman, Judicial Board, UMSOM |
| 2010-2012 | UMSOM Council Representative |
| 2008-2012 | UMSOM Faculty Senate |
| 2011-present | Quality Review Committee, Dept. of Surgery, UMSOM |
| 2013-present | Leader, Thoracic Oncology Tumor Board, UMMC |

Teaching Service

Student Teaching

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| 2001-2006 | Faculty, University Hospital, Thoracic Surgery 2-3, 3 rd year medical students, – 4 + hours, daily |
| 2009-present | Lecturer, Lung Cancer: Diagnosis and Treatment Pathophysiology and Therapeutics Course, I/II 160, 2 nd year medical students - 1 hour lecture, annually |
| 2006-present | Preceptor in Thoracic Surgery |

2009-present 1-2, 3rd year medical students – 6 + hours, daily
Lecturer, The Stage Specific Treatment of Lung Cancer
Surgery Clerkship
40, 3rd year medical students - 1 hour lecture , quarterly

Resident Teaching

2001-present Lead Faculty/Educator, Thoracic Surgery, University Hospital
General Surgery residency (PGY1-4 rotators)
2001-2006 Faculty, Thoracic Surgery, University Hospital
Cardiothoracic residency (PGY 6-8)
2006-2013 Co-Principal Faculty, Thoracic Surgery, University Hospital
Cardiothoracic residency, (PGY 5-7)
2009-2013 Co-Principal Faculty, Thoracic Surgery
Integrated (I6) Cardiothoracic residency (PGY 1-6)
2013-present Lead Faculty, Thoracic Surgery
Integrated (I6) Cardiothoracic residency (PGY 1-6)

Grant Support

Pending Grants

RO1 Renewal, Co-investigator
PI: Feng Jiang, M.D., Ph.D.

Non-invasive Biomarker Panels for Early Detection of Lung Squamous Cell Carcinoma
Submitted Nov 5, 2014

Completed Grants

NIH R21 Co-Principle Investigator

iNOS, COX-2, and Arginase in murine models of reflux esophagitis, Barrett's esophagus, and Barrett's associated adenocarcinoma
(funding expired 2004)

Clinical Trials

Institutional Principal/Co-Principal Investigator

ACOSOG Z0030: A randomized trial of mediastinal lymph node sampling versus complete lymphadenectomy during pulmonary resection in the patient with N0 N1 non-small cell lung cancer (closed)
ACOSOG Z0040: A prospective study of prognostic significance of occult micrometastases in the patient with resectable non-small cell lung cancer (closed)

Greenbaum Cancer Center Principle Investigator

Pleural/Peritoneal Lavage Cytology as an Adjuvant Staging Procedure for Esophageal Cancer (closed)

Phase III Randomized Study of Lobectomy Versus Sublobar Resection in Patients With Peripheral Peripheral Stage IA Non-Small Cell Lung Cancer (CALGB – 140503Small)

