

**Curriculum Vitae**  
**Seth B. Krantz, M.D., FACS**

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NorthShore University HealthSystem  
Division of Thoracic Surgery  
Department of Surgery  
2650 Ridge Avenue  
Evanston, IL

**Education**

2002            **The University of Michigan, Ann Arbor, MI**  
Bachelor of Science with High Distinction  
Biopsychology and Cognitive Science

2006            **Northwestern University Feinberg School of Medicine, Chicago, IL**  
Doctor of Medicine

**Training**

*Clinical*

2006-2012     **Northwestern University Feinberg School of Medicine, Chicago, IL**  
Resident, General Surgery

2012-2013     Chief Resident, General Surgery

2013-2015     **Washington University School of Medicine, Saint Louis, MO**  
Fellow, Cardiothoracic Surgery

*Research*

2009-2011     **Robert H. Lurie Comprehensive Cancer Center**  
**Northwestern University Feinberg School of Medicine, Chicago, IL**  
Surgical Research Fellow

**Hospital Appointments**

2019-Present   **NorthShore University HealthSystem, Evanston, IL**  
Division Head, Thoracic Surgery

2015-2019     Attending Surgeon, Division of Thoracic Surgery

**Academic Appointments**

2021-present   **University of Chicago Pritzker School of Medicine, Chicago, IL**  
Clinical Associate Professor, Department of Surgery

2015-2021     Clinical Assistant Professor, Department of Surgery

**Licensure and Board Certification**

American Board of Thoracic Surgery  
American Board of Surgery  
Illinois Medical License, Active

**Honors and Awards**

Cancer Liaison Physician Outstanding Performance Award, Commission on Cancer, 2022  
Presidential Abstract Recognition Award, American Association for Thoracic Surgery, 2022  
Richard J. Clark Memorial Award, Society of Thoracic Surgeons, 2018  
Kanavel Scholar, Department of Surgery, Northwestern University, 2012  
Young Investigator Award, American Pancreatic Association, 2010  
Goldberg Trust Research Award, Northwestern Memorial Hospital, 2010, 2011  
Resident Research Fellowship, Association for Academic Surgery, 2009-2011

Michael Sweig Career Development Award, Robert H. Lurie Comprehensive Center,  
Northwestern University 2009-2011  
Resident as Teacher Award, Department of Surgery, Northwestern University, 2009  
Alpha Omega Alpha Honor Medical Society, Northwestern University, 2005  
Medical Ethics Fellow, New England Institute of Jewish Studies, 2004  
Medical Student Summer Research Fellowship, Northwestern University, 2003  
Phi Beta Kappa, University of Michigan, 2001  
Order of Omega, University of Michigan, 2000  
University Honors, University of Michigan, 2000, 2001  
Class Honors, University of Michigan, 1999, 2000

### **Professional Societies Membership**

American College of Surgeons, Fellow  
Society of Thoracic Surgeons  
Thoracic Surgery Outcomes Research Network  
Chicago Surgical Society

### **Committees and leadership**

#### **National**

Standards Investigation and Validation Committee, American College of Surgeons Cancer Research Program  
Society of Thoracic Surgeons Health Policy and Advocacy Task Force – current  
Thoracic Surgery Outcomes Research Network Ad-hoc task force on COVID-19 Triage Guidance, 2020  
Self Education Self-Assessment in Thoracic Surgery (SESATS) 13 – question writer, 2019

#### **NorthShore University Health System**

Cancer Committee  
Chair, current  
Survivorship executive committee member  
Quality Committee Member  
Executive committee member  
Cancer Liaison Physician 2018-2023  
Kellogg Cancer Center Vision Planning Committee, 2023  
Surgical Executive Committee  
Specialty Physicians Care Network  
Tobacco Cessation and Lung Cancer Screening task force  
Digital Health Initiative Committee, 2018-2020  
Epic Integrated Video Visit Task Force, 2020-2021  
Medical Records Committee  
Millennial Task Force, 2017  
Epic Optimization Committee, 2016-2019

#### **Washington University School of Medicine**

ACGME Clinical Learning Environment Review representative, peer selected, 2015  
Cardiothoracic Surgery Weekly Educational Conference Fellow, 2014-2015

#### **Northwestern University Feinberg School of Medicine**

Associate Dean for Graduate Medical Education and DIO Search Committee, 2010-2011  
Resident and Fellow Forum, President, 2009-2011  
Graduate Medical Education Committee, 2009-2011  
McGaw Medical Center Investment Committee, 2009-2011  
Anatomy Lab Teaching Assistant, 2005, 2010  
Medical School Interview Committee, 2005

