

## CURRICULUM VITAE

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### EDUCATION

#### Medical School

MD 1994 Shanghai Medical College of Fudan University, Shanghai, China.

#### Graduate School

PhD 2005 Molecular and Cellular Biology  
University of Massachusetts at Amherst, MA

### POSTGRADUATE TRAINING

#### Residency

2009-2013 Department of Pathology, Rhode Island Hospital, Providence, RI  
The Warren Alpert Medical School of Brown University

#### Fellowships

2005-2009 Research Associate, Department of Cancer Biology, University of  
Massachusetts Medical School, Worcester, MA

2013-2014 Pathology Fellow, Gastrointestinal and Liver Pathology,  
Department of Pathology, Rhode Island Hospital, and The Warren Alpert  
Medical School of Brown University, Providence, RI

### POSTGRADUATE HONORS AND AWARDS

2000 First place in Written Comprehensive Examination for Ph.D. candidates in  
Molecular and Cellular Biology program, Class of 2000, University of  
Massachusetts, Amherst

2011 Best Resident Research in Clinical Sciences, International Society of Breast  
Pathology, USCAP 2011, San Antonio, Texas. "Claudin expression in high-  
grade invasive ductal carcinoma of the breast: correlation with the molecular

subtype,” **Lu S**, Singh K, Mangray S, Tavares R, Noble L, Resnick MB, Yakirevich E

- 2013 Stowell-Orbison Award, USCAP 2013. “Expression microarray analysis identifies novel epithelial-derived protein markers in eosinophilic esophagitis,” Matoso A, Mukkada VA, **Lu S**, Monahan R, Cleveland K, Noble L, Mangray S, Resnick MB
- 2022 15<sup>th</sup> Annual Dean’s Excellence in Teaching Awards 2022, The Warren Alpert Medical School Brown University.

#### PROFESSIONAL LICENSES AND BOARD CERTIFICATION

2013-present American Board of Pathology: Anatomic and Clinical Pathology

#### ACADEMIC APPOINTMENTS

- 2021-present Associate Professor, Warren Alpert Medical School of Brown University, Providence, RI
- 2014-2021 Assistant Professor, Warren Alpert Medical School of Brown University, Providence, RI

#### HOSPITAL APPOINTMENTS

- 2014-present Anatomic Pathologist, Lifespan Academic Center, Providence, RI
- 2014-present Director of Clinical Immunology Laboratory, Lifespan Academic Center, Providence, RI

#### UNIVERSITY/HOSPITAL COMMITTEES

- 2018-present Member, Pathology Resident Recruitment and Selection Committee, Brown University
- 2014-present Faculty, GI Pathology fellowship program, Brown University

#### PROFESSIONAL SOCIETIES

- 2009-present Member, USCAP
- 2009-present Member, Collage of American Pathologists
- 2018-present Ambassador, United States and Canadian Academy of Pathology (USCAP)