Publications

Peer-reviewed journal articles

1. Krasna MJ, Jiao X, Mao YS, Sonett J, Gamliel Z, Kwong K, **Burrows W**, Flowers JL, Greenwald B, White C. Thoracoscopy/laparoscopy in the staging of esophageal cancer: Maryland experience. *Surg Laparosc Endosc Percutan Tech*. 2002, Aug;12(4):213-8. PubMed PMID: 12193812.
2. Jiao X, Eslami A, Ioffe O, Kwong KF, Henry M, Zeng Q, Refaely Y, **Burrows W**, Gamliel Z, Krasna MJ. Immunohistochemistry analysis of micrometastasis in pretreatment lymph nodes from patients with esophageal cancer. *Ann Thorac Surg*. 2003 Oct;76(4):996-9; discussion 999-1000. PubMed PMID: 14529974.
3. **Burrows WM**. Gastrointestinal function and related problems following esophagectomy. *Semin Thorac Cardiovasc Surg*. 2004 Summer;16(2):142-51. Review. PubMed PMID: 15197689.
4. Kwong KF, Cooper LB, Bennett LA, **Burrows W**, Gamliel Z, Krasna MJ. Clinical experience in 397 consecutive thoracoscopic sympathectomies. *Ann Thorac Surg*. 2005 Sep;80(3):1063-6; discussion 1066. PubMed PMID: 16122487.
5. Kwong KF, Edelman MJ, Suntharalingam M, Cooper LB, Gamliel Z, **Burrows W**, Hausner P, Doyle LA, Krasna MJ. High-dose radiotherapy in trimodality treatment of Pancoast tumors results in high pathologic complete response rates and excellent long-term survival. *J Thorac Cardiovasc Surg*. 2005 Jun;129(6):1250-7. PubMed PMID: 15942564.
6. **Burrows WM**. Anatomical lung resection after neoadjuvant chemoradiotherapy. *Semin Thorac Cardiovasc Surg*. 2007 Winter;19(4):360-5. doi:10.1053/j.semtcvs.2007.12.002. Review. PubMed PMID: 18395639.
7. Kwong KF, Hobbs JL, Cooper LB, **Burrows W**, Gamliel Z, Krasna MJ. Stratified analysis of clinical outcomes in thoracoscopic sympathectomy for hyperhidrosis. *Ann Thorac Surg*. 2008 Feb;85(2):390-3; discussion 393-4. doi:10.1016/j.athoracsur.2007.08.001. PubMed PMID: 18222231.
8. Holton LH 3rd, Chung T, Silverman RP, Haerian H, Goldberg NH, **Burrows WM**, Gobin A, Butler CE. Comparison of acellular dermal matrix and synthetic mesh for lateral chest wall reconstruction in a rabbit model. *Plast Reconstr Surg*. 2007 Apr 1;119(4):1238-46. PubMed PMID: 17496596.
9. Edelman MJ, Suntharalingam M, **Burrows W**, Kwong KF, Mitra N, Gamliel Z, Riley M, Cooper LB, Kennedy NL, Buskirk S, Hausner P, Doyle LA, Krasna MJ. Phase I/II trial of hyperfractionated radiation and chemotherapy followed by surgery in stage III lung cancer. *Ann Thorac Surg*. 2008 Sep;86(3):903-10. doi:10.1016/j.athoracsur.2008.06.022. PubMed PMID: 18721580.
10. Krasna MJ, Gamliel Z, **Burrows WM**, Sonett JR, Kwong KF, Edelman MJ, Hausner PF, Doyle LA, DeYoung C, Suntharalingam M. Pneumonectomy for lung cancer after preoperative concurrent chemotherapy and high-dose radiation. *Ann Thorac Surg*. 2010 Jan;89(1):200-6; discussion 206. doi: 10.1016/j.athoracsur.2009.08.069. PubMed PMID: 20103235.
11. Edelman MJ, **Burrows W**, Krasna MJ, Bedor M, Smith R, Suntharalingam M. Phase I trial of carboplatin/paclitaxel/bortezomib and concurrent radiotherapy followed by surgical resection in Stage III non-small cell lung cancer. *Lung Cancer*. 2010 Apr;68(1):84-8. doi:10.1016/j.lungcan.2009.05.003. Epub 2009 Jun 21. PubMed PMID: 19540615.
12. Koshy M, Greenwald BD, Hausner P, Krasna MJ, Horiba N, Battafarano RJ, **Burrows W**, Suntharalingam M. Outcomes after trimodality therapy for esophageal cancer:the impact of histology

on failure patterns. *Am J Clin Oncol*. 2011 Jun;34(3):259-64. doi: 10.1097/COC.0b013e3181e841ce. PubMed PMID: 20686405.

