CURRICULUM VITAE MICHAEL D. BELAND, M.D.

Rhode Island Hospital Department of Diagnostic Imaging 593 Eddy Street Providence RI 02903

Phone: (401) 444-5184 Fax: (401) 444-5017

Email: mbeland@lifespan.org

EDUCATION

Undergraduate University of New Hampshire, Major:

Zoology, May 1994

University of Massachusetts at Amherst,

Major: Biology, Concentration:

Neuroscience, cum laude, Junior Fellow,

Howard Hughes Scholar, BS 1997

Medical School University of Massachusetts Medical

School, AOA, MD 2001

POSTGRADUATE TRAINING

Residency University of Massachusetts Medical

School/St. Vincent's Hospital, Intern Internal Medicine, Worcester, MA,

2001-2002

Brown Medical School, Rhode Island Hospital/Brown University, Diagnostic Radiology Residency, Providence, RI, 2002-

2006

Fellowship Harvard Medical School/Massachusetts

General Hospital, Abdominal Imaging and Intervention Fellowship, Boston, MA, 2006-

2007

POSTGRADUATE HONORS AND AWARDS

Senior Scholar, Department of Radiology, University of Massachusetts Medical School, 2000

Alpha Omega Alpha, University of Massachusetts Medical School, 2001

Toshiba Resident Award, Society of Radiologists in Ultrasound Meeting, Washington D.C. October 2004

Chief Resident in Radiology, Rhode Island Hospital, 2005-2006

RSNA Roentgen Resident/Fellow Research Award, 2005

Haffenreffer House Staff Excellence Award, 2006

AUR-AGFA Radiology Management Program, Selected participant, Association of University Radiologists, 2011

Teacher of the Year Award, Brown University Radiology Residency, 2010-2011

Fellowship, Society of Radiologists in Ultrasound, 2012

Brown University, Master of Arts ad eundem, 2014

Graduate Faculty Status, University of Rhode Island Department of Physics, 2014

Guest Editor, Abdominal Imaging, Special Issue on Elastography, April 2015

Brown University Medical Engineering Capstone Project Selection, Awarded September 2016

Fellowship, Society of Abdominal Radiology, 2017

Fellowship, American College of Radiology, April 2022

Outstanding Attending Service Award, Department of Diagnostic Imaging, Rhode Island Hospital, Brown University, 2021-2022

PROFESSIONAL LICENSES AND BOARD CERTIFICATION

Massachusetts State Licensure (Expires 3/14/25)

Drug Enforcement Administration (Expires 7/31/24)

Diplomate, American Board of Radiology, Certified 2006, Recertified 2016

Rhode Island State Licensure (Expires 6/30/26)

Rhode Island Controlled Substance (Expires 6/30/26)

ACADEMIC APPOINTMENTS

Instructor in Radiology, Harvard Medical School, Massachusetts General Hospital, 2006-2007

Assistant Professor of Diagnostic Imaging, Brown Medical School, 2006-2013

Associate Professor of Diagnostic Imaging, Teaching Scholar Track, Brown Medical School, 2013-2019

Adjunct Associate Professor of Physics, University of Rhode Island, 2014- present

Professor of Diagnostic Imaging, Teaching Scholar Track, Brown Medical School, July 2019-June 2024

HOSPITAL APPOINTMENTS

Attending Radiologist, Rhode Island Hospital, Providence, RI, 2007-present

Attending Radiologist, The Miriam Hospital, Providence, RI, 2007-present

Attending Radiologist, Women and Infants Hospital, Providence, RI, 2007-present

Radiologist, Sturdy Memorial Hospital, Attleboro, MA, 2018-present

Director of Ultrasound, Department of Diagnostic Imaging, Rhode Island Hospital, 2007-2021

Lifespan Imaging Strategy Workstream Committee member, 2018-2019

Attending Radiologist, Kent Hospital, Warwick, RI, 2021-present

Chief of Radiology, Kent Hospital, November 2021-March 2024

Attending Radiologist, Newport Hospital, Newport, RI, 2022-present

Professional Refinement Council, Kent Hospital, November 2021-2022

Chief's Council, Kent Hospital, November 2021-2024

Credentials Committee, Kent Hospital, November 2021-2024

Clinical Performance Committee, Kent Hospital, November 2021-2024

Medical Executive Committee, Kent Hospital, November 2021-2024

Outcomes & Efficiency Subcommittee, Kent Hospital, November 2021-March 2024

Attending Radiologist, Charter Care Hospitals Roger Williams Medical Center and Our Lady of Fatima Hospital, December 2022

Attending Radiologist, South County Hospital, April 2023

Attending Radiologist, Landmark Hospital, May 2024

OTHER APPOINTMENTS

Program Committee, Society of Radiologists in Ultrasound (SRU), 2007-2013

Co-Director, 2010-2011 New England Roentgen Ray Society Saturday Refresher course in Ultrasound (NERRS)

Journal Reviewer, Ultrasound in Medicine and Biology, 2010-2021

Journal Reviewer, Cancer, 2010-2018

Journal Reviewer, Ultrasound Quarterly, 2010-present

Co-Chair, Education Committee of the New England Roentgen Ray Society (NERRS), 2011-2012

Journal Reviewer, American Journal of Radiology, 2011-present

American College of Radiology (ACR) Appropriateness Criteria Expert Panel on Urological Imaging. Expert Panel Member, 2013-2016

Associate Editor, Ultrasound Section, Abdominal Imaging, 2013-2015

ACR TI-RADS Steering Committee, 2014-2018; 2023-present

Executive Council, Society of Radiologists in Ultrasound, 2015-present

Vice Chair, Society of Radiologists in Ultrasound Professional Practice Committee, 2015-2018.

Journal Reviewer, Abdominal Radiology, 2015-2021

Board of Directors, Rhode Island Medical Imaging, 2015-present

Journal Reviewer, Journal of Clinical Imaging, 2016-2018

Treasurer, Rhode Island Medical Imaging, 2016-present

ACR-AIUM-SPR-SRU Practice Parameter for the Performance of an Ultrasound Examination of the Abdomen and/or Retroperitoneum – SRU Representative, 2016-2020

ACR Ultrasound Medical Education Task Force, 2016-2020

Chair, Society of Radiologists in Ultrasound Professional Practice Committee, 2018-2019.

Member, Society of Radiologists in Ultrasound Training and Education Committee, 2019-2022

UNIVERSITY COMMITTEES

Brown Medical School Resident & Fellow Radiology Education Committee, 2008-2010

Brown Medical School Resident Physics Education Subcommittee, 2010-present

Brown Medical School Awards Committee, 2013-2024

Clinical Competence Committee, 2013-2021

Brown Medical School Resident Selection Committee, 2017-2019

Brown Medical School Resident & Fellow Radiology Education Committee, 2015-2021

Department of Diagnostic Imaging Promotions Committee, 2019-2023

Brown BioMed Faculty Search Committee: Director of Anatomic Pathology (FH-1645), 2021