#### Publications in Peer-Reviewed Journals

1. **Lu S**, Huang G. Epidural scar formation and failed back surgery syndrome (review). *Chinese Journal of Orthopaedics* 2000; 20(10), 630-633.
2. **Lu S**, Huang G. An experimental study of inhibiting the epidural scar formation following lumbar spinal surgery. *Chinese Journal of Orthopaedics*. 2001; 21(4):238-244.
3. Becker KA, **Lu S**, Dickinson ES, Dunphy KA, Mathews L, Schneider SS, Jerry DJ. Estrogen and progesterone regulate radiation-induced p53 activity in mammary epithelium through TGF-beta-dependent pathways. *Oncogene*. 2005 Sep 22;24(42):6345-53. PMID: 15940247.
4. **Lu S**, Simin K, Khan A, Mercurio AM. Analysis of integrin beta4 expression in human breast cancer: association with basal-like tumors and prognostic significance. *Clin Cancer Res*. 2008 Feb 15;14(4):1050-8. PMID: 18281537.
5. **Lu S**, Becker KA, Hagen MJ, Yan H, Roberts AL, Mathews LA, Schneider SS, Siegelmann HT, MacBeth KJ, Tirrell SM, Blanchard JL, Jerry DJ. Transcriptional responses to estrogen and progesterone in mammary gland identify networks regulating p53 activity. *Endocrinology*. 2008 Oct;149(10):4809-20. PMID: 18556351; Central PMCID: PMC2582927.
6. Bae D, **Lu S**, Taglienti CA, Mercurio AM. Metabolic stress induces the lysosomal degradation of neuropilin-1 but not neuropilin-2. *J Biol Chem*. 2008 Oct 17;283(42):28074-80. PMID: 18708346; Central PMCID: PMC2568914.
7. Yang X, Pursell B, **Lu S**, Chang TK, Mercurio AM. Regulation of beta 4-integrin expression by epigenetic modifications in the mammary gland and during the epithelial-to-mesenchymal transition. *J Cell Sci*. 2009 Jul 15;122(Pt 14):2473-80. PMID: 19549682; Central PMCID: PMC2704882.
8. Walter O, Prasad M, **Lu S**, Quinlan RM, Edmiston KL, Khan A. IMP3 is a novel biomarker for triple negative invasive mammary carcinoma associated with a more aggressive phenotype. *Hum Pathol*. 2009 Nov;40(11):1528-33. PMID: 19695680.
9. Goel HL, Bae D, Pursell B, Gouvin LM, **Lu S**, Mercurio AM. Neuropilin-2 promotes branching morphogenesis in the mouse mammary gland. *Development*. 2011 Jul;138(14):2969-76. PMID: 21693513; Central PMCID: PMC3119306.
10. Yakirevich E, Samkari A, Holloway MP, **Lu S**, Singh K, Yu J, Fenton MA, Altura RA. Total Survivin and acetylated Survivin correlate with distinct molecular subtypes of breast cancer. *Hum Pathol*. 2012 Jun;43(6):865-73. PMID: 22055399.
11. Cellurale C, Girnius N, Jiang F, Cavanagh-Kyros J, **Lu S**, Garlick DS, Mercurio AM, Davis RJ. Role of JNK in mammary gland development and breast cancer. *Cancer Res*. 2012 Jan 15;72(2):472-81. PMID: 22127926; Central PMCID: PMC3261359.
12. Jiao B, Ma H, Shokhirev MN, Drung A, Yang Q, Shin J, **Lu S**, Byron M, Kalantry S, Mercurio AM, Lawrence JB, Hoffmann A, Bach I. Paternal RLIM/Rnf12 is a survival factor for milk-producing alveolar cells. *Cell*. 2012 Apr 27;149(3):630-41. PMID: 22541433; Central PMCID: PMC3342660.

13. **Lu S**, Mukkada VA, Mangray S, Cleveland K, Shillingford N, Schorl C, Brodsky AS, Resnick MB. MicroRNA Profiling in Mucosal Biopsies of Eosinophilic Esophagitis Patients Pre and Post Treatment with Steroids and Relationship with mRNA Targets. PLoS One. 2012;7(7):e40676. PMID: 22815788; Central PMCID: PMC3398046.
14. **Lu S**, Singh K, Mangray S, Tavares R, Noble L, Resnick MB, Yakirevich E. Claudin expression in high-grade invasive ductal carcinoma of the breast: correlation with the molecular subtype. Mod Pathol. 2013 April; 26: 485-495. PMID: 23222490; Central PMCID: PMC4000969.
15. Matoso A, Mukkada VA, **Lu S**, Monahan R, Cleveland K, Noble L, Mangray S, Resnick MB. Expression microarray analysis identifies novel epithelial-derived protein markers in eosinophilic esophagitis. Mod Pathol. 2013 May;26(5):665-76. PMID: 23503644.
16. Ratanaprasatporn L, Charpentier KP, Resnick M, Lu S, Dupuy D. Intra-operative microwave ablation of liver malignancies with tumour permittivity feedback control: a prospective ablate and resect study. HPB (Oxford). 2013 Dec;15(12):997-1001. doi: 10.1111/hpb.12084. Epub 2013 Mar 29. PMID: 23551845; Central PMCID: PMC3843619.
17. Cross-Knorr S, **Lu S** (co-first author), Perez K, Guevara S, Brilliant K, Pisano C, Qusenberry P, Resnick MR and Chatterjee D. RKIP phosphorylation and STAT3 activation is inhibited by Oxaliplatin and Camptothecin and are associated with poor prognosis in Stage II colon cancer patients. BMC Cancer 2013 Oct 8; 13(1):463. PMID: 24098947; Central PMCID: PMC3856511.
18. Taliano, R, **Lu S**, Singh K, Mangray S, Tavares R, Noble L, Resnick MB, Yakirevich E. Calretinin expression in high-grade invasive ductal carcinoma of the breast is associated with basal-like subtype and unfavorable prognosis. Hum Pathol 2013 Dec;44(12):2743-50. PMID:24262018; Central PMCID: PMC3838787.
19. He M, Pepperell JR, Gundogan F, De Paepe M, Maggio L, **Lu S**, Kostadinov S, O'Brien B, DeLaMonte S, Pinar H, Tantravahi U. Monozygotic Twins Discordant for Mosaic Trisomy 14. Am J Med Genet. 2014 May;164A(5):1227-33. PMID: 24458767.
20. Matoso A, Allen D, Herzlinger M, Ferreira J, Chen S, **Lu S**, Fabre V, Monahan R, Yang D, Noble L, Mangray S, Resnick MB. Correlation of ALOX15 expression with eosinophilic or reflux esophagitis in a cohort of pediatric patients with esophageal eosinophilia. Hum Pathol. 2014 Jun;45(6):1205-12. PMID: 24742828.
21. Snow AN, Mangray S, **Lu S**, Clubwala R, Li J, Resnick MB, Yakirevich E. Expression of cadherin 17 in well-differentiated neuroendocrine tumours. Histopathology. 2015 Jun;66(7):1010-21. PMID: 25388236.
22. Yakirevich E, Magi-Galluzzi C, Grada Z, **Lu S**, Resnick MB, Mangray S. Cadherin 17 is a sensitive and specific marker for metanephric adenoma. Am J Surg Pathol. 2015; 39(4):479-86. PMID: 25768256; Central PMCID: PMC4360917.

