CURRICULUM VITAE

Lars J Grimm, MD, MHS, FSBI

PRIMARY ACADEMIC APPOINTMENT:	Radiology Duke University Medical Center
PRESENT ACADEMIC RANK AND TITLE:	Associate Professor, Track IV
MEDICAL LICENSURE:	North Carolina License # 2013-01316 June 27, 2013
SPECIALTY CERTIFICATION:	American Board of Radiology October 2, 2015
DATE AND PLACE OF BIRTH:	May 20, 1982 in Ft. Lauderdale, Florida

EDUCATION

High School – Community School of Naples (Naples, FL), 2000

College – Stanford University (Palo Alto, CA), 2004
Bachelor of Science in Geological and Environmental Sciences, conferred with distinction

Medical School – Yale University School of Medicine (New Haven, CT), 2009
Doctor of Medicine
Master of Health Science

MEDICAL TRAINING

Internship – Duke University Medical Center (Durham, NC)
Internal Medicine, 2009-2010

Residency – Duke University Medical Center (Durham, NC)
Diagnostic Radiology, 2010-2014
Chief Resident, 2013-2014

Fellowship – Duke University Medical Center (Durham, NC)
Breast Imaging, 2014-2015

PROFESSIONAL TRAINING

Clinical Research Training Program – Non-degree student, Duke University, 2015-2016
Breast Cancer Screening Leadership Group – Member, American College of Radiology/Society

of Breast Imaging, 2017-2018
Health Disparities Research Curriculum (HDRC) – Student, Duke University, 2020-2021

POSITIONS

Medical Instructor – Duke University Medical Center (Durham, NC)
Division of Breast Imaging, Department of Radiology, 2015-2016

Assistant Professor – Duke University Medical Center (Durham, NC)
Division of Breast Imaging, Department of Radiology, 2016-2019

Associate Professor – Duke University Medical Center (Durham, NC)
Division of Breast Imaging, Department of Radiology, 2019-present

SCHOLARLY WORK

Publication summary:

#	Type of Publication
88	Refereed journal publications (38 first author, 12 last author)
6	Non-refereed publications
48	Oral/Poster presentations
6	Book chapters

Google Scholar statistics (updated 4/16/2021):
Total # of citations: 1786
h-index = 20 (*h* papers have been cited at least *h* times)
i10-index = 38 (# papers cited at least 10 times)

Manuscripts in Refereed Journals

1. **Grimm LJ**, Cornfeld D, Mojibian H. The effect of left versus right sided contrast infusion on attenuation of the main pulmonary artery when performing CT angiograms of the chest. J Comput Assist Tomogr 2010;34: 52-57. PMID: 20118722

2. **Grimm LJ**, Maxfield CM. [US Graduate Radiology Training] Chin J Radiol 2011;45(11):1083-85. Chinese.

3. Feuerlein S, **Grimm LJ**, Davenport MS, Haystead CM, Miller CM, Neville AM, Jaffe TA. Can the localization of primary colonic tumors be improved by staging CT without specific bowel preparation compared to optical colonoscopy? Eur J Radiol 2012;81(10):2538-42. PMID: 22209431

4. **Grimm LJ**, Feuerlein S, Bashir M, Nelson RC. Effectiveness of a breath hold monitoring system in improving the reproducibility of different breath-hold positions in multiphasic CT imaging. Clin Imaging. 2012;36(6):754-7. PMID: 23154005

5. **Grimm LJ**, Coleman RE. Assessing the utility of the ventilation phase in ventilation-perfusion imaging for acute pulmonary embolism. Nucl Med Commun. 2013;34(1):1-4.

PMID: 23111382

6. Wang YE, Liu M, Jin L, Lungren MP, **Grimm LJ**, Zhang Z, Maxfield CM. Radiology education in China. J Am Coll Radiol. 2013;10(3):213-219. PMID: 23571062

7. **Grimm LJ**, Engstrom BI, Nelson R, Kim CY. Incidental detection of nutcracker phenomenon on multidetector CT in an asymptomatic population: prevalence and associated findings. J Comput Assist Tomogr. 2013;37(3):415-8. PMID: 23674014

8. **Grimm LJ**, Maxfield CM. Ultimate publication rate of unpublished manuscripts listed on radiology residency applications. Acad Med. 2013;88(11):1719-22. PMID: 24072127

9. **Grimm LJ**, Maxfield CM. A Proposal to Reduce Misrepresentation of Medical Student Research Activities in ERAS. Acad Med. 2014;89(6):833. PMID: 24865825

10. **Grimm LJ**, Shapiro LM, Singhapricha T, Mazurowski MA, Desser T, Maxfield CM. Predictors of an academic career on radiology residency applications. Acad Rad. 2014;21(5):685-90. PMID: 24629444

11. **Grimm LJ**, Kuzmiak CM, Ghate SV, Yoon SC, Mazurowski MA. Radiology resident mammography training: interpretation difficulty and error making patterns. Acad Rad. 2014;21(7):888-92. PMID: 24928157

12. **Grimm LJ**, Ghate SV, Yoon SC, Kuzmiak CM, Kim C, Mazurowski MA. Predicting error in detecting mammographic masses among radiology trainees using statistical models based on BI-RADS features. Med Phys. 2014;41(3):031909. PMID: 24593727

13. Mazurowski MA, Zhang J, **Grimm LJ**, Yoon S, Silber Z. Radiogenomic analysis of breast cancer: Luminal B molecular subtype is associated with enhancement dynamics in MRI. Radiology. 2014;273(2):365-72. PMID: 25028781

14. **Grimm LJ**, Desser TS, Bailey J, Maxfield MA. Applicant to residency program translation guide. JACR. 2015;12(6)622-3. PMID: 25620237

15. **Grimm LJ,** Anderson A, Baker JA, Johnson KS, Walsh R, Yoon S, Ghate S. Interobserver Variability Between Breast Imagers Using the Fifth Edition of the BI-RADS MRI Lexicon. AJR. 2015;204(5):1120-4. PMID: 25905951

16. **Grimm LJ,** Johnson KS, Marcom PK, Baker JA, Soo MS. Can breast cancer molecular subtype help select patients for preoperative MRI? Radiology. 2015;274(2):352-8. PMID: 25325325

17. Engstrom BI, **Grimm LJ**, Ronald JS, Smith TP, Kim CY. Accessory veins in nonmaturing autogenous arteriovenous fistulae: analysis of hemodynamic significance. Seminars in Dialysis. 2015;28(3):E30-4. PMID: 25482275

18. **Grimm LJ,** Anderson A, Baker JA, Johnson KS, Walsh R, Yoon SC, Ghate S. Frequency of malignancy and imaging characteristics of probably benign lesions seen on breast MRI. AJR. 2015;205(2):442-7. PMID: 26204298

19. **Grimm LJ**, Zhang J, Mazurowski MA. Computational approach to radiogenomics of breast cancer: Luminal A and luminal B molecular subtypes are associated with imaging features on routine breast MRI extracted using computer vision algorithms. JMRI. 2015;42(4):902-7. PMID: 25777181

20. Zhang Z, **Grimm LJ,** Lo JY, Johnson KS, Ghate SV, Walsh R, Mazurowski MA. Does trainee experience in breast imaging translate into improved performance with this new modality? JACR 2015;12(7):728-32. PMID: 26143567

21. **Grimm LJ,** Nagler A, Maxfield CM. Survey of the incidence and effect of major life events on graduate medical education trainees. Med Ed Online. 2015;20:27597. PMID: 26070948

22. Mazurowski MA, **Grimm LJ,** Zhang J, Marcom PK, Yoon SC, Kim CE, Johnson KS. Recurrence-free survival in breast cancer is associated with MRI tumor enhancement dynamics quantified using computer algorithms. Eur J Radiol. 2015;84(11):2117-22. PMID: 26210095

23. **Grimm LJ,** Avery CS, Maxfield CM. Residency Postinterview Communications: More Harm Than Good? JGME;8(1):7-9. PMID: 26913094.