MEMBERSHIP IN SOCIETIES

Alpha Omega Alpha, 2001-present American Roentgen Ray Society, 2001present

American College of Radiology, 2002-present

Association of University Radiologists, 2002-present

New England Roentgen Ray Society, 2002-present

Radiological Society of North America, 2002-present

Society of Radiologists in Ultrasound, 2004-present

Society of Abdominal Radiology (formerly Society of Uroradiology), 2005-present

PUBLICATIONS LIST

ORIGINAL PUBLICATIONS IN PEER-REVIEWED JOURNALS

- 1. **Beland MD**, Dupuy DE, Mayo-Smith WW. Percutaneous Cryoablation of Extra-Abdominal Metastatic Disease: Initial Results. *AJR* 2005; 184:926-930
- 2. **Beland MD**, Soares G, Dubel G, Forte M, Murphy T. Endovascular Repair of Thoracic Aorta Mycotic Pseudoaneurysm in a Patient with History of Bacteroides Fragilis Sepsis and Leprosy. *J Vasc Interv Radiol* 2005; 16:298-300
- 3. **Beland MD** and Dupuy DE. Current and Future Applications of Percutaneous Radiofrequency Ablation in the Treatment of Lung Neoplasms. *Applied Radiology* 2006; 35:21-28
- 4. **Beland MD**, Mayo-Smith WW, Dupuy DE, DeLellis RA, Cronan JJ. Diagnostic Yield of 58 Consecutive Image-Guided Solid Renal Mass Biopsies: Should We Biopsy All Indeterminate Solid Renal Masses? *AJR* 2007; 188:792-797
- 5. Rabinowitz CB, Egglin TK, **Beland MD**, Mayo-Smith WW. Outcomes in 74 patients with an appendicolith who did not undergo surgery: is follow-up imaging necessary? *Emergency Radiology* 2007; 14(3):161-165
- 6. **Beland MD**, Mueller PR, Gervais DA. Thermal Ablation in Interventional Oncology. *Seminars in Roentgenology*. 2007;42(3):175-190
- 7. **Beland MD**, Gervais DA, Levis DA, Hahn PF, Arellano RS, Mueller PR. Complex Abdominal and Pelvic Abscesses: Efficacy of Adjunctive Tissue-Type Plasminogen Activator for Drainage. *Radiology* 2008; 247(2):567-573
- 8. **Beland MD** and Mayo-Smith WW. Ablation of Adrenal Neoplasms. *Abdominal Imaging* 2009; 34(5):588-592.
- 9. Schirmang TC, Mayo-Smith WW, Dupuy DE, **Beland MD**, Grand DJ. Kidney neoplasms: Renal halo sign after percutaneous radiofrequency ablation incidence and clinical importance in 101 consecutive patients. *Radiology* 2009; 253(1):263-269.
- 10. Grand DJ, **Beland MD**, Dupuy DD, Mayo-Smith WW. Contrast-to-Noise Ratios of Liver Lesions Using Subtraction Imaging On Multi-Phase 64 Detector Row CT. *Clinical Radiology* 2009; 64:373-380.
- 11. *Wolf FJ and **Beland MD**. Thermal Ablation: Clinical Applications, Safety, and Efficacy. *Med Health R I*. 2009; 92(12):407-411.
- 12. **Beland MD**, Wasser EJ, Mayo-Smith WW, Dupuy DE. Primary non-small cell lung cancer: review of frequency, location and time of recurrence after RFA. *Radiology* 2010; 254:301-307.
- 13. *DeBenedectis CM, **Beland MD**, Dupuy DE, Mayo-Smith WW. Utility of Iodinated Contrast in Hydrodissection Fluid when Performing Renal Tumor Ablation. *J Vasc Interv Radiol.* 2010 May; 21(5):745-7.
- 14. Kampalath V, Harris A, Grand D, **Beland M**, Shah, S. MR Detection of Colonic Crohn's Disease Without Use of Colon Preparation or Anti-Peristaltic Agents, *Am J Gastroenterol*. 2010 105:S438.
- 15. Harris A, Grand D, Kampalath V, **Beland M**, Chen W, Shah S. Efficacy of MR Enterography for Evaluation of Known or Suspected Crohn's Disease. *Am J Gastroenterol*. 2010 105:S437-S438.
- 16. **Beland MD**, Walle NL, Machan JT, Cronan JJ. Renal cortical thickness measured on ultrasound: Is it better than renal length as an indicator of renal function in chronic kidney disease? *AJR* 2010; 195:W146-W149

- 17. Healey TT, **Beland MD**, Bowkley CW 3rd, Dupuy DE. Stabilization of mobile pulmonary nodules during radiofrequency ablation. *AJR* 2010; 195(5): 1238-1240
- 18. Grand DJ, **Beland MD**, Noto RB, Mayo-Smith WW. Optimum imaging of colorectal metastases. *J Surg Oncol* 2010; 102:909–913
- 19. **Beland MD**, Grand DJ, Mayo-Smith WW, Machan JT, Monchik JM. Dynamic MDCT for localization of occult parathyroid adenomas in 26 patients with primary hyperparathyroidism. *AJR* 2011; 196:61–65
- 20. Beland MD, Kwon L, Delellis RA, Cronan JJ, Grant EG. Nonshadowing echogenic foci in thyroid nodules: Are certain appearances enough to avoid thyroid biopsy? J Ultrasound Med 2011 30: 753-760
- 21. *Patel C, **Beland MD**, Feller E. Acute Renal Failure from a Pelvic Arteriovenous Malformation. *Med Health R I* 2011; 94: 144-145.
- 22. Grand DJ, **Beland MD**, Machan JT, Mayo-Smith WW. Detection of Crohn's disease: Comparison of CT and MR enterography without anti-peristaltic agents performed on the same day. *Eur J Radiol*. 2011 Jun 4.
- 23. Song JS, **Beland MD**, Mayo-Smith WW. Hematuria evaluation with MDCT: is a contrast-enhanced phase required when calculi are detected in the unenhanced phase? *AJR* 2011; 197:W84-W89
- 24. **Beland MD**, Wolf FJ, Grand DJ, Dupuy DE, Mayo-Smith WW. Incidence of multiple sporadic renal cell carcinomas in patients referred for renal radiofrequency ablation: Implications for imaging follow-up. *AJR*. 2011 197:671-675
- 25. Grand DJ, Cloutier DR, **Beland MD**, Mayo-Smith WW. Inadvertent Ingestion of Wire Bristles from a Grill Cleaning Brush: Radiologic Detection of Unsuspected Foreign Bodies. *AJR* 2012 198:836-839
- 26. *Pietryga J, **Beland MD**, Dupuy DE, Mayo-Smith WW. Placing Marker Coils at Biopsy: Utility in Localizing Poorly Visualized Renal Neoplasms for Subsequent CT-guided Radiofrequency Ablation. *Radiology* 2012; 263:555-561.
- 27. **Beland, MD** and Monchik JM. 4D CT A diagnostic tool to localize an occult parathyroid adenoma in a patient with primary hyperparathyroidism. *Medicine and Health Rhode Island* 2012; 95(5):157-158.
- 28. Song JS, **Beland MD**, Mayo-Smith WW. Incidental extra-urinary findings at MDCT urography for hematuria evaluation: Prevalence in 1209 consecutive exams. *AJR* 2012; 199:616-622
- 29. *Simon T, **Beland MD**, Machan J, DiPetrillo T, Dupuy D. Charlson Comorbidity Index predicts patient outcome, in cases of inoperable non-small cell lung cancer treated with radiofrequency ablation. *Eur J Radiol*. 2012; 81:4167–4172
- 30. Grand DJ, Kampalath V, Harris A, **Beland MD**, Chen WT, Shah SA. MR Enterography Correlates Highly with Colonoscopy and Histology for both Distal Ileal and Colonic Crohn's Disease in 310 Patients. *Eur J Radiol* 2012; 81(5):e763-9
- 31. Grand DJ, **Beland M**, Harris, A. Magnetic resonance enterography. *Radiologic Clinics of North America* 2013; 51(1):99-112.
- 32. **Beland MD**, Esteva C, Kim E, Cronan JJ. Phlegmonous Colitis Associated with Advanced Liver Disease: Report of a Case and Its Diagnostic Significance. *Medicine and Health Rhode Island* 2013;96(3): 50-52