23. Friedman K, Brodsky AS, **Lu S**, Wood S, Gill AJ, Lombardo K, Yang D, Resnick MB. Medullary carcinoma of the colon: a distinct morphology reveals a distinctive immunoregulatory microenvironment. *Mod Pathol*. 2016 May;29(5):528-41. PMID: 26965581.
24. Li J, **Lu S**, Lombardo K, Monahan R, Amin A. ARID1A alteration in aggressive urothelial carcinoma and variants of urothelial carcinoma. *Hum Pathol*. 2016 Sep;55:17-23. PMID: 27137986.
25. Wang Y, Resnick MB, **Lu S**, Hui Y, Brodsky AS, Yang D, Yakirevich E, Wang L. Collagen type III  $\alpha 1$  as a useful diagnostic immunohistochemical marker for fibroepithelial lesions of the breast. *Hum Pathol*. 2016 Nov;57:176-181. PMID: 27498063.
26. Wood SM, Gill AJ, Brodsky AS, **Lu S**, Friedman K, Karashchuk G, Lombardo K, Yang D, Resnick MB. Fatty acid-binding protein 1 is preferentially lost in microsatellite instable colorectal carcinomas and is immune modulated via the interferon gamma pathway. *Mod Pathol*. 2017 Jan;30(1):123-133. PMID: 27687006; Central PMCID: PMC5218856.
27. Wang Y, **Lu S**, Graves T, Ouseph MM, Resnick MB, Yakirevich E. Can Sentinel Lymph Node Biopsy Be Spared in Papillary Carcinoma of the Breast? *Clin Breast Cancer*. 2017 Apr;17(2):127-133. PMID: 27692774.
28. Hui Y, Quddus MR, Murthy JN, Yang D, Sung CJ, **Lu S**, Resnick MB, Wang LJ. Human Papillomavirus Genotyping of Incidental Malignant and Premalignant Lesions on Hemorrhoidectomy Specimens. *Am J Surg Pathol*. 2017 Mar;41(3):382-388. PMID: 28098569.
29. Park WKC, Maxwell AWP, Frank VE, Primmer MP, Paul JB, Collins SA, Lombardo KA, **Lu S**, Borjeson TM, Baird GL, Dupuy DE. The in vivo performance of a novel thermal accelerant agent used for augmentation of microwave energy delivery within biologic tissues during image-guided thermal ablation: A porcine study. *International Journal of Hyperthermia* 2017 Apr 24:1-8. PMID: 28540805.
30. Yakirevich E, **Lu S**, Allen D, Mangray S, Fanion JR, Lombardo KA, Safran H, Resnick MB. Prognostic significance of IgG4+ plasma cell infiltrates following neoadjuvant chemoradiation therapy for esophageal adenocarcinoma. *Hum Pathol*. 2017 Aug;66:126-135. PMID: 28666927.
31. Zhao CL, Hui Y, Wang LJ, Lombardo K, Yang D, Mangray S, Yakirevich E, Amin A, Huang CK, **Lu S**. T-complex-associated-testis-expressed 3 (TCTE3) is a Novel Marker for Pancreatobiliary Carcinomas *Hum Pathol*. *Hum Pathol*. 2017 Dec;70:62-69. Central PMCID: PMC5757622.
32. Huang CK, Iwagami Y, Zou J, Casulli S, **Lu S**, Nagaoka K, Ji C, Ogawa K, Cao KY, Gao JS, Carlson RI, Wands JR. Aspartate beta-hydroxylase promotes cholangiocarcinoma progression by modulating RB1 phosphorylation. *Cancer Lett*. 2018 Aug 10;429:1-10. PMID: 29733964; Central PMCID: PMC5985220.
33. Zhao CL, Hui Y, Wang LJ, Yang D, Yakirevich E, Mangray S, Huang CK, **Lu S**. Alanine-Glyoxylate Aminotransferase 1 (AGXT1) is a Novel Marker for Hepatocellular Carcinomas. *Hum Pathol*. 2018 Oct;80:76-81. PMID: 29883780.