24. **Grimm LJ**, Johnson KS, Yoon SC, Kim CE, Ghate SV, Soo MS. Abbreviated Screening Protocol for Breast MRI: A Feasibility Study. Acad Rad. 2015;22(9):1157-1162. PMID: 26152500

25. **Grimm LJ,** Zhang Z, Lo JY, Johnson KS, Ghate SV, Walsh R, Mazurowski MA. Radiology trainee performance in digital breast tomosynthesis: relationship between difficulty and error-making patterns. JACR. 2016:13(2):198-202. PMID: 26577878

26. Lewis D, **Grimm LJ**, Kim CY. Left renal vein compression as cause for varicocele: Prevalence and associated findings on contrast-enhanced CT. Abdom Imaging. 2015;40(8):3147-51. PMID: 26210372

27. Myers ER, Moorman P, Gierisch JM, Havrilesky LJ, **Grimm LJ**, Ghate S, Davidson B, Chatterjee Montgomery R, Crowley MJ, McCrory DC, Kendrick A, Sanders GD. Benefits and Harms of Breast Cancer Screening: A Systematic Review. JAMA. 2015;314(15):1615-34. PMID: 26501537

28. **Grimm LJ**, Ngo JS, Pisano ED, Yoon S. Men (and women) in radiology: How can we reduce the gender discrepancy. AJR. 2016;206(4):678-80. PMID: 27003048.

    a. **Grimm LJ**, Ngo JS, Pisano ED, Yoon S. Reply to "Reducing gender discrepancies in academic radiology" AJR. 2016;207(5):W105 PMID: 27490634

29. Burke C, **Grimm LJ**, Boyle M, Moorman CT, Hash T. Imaging proximal tibiofibular instability: A 10 year retrospective case series. Clin Imaging 2016;40(3):470-6. PMID: 27133689

30. **Grimm LJ.** Breast MRI Radiogenomics: Current Status and Research Implications. JMRI. 2016;43(6):1269-78. PMID: 26663695

31. Saha A, **Grimm LJ** Harowicz M, Ghate SV, Kim C, Walsh R, Mazurowski MA. Interobserver variability in identification of breast tumors in MRI and its implications for prognostic biomarkers and radiogenomics. Med Phys. 2016;43(8):4558. PMID: 27487872.

32. **Grimm LJ**, Avery CS, Maxfield CM. Recommendations to reduce diagnostic radiology resident misrepresentation in post-interview communications. JACR 2016;13(8):964-6. PMID: 27209597

33. **Grimm LJ**, Hwang ES. Active Surveillance for DCIS: The Importance of Selection Criteria and Monitoring. Ann Surg Oncol. 2016;23(13):4134-4136. PMID: 27704372

34. Cho MW, **Grimm LJ**, Johnson KS. Focal breast pain: Does breast density affect the need for ultrasound? Acad Rad. 2017;24(1):53-59. PMID:27746121

35. Wang M, Zhang J, **Grimm LJ**, Ghate SV, Walsh R, Johnson KS, Lo J, Mazurowski MA. Predicting false negative errors in digital breast tomosynthesis among radiology trainees using a computer vision-based approach. Expert Syst Appl. 2016;56(C):1-8.

36. **Grimm LJ**, Zhang J, Baker JA, Soo MS, Johnson KS, Mazurowski MA. Relationships between MRI Breast Imaging-Reporting and Data System (BI-RADS) lexicon descriptors and breast cancer molecular subtypes: internal enhancement is associated with luminal B subtype. The Breast J. 2017;23(5):579-82. PMID: 28295860.

37. Wang M, Wang M, **Grimm LJ**, Mazurowski MA. A Computer Vision-based Algorithm to Predict False Positive Errors in Radiology Trainees When Interpreting Digital Breast Tomosynthesis Cases. Expert Syst Appl. 2016;64(1):490-9.

38. **Grimm LJ**, Johnson DY, Johnson KS, Baker JA, Soo MS, Hwang ES, Ghate SV. Suspicious breast calcifications undergoing stereotactic biopsy in women ages 70 and over: Breast cancer incidence by BI-RADS descriptors. Eur Rad. 27(6):2275-81. PMID: 27752832.

39. Harowicz M, Saha A, **Grimm LJ**, Marcom PK, Marks JR, Hwang ES, Mazurowski MA. Can algorithmically-assessed MRI features predict which patients with a preoperative diagnosis of ductal carcinoma in situ are upstaged to invasive breast cancer? JMRI 2017;46(5):1332-40. PMID: 28181348

40. Cater SW, Krishnan L, **Grimm LJ**, Garibaldi B, Green I. Developing an Introductory

Radiology Clerkship at Perdana University Graduate School of Medicine in Kuala Lumpur, Malaysia. Health Prof Ed. 2017;3(2): 113-7.

41. Campbell J, Yoon S, Cater S, **Grimm LJ**. Factors Influencing the Gender Breakdown of Academic Radiology Residency Programs. JACR. 2017;14(7):958-962. PMID: 28427906

42. Shi B, **Grimm LJ,** Mazurowski MA, Baker JA, Marks JR, King LM, Maley CC, Hwang ES, Lo JY. Can occult invasive disease in ductal carcinoma in situ be predicted using computer-extracted mammographic features? Acad Rad 2017;24(9):1139-47. PMID: 28506510

43. **Grimm LJ**, Lowell DA, Cater SW, Yoon SC. Differential motivations for pursuing diagnostic radiology by gender: Implications for residency recruitment. Acad Rad 2017;24(10):1312-1317. PMID: 28552374

44. **Grimm LJ**, Ghate SV, Hwang ES, Soo MS. Imaging features of patients undergoing active surveillance for ductal carcinoma in situ. Acad Rad 2017;24(11):1364-71 PMID: 28705686

45. **Grimm LJ**, Ryser M, Partridge A, Alastair T, Hwang ES. Surgical upstaging rates for vacuum assisted biopsy proven DCIS: implications for active surveillance trials. Ann Surg Onc 2017;24(12):3534-3540. PMID: 28795370

46. **Grimm LJ**, Ryser M, Hyslop T. Pre-operative variables are critical in reducing the rate of occult invasive disease for women considering active surveillance for DCIS. JAMA Surg 2018;153(3):290-291. PMID: 29344621

47. **Grimm LJ,** Viradia NK, Johnson KS. Normal Axillary Lymph Node Variability Between White and Black Women on Breast MRI. Acad Rad. 2018;25(3):305-308. PMID: 29195786.