13. Suntharalingam M, Paulus R, Edelman MJ, Krasna M, **Burrows W**, Gore E, Wilson LD, Choy H. Radiation therapy oncology group protocol 02-29: a phase II trial of neoadjuvant therapy with concurrent chemotherapy and full-dose radiation therapy followed by surgical resection and consolidative therapy for locally advanced non-small cell carcinoma of the lung. *Int J Radiat Oncol Biol Phys*. 2012 Oct 1;84(2):456-63. doi: 10.1016/j.ijrobp.2011.11.069. Epub 2012 Apr 28. PubMed PMID:22543206.
14. Saxena H, Deshpande DA, Tiegs BC, Yan H, Battafarano RJ, **Burrows WM**, Damera G, Panettieri RA, Dubose TD Jr, An SS, Penn RB. The GPCR OGR1 (GPR68) mediates diverse signalling and contraction of airway smooth muscle in response to small reductions in extracellular pH. *Br J Pharmacol*. 2012 Jun;166(3):981-90. doi:10.1111/j.1476-5381.2011.01807.x. PubMed PMID: 22145625; PubMed Central PMCID:PMC3417423.
15. Dipetrillo T, Suntharalingam M, Ng T, Fontaine J, Horiba N, Oldenburg N, Perez K, Birnbaum A, Battafarano R, **Burrows W**, Safran H. Neoadjuvant paclitaxel poliglumex, cisplatin, and radiation for esophageal cancer: a phase 2 trial. *Am J Clin Oncol*. 2012 Feb;35(1):64-7. doi:10.1097/COC.0b013e318201a126. PubMed PMID:21297434.
16. Boggs DH, Tarabolous C, Morris CG, Hanna A, **Burrows W**, Horiba N, Suntharalingam M. Analysis of pathological complete response rates with paclitaxel-based regimens in trimodality therapy for esophageal cancer. *Dis Esophagus*. 2014 May 26. doi: 10.1111/dote.12243. PMID:24863682
17. Kim GJ, Koshy M, Hanlon AL, Horiba MN, Edelman MJ, **Burrows WM**, Battafarano RJ, Suntharalingam M. The Benefit of Chemotherapy in Esophageal Cancer Patients with Residual Disease After Trimodality Therapy. *Am J Clin Oncol*. 2014 Jan 30. PMID:24487417

Published Abstracts

1. DeYoung CM, Edelman MJ, Patel A, Krasna MJ, Line BR, Burrows W, Guo C, Suntharalingam M. The ability of whole body FDG18 PET to predict pathological response to induction chemoradiotherapy in stage IIIA and IIIB non-small cell lung cancer. Results of a phase I/II subanalysis. *Int J Radiat Oncol Biol Phys*. 2004 Sept 60(1): S202: 122 doi: 10.1016/j.ijrobp.2004.06.147
2. Edelman MJ, Paulus R, Suntharalingam M, Krasna M, Burrows W, Gore EM, Yom SS, Choy H. RTOG 0229: A Phase II Trial of Concurrent Chemotherapy and Full Dose Radiotherapy Followed by Surgical Resection and Consolidative Therapy for Locally Advanced Non-Small Cell Carcinoma of the Lung. *J Thor Oncol*. 2011 Jun 6(6):S375-6

Abstracts and/or Presentations

1. KF Kwong, LA Bennett, A Soleimani, W Burrows, Z Gamliel, MJ Krasna. Thoracoscopic Sympathectomy: University of Maryland Experience 1992-2003. Southern Thoracic Surgical Association 50th Anniversary Annual Meeting, Bonita Springs FL. November 2003.
2. KF Kwong, I Shilabi, S Beck, BR Line, LB Cooper, M Lodge E Spiegler, Z Gamliel, W Burrows, B Greenwald, MJ Krasana. Comparison of FDG-PET Imaging Versus Gold-Standard Tissue in Pre-Resection Esophageal Cancer Patients. Society of Nuclear Medicine Scientific Sessions, New Orleans, LA. June 2003.
3. S. Taimur, MJ Edelman, M. Suntharalingam, MJ Krasna, K.Kwong, N. Kennedy, P Hausner, LA Doyle, Z Gamliel, W Burrows. Intensified combined modality therapy for stage III non-small cell lung cancer: Phase I/II trial of hyperfractionated radiotherapy with concurrent carbonplatin/vinorelbine