34. **Lu S**, Herzlinger M, Cao W, Noble L, Yang D, Shapiro J, Kurtis J, LeLeiko N, Resnick M. Utility of 15(S)-HETE as a Serological Marker for Eosinophilic Esophagitis. *Sci Rep (Nature)*. 2018 Sep 28;8(1):14498. PMID: 30266946; Central PMCID: PMC6162315.
35. Hui Y, **Lu S**, Wang H, Resnick MB, Wang Y. Discordant HER2 Immunohistochemical Expression and Gene Amplification in Ductal Carcinoma In Situ - Evaluating HER2 in Synchronous In Situ and Invasive Carcinoma. *Histopathology*. 2019 Jan;74(2):358-362. PMID:30117181.
36. Acosta-Gonzalez G, Ouseph M, Lombardo K, **Lu S**, Glickman J, Resnick M. Immune environment in serrated lesions of the Colon: intraepithelial lymphocyte density, PD-1, and PD-L1 expression correlate with serrated neoplasia pathway progression. *Hum Pathol*. 2019 Jan;83:115-123. PMID: 30172913; Central PMCID: PMC6365194.
37. Ji C, Nagaoka K, Zou J, Casulli S, **Lu S**, Cao K, Zhang H, Iwagami Y, Carlson R, Brooks K, Lawrence J, Mueller W, Wands J, Huang C. Chronic ethanol mediated hepatocyte apoptosis links to decreased TET1 and 5-hydroxymethylcytosine formation. *The FASEB J* 2019 Feb;33(2):1824-1835 PMID: 30188753; Central PMCID: PMC6338639.
38. Wang Y, **Lu S**, Xiong J, Singh K, Hui Y, Zhao C, Brodsky AS, Yang D, Jolly G, Ouseph M, Schorl C, DeLellis RA, Resnick MB. ColX $\alpha$ 1 is a stromal component that colocalizes with elastin in the breast tumor extracellular matrix. *J Pathol Clin Res*. 2019 Jan;5(1):40-52. PMID:30207088; Central PMCID: PMC6317058.
39. **Lu S**, Wang LJ, Lombardo K, Kwak Y, Kim WH, Resnick BR. Expression of Indoleamine 2,3-dioxygenase 1 (IDO1) and Tryptophanyl-tRNA Synthetase (WARS) in Gastric Cancer Molecular Subtypes. *Appl Immunohistochem Mol Morphol*, 2019 Apr 24. PMID: 31033497; Central PMCID: PMC6813876.
40. Bouton TC, Gillani FS, **Lu S**, Carter EJ. High Rates of Indeterminate TB Tests Among Hospitalized Patients: Can We Optimize Use of Gamma Interferon Release Assays in Tuberculosis? *R I Med J* (2013). 2019 Aug 1;102(6):27-30. PMID:31398965.
41. Yakirevich E, Madisonc R, Fridmand E, Mangray S, Carneirob BA, **Lu S**, Cookec M, Bratslavsky G, Webster J., Ross JS, Ali SM. Comprehensive Genomic Profiling of Adult Renal Sarcomas Provides Insight into Disease Biology and Opportunities for Targeted Therapies. *European Urology Oncology* 2019 Apr 22. pii: S2588-9311(19)30044-6. PMID: 31412008.
42. Zhao CL, Singh K, Brodsky AS; Lu S, Graves TA, Fetton MA, Yang D, Sturtevant A; Resnick MB, Wang Y. Stromal ColX $\alpha$ 1 Expression Correlates with Tumor-Infiltrating Lymphocytes and Predicts Adjuvant Therapy Outcome in ER-Positive/HER2-Positive Breast Cancer. *BMC Cancer* 2019 Nov 1;19(1):1036. PMID: 31675929; Central PMCID: PMC6825361.
43. **Lu S**, Yakirevich E, Wang LJ, Resnick MR, and Wang Y. Cytokeratin 7-negative and GATA3-negative breast cancers: Clinicopathological and prognostic features. *BMC Cancer* 2019 Nov 12;19(1):1085. PMID: 31718619; Central PMCID:PMC6849242.