48. Cater SW, Yoon SC, Lowell DA, Campbell JC, Sulioti G, Qin R, Jiang B, **Grimm LJ**. Bridging the Gap: Identifying Global Trends in Gender Disparity among the Radiology Physician Workforce. Acad Rad 2018:25(8):1052-61. PMID: 29398433

49. Campbell JC, Yoon SC, **Grimm LJ.** Collaboration Metrics Among Female and Male Researchers: A 5-Year Review of Publications in Major Radiology Journals. Acad Rad 2018;25(7):951-954. PMID: 29887278.

50. Shi B, **Grimm LJ**, Mazurowski MA, Baker JA, Marks JR, King LM, Maley CC, Hwang ES, Lo JY. Prediction of occult invasive disease in ductal carcinoma in situ using deep learning features. JACR 2018;15(3B):527-534. PMID: 29398498

51. **Grimm LJ**, Shelby RA, Knippa EE, Langman EL, Miller LS, Whiteside BE, Soo MS. Patient perceptions of breast cancer risk in imaging-detected low risk scenarios and thresholds for desired intervention: a multi-institution survey. JACR 2018;15(6):911-919.

PMID: 29606632.

52. **Grimm LJ,** Bookhout CE, Bentley RC, Jordan SG, Lawton TJ. Concordant, Non-Atypical Breast Papillomas Do Not Require Surgical Excision: A 10-year Multi-Institution Study and Review of the Literature. Clin Imag 2018;1(51):180-185. PMID: 29859481.

53. Force J, Holl E, Brown M, Marcom P, **Grimm L**, Boczkowski D, Frazier V, Herndon JE, Bigner DD, Hwang ES, Gromeier M, Nair, S. Recombinant oncolytic poliovirus combined with checkpoint blockade for breast cancer therapy. J Clin Onc 2018;36:15 suppl, e12641-e12641.

54. Saha A, Harowicz M, **Grimm LJ**, Kim C, Ghate S, Walsh R, Mazurowski M. A machine learning approach to radiogenomics of breast cancer: a study of 922 subjects and 529 DCE-MRI features. Br J Cancer 2018;119(4):508-516. PMID: 30033447.

55. Aminololama-Shakeri S, Soo MS, **Grimm LJ**, Watts MR, Poplack SP, Rapelyea J, Saphier N, Stack R, Destounis S. Radiologist-patient communication: current practices and barriers to communication in breast imaging. JACR 2019;16(5):709-716. PMID: 30580958.

56. **Grimm LJ**, Saha A, Ghate SV, Kim C, Soo MS, Yoon S, Mazurowski MA. Relationship between background parenchymal enhancement on high-risk screening MRI and future breast cancer risk. Acad Rad 2019;26(1):69-75 PMID: 29602724.

57. **Grimm LJ**, Shelby RA, Knippa EE, Langman EL, Miller LS, Whiteside BS, Soo MS. Frequency of Breast Cancer Thoughts and Lifetime Risk Estimates: A Multi-Institutional Survey of Women Undergoing Screening Mammography. JACR 2019;16(10):1393-1400. PMID: 30826236

58. Goldman D, Martin J, Bercu Z, Newsome J, **Grimm LJ**. Differential Motivations for Pursuing Interventional Radiology: Implications for Residency Recruitment. JACR 2019;16(1):82-88. PMID: 30243820.

59. Campbell JC, Yoon SC, **Grimm LJ**. Authorship and Impact of Gender-Specific Research in Major Radiology Journals. JACR 2019;16(2):240-243. PMID: 30722843

60. Ryser MD, Weaver DL, Zhao F, Worni M, **Grimm LJ**, Gulati R, Spiegelhalter D, Etzioni R, Hyslop T, Lee SJ, Hwang ES. Cancer outcomes in DCIS patients without locoregional treatment. JNCI 2019;111(9):952-960. PMID: 30759222

61. Saha A, **Grimm LJ,** Ghate SV, Kim CE, Soo Ms, Yoon SC, Mazurowski MA. Machine learning-based prediction of future breast cancer using algorithmically measured background parenchymal enhancement on high-risk screening MRI. JMRI 2019;50(2):456-464. PMID: 30648316.

62. Maxfield CM, Thorpe MP, Desser TS, Heitkamp D, Hull NC, Johnson KS, Koontz NA, Mlady GW, Welch TJ, **Grimm LJ**. Bias in radiology resident selection: Do we discriminate against the obese and unattractive? Acad Med 2019;94(11):1774-1780 PMID: 31149924.

63. Pamarthi V, **Grimm LJ**, Johnson KS, Maxfield CM. Hybrid interactive and didactic teaching format improves resident retention and attention compared to traditional lectures. Academic Radiology Acad Radiol 2019;26(9);1269-1273. PMID: 31085099.

64. **Grimm LJ,** Miller MM, Thomas SM, Liu Y, Lo JY, Hwang ES, Hyslop T, Ryser MD Growth dynamics of mammographic calcifications: differentiating DCIS from benign breast disease. Radiology 2019;292(1):77-83. PMID: 31112087

65. Aminololama-Shakeri S, Soo MS, **Grimm LJ**, Watts MR, Poplack SP, Rapelyea J, Saphier N, Stack R, Destounis S. Screening guidelines and supplemental screening tools: Assessment of the Adequacy of Patient-Provider Discussions. JBI 2019;1(2):109-114.

66. Baker JA, **Grimm LJ,** Johnson KS. A Proposal to Define Three New Breast Calcification Shapes – Square, Sandwich, and Teardrop, Pill & Capsule. JBI 2019;1(3)186-191.

67. Shehata M, **Grimm LJ**, Ballantyne N, Lourenco A, DeMello LR, Kilgore MR, Rahbar H, MD. Ductal Carcinoma in Situ – Current Concepts in Biology, Imaging, and Treatment. JBI 2019;1(3):166-176. PMID: 31538141.

68. Maxfield, CM, **Grimm LJ**. The value of numerical USMLE Step 1 scores in radiology resident selection Academic Radiology. Acad Rad *[ePub ahead of print]*. PMID: 31445825

69. **Grimm LJ**, Redmond RA, Campbell JC, Rosette AS. Gender and racial bias in radiology residency letters of recommendation. JACR 2020; 17(1):64-71. PMID: 31494103.

70. Hou R, Mazurowski MA, **Grimm LJ**, Marks JR, King LM, Maley CC, Hwang ES, Lo JY. Prediction of upstaged ductal carcinoma in situ using forced labeling and domain adaption. IEEE Trans Biomed Eng. 2019;67(6):1565-1572 PMID: 31502960

71. **Grimm LJ**, Mazurowski MA. Breast cancer radiogenomics: Current status and future directions. Acad Rad 2020;27(1):39-46. PMID: 31818385.