- followed by individualized surgery and chemotherapy. American Society of Clinical Oncology Annual Meeting, Chicago, IL. May 2003.
4. KF Kwong, LB Cooper, MJ Edelman, Z Gamliel, M Suntharalingam, W Burrows, P Hausner, LA Doyle, MJ Krasna. High-dose radiation in tri-modality treatment of Pancoast tumors improves pathologic complete response rates and confers survival advantage. American Association for Thoracic Surgery Annual Meeting, Toronto, Canada. April 2004.
 5. KF Kwong, MJ Edelman, M Suntharalingam, Z Gamliel, SP Bisaccia, LB Cooper, NL Kennedy, W Burrows, P Hausner, LA Doyle, MJ Krasna. High-Dose neoadjuvant chemoradiation plus surgery in Multi-Modality treatment of Stage IIIA and IIIB non-small cell lung cancer: Clinical results of UMD-GCC 9953, A prospective phase II study. American Association for Thoracic Surgery Annual Meeting, San Francisco, CA. April 2005.
 6. Z Gamliel, WM Burrows, JR Sonett, M Suntharalingam, MJ Edelman, P Hausner, LA Doyle, C DeYoung, KF Kwong, MJ Krasna. Pneumonectomy for lung cancer can be performed safely following preoperative concurrent chemoradiotherapy and high-dose radiation. Society of Thoracic Surgeons 42nd Annual Meeting, Chicago, IL. January 2006.
 7. KF Kwong, JL Hobbs, LB Cooper, W Burrows, Z Gamliel, MJ Krasna. Factors correlating with successful thoroscopic sympathectomy: stratified analysis of clinical outcomes in the treatment of hyperhidrosis. Society of Thoracic Surgeons 42nd Annual Meeting, Chicago, IL. January 2006.
 8. T. Flannery, M. Krasna, E. Nichols, M. Koshy, J. Bardos, A. Doyle, W. Burrows, M. Suntharalingam. The Role of Trimodality Therapy for Patients with Stage IV Esophageal Cancer. American Society for Radiation Therapeutics and Oncology 49th Annual Meeting, Los Angeles, CA. October 2007.
 9. M. Koshy, T. Flannery, E. Maani, W. Burrows, A. Dhople, L. Doyle, M. Krasna, M. Suntharalingam. The Impact of Pathologic Response on Long-term Outcomes in Patients Treated with Trimodality . Therapy for Esophageal Cancer. American Society for Radiation Therapeutics and Oncology 49th Annual Meeting, Los Angeles, CA. October 2007.
 10. A B Patel, M J Edelman, W Burrows, P Hausner, Y Kwok, M Krasna, and M Suntharalingam. The Impact of Prophylactic Cranial Irradiation in Patients with Locally Advanced Non-Small Cell Lung Cancer Treated with Trimodality Therapy. American Society for Radiation Therapeutics and Oncology 49th Annual Meeting, Los Angeles, CA. October 2007.
 11. M. Suntharalingam, R Paulus, M.J. Edelman, M Krasna, W.M. Burrows, E. Gore, S.S. Yom, H. Choy. RTOG 0229: A phase II trial of Neoadjuvant Therapy with Concurrent Chemotherapy and high Dose Radiotherapy (XRT) followed by Resection and Consolidative Therapy for LA-NSCLC. . American Society for Radiation Therapeutics and Oncology 52nd Annual Meeting, October 2010.
 12. G.J. Kim, M. Koshy, M.N. Horiba, M.J. Edelman, L.A. Doyle, W.M. Burrows, R.J. Battafarano, M.J. Krasna, A.L. Hanlon, M.Suntharalingam. The Benefit of Adjuvant Chemotherapy in Esophageal Cancer Patients with Residual Disease following Trimodality Therapy. American Society for Radiation Therapeutics and Oncology 52nd Annual Meeting, October 2010.
 13. A.S. Reese, G.J. Kim, R.J. Battafarano, W.M. The Impact of a Feeding Jejunostomy in Nutritionally High Risk Patients with Trimodality Therapy for Esophageal Cancer. American Society for Radiation Therapeutics and Oncology 53rd Annual Meeting, October 2011.
 14. E.M. Nichols, M. Liriano, C.G. Morris, W.M. Burrows, Marital Status is an Independent Predictor of Survival for Patients Undergoing Definitive Chemoradiation for Stage III Non-small Cell Lung Cancer (NSCLC). American Society for Radiation Therapeutics and Oncology 54th Annual Meeting, November 2012.
 15. M. Liriano, E.M. Nichols, C.G. Morris, W.M. Burrows, Trimodality Therapy for Locally Advanced Non-small Cell Lung Cancer (NSCLC): Predictors of Surgical Drop Out. American Society for Radiation Therapeutics and Oncology 54th Annual Meeting, November 2012.
 16. D.H. Boggs, C. Taraboulos, W.M. Burrows, N. Horiba, M. Suntharalingam. Predictors of Complete Pathological Response Rates in Patients Receiving Trimodality Therapy for Esophageal Cancer. American Society for Radiation Therapeutics and Oncology 55th Annual Meeting, September, 2013.