44. Tang EW, Paiva KJ, Pytel-Parenteau DL, Maynard MA, Chan PA, **Lu S**. Evaluation of BioPlex 2200 Syphilis Total with Automated Rapid Plasma Reagin: Experience from a Tertiary Medical Center. *Sex Transm Dis*. 2020;47(5):301-305. doi:10.1097/OLQ.0000000000001153 PMID: 32073549.
45. Paiva KJ, Grisson RD, Chan PA, Huard RC, Caliendo AM, Lonks JR, King E, Tang EW, Pytel-Parenteau DL, Nam GH, Yakirevich E, **Lu S**. Validation and Performance Comparison of Three SARS-CoV-2 Antibody Assays [published online ahead of print, 2020 Jul 25]. *J Med Virol*. 2020;10.1002/jmv.26341. doi:10.1002/jmv.26341
46. Bai X, Zhang H, Zhou Y, Nagaoka K, Meng J, Ji C, Liu D, Dong X, Cao K, Mulla J, Cheng Z, Mueller W, Bay A, Hildebrand G, **Lu S**, Wallace J, Wands JR, Sun B, Huang CK. Ten-Eleven Translocation 1 promotes malignant progression of cholangiocarcinoma with wild-type isocitrate dehydrogenase 1. *Hepatology*. 2020 Aug 1. doi: 10.1002/hep.31486. Epub ahead of print. PMID: 32740973.
47. Tang EW, Bobenchik AM, **Lu S**. Testing for SARS-CoV-2 (COVID-19): A General Review. *R I Med J* (2013). 2020 Sep 4;103(8):20-23. PMID: 32900007.
48. Yakirevich E, Pavlick DC, Perrino CM, Stanton M, **Lu S**, Carneiro B, Bratslavsky G, Ross JS. NF2 Tumor Suppressor Gene Inactivation in Advanced Papillary Renal Cell Carcinoma. *Am J Surg Pathol*. 2020 Sep 9. doi: 10.1097/PAS.0000000000001586. Epub ahead of print. PMID: 32925192.
49. Rogers R, Shehadeh F, Mylona EK, Rich J, Neill M, Touzard-Romo F, Geffert S, Larkin J, Bailey JA, **Lu S**, Sweeney J, Mylonakis E. Convalescent plasma for patients with severe COVID-19: a matched cohort study. *Clin Infect Dis*. 2020 Oct 10:ciaa1548. doi: 10.1093/cid/ciaa1548. Epub ahead of print. PMID: 33038227.
50. Wang R, Cai Y, Lee IK, Hu R, Purkayastha S, Pan I, Yi T, Tran TML, **Lu S**, Liu T, Chang K, Huang RY, Zhang PJ, Zhang Z, Xiao E, Wu J, Bai HX. Evaluation of a convolutional neural network for ovarian tumor differentiation based on magnetic resonance imaging. *Eur Radiol*. 2020 Oct 14. doi: 10.1007/s00330-020-07266-x. Epub ahead of print. PMID: 33052463.
51. **Lu S**, Yakirevich E, Hart J, Wang L, Wang Y. PAX8 Expression in Breast Cancer. *Appl Immunohistochem Mol Morphol*. 2020 Nov 17. doi: 10.1097/PAI.0000000000000883. Epub ahead of print. PMID: 33208672
52. Wang Y, **Lu S**, Amin A, Wang L. Coexpress of GATA-3 and ER in Anorectal and Head and Neck Squamous Cell Carcinoma Mimicking Metastatic Breast Cancer. *Appl Immunohistochem Mol Morphol*. 2020 Dec 1. doi: 10.1097/PAI.0000000000000887. Epub ahead of print. PMID: 33264107.
53. Jiao Z, Choi JW, Halsey K, Tran TML, Hsieh B, Wang D, Eweje F, Wang R, Chang K, Wu J, Collins SA, Yi TY, Delworth AT, Liu T, Healey TT, **Lu S**, Wang J, Feng X, Atalay MK, Yang L, Feldman M, Zhang PJJ, Liao WH, Fan Y, Bai HX. Prognostication of patients with COVID-19 using artificial intelligence based on chest x-rays and clinical data: a retrospective study.