- 33. **Beland MD**, Scappaticci AA, Machan JT, Huda W, Collins SA, Mayo-Smith WW. Effect of patient size on mean sterile water Hounsfield units during multiphase CT exams. *AJR* 2013; 200(5):1048-53
- 34. Pareek G, Acharya UR, Sree SV, Swapna G, Yantri R, Martis RJ, Saba L, Krishnamurthi G, Mallarini G, El-Baz A, Ekish SA, **Beland MD**, Suri JS. Prostate Tissue Characterization/Classification in 144 Patient Population using Grayscale Feature Paradigm. *Technol Cancer Res Treat*. 2013 Jun 6. [Epub ahead of print]
- 35. Hu S, Igari M, Walle N, Steffes M, **Beland MD**, Collins S, Gohh R. Kidney Transplant Donor Glomerular Filtration Rate by Iohexol Clearance during Computed Tomographic Angiography of the Kidneys. *Transplantation Proceedings*. 2013; 45(9): 3229-3233
- 36. Song JH, Grand DJ, **Beland MD**, Chang KJ, Machan, JT, Mayo-Smith WW. Morphologic features of 211 adrenal masses at initial contrast-enhanced CT: Can we differentiate benign from malignant lesions using imaging features alone? *AJR* 2013; 201:1248–1253
- 37. *Anderson T, Atalay MK, Grand DJ, Baird G, Cronan JJ, **Beland MD**. Management of the nondiagnostic thyroid FNA: Can we avoid repeat biopsy? *Radiology* 2014;272(3): 777-784
- 38. **Beland MD**, Machan JT, Taliano R, Brown S, Promrat K, Cronan JJ. A Pilot Study Estimating Liver Fibrosis With Ultrasound Shear-Wave Elastography: Does the Cause of Liver Disease or Location of Measurement Affect Performance? *AJR*. 2014; 203: W267–W273
- 39. *Ellermeier A and **Beland MD**. Gallbladder Lymphangiomas: Rare Lesions with Characteristic Imaging Features. *Ultrasound Quarterly*. 2014; 30(3):216-8
- 40. **Beland MD**, Anderson TJ, Atalay MK, Grand DJ, Cronan JJ. Resident experience decreases nondiagnostic rate of thyroid fine needle aspiration biopsies *Academic Radiology*. 2014; 21(11):1490–1494
- 41. Malhi H, **Beland MD**, Cen SY, Allgood E, Daley K, Martin SE, Cronan JJ, Grant EG. Echogenic foci in thyroid nodules: significance of posterior acoustic artifacts. *AJR*. 2014; 203(6):1310-6.
- 42. Rahni D, **Beland M**, Habr F. Aortoesophageal Fistula. *Am J Gastroenterol*. 2014 109: S1-S3.
- 43. *Day KM, Elsayed M, **Beland MD**, Monchik JM. The Utility of 4D CT for Pre-operative Localization of Primary Hyperparathyroidism in Patients Not Localized by Sestamibi or Ultrasound. *Surgery* 2015 Mar;157(3):534-9.
- 44. *Wu JY, **Beland MD**, Konrad J, Tuomi A, Glidden D, Grand D, Merck D. Quantitative ultrasound texture analysis for clinical decision making support. *Proc. SPIE* 9419, Medical Imaging 2015: Ultrasonic Imaging and Tomography, 94190W
- 45. Heilbrun ME, Remer EM, Casalino DD, **Beland MD**, Bishoff JT, Blaufox MD, Coursey CA, Goldfarb S, Harvin HJ, Nikolaidis P, Preminger GM, Raman SS, Sahni VA, Vikram R, Weinfeld RM. ACR Appropriateness Criteria® Indeterminate Renal Mass. *Am Coll Radiol* 2015;12:333-341.
- 46. Alexander ES, Wolf FJ, Machan JT, Charpentier KP, **Beland MD**, Iannuccilli JD, Haas RH, Dupuy DE, Microwave ablation of focal hepatic malignancies regardless of size: a 9-year retrospective study of 64 patient. *European J Radiol.* 2015:84(6);1083–1090.
- 47. Iannuccilli J, Dupuy DE, **Beland MD**, Machan J, Golijanin D, Mayo-Smith WW. Effectiveness and Safety of CT-Guided Radiofrequency Ablation of Renal Cancer: A 14-

- Year Single Institution Experience in 203 Patients. *European J Radiol*. 2016 Jun;26(6):1656-64.
- 48. Smith-Bindman R, Moghadassi M, Griffey RT, Camargo CA, Bailitz J, **Beland MD**, Miglioretti DL. Computed Tomography Radiation Dose in Patients with Suspected Urolithiasis. *JAMA Intern Med.* 2015. 175:1413-1416
- 49. Khokhar, M; Day, K; Sangal, R; Ahmedli, N; Pisharodi, L; **Beland, M**; Monchik, J. Preoperative High-Resolution Ultrasound for the Assessment of Malignant Central Compartment Lymph Nodes In Papillary Thyroid Cancer. *Thyroid*. 2015 Dec;25(12):1351-4.
- 50. Grant EG, Tessler FN, Hoang JK, Langer JE, **Beland MD**, Berland LL, Cronan JJ, Desser, TS, Frates MC, Hamper UM, Middleton WD, Reading CC, Scoutt LM, Stavros AT, Teefey SA. Thyroid Ultrasound Reporting Lexicon: White Paper of the ACR Thyroid Imaging, Reporting and Data System (TIRADS) Committee. *JACR*. 2015 Dec;12(12 Pt A):1272-9.
- 51. **Beland MD,** Sternick L, Baird GL, Dupuy DE, Cronan JJ, Mayo-Smith WW. Optimizing Modality Selection for Image-Guided Procedures: An Analysis of the Challenges to Ultrasound Guidance. *Abdominal Radiology*. 2016 Apr;41(4):590-9.
- 52. *Wu JY, Tuomi A, **Beland MD**, Konrad J, Glidden D, Grand D, Merck D. Quantitative analysis of ultrasound images for computer-aided diagnosis. *Journal of Medical Imaging* 3(1), 014501 (Jan–Mar 2016)
- 53. Raghunandan V, **Beland MD**, Blaufox MD, et al. ACR Appropriateness Criteria Renal Cell Carcinoma Staging. *J Am Coll Radiol* 2016;13:518-525.
- 54. Narasimhamurthy M, Smith L, Machan JT, Reinert SE, Gohh, RY, Dworkin LD, Merhi B, Patel N, **Beland MD**, Hu, SH. Does Size Matter? Kidney Transplant Donor Size Determines Kidney Function among Living Donors. *Clinical Kidney Journal*, 2017. 10:1, 116-123.
- 55. Tessler FN, Middleton WD, Grant EG, Hoang JK, Berland LL, Teefey SA, Cronan JJ, **Beland MD**, Desser TS, Frates MC, Hammers LW, Hamper UM, Langer JE, Reading CC, Scoutt LM, Stavros AT. ACR Thyroid Imaging, Reporting and Data System (TI-RADS): White Paper of the ACR TI-RADS Committee. *JACR*. 2017 May;14(5):587-595.
- 56. Middleton WD, Teefey, Reading CR, Langer JE, **Beland MD**, Szabunio MM, Desser TS. Multiinstitutional Analysis of Thyroid Nodule Risk Stratification Using the American College of Radiology Thyroid Imaging Reporting and Data System. *AJR*. 2017 Jun;208(6):1331-1341.
- 57. Taffel MT, Nikolaidis P, **Beland MD**, Blaufox MD, Dogra VS, Goldfarb S, Gore JL, Harvin HJ, Heilbrun ME, Heller MT, Khatri G. ACR Appropriateness Criteria® Renal Transplant Dysfunction. *JACR*. 2017 May 31;14(5):S272-81.
- 58. *Konrad J, Merck D, Wu JY, Tuomi A, **Beland MD**. Improving Ultrasound Detection of Uterine Adenomyosis through Computational Texture Analysis. *Ultrasound Quarterly*. 2018 Mar;34(1):29-31.
- 59. Rebello D, Anjelly D, Grand DJ, Machan JT, **Beland MD**, Furman MS, Shapiro J, Sands BE, Mallette M, Bright R, Moniz H, Merrick M, Shah SA. Opportunistic Screening for Bone Disease Using Abdominal CT Scans Obtained for Other Reasons In Newly Diagnosed IBD Patients. *Osteoporos Int.* 2018;29:61359–1366
- 60. Middleton WD, Teefey SA, Reading CC, Langer JE, **Beland MD**, Szabunio MM, Desser TS. Comparison of Performance Characteristics of American College of Radiology TI-