#### **Northwestern Memorial Hospital**

Chief Resident's Forum, 2009-2011, 2012-2013  
Operating Room "On-Time Start" Quality Improvement Committee, 2008-2009

### ***Community Involvement***

#### **Beth Emet Synagogue Evanston, IL**

Executive Committee 2019-2021  
Board of Trustees 2018-021  
Cantor Search Committee Co-Chair – 2018

#### **Steppenwolf Theater Chicago, IL**

Director's Circle 2010-present  
Vice President and Executive Committee Member, auxiliary council, 2010-2012  
Governor, auxiliary council, 2009-2013

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## **Bibliography**

### *Peer Reviewed Original Articles*

1. Rifkin AS, Less EM, Wei J, Shi Z, Zheng SL, Helfand BT, Hulick PJ, **Krantz SB**, Xu J. Association of reported monogenic genes with lung cancer risk. *Clin Lung Cancer*. 2023 Jan 26;S1525-7304(23).
2. Lam A, Campbell NP, Russell HM, **Krantz SB**. Complete Pathologic Response of Squamous Cell Carcinoma Abutting an Internal Mammary Bypass Graft. *Ann Thorac Surg Short Reports*. 2023 Jan 3.
3. **Krantz SB**, Zeeshan K, Kuchta KM, Hensing TA, Mangold KA, Zheng SL, Xu J. Germline Mutations in High Penetrance Genes are Associated with Worse Clinical Outcomes in Patients with Non-Small Cell Lung Cancer. *JTCVS Open*. 2022 Sep 21;12:399-409
4. Zijlstra MK, Silvers RI, Fimmel CJ, **Krantz SB**. Esophageal Perforation Due to a Calcium Supplement Tablet. *Case Rep Gastroenterol*. 2022 June 30;16(2):435-440.
5. Mitzman B, Varghese TK, Kuchta, K, **Krantz SB**. National guideline concordance and outcomes for pathologic N2 disease in non-small cell lung cancer. *J Thorac Dis*. 2022 May; 14(5):1360-1373
6. **Krantz SB** as part of Bryan DS, Ferguson MK, Antonoff MB, et al. Consensus for Thoracoscopic Left Upper Lobectomy-Essential Components and Targets for Simulation. *Ann Thorac Surg*. 2021 Aug;112(2):436-442. Epub 2020 Oct 27
7. Molins, L, Lanuti M, Force S, Woolley S, **Krantz SB**, Creedon EF, Schwiens ML, Singleton DW, Waggoner JR, Fryrear R, Lict P. Evaluation of a Powered Vascular Stapler in Video-Assisted Thoracic Surgery Lobectomy. *J Surg Res*. 2020 Sep;1253:26-33
8. **Krantz SB**, Howington JA, Wood DE, Kim KW, Kosinski AS, Cox ML, Kim S, Mulligan MS, Farjah F. Invasive Mediastinal Staging for Lung Cancer by Society of Thoracic Surgeons Database Participants. *Ann Thorac Surg*. 2018 Oct; 106(4): 1055-1062.
9. Ajmani GS, Wang C, Kim K, Howington JA, **Krantz SB**. Surgical quality of wedge resection impacts overall survival in patients with early stage non-small cell lung cancer. *J Thorac Cardiovasc Surg*. 2018 Jul; 156(1):380-391.
10. **Krantz SB**, Mitzman B, Lutfi W, Wang C, Howington JA, Kim K. Neoadjuvant Chemotherapy And Radiation Shows No Survival Advantage To Chemotherapy Alone In Stage IIIA Patients. *Ann Thorac Surg*. 2018 Apr; 105(4):1008-1016.