- Lancet Digit Health. 2021 May;3(5):e286-e294. doi: 10.1016/S2589-7500(21)00039-X. Epub 2021 Mar 24. Erratum in: Lancet Digit Health. 2021 May;3(5):e283. PMID: 33773969; PMCID: PMC7990487.
54. Wang R, Cai Y, Lee IK, Hu R, Purkayastha S, Pan I, Yi T, Tran TML, **Lu S**, Liu T, Chang K, Huang RY, Zhang PJ, Zhang Z, Xiao E, Wu J, Bai HX. Correction to: Evaluation of a convolutional neural network for ovarian tumor differentiation based on magnetic resonance imaging. *Eur Radiol*. 2021 Nov;31(11):8816. doi: 10.1007/s00330-021-07854-5. Erratum for: *Eur Radiol*. 2021 Jul;31(7):4960-4971. PMID: 33900434.
  55. Murphy M, Li WS, Gentile B, Toma E, Napoleon SC, Roussel B, Maynard MA, **Lu S**, Chan PA. Seroprevalence of SARS-CoV-2 among Internal Medicine Residents at a Major Academic Medicine Residency Program. *R I Med J* (2013). 2021 Jun 1;104(5):20-23. PMID: 34044432.
  56. Eweje FR, Bao B, Wu J, Dalal D, Liao WH, He Y, Luo Y, **Lu S**, Zhang P, Peng X, Sebro R, Bai HX, States L. Deep Learning for Classification of Bone Lesions on Routine MRI. *EBioMedicine*. 2021 Jun;68:103402. doi: 10.1016/j.ebiom.2021.103402. Epub 2021 Jun 5. PMID: 34098339; PMCID: PMC8190437.
  57. Haghayeghi K, **Lu S**, Matoso A, Schiff SF, Mueller-Leonhard C, Amin A. Association of current molecular subtypes in urothelial carcinoma with patterns of muscularis propria invasion. *Virchows Arch*. 2021 Sep;479(3):515-521. doi: 10.1007/s00428-021-03145-y. Epub 2021 Jul 4. PMID: 34218288.
  58. Hart JL, Canepa M, Agarwal S, **Lu S**, Azzoli C, Garcia-Moliner M. The effect that pathologic and radiologic interpretation of invasive and non-invasive areas in lung adenocarcinoma has on T-stage and treatment. *Ann Diagn Pathol*. 2021 Oct;54:151799. doi: 10.1016/j.anndiagpath.2021.151799. Epub 2021 Jul 20. PMID: 34311302.
  59. **Lu S**, Yakirevich E, Yang D, Xiao Y, Wang LJ, Wang Y. Wnt Family Member 9b (Wnt9b) Is a New Sensitive and Specific Marker for Breast Cancer. *Am J Surg Pathol*. 2021 Dec 1;45(12):1633-1640. doi: 10.1097/PAS.0000000000001784. PMID: 34324458.
  60. Ollila TA, **Lu S**, Masel R, Zayac A, Paiva K, Rogers RD, Olszewski AJ. Antibody Response to COVID-19 Vaccination in Adults With Hematologic Malignant Disease. *JAMA Oncol*. 2021 Nov 1;7(11):1714-1716. doi: 10.1001/jamaoncol.2021.4381. PMID: 34379085; PMCID: PMC8358793.
  61. Kim CK, Choi JW, Jiao Z, Wang D, Wu J, Yi TY, Halsey KC, Eweje F, Tran TML, Liu C, Wang R, Sollee J, Hsieh C, Chang K, Yang FX, Singh R, Ou JL, Huang RY, Feng C, Feldman MD, Liu T, Gong JS, **Lu S**, Eickhoff C, Feng X, Kamel I, Sebro R, Atalay MK, Healey T, Fan Y, Liao WH, Wang J, Bai HX. An automated COVID-19 triage pipeline using artificial intelligence based on chest radiographs and clinical data. *NPJ Digit Med*. 2022 Jan 14;5(1):5. doi: 10.1038/s41746-021-00546-w. PMID: 35031687.
  62. Baykara Y, Xiao Y, Yang D, Yakirevich E, Maleki S, Garcia-Moliner M, Wang LJ, Huang CK, **Lu S**. Utility of secretogin as a marker for the diagnosis of lung neuroendocrine carcinoma.



ABSTRACTS (selected)

1. **Lu S**, Guo A, Becker K, Siefelmann H, Sebastiani P, MacBeth K, Jerry DJ. Microarray Analysis of Global Gene Expression in the Mammary Gland Following Estrogen and Progesterone Treatment of Ovariectomized Mice. Second Annual AACR International Conference on Frontiers in Cancer Prevention Research, Phoenix, Arizona, 2003.
2. **Lu S**, Guo A, Becker K, Mathews L, Loureiro O, Siefelmann H, MacBeth K, Jerry DJ. Microarray Analysis of Hormonal Treated Mammary Gland Reveals the Role of Extracellular Matrix in p53 Activities. Third Annual AACR International Conference on Frontiers in Cancer Prevention Research, Seattle, Washington, 2004.
3. **Lu S**, Becker KA, Guo A, Minter LM, Siefelmann H, Sebastiani P, MacBeth K, Jerry DJ. Microarray analysis of hormonal treated mammary gland reveals the role of extracellular matrix in p53 activities. Gordon Research Conferences-Mammary Gland Biology, Salve Regina University Newport, RI, 2005.
4. **Lu S**, Simin K, Khan A, Mercurio AM. Integrin beta4 is a maker for basal-like Breast Cancer. Gordon Research Conferences-Mammary Gland Biology, Salve Regina University Newport, RI, 2007.
5. **Lu S**, Mercurio A, Prasad M, Khan A. Expression of Sox9 is significantly associated with basal-like phenotype in invasive mammary carcinoma. USCAP, Boston MA, 2009.
6. **Lu S**, Walter O, Vohra P, Kandil D, Wang LW, Mercurio AM, Khan A. Prognostic Value of Multiple Triple-Negative Markers in Breast Cancer. USCAP, Washington DC, 2010.
7. **Lu S**, Aswad B, Pisharodi L, Yu G. Cytologic Features of Metastatic Papillary Thyroid Carcinoma in Cervical Lymph Nodes on ThinPrep Based FNA Preparations. USCAP, San Antonio TX, 2011.
8. **Lu S**, Singh K, Mangray S, Tavares R, Noble L, DeLellis RA, Resnick M, Yakirevich E. Claudin-Low Breast Cancer: A Novel Subtype Associated with Basal-Like Phenotype and Metaplastic Breast Cancer. USCAP, San Antonio, 2011. **Best Resident Research in Clinical Sciences from International Society of Breast Pathology.**
9. **Lu S**, Singh K, Mangray S, Tavares R, Monahan R, Li J, Resnick M, Yakirevich E. Claudin Expression in Invasive Lobular Carcinoma with an Emphasis on Pleomorphic Lobular Carcinoma. USCAP, Vancouver, BC, Canada, 2012.
10. **Lu S**, Cleveland K, Mukkada V, Mangray S, Schorl C, Brodsky A, Resnick M. Profiling microRNA and mRNA in Esophageal Biopsies of Patients with Eosinophilic Esophagitis before and after Treatment. USCAP, Vancouver, BC, Canada, 2012.