- RADS, Korean Society of Thyroid Radiology TIRADS, and American Thyroid Association Guidelines. *AJR* 2018;210:1148-1154.
- 61. **Beland MD**, Patel LD, Ahn SH, Grand DJ. Image Guided Cholecystostomy Tube Placement: Short and Long-Term Outcomes of Transhepatic versus Transperitoneal Placement. *AJR* 2018 Oct 24:1-4. doi: 10.2214/AJR.18.19669. [Epub ahead of print]
- 62. *Chung M, Baird GL, Weiss KE, **Beland MD**. 2D Shear-wave Elastography: Measurement Acquisition and Reliability Criteria in Non-invasive Assessment of Liver Fibrosis. *Abdominal Radiology* 2019. Published on-line first, DOI 10.1007/s00261-019-02183-0
- 63. Karam AR and **Beland MD**. Liver Ultrasound Elastography: Review of Techniques and Clinical Applications. *RIMJ* 2020 103(5):26-29.
- 64. * Stib M, Pan I, Merck D, Middleton, W, **Beland MD**. Thyroid Nodule Malignancy Risk Stratification Using a Convolutional Neural Network. *Ultrasound Quarterly*. 2020 36(2):164-172
- 65. *Weiss K, Yang H, **Beland MD**. Reclaiming Hands-On Ultrasound for Radiology with a Simulation-Based Ultrasound Curriculum for Radiology Residents. *Ultrasound Quarterly* 2020 36(3):268-274
- 66. Yakhkind A, Lang AE, Montalvo M, **Beland MD**, Cutting S. Gastrointestinal Angioedema as a Side Effect of Alteplase for Acute Stroke. *JVIR* 2020 31(11):1921-1924
- 67. Middleton WD, Teefey SA, Tessler FN, Hoang JK, Reading CC, Langer JE, **Beland MD**, Szabunio MM, Desser TS. Analysis of Malignant Thyroid Nodules That Do Not Meet Criteria for FNA on ACR TI-RADS. *AJR*. 2020. 10.2214/AJR.20.23123
- 68. Balk EM, Adam GP, Cao W, Danko K, Bhuma MR, Mehta S, Saldanha IJ, **Beland MD**, Shah N. Management of Colonic Diverticulitis. Comparative Effectiveness Review No. 233. (Prepared by the Brown Evidence-based Practice Center under Contract No. 290-2015-00002-I.) AHRQ Publication No. 20(21)-EHC025. Rockville, MD: Agency for Healthcare Research and Quality; October 2020. DOI: 10.23970/AHRQEPCCER233
- 69. Teefey SA, Middleton WD, Reading CC, Langer JE, **Beland MD**, Szabunio MM, Desser TS. Effect of Decreasing the ACR TI-RADS Point Assignment for Punctate Echogenic Foci When They Occur in Mixed Solid and Cystic Thyroid Nodules. *AJR*. December 2020.
- 70. **Beland MD**, McElroy A, Brinker T, Gokaslan Z, Klinge P. In Vivo Ultrasound Imaging of the Spinal Cord and Subarachnoid Space at the C1-C2 Level in Healthy Adult Subjects, has been published in Ultrasound Quarterly in Vol. 38, No. 1, March 2022.
- 71. Li D, Hu R, Zhu C, Wu J, Liu S, Purkayastha S, Atalay MK, Zhang PJ, Lu S, **Beland MD**, Zou B, Zhang Z, Bai HX. Performance of automatic machine learning versus radiologists in the evaluation of endometrium on computed tomography. *SSRN Electronic Journal*. January 2021.
- 72. Jasim S, Teefey SA, Baranski TJ, Coble DW, Langer JE, Reading CC, **Beland MD**, Desser TS, Szabunio MM, Middleton WD. Inclusion of Thyroid Nodule Location in ACR TI-RADS Scoring: Impact on System Performance. *AJR*. January 2021. 10.2214/AJR.20.24224 (published on-line ahead of print)
- 73. Klinge P, McElroy A, Donahue J, Brinker T, Gokaslan Z, **Beland MD**. Abnormal spinal cord motion at the craniocervical junction in hypermobile Ehlers Danlos patients. *Journal of Neurosurgery* May 2021

- 74. Balk EM, Adam GP, Bhuma MR, Konnyu KJ, Saldanha IJ, **Beland MD**, Shah N. Diagnostic Imaging and Medical Management of Acute Left-Sided Colonic Diverticulitis: A Systematic Review. *Ann Intern Med.* 2022 Mar;175(3):379-387. doi: 10.7326/M21-1645. Epub 2022 Jan 18. PMID: 35038271. Barinov L, Jairaj A, Middleton W, **Beland MD** et al. Improving the efficacy of ACR TI-RADS through deep learning-based descriptor augmentation. Journal of Digital Imaging. Published on-line 14 August 2023. https://doi.org/10.1007/s10278-023-00884-z
- 75. Leary OP, Shaaya EA, Chernysh AA, Seidler M, Sastry RA, Persad-Paisley E, Zhu M, Gokaslan ZL, Oyelese AA, **Beland MD**, Jared S. Fridley JS. Microbubble Contrast-Enhanced Transcutaneous Ultrasound Enables Real-Time Spinal Cord Perfusion Monitoring Following Posterior Cervical Decompression. World Neurosurgery (accepted June 2024)

OTHER PEER-REVIEWED PUBLICATIONS

- 1. Zagoria R, Mayo-Smith WW, Fielding JR. <u>Case Review: Genitourinary Imaging.</u> Second edition. Elsevier. Philadelphia, Pennsylvania. 2006. Case Contributor.
- 2. *Ethier, M, **Beland MD**, Mayo-Smith WW. Image-guided Ablation for Adrenal Tumors. Tech Vasc Interv Radiol. 2013 Dec;16(4):262-8
- 3. *Srivastava A and **Beland MD**. Ultrasound Clinics of North America. Abdominal Ultrasound: Liver and Spleen. October 2014. 9(4): 545-830.

BOOKS AND BOOK CHAPTERS

- *Kujala N, Beland MD. Principles of cryoablation. In: Mueller P, Adam A, eds. <u>Interventional Oncology: A Practical Guide for the Interventional Radiologist</u>. New York, NY: Springer. 2011
- 2. **Beland MD** and Mayo-Smith WW. Adrenal Ablation: Primary Tumors and Metastatic Disease. Sabharwal T, Clark T (Eds.) <u>Interventional Radiology Techniques in Ablation</u>. Springer Science + Business Media, New York, NY 2013
- 3. **Beland MD**, Mayo-Smith WW. Image Guided Tumor Ablation (chapter). Kaufman J, Lee MJ eds. <u>Vascular and Interventional Radiology: The Requisites, Second Edition</u>. Elsevier Saunders. September, 2013

OTHER NON-PEER REVIEWED PUBLICATIONS

- 1. **Beland MD**. Ask the Expert: What is the role of ultrasound for renal stone disease in 2011? SRU Newsletter July 2011
- 2. Song JS and **Beland MD**. Ask the Experts: What should I recommend (if anything) for an incidental 1.5 cm solid adrenal lesion shown at sonography? SRU Newsletter January 2013
- 3. Silva AC and **Beland MD**. Special Section Introduction: Elastography. Abdom Imaging (2015) 40:679

^{*}Directly mentored a resident or medical student

4. Issa G, **Beland MD**. Beyond the AJR: American College of Radiology TI-RADS Validation Study—Can We Perform Fine-Needle Aspiration of Even Fewer Nodules? AJR 2024 Jan 3 [published online]. Accepted manuscript. doi:10.2214/AJR.23.30693

CORPORATE AUTHORSHIP OR MULTICENTER TRIALS

- 1. Anderson L, Middleton WD, Teefey SA et al. Hashimoto thyroiditis: Part 1, sonographic analysis of the nodular form of Hashimoto thyroiditis. AJR 2010 Jul;195(1):208-15. (Site investigator)
- 2. Anderson L, Middleton WD, Teefey SA et al. Hashimoto thyroiditis: Part 2, sonographic analysis of benign and malignant nodules in patients with diffuse Hashimoto thyroiditis. AJR 2010 Jul;195(1):216-22. (Site investigator)

ABSTRACTS

- 1. **Beland M**, Davidoff A, Wang C, Yam S, Rajadhyasksha C, Smith E. Digital Education-A Hope Still to be Realized. American Roentgen Ray Society, Seattle WA. May, 2001.
- 2. **Beland M**, Rajadhyasksha C, Davidoff A. The Left Ventricle-Will it See Better Days with Radiology? American Roentgen Ray Society, Seattle WA. May, 2001.
- 3. **Beland MD**, Mayo-Smith WW, Dupuy, DE; DeLellis R. Revisiting the Role of Percutaneous Biopsy in the Work-up of the Solid Renal Mass. RSNA, Chicago, IL. November, 2005.
- 4. Lin H, Ahn S, Rabinowitz CB, Egglin TK, **Beland MD**. Cerebrovascular Injury of the Neck: An Increasingly Recognized Disease in the Era of 16-row Multidetector CT. RSNA, Chicago, IL. November, 2005.
- 5. Lin H, Ahn S, Egglin TK, **Beland MD**, Haas RA. Performance of 16-Slice Multidetector-CT Angiography in the Evaluation of Cerebrovascular Injuries of the Neck with Characterization of the Injury Types. RSNA, Chicago, IL. November, 2005.
- 6. **Beland MD**, Mayo-Smith WW, Dupuy, DE; Cronan JJ. Revisiting the Role of Percutaneous Biopsy in the Work-up of the Solid Renal Mass. SUR/SGR Combined Meeting. Kauai, Hawaii. February 2006.
- 7. **Beland MD**, Mayo-Smith WW, Dupuy DE, Murphy B, Golding D, Biffl W. CT Utilization in a Level 1 Trauma Center Over 6 Years: Have Indications and Diagnostic Yield Changed? RSNA, Chicago, IL. November, 2006.
- 8. **Beland MD**, Mayo-Smith WW, Grand D, Cronan JC, Dupuy DE, Monchik J. Utility of 4D CT in Localizing Ectopic Parathyroid Glands in Patients with Primary Hyperparathyroidism.
 - American Roentgen Ray Society Annual Meeting, Washington, D.C. April, 2008.
- 9. Grand DJ, **Beland MD**, Mayo-Smith WW, Atalay MK, Dupuy DE, Cronan JJ. Detecting Renal Lesions with 64 Detector-Row CT: Does subtraction Imaging Help? American Roentgen Ray Society Annual Meeting. Washington DC. April, 2008.
- 10. **Beland MD**, Mayo-Smith WW, Grand D, Cronan JC, Dupuy DE, Monchik J. Utility of 4D CT in Localizing Ectopic Parathyroid Glands in Patients with Primary Hyperparathyroidism. Neuroradiology Power Hour invited speaker. American Roentgen Ray Society Annual Meeting, Washington, D.C. April, 2008.