11. Brown CS, Gwilliam N, Kyrillos A, Lutfi W, Lapin B, Kim KW, **Krantz SB**, Howington JA, Yao K, Ujiki MB. Predictors of pathologic upstaging in early esophageal adenocarcinoma: Results from the national cancer database. *Am J Surg*. 2018 Jul;216(1):124-130
12. **Krantz SB**, Lutfi W, Kuchta K, Wang C, Kim K, Howington JA. Improved Lymph Node Staging In Early Stage Non-Small Cell Lung Cancer In The National Cancer Database. *Ann Thorac Surg*. 2017 Dec;104(6):1805-1814
13. Mitzman B, Lutfi W, Wang C, **Krantz SB**, Howington JA, Kim K. Minimally Invasive Esophagectomy Provides Equivalent Survival to Open Esophagectomy: An Analysis of the National Cancer Database. *Semin Thorac Cardiovasc Surg*. 2017 Summer; 29(2): 244-253.
14. Lancaster TS, **Krantz SB**, Patterson GA. Tracheal Resection and Carinal Reconstruction for Squamous Cell Carcinoma. *Ann Thorac Surg*. 2016 Jul; 102(1):e77-9
15. **Krantz SB**, Lawton JS. Subacute Endocarditis of an Atrial Septal Closure Device in a Patient With a Patent Foramen Ovale. *Ann Thorac Surg*. 2014 Nov; 98(5):1821-3.
16. Grippo PJ, Fitchev PS, Bentrem DJ, Melstrom LG, Dangi-Garimella S, **Krantz SB**, Heiferman MJ, Chung C, Adrian K, Cornwell ML, Flesh JB, MS Rao, Talamonti MS, Munshi HG, Crawford SE. Concurrent PEDF Deficiency & Kras Mutation Induce Invasive Pancreatic Cancer & Adipose-Rich Stroma in Mice. *Gut*. 2012 Oct.
17. **Krantz SB\***, Shields MA\*, Dangi-Garimella S, Grippo PJ, Bentrem DJ, Munshi HG. Interplay Between  $\beta$ 1-integrin and Rho Signaling Regulates the Differential Scattering and Motility of Pancreatic Cancer Cells by Snail and Slug. *J Biol Chem*. 2012 Feb 24;287(9):6218-29.
18. Cheon EC, Strouch MJ, **Krantz SB**, Heiferman MJ, Bentrem DJ. Genetic deletion of 5-Lipoxygenase increases macrophage infiltration in Apc<sup>A468</sup> mice. *J Gastrointest Surg*. 2012 Feb;16(2):389-93.
19. **Krantz SB**, Shields MA, Dangi-Garimella S, Munshi HG, Bentrem DJ. Contribution of Epithelial-to-Mesenchymal and Cancer Stem Cells to Pancreatic Cancer Progression. *J Surg Res*. 2012 Mar; 173(1): 105-12. 2011
20. **Krantz SB**, Shields MA, Dangi-Garimella S, Cheon EC, Barron M, Hwang RF, Rao MS, Grippo PJ, Bentrem DJ, Munshi HG. MT1-MMP cooperates with Kras<sup>G12D</sup> to promote pancreatic fibrosis through increased TGF- $\beta$  signaling. *Mol Cancer Res*. 2011 Oct;9(10):1294-304
21. Ward S, Dangi-Garimella S, Shields MA, Collander B, Siddiqui MAQ, **Krantz SB**, Munshi HG. Ethanol differentially regulates snail family of transcription factors and invasion of premalignant and malignant pancreatic ductal cells. *J Cell Biochem*. 2011 Oct;112(10):2966-73
22. Kircher SM, **Krantz SB**, Nimeiri HS, Mulcahy MF, Munshi HG, Benson III AB. Therapy of Locally Advance Pancreatic Adenocarcinoma- Unresectable and Borderline Patients. *Expert Rev of Anticancer Ther*. 2011 Oct;11(10):1555-65.
23. Shields MA, Dangi-Garimella S, **Krantz SB**, Bentrem DJ, Munshi HG. Pancreatic cancer cells respond to type I collagen by inducing Snail expression to promote membrane type 1-matrix metalloproteinase dependent collagen invasion. *J Biol Chem*. 2011 Mar 25;286(12):10495-504.
24. Cheon EC, Khazaie K, Khan MW, Strouch MJ, **Krantz SB**, Phillips J, Blatner NR, Hix LM, Dennis KL, Salabat MR, Heiferman MJ, Grippo PJ, Munshi HG, Gounaris E, Bentrem DJ. Mast cell 5-Lipoxygenase activity promotes intestinal polyposis in APC $\Delta$ 468 mice. *Cancer Res*. 2011 Mar 1;71(5):1627-36.