72. Zhu Z, Harowicz M, Zhang J, Saha A, **Grimm LJ**, Hwang ES, Mazurowski MA. Deep learning analysis of breast MRIs for prediction of occult invasive disease in ductal carcinoma in situ. Comput Biol Med. 2019;115:103498. PMID: 31698241

73. Selvakumaran V, Hou R, Baker JA, Yoon SC, Ghate SV, Walsh R, Litton TP, Lu L, Devalapalli A, Kim C, Soo M, Hwang ES, Lo JY, **Grimm LJ**. Predicting upstaging of DCIS to invasive disease: radiologist's predictive performance. Acad Rad *[Epub ahead of print]* PMID: 32001164

74. Ballantyne N, Chen YA, Rahbar H, **Grimm LJ.** Multimodality Imaging of Ductal Carcinoma in Situ. Curr Br Ca Reports 2020 12:26-35. https://doi.org/10.1007/s12609-019-00349-9

75. Maxfield CM, Thorpe M, Desser T, Heitkamp D, Hull N, Johnson K, Koontz NA, Mlady G, Welch T, **Grimm LJ.** Awareness of implicit bias mitigates discrimination in radiology resident selection. Med Ed 2020 *[Epub ahead of print]* PMID: 32119145

76. Devalapalli A, Thomas S, Mazurowski MA, Saha A, **Grimm LJ**. Performance of preoperative breast MRI based on breast cancer molecular subtype. Clin Imag *[ePub ahead of print]* PMID: 32619774

77. Ong CT, Ren Y, Thomas SM, Stashko I, Hyslop T, Goode V, Kimmick G, Blitzblau RC, Hwang ES, **Grimm LJ**, Greenup RA. Overall health at diagnosis predicts the risk of complications within the first year after breast cancer diagnosis. Br Ca Res Treat 2020;182(2):439-449. PMID: 32468334

78. **Grimm LJ**. Destounis SV, Rahbar H, Soo MS, Poplack SP. Ductal Carcinoma In Situ Biology, Language, and Active Surveillance: A Survey of Breast Radiologists' Knowledge and Opinions. JACR *[ePub ahead of print]* PMID: 32278849

79. **Grimm LJ**, Neely B, Hou R, Selvakumaran V, Baker JA, Yoon SC, Ghate SV, Walsh R, Litton TP, Devalapalli A, Kim C, Soo MSS, Hyslop T, Hwang ES, Lo JY. Mixed-methods study to predict upstaging of DCIS to invasive disease on mammography. AJR *[Accepted]*

80. Plichta JK, Williamson H, Sergesketter AR, **Grimm LJ**, Thomas SM, DiLalla G, Zwischenberger BA, Hwang ES, Plichta RP. It's not you, it's me: The influence of gender on patient satisfaction scores. Am J Surg. *[Accepted]*

81. Taylor-Cho MW, Ronald J, **Grimm LJ**, Johnson KS, Martin JG, Schooler GR, Maxfield CM. Knowledge retention in radiology residents for audience response system versus traditional hot seat conference. J Am Coll Radiol. *[ePub ahead of print]* PMID: 32735919

82. Maxfield CM, Thorpe MP, Koontz NA, **Grimm LJ.** You're biased! Deal with it. JACR *[Accepted]*

83. Dodelzon K, **Grimm LJ,** Tran K, Dontchos B, Destounis S, Dialani V, Dogan B, Sonnenblick E, Zuley M, Milch H. Impact of COVID-19 on Breast Imaging Practice Operations and Recovery Efforts – A North American Study. JBI *[Accepted]*

84. **Grimm LJ.** Radiomics: A Primer for Breast Radiologists. JBI *[Accepted]*

85. Milch AS, **Grimm LJ**, Plimpton SR, Tran K, Markovic D, Dontchos B, Destounis S, Dialani V, Dogan BE, Sonnenblick EB, Zuley ML, Dodelzon K. COVID-19 and Breast

Radiologist Wellness: Impact of Gender, Financial Loss and Childcare Need. JACR *[Accepted]*

86. Chalfant JS, Pittman SM, Kothari PD, Chong A, **Grimm LJ**, Sohlich RE, Leung JWT, Downey JR, Cohen EO, Ojeda-Fournier H, Hoyt AC, Joe BN, Feig SA, Trinh L, Rosen EL, Aminololama-Shakeri S, Ikeda DM. Impact of the COVID-19 Pandemic on Breast Imaging Education. JBI *[Accepted]*

87. Chalfant JS, Cohen EO, Leung JWT, Pittman SM, Kothari PD, Downey JR, Sohlich RE, Chong A, **Grimm LJ**, Hoyt AC, Ojeda-Fournier H, Joe BN, Trinh L, Rosen EL, Feig SA, Aminololama-Shakeri S, Ikeda DM. Adaptations of Breast Imaging Centers to the COVID-19 Pandemic: A Survey of California and Texas. JBI *[Accepted]*

88. Tait S, Oshima SM, Fish L, Greenup R, **Grimm LJ**. Primary Care Provider Perspectives on Screening Mammography in Older Women: A Qualitative Study. Preventive Medicine Reports *[Accepted]*

Non-refereed Publications

1. **Grimm LJ**. Screening for breast cancer in average-risk women. Ann Int Med 2019;171(6): 450. PMID: 31525747

2. Maxfield CM, **Grimm LG**. Appearance-based discrimination in GME resident selection. Acad Med. 2019. Available at: http://academicmedicineblog.org/appearance-based-discrimination-in-gme-resident-selection/

3. **Grimm LJ**. Major Factors Driving Expert Opinion on Preoperative Breast MRI Do Not Predict Additional Disease. Radiology: Imaging Cancer. 2020;2(4):e200025. https://doi.org/10.1148/rycan.2020200025

4. **Grimm LJ**. Healthcare Costs Must Be Placed in Context. JAMA: Int Med. [*Accepted]*

5. **Grimm LJ.** Editorial for "Harmonization of quantitative parenchymal enhancement in T1-weighted breast MRI" JMRI. *[ePub ahead of print]* PMID: 32491242

6. **Grimm LJ**. Editorial for "Accuracy of preoperative breast MRI versus conventional imaging in measuring pathological extent of invasive lobular carcinoma" JBI *[Accepted]*

Oral/Poster Presentations

1. Covey AS, **Grimm L**, Bernstein J. Musculoskeletal curriculum in US medical schools during the Bone & Joint Decade. Health Policy Fellows Reception at American Academy of Orthopedic Surgery Annual Meeting, San Diego, CA. 2007, Feb.

2. **Grimm LJ**, Galante NJ, Alian AA, Silverman DG, Shelley KH. Differing responses of forehead and finger plethysmograph width to hypovolemia. American Society of

Anesthesiology Annual Meeting, Orlando, FL. 2008, Oct.