- 11. **Beland MD**, Wasser EJ, Scappaticci A, Mayo-Smith WW, Dupuy DE. Radiofrequency Ablation of Primary Lung Cancer: A Ten-Year Review of Patterns of Recurrence in 87 Tumors Treated from 1998 to 2008. Interventional Oncology Symposium at RSNA 2008, Chicago, IL. November, 2008.
- 12. **Beland MD**, Wasser EJ, Scappaticci A, Mayo-Smith WW, Dupuy DE. Radiofrequency Ablation of Primary Lung Cancer: A Ten-Year Review of Patterns of Recurrence in 87 Tumors Treated from 1998 to 2008. RSNA, Chicago, IL. November, 2008.
- 13. Mayo-Smith WW, Collins S, Kim J, **Beland MD**, Grand DJ, North DL. Do Breast Shields Really Work? Attenuation Measurements Using a Breast Shield on 4, 16 and 64 Detector Row CT Scanners. RSNA, Chicago, IL. November, 2008.
- 14. *Powers K, **Beland MD**, Mayo-Smith WW. Is it Really Zero? Variability of Sterile Water Density Measurements During Multiphase Contrast-enhanced MDCT. RSNA, Chicago, IL. November, 2008.
- 15. *DeBenedectis CM, **Beland MD**, Dupuy DE, Mayo-Smith WW. To See or Not to See: Utility of Intravenous Contrast in Hydrodissection Fluid when Performing Renal Tumor Ablation. Society of Interventional Radiology Annual Meeting. San Diego, CA. March, 2009.
- 16. *Wasser EJ, **Beland MD**, Scappaticci A, Mayo-Smith WW, Dupuy DE. Ensuring Successful Radiofrequency Ablation of Primary Lung Cancer: A 10 year Retrospective Review Evaluating Risk Factors for Recurrence. Society of Interventional Radiology Annual Meeting. San Diego, CA. March, 2009.
- 17. **Beland MD**, Grand D, Dupuy DE, Yoo D, Monchik J, Mayo-Smith WW. Finding Ectopic Parathyroid Adenomas Missed by Ultrasound, Nuclear Scintigraphy or Surgery: Preliminary Results of 4 Phase MDCT in 18 Patients. American Roentgen Ray Society Annual Meeting. Boston, MA. April, 2009.
- 18. **Beland MD**, Kim J, North D, Collins S, Mayo-Smith WW. Does Oral Contrast Increase Radiation Dose in mA Modulated MDCT Scanners? Estimated and Measured Dose Using a Body Phantom on 4, 16 and 64 Detector Row Scanners. American Roentgen Ray Society Annual Meeting. Boston, MA. April, 2009
- 19. Grand D, Shah S, **Beland MD**, Mayo-Smith WW. Imaging of Crohn's Disease in the Era of Radiation Safety: Lessons Learned from 100 Consecutive MR Enterography Exams. American Roentgen Ray Society Annual Meeting. Boston, MA. April, 2009
- 20. Grand DJ, **Beland MD** and Shah S. Imaging of Crohn's Disease in the Era of Radiation Safety: Lessons Learned from 100 Consecutive MR Enterography Exams. State of the Art Small Bowel Imaging Course (Mayo Clinic), Scottsdale AZ October, 2009
- 21. Song JH, **Beland MD**, Mayo-Smith WW. Is Contrast Required for Hematuria Evaluation when a Calculus is Detected on the Un-enhanced Phase of MDCT Urography? RSNA, Chicago, IL. November, 2009
- 22. Song JH, **Beland MD**, Mayo-Smith WW. Incidental Extraurinary Findings on MDCT Urography: Prevalence in 1221 Consecutive Exams. RSNA, Chicago, IL. November, 2009
- 23. Wolf FJ, Dupuy DE, **Beland MD**, Iannitti D, Haas RA, Grand DJ et al. Microwave Ablation of Hepatic Malignancies: Safety and Efficacy in 70 Patients. RSNA, Chicago, IL. November, 2009

- 24. **Beland MD**, Dupuy DE, Mayo-Smith WW. Placement of a Marking Clip Prior to Renal RFA: A Way to Improve Localization of Difficult to See Masses. RSNA, Chicago, IL. November, 2009.
- 25. Beland MD, Walle NW, Machan JT, Cronan JJ. Renal Cortical Thickness: Does it Trump Renal Length as an Ultrasound Indicator of Chronic Renal Insufficiency? SUR/SGR Combined Meeting, Orlando, FL. February, 2010
- 26. *Pietryga JA, **Beland MD**, Wolf FJ, Dupuy DE, Chang KJ, Grand DJ et al. Localizing Small Intraparenchymal Renal Cell Carcinomas for Radiofrequency Ablation: The Utility of Placing Marker Coils at the Time of Biopsy. RSNA, Chicago, IL. November, 2010.
- 27. **Beland MD**, Tian L, Gong R. Protecting Against Acute Kidney Injury: Targeted Gene Therapy by Sonoporation Using a Standard Commercial Ultrasound Unit in a Mouse Model. RSNA, Chicago, IL. November, 2010.
- 28. Grand DJ, **Beland MD**, Mayo-Smith WW. Detection of Crohn's Disease: Comparison of CT and MR Enterography without Anti-peristaltic Agents Performed on the Same Day. RSNA, Chicago, IL. November, 2010.
- 29. Grand DJ, **Beland MD**, Harris A, Kampalath V, Chen W, Shah S. Efficacy of MR Enterography for Diagnosis of Crohn's Disease without Use of Anti-Peristaltic Agents. RSNA, Chicago, IL. November, 2010.
- 30. *Wolf FJ, **Beland MD**, Machan J, Dupuy DE, Mayo-Smith WW. CT-guided Percutaneous Radiofrequency Ablation of Solid Renal Masses: Effectiveness and Safety in 200 Consecutive Patients. RSNA, Chicago, IL. November, 2010.
- 31. *Walle N, **Beland MD**, Mayo-Smith WW, Cronan JJ, Hu S, Collins S. Do Segmented Cortical Volumes Calculated on Renal Donor CT Angiograms Correlate with Renal Function? RSNA, Chicago, IL. November, 2010.
- 32. Chang KJ, Thavaseelan S, Lasser MS, **Beland MD**, Haleblian GE, Pareek G, Renzulli J. Radiologically Detectable Complications of Robotic Prostatectomy. RSNA, Chicago, IL. November, 2010.
- 33. **Beland MD**, Grand DJ, Dupuy DE, Mayo-Smith WW, Cronan JJ. Incidence of sporadic secondary renal cell carcinomas in 162 patients treated with renal radiofrequency ablation. SUR/SGR Combined Meeting, Carlsbad, CA. March, 2011.
- 34. Grand DJ, **Beland MD**, Mayo-Smith WW. Feasibility of MR Enterography for Evaluation of Crohn's Disease in Pregnancy. American Roentgen Ray Society Annual Meeting. Chicago, IL. April, 2011.
- 35. **Beland MD**, Kwon L, Delellis RA, Cronan JJ, Grant EG. Echogenic nonshadowing foci in thyroid nodules: Are certain appearances enough to avoid thyroid biopsy? American Roentgen Ray Society Annual Meeting. Chicago, IL. April, 2011.
- 36. **Beland MD**, Wolf FJ, Grand DJ, Dupuy DE, Mayo-Smith WW, Cronan JJ. Incidence of sporadic secondary renal cell carcinomas in 162 patients treated with renal radiofrequency ablation. American Roentgen Ray Society Annual Meeting. Chicago, IL. April, 2011.
- 37. *Ethier M, **Beland MD**, Atalay M, Cronan JJ. Guiding the surgeon through difficult territory; Preliminary experience with pre-operative ultrasound guided dye localization of recurrent thyroid cancer. American Roentgen Ray Society Annual Meeting. Chicago, IL. April, 2011.
- 38. *Patel C, **Beland MD**, Feller E. Acute Renal Failure from a Pelvic Arteriovenous Malformation. American College of Physicians Annual Meeting, RI chapter. May, 2011.