25. Dangi-Garimella S, **Krantz SB**, Barron MR, Shields MA, Heiferman M, Grippo PJ, Bentrem DJ, Munshi HG. Three dimensional collagen I promotes gemcitabine resistance in pancreatic cancer through MT1-MMP-mediated expression of HMGA2. *Cancer Res.* 2011 Feb 1; 71(3): 1019-28.
26. **Krantz SB**, Shields MA, Dangi-Garimella S, Bentrem DJ, Munshi HG. Contribution of epithelial-mesenchymal transition to pancreatic cancer. Review. *Cancers.* 2(4): 2084-2097.
27. Cheon EC, Small W, Strouch MJ, **Krantz SB**, Rademaker A, Mulcahy MF, Benson AB, Bentrem DJ, Talamonti MS. The Effects of Neoadjuvant Bevacizumab on Postoperative Complications in Patients Undergoing Colorectal and Pancreatic Cancer Resection. *J Surg Oncol.* 2010 Oct; 102:539-542. PMID: 20812264
28. Cheon EC, Strouch MJ, Barron MR, Ding Y, Melstrom LG, **Krantz SB**, Adrian K, Rao S, Adrian TE, Bentrem DJ, Grippo PJ. Alteration of strain background and a high omega-6 fat diet induces earlier onset of pancreatic precancer in EL-Kras transgenic mice. *Int J Cancer.* 2011 Jun 15;128(12):2783-92.
29. Strouch MJ, Cheon EC, **Krantz SB**, Salabat MR, Gounaris E, Melstrom, LG, Dangi-Garimella S, Wang E, Munshi HG, Khazaie K, Bentrem DJ. Crosstalk between mast cells and pancreatic cancer cells contributes to pancreatic tumor progression. *Clin Cancer Res.* 2010 Apr 15; 16(8): 2257-65. PMID: 20371681
30. Blatner NR, Bonertz A, Beckhove P, Cheon EC, **Krantz SB**, Strouch M, Weitz J, Koch M, Halverson AL, Bentrem DJ, Khazaie K. In colorectal cancer mast cells contribute to systemic regulatory T cell dysfunction. *P Natl Acad Sci USA.* 2010 Apr 6; 107(14).
31. Amaranto DJ, Abbas F, **Krantz S**, Pearce WH, Wang E, Kibbe MR. An evaluation of gender and racial disparity in the decision to surgically treat arterial disease. *J Vasc Surg.* 2009 Dec; 50(6): 1340-7. PMID: 19837528
32. Sener SF, Winchester DJ, Winchester DP, Du H, Brinkmann EM, Barrera E Jr., Bilimoria MM, **Krantz S**, Rabbitt S. The Effects of Hormone Replacement Therapy (HRT) on Breast Cancer Biology and Survival. *Am J Surgery.* 2009 Mar; 197(3): 403-7. PMID: 19245923  
\*Equally Contributing

*Book Chapters, Invited Reviews, Commentaries and Editorials*

33. Vigneswaran J, **Krantz SB**, Howington JA. Economic Considerations of Lung Volume Reduction Surgery and Bronchoscopic Valves. *Thorac Surg Clin.* Hazelrigg S, Crabtree TD, ed. Thorac Surg Clin. 2021 May;31(2):211-219
34. **Krantz SB** as part of the Thoracic Surgery Outcomes Research Network. COVID-19 guidance for triage of operations for thoracic malignancies: A consensus statement from Thoracic Surgery Outcomes Research Network. Published Jointly by *J Thorac Cardiovasc Surg.* 2020 Aug; 160(2):601-605. Epub 2020 Apr 9. AND *Ann Thorac Surg.* 2020 Apr 4; 110(2):692-
35. **Krantz SB**. Robotic Vs. VATS Thymectomy for Thymoma. In *Difficult Decisions in Thoracic Surgery.* 4<sup>th</sup> Edition. Ferguson, M, ed. Springer. 2020.
36. Delinger CE. **Krantz SB**. Sifting the needles from the hay. *J Thorac Cardiovasc Surg.* 2020 Apr;159(4):1567-1568
37. Brownlee A, **Krantz SB**. Increasing T stage is associated with the need for more extensive lymph node assessment in clinical stage I non-small cell lung cancer. *J Thorac Dis.* 2019 Sep;11(Suppl 15):S1927-S1929.