3. **Grimm LJ**, Galante NJ, Alian AA, Shelley KH, Silverman DG. Influence of heart rate on changes in plethysmographic width during hypovolemia. American Society of Anesthesiology Annual Meeting, Orlando, FL. 2008, Oct.

4. Galante NJ, **Grimm LJ**, Alian AA, Silverman DG, Shelley KH. Change in plethysmographic waveform of amplitude during hypovolemia: finger vs. forehead. American Society of Anesthesiology Annual Meeting, Orlando, FL. 2008, Oct.

5. Alian AA, Galante NJ, **Grimm LJ**, Jakab EA, Silverman DG. Heart rate and heart variability as indicators of baroreceptor response to volume replacement. American Society of Anesthesiology Annual Meeting, Orlando, FL. 2008, Oct.

6. Galante NG, Alian AA, **Grimm LJ**, Silverman DG, Shelley KH. The ear PPG oscillates at the 0.12-0.18 Hz autonomic frequency during lower body negative pressure. American Society of Anesthesiology Annual Meeting, Orlando, FL. 2008, Oct.

7. **Grimm LJ**, Cornfeld D, Muhs B, Huber S, Tal M, Mojibian HR. Technical and diagnostic pitfalls of multidetector CT angiography (MDCTA) in trauma victims: a review for interventionalists. Society of Interventional Radiology Annual Meeting, San Diego, CA. 2009, Mar.

8. **Grimm L**, Aruny J, Tal MG, Muhs B, Moin EIA, Mojibian HR. Technical and diagnostic pitfalls of multidetector CT angiography (MDCTA) in interventional planning: a review for interventionalists. Cardiovascular and Interventional Radiological Society of Europe Annual Meeting, Lisbon, Portugal. 2009, Sep.

9. **Grimm LJ**, Feuerlein S, Davenport MS, Haystead CM, Miller CM, Neville AM, Jaffe TA. Localization of primary colonic tumors: A comparison of CT and colonoscopy. Radiological Society of North America Annual Meeting, Chicago, IL. 2011, Nov.

10. **Grimm LJ**, Coleman RE. Assessing the utility of the ventilation phase in ventilation-perfusion imaging for acute pulmonary embolism: Is it necessary? Radiological Society of North America Annual Meeting, Chicago, IL. 2012, Nov.

11. Engstrom BI, **Grimm LJ,** Miller M Jr, Smith TP, Kim CY. Accessory veins in failure-to-mature autogenous AV fistulas: correlation with fistula caliber changes and success rates of maturation after coil embolization. Society of Interventional Radiology Annual Meeting, New Orleans, LA. 2013, Apr.

12. **Grimm LJ**, Maxfield CM. Ultimate publication rate of unpublished manuscripts listed on radiology residency applications. Association of University Radiologists Annual Meeting, Los Angeles, CA. 2013, Apr.

13. **Grimm LJ**, Soo MS, Baker JA, Johnson KS. Can breast cancer molecular subtypes help

select patients for preoperative MRI? Radiological Society of North America Annual Meeting, Chicago, IL. 2013, Nov.

14. **Grimm LJ**, Shapiro LM, Singhapricha T, Mazurowski MA, Desser T, Maxfield CM. Predictors of an academic career on radiology residency applications. Association of University Radiologists Annual Meeting, Baltimore, MD. 2014, Apr.

15. Lewis DS, **Grimm LJ**, Kim CY. Left renal vein compression as cause for varicocele: Prevalence and associated findings on contrast-enhanced CT. Radiological Society of North America Annual Meeting, Chicago, IL. 2014, Nov.

16. **Grimm LJ**, Zhang J, Johnson KS, Lo JY, Mazurowski MA. Incorporating breast tomosynthesis into radiology residency: Does trainee experience in breast imaging translate into improved performance with the new modality? SPIE Medical Imaging, Orlando, FL. 2014, Feb.

17. **Grimm LJ**, Johnson KS, Bentley R, Walsh R. Atypical Ductal Hyperplasia: Controversies in Diagnosis and Management. Radiological Society of North America Annual Meeting, Chicago, IL. 2015, Nov.

18. **Grimm LJ**, Johnson KS, Baker JA, Soo MS, Ghate SV. Suspicious Breast Calcifications in Women Over Age 70: Are Some Safe to Follow? Radiological Society of North America Annual Meeting, Chicago, IL. 2015, Nov.

19. Cho MW, **Grimm LJ**, Johnson KS. Focal Breast Pain: Does Breast Density Affect the Need for Ultrasound? Radiological Society of North America Annual Meeting, Chicago, IL. 2015, Nov.

20. Wang M, Zhang J, **Grimm LJ**, Ghate SV, Walsh R, Johnson KS, Lo JY, Mazurowski MA. Identification of error making patterns in lesion detection on digital breast tomosynthesis using computer-extracted image features. SPIE Medical Imaging, San Diego, CA. 2016, Mar.

21. Shi B, **Grimm LJ**, Mazurowski MA, Marks J, King L, Maley CC, Hwang ES, Lo JY. Prediction of occult invasive disease in ductal carcinoma in situ using computer-extracted mammographic features. SPIE Medical Imaging, Orlando, FL. 2017, Feb.

22. Shi B, **Grimm LJ**, Mazurowski MA, Marks J, King L, Maley CC, Hwang ES, Lo JY. Can upstaging of ductal carcinoma in situ be predicted at biopsy by histologic and mammographic features?. SPIE Medical Imaging, Orlando, FL. 2017, Feb.

23. **Grimm LJ**, Ghate SV, Hwang ES, Soo MS. Imaging features and outcomes of patients undergoing active surveillance for ductal carcinoma in situ. Society of Breast Imaging, Los Angeles, CA. 2017, April.

24. Cater SW, Yoon SC, Lowell DA, Campbell J, Sulioti G, Qin R, Jiang B, **Grimm LJ**. Bridging the Gap: Identifying Global Trends in Gender Disparity among the Radiology Physician Workforce. Association of University Radiologists Annual Meeting, Hollywood, FL. 2017, May.

25. **Grimm LJ**, Shelby R, Eads E, Miller LS, Whiteside BE, Langman EL, Soo MS. Patient perceptions of breast cancer risk and thresholds for intervention: a multi-institutional survey. Radiological Society of North America, Chicago, IL. 2017, Nov.

26. Shi B, **Grimm LJ**, Mazurowski MA, Baker JA, Marks JR, King LM, Maley CC, Hwang ES, Lo JY. Prediction of occult invasive disease in ductal carcinoma in situ using deep learning features. San Antonio Breast Cancer Symposium, San Antonio, TX. 2017, Dec.

27. Zhe Z, Harowicz M, Zhang J, Saha A, **Grimm LJ,** Hwang ES, Mazurowski MA. Deep learning-based features of breast MRI for prediction of occult invasive disease following a diagnosis of ductal carcinoma in situ: preliminary data. SPIE Medical Imaging, Houston, TX. 2018, Feb.