- 39. Jayaraman MV, **Beland MD**, Atalay MK, Ahn SH, DiBiasio EL, Rizvi SA. Doppler waveform analysis of jugular venous flow in patients with and without Multiple Sclerosis. ASNR 49th Annual Meeting, Chicago, IL. June, 2011
- 40. Simon T, **Beland MD**, DiPetrillo T, Machan J, Dupuy D. Charlson Comorbidity Index predicts survival in radiofrequency ablation of non-small cell lung cancer. WCIO Annual Meeting. June, 2011
- 41. *Simon T, **Beland MD**, DiPetrillo T, Machan JT, Dupuy DE. Charlson Comorbidity Index: A Prognostic Determinant of Patient Outcome, in Radiofrequency Ablation of Medically Inoperable Non-Small Cell Lung Cancer. RSNA, Chicago, IL. November, 2011.
- 42. Grand DJ, Harris A, Kampalath V, **Beland MD**, Shah S. Sensitivity of MR Enterography: Correlation with Pathologic Severity of Crohn's Disease. SUR/SGR Combined Annual Meeting, Scottsdale, AZ. March, 2012.
- 43. *Daley K, **Beland MD**, Cronan JJ. Evaluation of Sonographic Characteristics of Echogenic Foci within Thyroid Nodules: Echogenicity is just the beginning. American Roentgen Ray Society Annual Meeting. Vancouver, BC. April, 2012.
- 44. Hu, S, Igari, M, Steffes, M, Walle, N, **Beland M**, Gohh, R. Renal Transplant Donor Glomerular Filtration Rate Determination by Plasma Clearance of Iohexol During Computed Tomographic Angiography of the Kidneys. American Transplant Congress. Boston, MA. June, 2012.
- 45. Malhi H, Allgood E, **Beland MD**, Cronan JJ, Grant EG. Significance of echogenic foci and associated posterior acoustic artifacts in assessment of thyroid nodules. SRU Annual Meeting, Baltimore, MD. October 2012.
- 46. Song JH, Grand DJ, **Beland MD**, Chang KJ, Machan J, Mayo-Smith WW. Morphologic Features of Adrenal Mass at Contrast-Enhanced CT: Can We Differentiate Benign from Malignant Lesions? RSNA, Chicago, IL. November, 2012.
- 47. Iannuccilli JD, Wolf FJ, **Beland MD**, Dupuy DE, Mayo-Smith WW. Image-Guided Percutaneous Radiofrequency Ablation of Solid Renal Masses: Effectiveness & Safety in 256 Patients. RSNA, Chicago, IL. November, 2012.
- 48. Ekish SA, Acharya UR, Pareek G, Swapna G, Sree SV, Mallarini G, El-Baz A, **Beland MD**, Suri JS. A Prostate Tissue Characterization/Classification System Using Grayscale Features. AIUM Annual Meeting. April, 2013.
- 49. **Beland MD**. Management of the Nondiagnostic Thyroid FNA: Can we Avoid Repeat FNA? SRU Fellows Meeting, Chicago, IL. October 2013.
- 50. *Ellermeier A, **Beland MD**, Cronan JJ. Gallbladder Lymphangioma. Case presentation, SRU Annual Meeting, Chicago, IL. October 2013.
- 51. *Anderson T, Atalay MK, Grand DJ, **Beland MD**. Can Ultrasound Features of Thyroid Nodules Predict Outcomes after a Non-Diagnostic Fine Needle Aspiration? RSNA, Chicago, IL. November, 2013.
- 52. *Anderson T, Atalay MK, Grand DJ, **Beland MD**. Is Repeat FNA after a Non-Diagnostic Thyroid Nodule FNA Necessary? RSNA, Chicago, IL. November, 2013.
- 53. *Day K, Elsayed M, Yu J, Avanessian B, **Beland MD**, J Monchik. The Utility of 4D CT Scan for Preoperative Localization of Patients With Primary Hyperparathyroidism Not Localized by Sestamibi or Ultrasound. 6th Biennial European Society of Endocrine Surgery Meeting. Cardiff, Wales. May, 2014.

- 54. **Beland MD**, Wu JY, Konrad J, Tuomi A, Glidden D, Grand D, Merck D. Quantitative Ultrasound Texture Analysis for Clinical Decision Making Support. SRU Fellows Meeting, Denver, CO. October 2014.
- 55. *Konrad JS, Merck D, Glidden DT, Baird G, Lourenco AP, **Beland MD**. Improving Ultrasound Detection of Uterine Adenomyosis through Computational Texture Analysis. RSNA, Chicago, IL. November, 2014.
- 56. **Beland MD** and Dihiya N. Xanthogranulomatous Cholecystitis. RSNA case of the day. RSNA. Chicago, IL. November, 2014.
- 57. *Wu JY, **Beland MD**, Konrad J, Tuomi A, Glidden D, Grand D, Merck D. Quantitative ultrasound texture analysis for clinical decision making support (abstract). International Society of Optics and Photonics (SPIE) Medical Imaging Symposium, Orlando, FL, Jan 2015.
- 58. Maxwell AWP, Tsang Mui Chung MS, **Beland MD**, Baird GL, Wang L, Mayo-Smith WW, Dupuy DE. Thermal ablation of suspicious renal masses: Is a biopsy necessary? 2016 World Congress of Interventional Oncology, Boston, MA, USA, June 9-12, 2016.
- 59. *Chung M, **Beland MD**, Grand DJ, Atalay MK, Cronan JJ, Dupuy DE, et al. Thyroid Elastography: Acoustic Radiation Force Impulse (ARFI) Quantification in Differential Diagnosis of Benign and Malignant Nodules. RSNA. Chicago, IL. November, 2016.
- 60. *Dang V, Lusi C, Woo M, Yakubov J, **Beland MD**. Encapsulation of Ultrasound Gel within Polyurethane Finger-Cuffs for Imaging of Superficial Tissue. School of Engineering, Brown University, BME Capstone Design Poster Symposium Providence, RI, December 2016.
- 61. *Patel L, **Beland MD**, Grand DJ, Baird G, Ahn SH. Efficacy of Percutaneous Cholecystostomy as Definitive Treatment for Acute Cholecystitis: A Single Center's 10 Year Experience. Society of Abdominal Radiology Annual Meeting 2017, Hollywood, FL, March 2017.
- 62. Rebello D, Anjelly D, Grand DJ, Machan JT, **Beland MD**, Furman, MS, Shapiro J, LeLeiko N, Sands BE, Mallette M, Bright R, Moniz H, Merrick M, Shah SA. Opportunistic Screening for Bone Disease Using Abdominal CT Scans Obtained for Other Reasons In Newly Diagnosed IBD Patients. Digestive Disease Week. Annual Conference. Chicago, IL, May, 2017.
- 63. *Venegas O, Chang A, Pan I, Chung M, Merck L, **Beland MD**, et al. Textured Image Analysis of Hepatic Shear Wave Elastography Imagery via Pyradiomics Module. 25th Annual Lifespan Hospitals Research Symposium. 2017;25:Abstract #41.
- 64. *Venegas O, Chang A, Pan I, Chung M, Merck L, **Beland MD**, et al. Evaluation of Hepatic Fibrosis via Pyradiomics Module. 10th Annual Alpert Medical School Summer Research Showcase. 2017;10:Abstract #59.
- 65. **Beland MD**, Patel L, Baird GL, Ahn S, Grand DJ. Image Guided Cholecystostomy Tube Placement: Short and Long Term Outcomes of Transhepatic versus Transperitoneal Placement. RSNA, Chicago, IL. November, 2017.
- 66. Grand DJ, Beland MD, Patel, L. The Myth of Murphy's Sign. RSNA. Chicago, IL. November, 2017.
- 67. Malkawi A, Karam A, **Beland MD**, Pietryga J, Grand DJ. Friend or Foe? Pitfalls and Mimics in Abdominal Imaging. SAR Annual Meeting, Scottsdale, AZ. March, 2018.