38. **Krantz SB.** Lymph Node Assessment Adequacy and First Amendment Jurisprudence: Can We Do Better Than Just “Knowing it When We See it?” *J Thorac Cardiovasc Surg.* 2018 Dec; 156(6): 2326-2327.
39. **Krantz SB.** A wedge is still a cancer operation, so treat it like one! *J Thorac Cardiovasc Surg.* 2018 Jul; 156(1): 380-391.
40. **Krantz SB.** Commentary on: Concurrent Versus Sequential Chemoradiation Therapy in Completely Resected Pathologic N2 Non-Small Cell Lung Cancer: Propensity-Matched Analysis of the National Cancer Data Base. *Ann Surg Oncol.* 2018 Jun;25(6):1473-1474
41. **Krantz SB.** Are we comparing apples and thoracotomies? *J Thorac Cardiovasc Surg.* 2018 Mar; 155(3): 1309-1309.
42. **Krantz SB,** Crabtree TD. Pre Operative Preparation of the General Thoracic Surgical Patient. In *Shields' General Thoracic Surgery.* 8<sup>th</sup> Edition. LoCicero J, Feins RH, Rocco G, Colson YL, Myers BF, ed., Lippincott Williams and Wilkins. 2017.
43. **Krantz SB.** Getting to the meat of the matter: It's about more than sparing muscle. Invited Commentary. *J Thorac Cardiovasc Surg.* 2017 Oct; 154(4):1430-1431.
44. **Krantz SB\***, Merritt-Genore H\*. How old are you, and how many of these have you done? Fielding questions of age and experience in your early career. Young Surgeon's Note Series. *J Thorac Cardiovasc Surg.* 2017 Aug; 154(2):565-567.
45. Blasberg JD\*, **Krantz SB\***. What and How To Read: Staying Current As a Young Cardiothoracic Surgeon. Young Surgeon's Note Series. *J Thorac Cardiovasc Surg.* 2017 Aug; 15(2): 558-562.
46. **Krantz SB,** Meyers BF. Health Risks from Computed Tomographic Screening. *Thorac Surg Clin.* 2015 May;25(2):155-60.
47. **Krantz SB,** Bentrem DJ. It takes a Village: Defining the value of dedicated multidisciplinary teams in cancer outcomes. Commentary. *J Surg Res.* 2012 Mar;173(1):51-3.
48. **Krantz SB,** Mahvi DM. Ablative Therapies for Hepatic Neoplasms. In *Yeo: Shackelford's Surgery of the Alimentary Tract.* 7<sup>th</sup> Edition. Yeo CJ, Peters J, McFadden D, Matthews JB, Pemberton JH, ed., Elsevier. 2012.
49. **Krantz SB,** Mahvi DM. The Stomach. In *Sabiston Textbook of Surgery.* 19<sup>th</sup> Edition. Townsend CM, Beauchamp RD, Evers BM, Mattox KL, ed., Elsevier. 2012.
50. Bentrem DJ, **Krantz SB.** Pancreaticoduodenectomy: Whipple Procedure. *Northwestern Handbook of Surgical Procedures.* 2<sup>nd</sup> Edition. Soper NJ, Kaufman D, ed., Landes Bioscience. 2010.

#### Abstracts

51. Pai SI, Park JC, Friedman AD, Campbell NP, **Krantz SB,** Shin KY, Song PC, Nocon CC, Carroll TL, Faquin WC, O'Neil A, Franco RA. A Phase II Study of Pembrolizumab For HPV-Associated Papilloma Patients with Laryngeal, Tracheal, And/Or Pulmonary Involvement. Poster Presentation at the 2022 Annual Meeting of the American Society of Clinical Oncology. Chicago, IL. June 2022.
52. **Krantz SB,** Zeeshan K, Kuchta KM, Hensing TA, Mangold KA, Zheng SL, Xu J. Germline Mutations in High Penetrance Genes are Associated with Higher Pathologic Stage and Increased Recurrence in Non-Small Cell Lung Cancer. Oral Presentation at 102<sup>nd</sup> Annual Meeting of American Association for Thoracic Surgery. Boston, MA. 2022 May.