11. **Lu S**, Buell-Gutbrod R, Quddus MR, Xiong J, W Lawrence D, Sung JC. Mismatch Repair Status in Recurrent Low Grade Endometrioid Adenocarcinomas. USCAP, Baltimore, MD, 2013.
12. **Lu S**, Cleveland K, Mangray S, Brodsky A, Resnick M, Yakirevich E. MicroRNA Are Differentially Expressed in Appendiceal Versus Ileal Neuroendocrine Tumors. USCAP, Baltimore, MD, 2013.
13. **Lu S**, Treaba D, Mangray S, Monahan R, Magi-Galluzzi C, Resnick R, Yakirevich E. Claudins 4 and 8 Help to Distinguish Metanephric Adenoma from its Mimics. USCAP, San Diego, MA, March 2014.
14. **Lu S**, Dong L, Breese V, Jackson C, Snow A, Resnick M, Yakirevich E. Genetic Alterations in Small Intestinal versus Appendiceal Neuroendocrine Tumors Detected by Whole Exome Next Generation Sequencing. USCAP, San Diego, CA, March 2014.
15. **Lu S**, Michael Herzlinger M, Noble L, Yang D, Matoso A, Cao W and Resnick M. The Utility of 15-s-HETE as a Noninvasive Serological Marker for Eosinophilic Esophagitis. USCAP, San Diego, CA, March 2014.
16. Kalife E, Lombardo KA, Noble LC, Yakirevich E, Resnick MB, Mangray S, **Lu S**. Role of FoxP3 and Claudin-3 in predicting gluten sensitive enteropathy in biopsies with increased intraepithelial lymphocytes and minimal villous blunting. Society for Pediatric Pathology Spring Meeting, Platform Presentation. Boston, MA March 21-22, 2015.
17. Zhao CL, Wang LJ, Lombardo KA, Yang D, Yakirevich E, Resnick MB, **Lu S**. The Diagnostic Utility of TCTE3 as a Novel Immunohistochemical Marker for Pancreatobiliary Tumors. USCAP, Boston, MA, 2016.
18. Wang H, Hui Y, Yang D, Lombardo KA, Yakirevich E, Resnick MB, Wang LJ, **Lu S**. Comparison of GRP52, mTOR, HoxB13, NKX3.1 and Protein in Metastatic Prostatic Adenocarcinoma. USCAP, Boston, MA, 2016.
19. Lombardo KA, Park WKC, Maxwell AWP, Walsh EG, Primmer MP, Collins SA, Dupuy DE, **Lu S**. Pathologic Evaluation of a Novel Thermal Accelerant Used in Microwave Tumor Ablation. USCAP, San Antonio, TX, 2017.
20. Zhao CL, Yang Y, Lombardo KA, Wang LJ, **Lu S**. Alanine-Glyoxylate Aminotransferase (AGXT) Is a Novel Marker for Hepatocellular Carcinomas. USCAP, Vancouver BC, 2018.
21. Hsia KL, **Lu S**. A Survey of Viral Integration Sites in Hepatocellular Carcinoma. USCAP, Baltimore, MD, 2019.
22. Tang E, Paiva KJ, Pytel-Parenteau DL, Maynard M, Chan PA, **Lu S**. Performances of BioPlex 2200 Syphilis Assay and Architect Syphilis Immunoassay for Detection of Syphilis-Related Antibodies. USCAP, Los Angeles CA, 2020.