- 68. *Chung M, Baird G, Taliano R, Weiss K, Grand D, **Beland MD**. 2D Shear-wave Elastography: Grouped Sampling in Non-invasive Assessment of Liver Fibrosis. SAR Annual Meeting, Scottsdale, AZ. March, 2018.
- 69. Karam A, Malkawi A, **Beland MD**, Pietryga J, Grand DJ. Image-guided Percutaneous Needle Biopsies: Breaking into the Pelvis. SAR Annual Meeting, Scottsdale, AZ. March, 2018.
- 70. *Furman MS, Makwana N, Baird G, **Beland MD**, Grand DJ. Percutaneous Lung Biopsy: Does Size Matter? Presented as Scientific Electronic Exhibit at American Roentgen Ray Society Annual Meeting, Washington, DC, April 2018. (Abstract # E1226).
- 71. *Furman MS, Makwana N, Baird G, **Beland MD**, Grand DJ. Utility of Completion Imaging Prior to Lung Biopsy: Measure Twice, Cut Once. Presented as Scientific Electronic Exhibit at American Roentgen Ray Society Annual Meeting, Washington, DC, April 2018. (Abstract # E1200).
- 72. *Pan I, Stiib M, Merck D, **Beland MD**. Predicting Thyroid Nodule Malignancy with Efficient Convolutional Neural Networks. RSNA. Chicago, IL. November 2018.
- 73. Baird GL, Berube AS, Smith WJ, **Beland MD.** Sonographer as a Source of Variability for Swear Wave Elastography: Separating Patient and Sonographer Variability Using Complete Block Design. RSNA. Chicago, IL. November 2018.
- 74. *Pan I, Merck D, **Beland MD**. Artificial Intelligence for Abdominal Ultrasound: A Robust New Toll to Predict Fatty Liver. SAR Annual Meeting, Orlando, FL. March 2019.
- 75. Johnson D, Pietryga J, Baird G, Grand DJ, **Beland MD**. Pathology vs. Cytology: Are Both Needed or is One Better Than the Other? SAR Annual Meeting, Orlando, FL. March, 2019.
- 76. *Chung M, Baird G, Weiss K, **Beland MD**. 2D Shear-wave Elastography: Reliability Criteria Increases Diagnostic Accuracy in Non-invasive Assessment of Liver Fibrosis. American Roentgen Ray Society Annual Meeting, Honolulu, HI. May 2019.
- 77. Klinge PM, **Beland MD**, McElroy A, Manfredi J, Sledge D, Stopa E, Rashmir A. Translational Studies of "Defective" Myodural Bridges Neurosurgical Implications. New England Neurosurgical Society Annual Meeting, Chatham, MA. June 2019.
- 78. **Beland MD**. Reclaiming Hands On Ultrasound for Radiology. SRU Fellows Meeting. Denver, CO. October 2019.
- 79. *Weiss K, Yang HJ, **Beland MD**. Reclaiming Hands On Ultrasound for Radiology. RSNA. Chicago, IL. December 2019.
- 80. **Beland MD**, Ghosh D, Dawson M. Combining Shear Wave Ultrasound Elastography and Single Cell Biophysical Analysis to Highlight Differences in Tumor Phenotype and Heterogeneity. RSNA. Chicago, IL. December 2019.
- 81. *Hidlay DT, Haines P, Baird GL, **Beland MD**. Adding Value to Abdominal Ultrasound: A Novel Metric For Cardiac Dysfunction. AIUM Annual Meeting. New York, NY. March 2020.
- 82. McElroy A, **Beland MD**, Liu D, Klinge P. Evaluation of Myodural Bridges in Hypermobile Ehlers-Danlos Syndrome. EDS Society Annual Meeting. Scottsdale, AZ. July 2020.
- 83. *Arcese AA, Collins S, Issa G, **Beland M**. 3-D Characterization of Carotid Artery Stenosis with CT Imaging. 2020 Warren Alpert Medical School Academic Symposium. Brown Digital Repository. Brown University Library. https://doi.org/10.26300/1a78-n094

- 84. **Beland MD,** McElroy AW, Lane KM, Klinge P. Dysfunctional Myodural Bridges in Patients with Connective Tissue Disease New Evidence on Ultrasound of the Atlanto-axial Subarachnoid Space. (Selected for Featured Session) RSNA. Chicago, IL (Virtual Meeting). December 2020.
- 85. *Arcese AA, Issa G, Collins S, Baird G, **Beland MD**. When Anatomy and Physiology Disagree: Comparison of CTA and US in the Evaluation of Carotid Artery Stenosis. AUR Annual Meeting, March 2022.
- 86. Shaaya E, Leary O, Sastry R, Zhu M, Persad-Paisley E, Seidler M, **Beland M**, Fridley J. In Vivo Evaluation of Spinal Cord Perfusion Using Contrast-Enhanced Transcutaneous Ultrasound. Congress of Neurological Surgeons (CNS) Annual Meeting. October, 2022. San Francisco, CA.

SCHOLARLY WORK PUBLISHED IN OTHER MEDIA

1. Guidelines for Thyroid FNA in 2013. Expert Lecture Series. October, 2013. https://sonoworld.com/LectureDetails/Guidelines_for_FNA___Update_2013.aspx?Id=1223 &Sequence=1

INVITED PRESENTATIONS

- 1. MRI with endorectal coil: New standard of care in staging rectal cancer. 4th Annual Symposium in Colorectal Cancer and Inflammatory Bowel Disease. Providence, RI. March, 2008.
- 2. Emergencies in Renal Ultrasound. Society of Radiologists in Ultrasound Annual Meeting. Chicago, IL. November 2009.
- 3. Doppler US: Visceral and Extremity Applications (Hands-on Workshop). Refresher Course Faculty. RSNA, Chicago, IL. November 2009.
- 4. A Great Time to be a Sonographer New Technologies and Clinical Applications in Ultrasound. Rhode Island Hospital School of Diagnostic Imaging 4th Annual Spring Symposium. Providence, RI. March 2010.
- 5. Radiofrequency Ablation for the Treatment of Twin-reversed Arterial Perfusion Sequence in Acardiac Twin. Multidisciplinary Antenatal Diagnosis and Management Conference. Women and Infants Hospital. Providence, RI. September 2010.
- 6. The Role of Ultrasound in Hematuria Evaluation. New England Roentgen Ray Society Ultrasound Course. Waltham, MA. October 2010.
- 7. Hematuria Evaluation: Ultrasound vs. CT. Society of Radiologists in Ultrasound Annual Meeting. Las Vegas, NV. October 2010.
- 8. Hematuria and Flank Pain 2010: Optimization of CT Urography, MR Urography, and US. Refresher Course Faculty. RSNA, Chicago, IL. November 2010.
- 9. Doppler US: Visceral and Carotid Applications (Hands-on Workshop). Refresher Course Faculty. RSNA, Chicago, IL. November 2010.
- Hematuria and Flank Pain 2011: Optimization of CT Urography, MR Urography, and US (An Interactive Session). Refresher Course Faculty. RSNA, Chicago, IL. November 2011.

- 11. Some Great Cases I Have Seen: Abdominal US (An Interactive Session) *Kidney* (An Interactive Session). Refresher Course Faculty. RSNA, Chicago, IL. November 2011.
- 12. Hematuria and Flank Pain 2012: Optimization of CT Urography, MR Urography, and US (An Interactive Session). Refresher Course Faculty. RSNA, Chicago, IL. November 2012.
- 13. Some Great Cases I Have Seen: Abdominal US (An Interactive Session) *Kidney* (An Interactive Session). Refresher Course Faculty. RSNA, Chicago, IL. November 2012.
- 14. Ultrasound in Hematuria Evaluation: 2013. New England Roentgen Ray Society Ultrasound Course. Waltham, MA. March 2013.
- 15. Ultrasound of the urinary tract for evaluation of hematuria. Visiting Professor, Mayo Clinic. March 2013.
- 16. Uncommon diseases of the gallbladder and scrotum on ultrasound. Case presentations. Visiting Professor, Mayo Clinic. March 2013.
- 17. Thyroid Nodules The Role of Ultrasound and Biopsy. Signs, Symptoms and Questions Related to Diagnostic Imaging and Interventional Radiology. Warren Alpert Medical School Office of Continuing Medical Education. Providence, RI. September 2013.
- 18. Guidelines for FNA: Update 2013. Plenary Session, SRU Annual Meeting, Chicago, IL. October, 2013.
- 19. Primer on Ultrasound Liver Elastography. AART CME lecture. East Providence RI. May, 2014.
- 20. Ultrasound of the Acute Abdomen. SRU Annual Meeting, Denver, CO. October, 2014.
- 21. Renal Masses and Parenchymal Diseases: Ultrasound (An Interactive Session). Refresher Course Faculty. RSNA, Chicago, IL. December 2014.
- 22. Acute Abdomen and Intervention: Ultrasound (An Interactive Session). Refresher Course Faculty. RSNA, Chicago, IL. December 2014.
- 23. Ultrasound Imaging of Hyperparathyroidism. SRU Annual Meeting, Chicago, IL. October 2015.
- 24. Image Guided Intervention: When Is Ultrasound Best? (An Interactive Session). Refresher Course Faculty. RSNA, Chicago, IL. December 2015.
- 25. Liver Elastography Evolving Techniques and Clinical Practice. Gastroenterology Grand Rounds, Brown University. February 2016.
- 26. Hands On Liver Elastography. Faculty. SRU Annual Meeting, Baltimore, MD. October 2016.
- 27. SRU Believe It or Not Unusual but Instructive Cases Interventional Cases. SRU Annual Meeting, Baltimore, MD. October 2016.
- 28. Pearls and Pitfalls in Interventional Ultrasound (An Interactive Session). Refresher Course Faculty. RSNA, Chicago, IL. December 2016.
- 29. Parathyroid and Other Neck Masses including Lymph Nodes Post-Thyroidectomy (An Interactive Session). Refresher Course Faculty. RSNA, Chicago, IL. December 2016.
- 30. Meet the Professor Elastography. SRU Annual Meeting. Chicago, IL. October 2017.
- 31. Ultrasound Evaluation of Renal Masses and Parenchymal Disease. Refresher Course Faculty. RSNA, Chicago, IL. November 2017.
- 32. Thyroid Ultrasound. Combined Adult and Pediatric Endocrine Grand Rounds. Brown University, Providence, RI. January 2018.
- 33. The Right Tool for the Job: US or CT? Choose Wisely.... SAR Annual Meeting, Scottsdale, AZ. March 2018.