53. **Krantz SB**, Howington JA, Wood DE, Kim K, Kosinski AS, Cox ML, Kim S, Mulligan MS, Farjah F. Invasive Mediastinal Staging for Lung Cancer by Society of Thoracic Surgeons Database Participants. Oral Presentation at the 54<sup>th</sup> Annual Meeting of the Society of Thoracic Surgeons. Richard J. Clark Memorial Paper. Fort Lauderdale, FL. 2018 January.
54. Ajmani GS, Wang C, Kim K, Howington JA, **Krantz SB**. Surgical quality of wedge resection impacts overall survival when compared to stereotactic body radiation therapy in patients with early stage non-small cell lung cancer. Oral Presentation at the American Association for Thoracic Surgery Centennial. Boston, MA. 2017 May.
55. Ajmani GS, Hensing TA, Kim K, **Krantz SB**, Prinz RA, Talamonti MS, Baker M, Bentrem DJ, Roggin KK, Marsh RW. Adjuvant chemotherapy and overall survival in patients with node positive esophageal adenocarcinoma treated with neoadjuvant therapy and esophagectomy. Poster Presentation at the ASCO 2017 Gastrointestinal Cancers Symposium. San Francisco, CA. 2017 January.
56. **Krantz SB**, Mitzman B, Lutfi W, Wang C, Howington JA, Kim K. Neoadjuvant Chemotherapy And Radiation Shows No Survival Advantage To Chemotherapy Alone In Stage IIIA Patients: A Propensity-Matched Analysis Of The National Cancer Data Base. Oral Presentation at the 53<sup>rd</sup> Annual Meeting of the Society of Thoracic Surgeons. Houston, TX. 2017 January.
57. **Krantz SB**, Lutfi W, Kuchta K, Wang C, Kim K, Howington JA. Improved Lymph Node Staging In Early Stage Non-Small Cell Lung Cancer In The National Cancer Database. Oral Presentation at the 63<sup>rd</sup> Annual Meeting of the Southern Thoracic Surgical Association. Naples, FL. 2016 November.
58. Brown CS, Gwilliam NR, Kyrillos A, Lutfi W, Lapin B, Kim K, **Krantz SB**, Howington JA, Yao K., Ujiki MB, Predictors of Pathological Upstaging in Early Esophageal Cancer Patients: Results from the National Cancer Database. Oral Presentation at the American College of Surgeons Clinical Congress. Washington, DC. 2016 October.
59. Mitzman B, Lutfi W, Wang C, **Krantz SB**, Howington JA, Kim K. Minimally Invasive Esophagectomy Provides Equivalent Survival to Open Esophagectomy: An Analysis of the National Cancer Database. Oral Presentation 42<sup>nd</sup> Annual Meeting of the Western Thoracic Surgical Association. Waikoloa, HI. 2016 June.
60. Lancaster TS, **Krantz SB**, Patterson GA. Tracheal Resection and Carinal Reconstruction for Squamous Cell Carcinoma. Video presentation at the 52<sup>nd</sup> Annual Society of Thoracic Surgeons Annual Meeting. Phoenix, AZ. 2016 January
61. **Krantz SB**, Shields MA, Dangi-Garimella S, Grippo PJ, Bentrem DJ, Munshi HG. Snail and Slug Differentially Affect Pancreatic Cancer Cell Scattering and Motility Through  $\beta$ 1-integrin and Rho Signaling. Poster presentation at the 65<sup>th</sup> Annual Society for Surgical Oncology Cancer Symposium. Orlando, FL. 2012 March.
62. **Krantz SB**. AAS Foundation Award Winner: MT1-MMP Cooperates With Kras<sup>G12D</sup> To Promote Pancreatic Fibrosis Through TGF- $\beta$  Activation Of Pancreatic Stellate Cells. Plenary session presentation at the 7<sup>th</sup> Annual Academic Surgical Congress. Las Vegas, NV. 2012 February
63. Munshi HG. Fibrosis-protease cross-talk regulates pancreatic cancer progression. Invited talk. Matrix Metalloproteinase Gordon Research Conference. Smithfield, RI. 2011 August.
64. **Krantz SB**, Shields MA, Dangi-Garimella S, Cheon EC, Barron MR, Hwang, RF, Rao MS, Grippo PJ, Bentrem DJH, Munshi MT1-MMP cooperates with Kras<sup>G12D</sup> to promote pancreatic fibrosis through TGF- $\beta$  activation of pancreatic stellate cells. Oral presentation at Pancreas Club Annual Meeting, Chicago, IL. 2011 May.
65. **Krantz SB**, Shields MA, Dangi-Garimella S, Grippo PJ, Bentrem DJ, Munshi HG. Membrane type 1-matrix metalloproteinase cooperates with Kras<sup>G12D</sup> to promote pancreatic fibrosis through transforming

growth factor- $\beta$  activation of pancreatic stellate cells. Poster presentation at the AACR Annual Meeting, Orlando, FL. 2011 April.