23. Baykara Y, Xiao Y, Yang D, Yakirevich E, Garcia-Moliner ML, Wang LJ, **Lu S**. The Utility of Secretagoin as a Novel Marker for the Diagnosis of Lung Neuroendocrine Carcinoma. USCAP, Virtual and Interactive, 2021
24. Baykara Y, Xiao Y, Yang D, Yakirevich E, Garcia-Moliner ML, Wang LJ, **Lu S**. The Utility of Secretagoin as a Novel Marker for the Diagnosis of Lung Neuroendocrine Carcinoma. ASIP annual meeting, Philadelphia, PA, 2022

#### INVITED PRESENTATIONS

1. “Eosinophilic Esophagitis: In Search of Better Diagnostic Markers,” Department of Pathology, University of Alabama Birmingham, Birmingham, Alabama, Nov 7, 2013.
2. “Pancreatic Ductal Adenocarcinoma and Its Precursors”, New York University Winthrop Hospital, Mineola, NY, Jan 24, 2020.
3. “Interesting Cases in Gastrointestinal Tract,” New York University Winthrop Hospital, Mineola, NY, Jan 24, 2020.
4. “New Tissue-Specific Diagnostic Markers for Surgical Pathology,” University of Massachusetts Medical School, Worcester, MA, March 25, 2020. (Postponed due to COVID-19)
5. “Interesting Cases in Surgical Pathology,” University of Massachusetts Medical School, Worcester, MA March 25, 2020. (Postponed due to COVID-19)
6. “GPR52, a New Marker in Prostate Cancer and its Biomedical Potentials” University of Iowa Department of Pathology, October 8, 2020 (Zoom)
7. “Finding New Diagnostic markers for Gastrointestinal Tumors,” GI TRDG meeting, Warren Alpert Medical School, Brown University, Providence, RI, Feb 12, 2020.
8. “Role of G Protein-Coupled Receptor 52 (GPR52) in prostate cancer progression and its therapeutic potential” Advance Clinical Translational Research presentation, Warren Alpert Medical School, Brown University, Providence, RI, Feb 10, 2022

#### RESEARCH GRANTS

1. Contribution of CUTL-1 to Basal Phenotype Breast Cancer.  
Postdoctoral Fellowship. Susan G. Komen for the Cure.  
Principal Investigator. \$135,000  
Duration: 2006-2009
2. Molecular Characterization of CK5/6 Positive Cells in Breast Carcinoma.  
Brown Pilot Project Funding for Translational Research.  
Principal Investigator. \$8,500

Duration: 2011-2012

3. Contribution of Hedgehog Signaling Pathway to Intrahepatic Cholangiocarcinoma.  
Rhode Island Foundation.  
Principal Investigator. \$15,000  
Duration: 2015-2016
4. COVID-19 Antibody Surveillance Research Support  
State of Rhode Island Department of Health  
Principal Investigator: \$79,650  
Duration: May 5, 2020 - Oct 31, 2020
5. COVID-19 Research Seed Fund  
Responding to the existence of a large number of asymptomatic COVID-19 cases, this research seeks to gain a broader understanding of how widespread exposure to the COVID-19 virus is in the local population.  
Brown University  
Co-Investigator (PI: Amanda Jamieson \$25,000)  
Duration: 2020-2021
6. Convalescent Plasma Randomized Clinical Trials for Early COVID-19 Treatment are Foundational for Subsequent Hyperimmune Globulin and Vaccines  
Johns Hopkins University/USDOD  
Co-Investigator: \$ 200,000 (PI: Adam Levine: \$378,000)  
Duration: June 8, 2020 – May 31, 2021
7. Roles of G Protein-Coupled Receptor 52 (GPR52) in Prostate Tumor Progression and Its potential as a therapeutic target.  
Advance-CTR (Clinical Translational Research), Brown University/NIGMS  
Principal Investigator: \$37,500  
Duration: 2021-2022

### TEACHING ACTIVITIES

2021-present	Associate Course Director, Biol 3673 Gastroenterology for Medical Students <ol style="list-style-type: none"><li>1. “Embryology and Anatomy of the GI tract”</li><li>2. “Pathology of the Small and Large Intestines”</li></ol>
2015-present	Lecturer, GI and Liver Pathology, Pathology Residency Program, Didactic lectures (60 minutes each, every two years): <ol style="list-style-type: none"><li>1. “Liver, Gallbladder and Bile Ducts Neoplasms”</li><li>2. “Pancreatic Neoplasms”</li></ol>
2019-present	Lecturer, Interesting Case Conference, Pathology Residency Program Two lectures per year