28. Saha A, Harowicz M, **Grimm L**, Kim C, Ghate S, Walsh R, Mazurowski M. Association of high proliferation marker Ki-67 expression with DCEMR imaging features of breast: a large scale evaluation. SPIE Medical Imaging. Houston, TX. 2018, Feb

29. Zhang J, Ghate SV, **Grimm LJ**, Cain H, Zhu Z, Mazurowski MA. Convolutional encoder-decoder for breast mass segmentation in digital breast tomosynthesis. SPIE Medical Imaging, Houston, TX. 2018, Feb.

30. Saha A, Harowicz MR, **Grimm LJ,** Kim CE, Ghate SV, Walsh R, Mazurowski MA. Association of high proliferation marker Ki-67 expression with DCE-MR imaging features of breast: A large scale evaluation. SPIE Medical Imaging, Houston, TX. 2018, Feb.

31. Hui R, Shi B, Grimm LJ, Mazurowski MA, Marks JR, King LM, Maley CC, Hwang ES, Lo JY. Improved classification with forced labeling of other related classes: application to prediction of upstaged ductal carcinoma in situ using mammographic features. SPIE Medical Imaging, Houston, TX. 2018, Feb.

32. Shi B, Rui H, Mazurowski MA Grimm LJ, Ren Y, Marks JR, King LM, Maley CC, Hwang ES, Lo JY. Learning better deep features for the prediction of occult invasive disease in ductal carcinoma in situ through transfer learning. SPIE Medical Imaging, Houston, TX. 2018, Feb.

33. Hou R, Shi B, **Grimm L**, Mazurowski M, Marks J, King L, Maley C, Hwang ES, Lo J. Improving classification with forced labeling of other related classes: application to prediction of upstaged ductal carcinoma in situ using mammographic features. SPIE Medical Imaging, Houston, TX. 2018, Feb.

34. Campbell JC, Yoon SC, **Grimm LJ.** Female Researchers Are Better Collaborators: A 5-

Year Review of Publications in Major Radiology Journals. Association of University Radiologists Annual Meeting, Orlando, FL. 2018, May.

35. Pamarthi V, **Grimm LJ**, Johnson KJ, Maxfield CM. 30/30 lectures improve resident attention and retention compared to traditional didactics. Association of University Radiologists Annual Meeting, Orlando, FL. 2018, May.

36. Ong CT, Ren Y, Thomas SM, Stashko I, Hyslop T, Goode V, Kimmick G, Blitzblau RC, Hwang ES, **Grimm L**, Greenup RA. Overall health at diagnosis predicts the risk of complications within the first year after breast cancer diagnosis and treatment. American Society of Breast Surgeons, Orlando, FL. 2018, May.

37. Campbell J, Yoon SC, **Grimm LJ.** Authorship and Impact of Gender Specific Research in Radiology: A 5-Year Review of Publications in Radiology Journals. American College of Radiology Annual Meeting. Washington, DC. 2018, May.

38. Plichta JK, Vernia H, **Grimm LJ**, Sergesketter AR, Thomas SM, Hwang S, Plichta RP. It's Not You, It's Me: The Influence of Surgeon Gender on Patient Satisfaction Scores. Annual Clinical Congress of the American College of Surgeons. Boston, MA, 2018, Oct.

39. Maxfield, C, Thorpe M, Desser T, Heitkamp D, Hull N, **Grimm L**, Johnson K, Koontz N, Mlady G, Welch T. Appearance-Based Discrimination in Radiology Resident Selection. Radiological Society of North America. Chicago, IL. 2018, Nov.

40. Ren Y. Hou R, Kong D, Geng Y, **Grimm LJ**, Marks JR, Lo JY. Multiview mammographic mass detection based on a single shot detection system. SPIE Medical Imaging. San Diego, CA. 2019, Mar.

41. Kong D, Ren Y, Hou R, **Grimm L**, Marks J, Lo J. Synthesis and texture manipulation of screening mammograms using conditional generative adversarial network. SPIE Medical Imaging. San Diego, CA. 2019, Mar.

42. Hou R, Ren Y, **Grimm L**, Mazurowski M, Marks J, King L, Maley C, Hwang ES, Lo J. Malignant microcalcification clusters detection using unsupervised deep autoencoders. SPIE Medical Imaging. San Diego, CA. 2019, Mar.

43. Miller M, Ryser MS, Thomas SM, Liu Y, Lo J, Hwang ES, Hyslop T, **Grimm LJ**. Growth dynamics of mammographic calcifications: differentiating DCIS from benign breast disease. Society of Breast Imaging Annual Meeting. Hollywood, FL. 2019, Apr

44. Ren Y, Zhu Z, Li Y, Kong D, Hou R, **Grimm LJ,** Marks JR, Lo JY. Mask embedding for realistic high-resolution medical image synthesis. MICCAI. Shenzhen, China. 2019, Oct

45. Hou R, **Grimm LJ**, Mazurowski MA, Marks JR, King LM, Maley CC, Hwang ES, Lo, JY. A multitask deep learning method in simultaneously predicting occult invasive disease in ductal carcinoma in-situ and segmenting microcalcifications in mammography. SPIE

Medical Imaging. Houston, TX. 2020, Feb.

46. Peng Y, Hou R, Ren Y, **Grimm LJ,** Marks JR, Hwang ES, Lo, Jy. Microcalcification Localization and Cluster Detection using Unsupervised Convolutional Autoencoders and Structural Similarity Index. SPIE Medical Imaging. Houston, TX. 2020, Feb.

47. **Grimm LJ.** Active surveillance for ductal carcinoma in situ. Radiological Society of North America. Virtual. 2020, Dec.

48. Chalfant J, Pittman S, Kothari P, Chong A, **Grimm L**, Sohlich R, Leung J, California Breast Density Information Group, Ikeda DM. Impact of the COVID-19 pandemic on breast imaging trainee education. Society of Breast Imaging Annual Meeting. Virtual. 2021, Apr.

49. Byng D, Retel VP, van Harten WH, Rushing CN, Thomas SM, Lynch T, McCarthy A, Francescatti AB, Frank ES, Partridge AH, Thompson AM, **Grimm L**, Hyslop T, Hwang ES, Ryser MD. Disparities in Surveillance Imaging After Breast Conserving Surgery for Primary DCIS. ASCO 2021. *Accepted*

Book Publications

1. **Grimm LJ**. Renal, Pathology, Endocrine, and Musculoskeletal chapter contributing author. In: Le T, Bhushan V, Ozturk A, Rao DA, eds. *First Aid for the USMLE Step 1: A Student-to-Student Guide*. 17th ed. New York: The McGraw-Hill Companies; 2007.

2. Le T, Bhushan V, Rao DA, **Grimm LJ**, eds. *First Aid for the USMLE Step 1: A Student-to-Student Guide*. 18th ed. New York: The McGraw-Hill Companies; 2008.

3. Le T, Bhushan V, **Grimm LJ**, Vasan N, eds. *First Aid for the USMLE Step 1: A Student-to-Student Guide.* 19th ed. New York: The McGraw-Hill Companies; 2009.