66. Abbott DE, De La Garza M, **Krantz SB**, Mahvi DM. The Impact of Physician-Nurse Interactions on Nurse Satisfaction. Oral presentation at the 6<sup>th</sup> Academic Surgical Congress, Huntington Beach, CA. 2011 February.
67. Ding X, Liao J, Li H, Rao MS, **Krantz SB**, Bentrem D, Yang GY. The role of the soluble epoxide hydrolase expression and K55R genetic polymorphism in pancreatic adenocarcinoma. The United States & Canadian Academy of Pathology Annual Meeting, San Antonio, TX. March 2010.
68. **Krantz SB**, Dangi-Garimella S, Shields MA, Grippo PJ, Bentrem DJ, Munshi HG. Overexpression of the Collagenase MT1-MMP in Kras<sup>G12D</sup> Mice Leads to Pancreatic Tumors With Pronounced Fibrosis. Oral presentation at the American Pancreatic Association Annual Meeting, Chicago, IL. 2010 November.
69. Dangi-Garimella S, **Krantz SB**, Barron MR, Shields MA, Grippo PJ, Bentrem DJ, Munshi HG. Three dimensional collagen I promotes gemcitabine resistance in pancreatic cancer through increased membrane type 1-matrix metalloproteinase-mediated HMG A2 expression. Poster presentation at the American Pancreatic Association Annual Meeting, Chicago, IL. 2010 November.
70. Shields MA, Dangi-Garimella S, **Krantz SB**, Bentrem DJ, Munshi HG. Collagen Promotes Snail-driven Invasion through Increased TGF- $\beta$  Signaling in Human Pancreatic Cells. Poster presentation at the American Pancreatic Association Annual Meeting, Chicago, IL. 2010 November.
71. **Krantz SB**, Dangi-Garimella S, Shields MA, Grippo PJ, Bentrem DJ, Munshi HG. MT1-MMP Cooperates With Kras to Generate Intraductal Papillary Mucinous Neoplasms With Pronounced Fibrosis. Oral presentation at the American College of Surgeons Clinical Congress, Washington, D.C. 2010 October.
72. Cheon EC, Strouch MJ, **Krantz SB**, Khan MK, Dennis, K, Blatner NR, Gounaris E, Khashayarsha K, Bentrem DJ. Genetic Deletion of Hematopoietic 5-Lipoxygenase Suppresses Intestinal Polyposis in APC<sup>A468</sup> Knockout Mice. Basic science plenary session presentation at the 51<sup>st</sup> annual meeting of the Society for Surgery of the Alimentary Tract. New Orleans, LA. 2010 May.
73. **Krantz SB**, Dangi-Garimella S, Shields MA, Grippo PJ, Bentrem DJ, Munshi HG. MT1-MMP cooperates with Kras to generate invasive pancreatic tumors with pronounced fibrosis. Poster presentation at the ASCO Annual Meeting, Chicago, IL. 2010 April.
74. Shields MA, Dangi-Garimella S, **Krantz S**, Bentrem DJ, Munshi HG. Collagen regulation of Snail expression in pancreatic cancer involves TGF- $\beta$ 1 signaling. Oral presentation at the AACR Annual Meeting, Washington, D.C. 2010 April.
75. Shields MA, Dangi-Garimella S, **Krantz SB**, Bentrem DJ, Munshi HG. Collagen promotes Snail-driven invasion through increased TGF- $\beta$  signaling in human pancreatic cancer cells. *Winner of best basic science poster*. Poster presentation at the Lewis Landsberg 6<sup>th</sup> Annual Research Day, Northwestern University Feinberg School of Medicine. Chicago, IL. 2010 April.
76. **Krantz SB**, Strouch MJ, Cheon EC, Heiferman MJ, Munshi HG, Khazaie K, Bentrem DJ. Mast cells can mediate invasion in pancreatic cancer cell lines. *J Surg Res*. 2010 Feb; 158(2):192-3. Oral presentation at the 5th Annual Academic Surgical Congress, San Antonio, TX. 2010 February.
77. Cheon EC, Strouch MJ, **Krantz SB**, Heiferman MJ, Dennis KL, Blatner NR, Khazaie K, Bentrem DJ. Genetic deletion of 5-Lipoxygenase suppresses intestinal polyposis in APC<sup>A468</sup> knockout mice. *J Surg Res*. 2010 Feb; 158(2):191. Oral presentation at 5th Annual Academic Surgical Congress, San Antonio, TX. 2010 February.