- 34. Ultrasound Evaluation of Renal Masses and Parenchymal Disease. Refresher Course Faculty. RSNA, Chicago, IL. November 2018.
- 35. Parathyroid Ultrasound. Faculty. SRU Annual Meeting, Denver, CO. October 2019.
- 36. Ultrasound Evaluation of Renal Masses: Pearls and Pitfalls. Refresher Course Faculty. RSNA, Chicago, IL. December 2019.
- 37. ACR TI-RADS Performance in Clinical Practice. SRU Annual Meeting, Washington DC. October 2023.

GRANTS

Principal Investigator, BR1-130 SonoVue Liver Protocol.

Characterization of focal liver lesions with Sonovue-enhanced ultrasound imaging: A phase III, intrapatient comparative study versus unenhanced ultrasound imaging using histology or combined imaging/clinical data as truth standard.

Sponsor: Bracco Diagnostics, Inc.

Amount: \$116,700

Dates: April 1, 2010 through March 31, 2011

Principle Investigator, Risk Management Loss Prevention Grant. Development of a semi automated body interventional follow-up and quality assurance database.

Sponsor: Lifespan Risk Services, Loss Prevention Grant Advisory

Committee

Amount: \$50,000 Dates: 7/2011

Principal Investigator, Correlation of Liver Sheer Wave Elastography (SWE) with Random Liver Biopsy for Hepatocellular Disease

Sponsor: SuperSonic

Amount: Equipment Loan for Research Study, est value \$150,000

Dates: 6/2012-12/2012

Principal Investigator, Hematuria evaluation using Ultrasound with advanced Doppler technique and 3D fly through compared with CT and cystoscopy

Sponsor: Toshiba

Amount: \$10,000 and Equipment loan for research study, est value

\$150,000

Dates: 7/2012-2013

Co-Investigator, HS019312 (PI, R. Smith-Bindman)

RCT of US Versus CT for Patients in the ED with Suspected Renal Colic. The major goal of this project is to test the use of renal ultrasound in diagnosing renal colic.

Sponsor: AHRQ / UCSF Subcontract

Amount: \$126,899 Dates: 8/1/10 – 7/31/13

Co-Investigator, (PI Tobias Mattias)

Real-Time Contrast Enhanced Ultrasound (CEUS) to Assess Muscle

Tissue Hypoperfusion in a Blood Flow Restriction Model

Sponsor: Emergency Medicine Foundation

Amount: \$9,750 Dates: 5/2011-2013

Co-Investigator, (Principal Investigators: Bruce Sands, Samir Shah) Ocean State Crohns and Colitis Area Registry (OSCCAR). CDC/CCFA U01-DP004785-02, CDC/CCFA U01-DP004785-02

Sponsor: Co-sponsored CDC and CCFA

Amount: \$452,978/year Dates: 9/28/2015-9/29/2018

Principal Investigator, Quantitative Elastography in characterization of Hepatic Steatosis (Phase I) and Thyroid Nodules (Phase II)

Sponsor: Siemens

Amount: Equipment Loan for Research, estimated value \$200,000

Dates: July 2013 - 2015

Principal Investigator, Correlation of Liver Shear Wave Elastography (SWE) and Utility of Shear Wave Arrival Time Contours with Random Liver Biopsy for Hepatocellular Disease

Sponsor: Toshiba

Amount: \$43,950 and Equipment Loan for Research Study, est value

\$150,000

Dates: 11/2015-2018

Co-Principal Investigator, Using Single Cell Biophysics and Shear Wave Ultrasound Elastography to Measure Cancer Mechanics Across Multiple Scales

Sponsor: Brown University

Amount: \$50,000

Dates: January 2017 - 2019

Principle Investigator, Risk Management Loss Prevention Grant. Ultrasound Training Lab to Improve Diagnostic and Procedural Skill Prior to Patient Scanning.

Sponsor: Lifespan Risk Services, Loss Prevention Grant Advisory

Committee

Amount: \$18,450 Dates: 2017 - 2018 Principle Investigator, Ultrasonographic Examination of Myodural

Bridges

Sponsor: RIMI/Diagnostic Imaging Foundation

Amount: \$1,963 Dates 2/2019-2021

Co-Investigator, HHSA290201500002 – TO 13 (PI E. Balk)

Management of Acute Diverticulitis

Sponsor: Agency for Healthcare Research and Quality (AHRQ)

Amount: US \$480,000 Dates: 03/29/19 – 06/19/20

Principle Investigator, Ultrasonographic Examination of Myodural

Bridges

Sponsor: RIMI/Diagnostic Imaging Foundation

Amount: \$1,300 Dates 2/2021-2022

UNIVERSITY TEACHING, ADVISING and MENTORING ROLES

Biomedical Engineering, Design, Research and Modeling (ENGN01930L) – BME Capstone Design project faculty. Submitted technological challenge in medical imaging with innovative design idea. Serving as faculty mentor to a team of 4 Brown Engineering Undergraduate students in developing product design and implementation.

Diagnostic Imaging Preclinical Elective (BIOL 6674) – Clinical elective offered to 1st and 2nd year medical students at the Warren Alpert Medical School of Brown University. Lecture students in Ultrasound and run hands on training session.

Diagnostic Radiology (RAD-6290) – Clinical elective offered to 3rd and 4th year medical students at the Warren Alpert Medical School of Brown University and visiting medical students. Teach rotating

students general Body Imaging and Ultrasound when rotating through clinical rotations and also giving noon conference lectures.

Body Imaging and Intervention (RAD-6330) - Clinical elective offered to offered to 3rd and 4th year medical students at the Warren Alpert Medical School of Brown University and visiting medical students. More intensive and focused instruction of students in Body Imaging and Ultrasound when present in department and also giving noon conference lectures.

Brown Radiology Student Interest Group -Lecture on Ultrasound, organize hands on live Ultrasound scanning sessions, interactive discussions about radiology as a profession.

Advanced Clinical Medical Imaging (phy585) – Faculty for Graduate Physics course at the University of Rhode Island.

Research Mentorship – Ongoing research mentoring of Brown University undergraduate students and Warren Alpert Medical School of Brown University students, Diagnostic Radiology Residents and Fellows.

HOSPITAL TEACHING, ADVISING and MENTORING ROLES

Faculty in Diagnostic Radiology Residency Program at Rhode Island Hospital/ Warren Alpert Medical School of Brown University. Supervision and instruction of 28 radiology residents in computed tomography, MRI, ultrasound, fluoroscopy and imaging-guided interventions. This includes lecturing on these topics in departmental noon conferences.

Faculty in Diagnostic Radiology Body Imaging Fellowship Program, Rhode Island

Hospital/ Warren Alpert Medical School of Brown University. Supervision, training and instruction of body imaging fellow(s) in computed tomography, MRI, ultrasound, fluoroscopy and imaging-guided interventions.

Ongoing education of sonographers and sonography students working and rotating through department.

Research Mentorship – Ongoing research mentoring of Diagnostic Radiology Residents and Fellows.