4. **Grimm LJ**. Associate author. In: Le T, Bechis SK, eds. *First Aid Q&A for the USMLE Step 1*. 2nd ed. New York: The McGraw-Hill Companies; 2009.

5. Obeng-Gyasi S, **Grimm LJ**, Hwang ES, Klimberg VS, Bland KI. Indications and techniques for biopsy. In Bland KI, Copeland EM, Klimberg VS, Gradishar WJ, *The Breast. Comprehensive management of benign and malignant disease.* 5th ed. Philadelphia: Elsevier; 2018.

6. Soo MSS, **Grimm LJ,** Johnson KJ. Breast imaging in breast cancer survivors: screening for new breast cancers and for cancer recurrence. In Common Issues in Breast Cancer Survivors - A Practical Guide to Evaluation and Management *[Accepted]*

Position Statements/Society Guidelines

1. **Grimm L**, Destounis S, Dogan B, Nicholson B, Dontchos B, Sonnenblick E, Milch H, Pushkin J, Benson J, Dodelzon K, Modi N, Yang R, Dialani V, Perera V. SBI

Recommendations for the Management of Axillary Adenopathy in Patients with Recent COVID-19 Vaccination. Society of Breast Imaging. Available at: https://www.sbi-online.org/Portals/0/Position%20Statements/2021/SBI-recommendations-for-managing-axillary-adenopathy-post-COVID-vaccination.pdf?_zs=F5Fae1&_zl=QmvM7. Accessed 2/19/21.

2. Society of Breast Imaging: SBI Screening Mammography Recommendations for Women Receiving the COVID-19 Vaccine. Available at: https://www.sbi-online.org/Portals/1/End-the-Confusion-Materials/recommendations-for-women-taking-covid-vaccine_landscape.pdf?_zs=F5Fae1&_zl=0PXQ7. Accessed 2/19/21

Online Publications
Over 160 educational slideshows hosted on Medscape Reference. Full listing is available upon request.

MEDIA
1. COVID-19 Adenopathy

- Duke Health: Schedule Your Screening Mammogram Around Your COVID-19 Vaccine. Available at: https://www.dukehealth.org/blog/schedule-your-screening-mammogram-around-your-covid-19-vaccine Accessed 2/19/21
- NPR: Coronavirus FAQs: Mammograms, Vaccine Ingredients ... And Dogs Who Sniff Masks. Available at: https://www.npr.org/sections/goatsandsoda/2021/02/19/969486527/coronavirus-faqs-mammograms-vaccine-ingredients-and-dogs-who-sniff-masks. Accessed 2/20/21
- CBS 17: https://www.cbs17.com/video/duke-radiologist-warns-covid-19-vaccine-reaction-can-mimic-sign-of-breast-cancer/6315834/. Accessed 2/23/21
- ABC 11: https://abc11.com/covid-19-vaccine-could-cause-mammogram-result-confusion-doctors-say/10362252/. Accessed 2/23/21
- CNN: Mammograms pick up swelling due to Covid-19 vaccine, causing unnecessary fear, radiologists say. Available at: https://www.cnn.com/2021/03/02/health/swelling-mammograms-covid-19-vaccine-wellness/index.html. Accessed 3/2/21

2. Breast cancer risk perception

- Aunt Minnie: Women overestimate breast cancer risk, prefer biopsy. Available at: https://www.auntminnie.com/index.aspx?sec=ser&sub=def&pag=dis&ItemID=119398. Accessed 2/19/21.
- Aunt Minnie: Women worry about breast cancer. Available at: https://www.auntminnie.com/index.aspx?sec=ser&sub=def&pag=dis&ItemID=126703. Accessed 2/19/21

3. Abbreviated breast MRI

- Aunt Minnie: Shortened breast MR protocol works just as well as full. Available at: https://www.auntminnie.com/index.aspx?sec=ser&sub=def&pag=dis&ItemID=111426. Accessed 2/19/21.

4. Recruitment bias

- Aunt Minnie: Racial bias affects radiology residency letters. Available at: https://www.auntminnie.com/index.aspx?sec=ser&sub=def&pag=dis&ItemID=126463.

Accessed 2/19/21

INVITED LECTURES

Internal

1. Quality and Safety Review. Duke Review Course. 2015, Mar.

2. Breast Cancer Risk. Duke Radiology Technology Appreciation Week. 2015, Nov.

3. AUR GE Radiology Research Academic Fellowship Award. Duke Radiology Grand Rounds. 2015, Dec.

4. Quality and Safety Review. Duke Review Course. 2016, Mar.

5. Quality and Safety Review. Duke Review Course. 2017, Mar.

6. Quality and Safety Review. Duke Review Course. 2018, Mar.

7. Inequalities in Radiology: Gender, Race, and Appearance. Duke Radiology Grand Rounds. 2018, May.

8. Morbidity and Mortality. Duke Radiology Grand Round. 2018, December.

9. Quality and Safety Review. Duke Review Course. 2019, Mar.

External

1. DCIS: Overdiagnosis, Overtreatment, or Overblown Concern. XXII Curso de Actualización en Imágenes: Imágenes Mamarias. Clínica Alemana, Santiago, Chile. 2018, July.

2. Radiogenomics. Introduction to Comparative Effectiveness Research and Big Data Analytics for Radiology. Armed Forces Institute of Pathology. Siler City, MD. 2018, September.

3. Radiogenomics. Radiological Society of North America. Chicago, IL. 2018, Nov.

4. DCIS: Do All Patients Require Surgery/Tomosynthesis Guided Biopsies/MRI Guided Biopsies. 25th Annual North Carolina Radiological Society Breast Imaging Review Course. Charlotte, NC. 2019, Jan.

5. DCIS Active Surveillance. Society of Breast Imaging Annual Meeting. Hollywood, FL. 2019, Apr.

6. How to Study Imaging Outcomes. Association of University Radiologists Annual Meeting. Baltimore, MD. 2019, Apr.

7. Active Surveillance for DCIS. Visiting Professorship. Memorial Sloan Kettering Cancer Center. New York City, NY. 2019, May.