78. Sener SF, Winchester DJ, Winchester DP, Du H, Brinkmann EM, Barrera E Jr., Bilimoria MM, **Krantz S**, Rabbitt S. The Effects of Hormone Replacement Therapy (HRT) on Breast Cancer Biology and Survival. Oral presentation at The Midwest Surgical Association Annual Meeting, Mackinac Island, MI. 2008 August.
79. **Krantz SB**, Davies KM, Krett NL, Rosen ST. Establishment of a Transcription Factor Activity Assay in Multiple Myeloma Cell Line, MM1.S. Oral presentation at The Northwestern University Feinberg School of Medicine Medical Student Summer Research Symposium, Chicago, IL. 2003 October.
80. Weatherwax KJ, **Krantz SB**, Malow BA. Obstructive sleep apnea in epilepsy patients: Further Validation of the Sleep Apnea Scale of the Sleep Disorders Questionnaire (SA-SDQ) in a Disease-specific Population. *Sleep*. 2001 April. Volume 24, Abstract Supplement. Pages: A271.

*Invited Lectures, Visiting Professorship, Grand Rounds*

81. To Infinity and Beyond? Pushing the Limits for Lung Cancer with Advanced Technology. Invited Lecture. 21<sup>st</sup> Annual Dr. Willard A. Fry Visiting Professor Lectureship in Thoracic Surgery. NorthShore University HealthSystem. Evanston, IL. 2021 June.
82. Can We Do It? Should We Do It? The Role of Pulmonary Metastasectomy. Invited Lecture. 36<sup>th</sup> Annual Meeting of the Association of Physician Assistants in Cardiovascular Surgery. New Orleans, LA. 2017 March
83. Semi-Annual Thoracic Surgery Morbidity and Mortality Conference and Quality Improvement. Washington University School of Medicine Division of Cardiothoracic Surgery Grand Rounds. St. Louis, MO. 2015 February.
84. Surgical Debate: Surgery versus Stereotactic Body Radiotherapy (SBRT) for Early Stage Non-Small Cell Lung Cancer. Washington University School of Medicine Division of Cardiothoracic Surgery Grand Rounds. St. Louis, MO. 2014 March.
85. Surgical Debate: The Role of Surgery in N2 positive, Stage III, Non-Small Cell Lung Cancer. Washington University School of Medicine Division of Cardiothoracic Surgery Grand Rounds. St. Louis, MO. 2013 November.
86. Barrett's Esophagus and Cancer. Ablation, EMR, and resection, where are we now? Northwestern Memorial Hospital Surgical Chief Resident Grand Rounds. Chicago, IL. 2013 February.
87. Improving Operating Room On-time Starts. Department of Surgery Grand Rounds. Northwestern University Feinberg School of Medicine, Chicago, IL. 2009 October.

*Print/Peer Reviewed/ Non Peer Reviewed Scholarship in the Media*

88. "Preparing for Oral Boards: Best Practices." Video roundtable as part of the 2020 STS Annual Meeting. CTSnet. Jan 2020.
89. "Clark Papers Spotlight Three STS National Database Studies." STS Meeting Bulletin, Jan 29, 2018
90. "Wedge resection offers higher survival for NSCLC." Video discussion of "Surgical quality of wedge resection impacts overall survival when compared to stereotactic body radiation therapy in patients with early stage non-small cell lung cancer," Thoracic Surgery News. Jun 6, 2017.

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**Editorial Boards and Reviewer**

## **Editorial Board**

Current Challenges in Thoracic Surgery, 2019-present

## **Reviewer**

Chest, 2019 - present

American Journal of Clinical Oncology, 2016-present

Annals of Thoracic Surgery, 2015-present

Journal of Thoracic and Cardiovascular Surgery, 2014-present

Annals of Surgical Oncology, 2011-present

Annals of Surgery, 2011

Journal of Surgical Oncology, 2009-2013

Pancreatology, 2010

Clinical Cancer Research, 2010

BMC Cancer, 2009

Journal of Surgical Research, 2009-2011

World Journal of Surgery, 2009

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## **Research Funding**

### ***Extramural***

Association for Academic Surgery

2009-2011

Resident Research Fellowship

- Two-year award provided to help support the research efforts of the surgical resident with the most outstanding research proposal as judged by the Executive Council of the AAS. Total award \$40,000.

### ***Intramural***

NorthShore University Health System Auxiliary

2018

- Research award to support analysis of an Inherited Cancer Panel performance in an existing lung cancer population. Total Award \$46,304

Robert H. Lurie Comprehensive Cancer Center

2009-2011

Northwestern University Feinberg School of Medicine

Michael Sweig Career Development Award

- Two-year award to support fully protected basic science cancer research. Total award estimate \$110,000.

Northwestern University Feinberg School of Medicine

2003

Medical Student Summer Research Fellowship

- Research stipend awarded to support outstanding medical student research proposals. Total award \$3,000.