17. J.S. Ha, D.J. Eyvazzadeh, W.M. Burrows, W.A. Teeter, J.M. Donahue, L.W. Martin, R. B. Battafarano, Standardization of Esophagogastric Anastomotic Technique Among All Surgeons Decreases the Leak Rate After Esophagectomy. American College of Surgeons, Maryland Chapter, Paper Competition, November 2013.
18. K Mahajan, A Burke, W Burrows, A Sachdeva. Carcinoid Tumor Presenting As Organizing Pneumonia: Resolution With Partial Relief of Endobronchial Obstruction. American College of Chest Physicians Annual Meeting, 2014
19. C.Pasrija, B. Wehman, Z.N. Kon, D. Pratt, I. Mohammed, N.M. George, J.M. Donahue, W.M. Burrows. Modern Outcomes in Surgical Repair of Esophageal Perforation. 52th Annual Meeting of the Eastern Thoracic Surgical Association. October 2014

Book Chapters

1. TM Sundt and **WM Burrows**: Complications in Aortic Surgery. In Complications in Cardiothoracic Surgery: Avoidance and Treatment, AG Little, Ed., 2004.
2. **WM Burrows** and MJ Krasna. Staging Techniques for Carcinoma of the Esophagus. In Sabiston & Spencer: Surgery of the Chest, 7th ed. FW Sellke, PJ del Nido, SJ Swanson, Eds. 2005.
3. JS Ha and **WM Burrows**: Principles of Thoracic Surgery. In National Medical Series, S Kavic, Ed, 2014.

Major Invited Speeches

Local

1. “Minimal Access Surgery for Benign Esophageal Disease”, Baltimore, MD, 2001
2. “Stage Specific Treatment of Lung Cancer”, Bethesda, MD, 2002
3. “VATS Lobectomy”, Baltimore 2003
4. “Minimal Access Esophagectomy”, Baltimore 2004
5. “Management of Thymic Pathology”, Baltimore, 2008

National

6. “Minimal Access Esophagectomy for Cancer”. AATS Annual Meeting, Washington, DC, 2002
7. “Minimal Access Esophagectomy: The Maryland Experience and Algorithm”, Univ. of Pittsburgh, Pittsburg, PA, 2002