8. DCIS: Multimodality Imaging. British Society of Breast Radiology Annual Meeting, Bristol, UK. 2019, Nov.

9. Predicting Treatment Response by Subtype. Radiological Society of North America. Virtual. 2020, Nov.

10. Imaging of DCIS. Society of Breast Imaging Annual Meeting. Virtual. 2020, Apr.

COMMITTEES/INSTITUTIONAL MEMBERSHIPS

Duke ICGME – Resident Representative, 2010-2014
Medscape – Advisory Board Member, 2011-present
American Journal of Roentgenology - Resident Advisory Group Member, 2013-2015
Duke 3/2 Research Committee – Member, 2015-present
Duke Cancer Institute – Member, 2015-present
Alliance for Clinical Trials in Oncology – Member, 2016-present
Duke Institutional Review Board (IRB) – Member, 2016-present
Carl E Ravin Advanced Imaging Laboratories – Member, 2016-present
AUR Radiology Alliance for Health Services Research (RAHSR) – Membership Committee Member, 2017-2019; Chair, Rules Committee, 2020-2022; Associate Program Chair, 2021-present
Society of Breast Imaging (SBI) – Fellow, 2017-present
SBI Patient Care and Delivery Committee – Member, 2018-2020; Chair, 2020-2022
SBI Connect Committee – Member, 2018-2020
Alliance Prevention Committee – Member, 2018-present
Journal of Magnetic Resonance Imaging – Deputy Editor, 2018-present
Radiology Research Alliance Comparative Effectiveness Research Working Group – Member, 2018
British Society of Breast Radiology – Honorary member, 2019-present
AUR Radiology Research Alliance Task Force – Lead, 2020
AUR Scientific Program Committee, Women's Imaging – Member, 2020-2023
SBI/ACR Breast Imaging Symposium Program Committee – Member, 2021

AWARDS/MERITS

Winged Foot Scholar Athlete Award Winner – $10,000 scholarship, 2000
National Merit Scholarship Finalist - $2,500 scholarship, 2000
Yale Endowed Summer Research Fellowship - $5,000, 2005
Yale Endowed One Year Research Fellowship - $25,000, 2007-2008
RSNA Trainee Research Prize - $1,000 award, 2012
RSNA Trainee Research Prize - $1,000 award, 2013

Duke Clinical Science Research Day – Top 10 Poster, 2013
Roentgen Resident/Fellow Research Award – 2014
AUR GE Radiology Research Academic Fellowship (GERRAF) Award – 2015-2016
Duke Health Fellow – $20,000 award, 2016
AUR Radiology Research Alliance New Investigator Award – 2018

THESIS COMMITTEE
Forrest Andrew McDougal – Master's Thesis, Medical Physics, 2017
Xinyuan Chen – Master's Thesis, Medical Physics, 2017
TJ Sauer – Master's Thesis, Medical Physics, 2017
Jayasai Rajagopal – Master's Thesis, Medical Physics, 2018
Yiling Liu – Master's Thesis, Biostatistics, 2018
Rui Hou – PhD Thesis, Medical Physics, 2018
Yinhao Ren – PhD Thesis, Biomedical Engineering, 2021

GRANT REVIEW STUDY SECTIONS
1. Department of Defense. 2017 Breast Cancer Research Program. Detection, Diagnosis and Prognosis-2 Review Panel. Reston, VA. 2018, February.

2. Department of Defense. 2018 Breast Cancer Research Program. Detection, Diagnosis and Prognosis Review Panel. Reston, VA. 2018, August.

3. National Institutes of Health. SBIB-S59 Special Emphasis Panel. San Francisco, CA. 2020, Feb.

4. National Institutes of Health. Emerging Imaging Technologies and Applications (EITA) Study Section. October, 2020.

RESEARCH SUPPORT
External - Current
Tomosynthesis Mammographic Imaging Screening Trial (TMIST)
PI: Pisano Effort: 20%
Purpose: A randomized control trial to compare digital mammography with digital breast tomosynthesis.
Role: Site-PI

Prevent Ductal Carcinoma in Situ Invasive Overtreatment Now – PRECISION
PI: Hwang Effort: 15%
Purpose: To identify determinants of DCIS overtreatment
Role: Co-investigator

Comparison of Operative to Medical Endocrine Therapy (COMET) for Low Risk DCIS
Alliance for Clinical Trials in Oncology Foundation

PI: Hwang Effort: 3%
Purpose: The aims are to evaluate both oncologic and QOL outcomes pertinent to DCIS and important to patients and stakeholders. Outcomes associated with differing management recommendations for DCIS will be compared between "usual care" and "nonstandard" options.
Role: Co-investigator
Amount: $241,762/year Duration: 03/01/16 – 02/28/21

Genomic diversity and the microenvironment as drivers of progression in DCIS
Department of Defense
PI: Hwang Effort: 6.8%
Purpose: To understand the tumor biology behind DCIS in order to better guide diagnostic and therapeutic decision making.
Role: Co-investigator
Amount: $266,544/year Duration: 9/30/14-9/29/19

When is cancer not really cancer?
Netherlands Cancer Institute
PI: Hwang Effort: 20%
Purpose: To identify key features that predict how DCIS will evolve with the goal of identify DCIS that can be left alone and to develop molecules to halt the development of breast cancer.
Role: Co-investigator
Amount: $411,259 Duration: 1/1/17-12/31/21

Breast Cancer Detection Consortium
National Institutes of Health
PI: Marks Effort: 10%
Purpose: To identify imaging and clinical biomarkers predictive of upstaging to invasive disease
Role: Co-investigator
Amount: $2,014,546 Duration: 9/19/16-8/31/21

Examining Oncolytic Poliovirus Bioactivity in Tumor Tissue after Intratumoral Administration of PVSRIPO in Women with TNBC
Department of Defense
PI: Nair Effort: 5%
Purpose: To determine if live attenuated poliovirus can be used to treat women with triple negative breast cancer
Duration: 8/1/18-

Mixed-Methods Study of Trainee Perceptions of Radiology with a Focus on Gender and Racial Inequality
Association of University Radiologists Venture Fund
PI: Grimm Effort: 1%
Purpose: To understand how medical student perceptions of radiology change based on exposure with a focus on gender and race.
Amount: $10,000

External – Completed
Reviews of Cancer Screening for Updating ACS Breast Cancer Screening Guidelines
American Cancer Society
PI: Myers
Purpose: The goal of this project is to support the American Cancer Society (ACS) Guidelines Development Panel (GDP) in the development of evidence based recommendations for breast cancer screening via systematic review of the literature.
Role: Co-investigator
Duration: 05/20/13-03/20/14

Development of a personalized evidence based algorithm for the management of suspicious mammographic calcifications
Association of University Radiologists/General Electric (GERRAF)
PI: Grimm Effort: 72%
Purpose: To develop evidence based algorithm for risk stratification of calcifications seen on mammography.
Amount: $70,000/year Duration: 7/1/15-6/30/17

Internal - Completed
Breast Cancer Risk Perception
Duke Radiology – Charles E. Putnam Seed Grant
PI: Grimm
Purpose: To investigate patient perceptions of breast cancer risk and threshold for image guided biopsies based on abnormal mammogram scenarios.
Amount: $10,000 Duration: 4/1/2016-4/1/2017

Weighing the benefits of breast cancer treatment against overall poor health: development of a decision model in medically complex patients
Duke Surgery – SCORES
PI: Greenup, Grimm
Purpose: To risk stratify breast cancer treatment by patient comorbidities.
Amount: $15,000 Duration: 10/1/16-10/1/17

JOURNAL REVIEWER
Journal of the American College of Radiology
Academic Radiology
American Journal of Roentgenology
Radiology
Annals of Surgical Oncology
Journal of Magnetic Resonance Imaging

MEDICAL SOCIETY MEMBERSHIPS
Radiological Society of North America
American College of Radiology

Association of University Radiologists
Society of Breast Imaging
International Society of Magnetic Resonance Imaging