CURRICULUM VITAE

NAME: Xiuli Liu, M.D., Ph.D.
Pathology, Immunology, and Laboratory Medicine
Gastrointestinal, Hepatic and Pancreaticobiliary Pathology
University of Florida College of Medicine
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HOSPITAL AND OTHER (NON ACADEMIC) APPOINTMENTS:

1/1/2016-Present	Directors, GI/Liver Unit & GI Fellowship Program, Department of Pathology Immunology and Laboratory Medicine, College of Medicine, University of Florida, 01/2016
7/2009-12/2015	Staff Pathologist, Cleveland Clinic Foundation, Department Anatomic Pathology
9/2007	Associate Staff Pathologist, Cleveland Clinic Foundation, Department Anatomic Pathology

EDUCATION:

Institution	Degree	Year
Beijing Medical University	MD	8/84-7/90
University of Arkansas for Medical Sciences	MS	8/95-5/97
University of Arkansas for Medical Sciences	PhD	8/98-5/02

LICENSURE:

State	License Number	Year
State of Alabama	L-2643	2004-06
State of Ohio	35-090234	2007-2016
State of Florida	ME 125914	2015

BOARD CERTIFICATION:

AP and CP board certification, September 2007

POSTDOCTORAL TRAINING:

Year	Degree	Institution
7/90-8/94	Resident, Internal Medicine	Dalian Med. Univ., Dalian City, P.R. China
5/02-1/03	Research Associate	Univ. of Arkansas for Med. Sci., Little Rock, AR
7/03-6/07	Resident, Pathology	Univ. of Alabama at Birmingham Birmingham, AL
7/05-6/06	Fellow, GI Pathology	Univ. of Alabama at Birmingham Birmingham, AL

ACADEMIC APPOINTMENTS:

1/1/2016-Present	College of Medicine, University of Florida, Professor, Dept. Pathol. Immnol. & Lab Med. 01/2016
7/2013-12/2015	Cleveland Clinic Lerner College of Medicine, Associate Professor
4/2009	Cleveland Clinic Lerner College of Medicine, Assistant Professor

AWARDS/HONORS:

- Traveling award from graduate school of UAMS, 7/2001
- Traveling award from graduate school of UAMS, 3/2001
- Presentation award (Run-up) from The Seager-Braswell graduate student research symposium. UAMS, 3/2000
- Junior investigator traveling award from FASEB, 4/2000
- Traveling award from graduate school of UAMS, 3/2000
- Honorable mention for Carl C. Smith Mechanism Graduate Student Awards, American Society of Toxicology, 3/2000
- Best student paper from the American Society of Pharmaceutical and Experimental Therapeutics, 4/1999
- Best Basic Science Award from the American Society of Colon and Rectal Surgeons, 04/2009

- Best resident research (2nd place) from the Chinese American Pathologists Association, 03/2010
- Best resident research (2nd place) from the Cleveland Society of Pathologists, 05/2010
- Best resident research (1st place) from the Cleveland Society of Pathologists, 05/2011
- Innovator Award, systems pathology model for predicting recurrence of colon cancer. Cleveland Clinic, 05/2013
- Finalist of the 2013 F. Merlin Bumpus Junior Investigator Award in the Clinical Research category. Cleveland Clinic Research Day, Sept. 2013.
- IBD Research Award. Significance of sessile serrated lesions in inflammatory bowel disease. ACG annual meeting, Oct. 2014.
- ACG Presidential Poster. Significance of sessile serrated lesions in inflammatory bowel disease. ACG annual meeting, Oct. 2014.

PROFESSIONAL SOCIETIES:

- American Society of Toxicology, 1998– 2002
- United States and Canadian Academy of Pathology, 2004 – present
- College of American Pathologists, 2006 – present
- American Society of Clinical Pathology, 2007 – present
- Investigational Pathology Society, March 2009 – present
- Gastrointestinal Pathology Society, 2011 - Present
- Hans Popper Hepatopathology Society, 2013 - Present

COUNCILS AND COMMITTEES:

- Pancreatic Cancer Care Path. Cleveland Clinic, Ohio 06/2015
- Colorectal Cancer Consortium. Cleveland, Ohio 5/08/2011
- Colorectal Cancer Consortium. Weston, Florida 12/10/2010

EDITORIAL BOARD MEMBERSHIPS:

- American Journal of Digestive Disease, February 2014
- Journal of Obesity and Weight-loss Medication, February 2015
- SRL Gastroenterology & Hepatology, November 2015
- Austin Journal of Gastroenterology, December 2015

MAJOR RESEARCH INTERESTS:

- Pathogenesis of nonalcoholic fatty liver disease including steatosis, hepatocellular injury, regeneration, and fibrosis/cirrhosis
- Signal transduction pathway and chemoprevention in colorectal carcinoma
- Sex hormone receptor expression in solid-pseudopapillary neoplasm of the pancreas
- Molecular events underlying the colorectal metastasis, methylation and miRNA
- Novel therapeutic strategies in colorectal cancer
- Chemosensitivity markers in pancreatic cancer
- miRNA expression in hepatocellular carcinoma
- Molecular diagnosis of hereditary colorectal cancer
- Molecular mechanisms of IBD-associated colorectal neoplasia

TEACHING EXPERIENCE:

Medical/dental student lecturing

- Lectures (Class-wide in second year medical students), Cholestatic Liver Disease, CCLCM, Cleveland, OH (04/2015)
- Lectures (Class-wide in second year medical students), Cholestatic Liver Disease, CCLCM, Cleveland, OH (04/2014)
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- Lectures (Class-wide in second year medical students), Pathology of Lower GI tract, CCLCM, Cleveland, OH (04/2012)
- Lectures (Class-wide in second year medical students), Cholestatic Liver Disease, CCLCM, Cleveland, OH (04/2011)
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- Lectures (Class-wide in second year medical students), Pathology of Lower GI tract, CCLCM, Cleveland, OH (04/2010)
- Lectures (Class-wide in second year medical students), Cholestatic Liver Disease, CCLCM, Cleveland, OH (04/2009)
- Lectures (Class-wide in second year medical students), Pathology of Lower GI tract, CCLCM, Cleveland, OH (04/2009)
- Lectures (Class-wide in second year medical students), Pathology of Lower GI tract, CCLCM, Cleveland, OH (04/2008)
- Lectures (Class-wide in second year pathology course), gastrointestinal tract, liver, and pancreas pathology for dental/optometry systemic pathology, UAB, Birmingham, AL. (01/2007).
- Lectures (Class-wide in second year pathology course), gastrointestinal tract, liver, and pancreas pathology for dental/optometry systemic pathology, UAB, Birmingham, AL. (01/2006).
- Lectures in Physical Diagnostics, Dalian Medical University, Dalian city, P.R.C. (1993-1995).
- Lectures in Internal Medicine, Dalian Medical University, Dalian city, P.R.C. (1993-1995).

Medical student research mentoring

- Research mentoring, Hao Xie, 3rd year medical student, CCLCM, Cleveland, OH (07/2011-06/2012)

Resident lecturing

- Lectures (pathology residents), Colorectal cancer diagnosis and staging, Cleveland Clinic, Cleveland, OH (08/2015)
- Lectures (pathology residents), Colorectal cancer diagnosis and molecular testing, Cleveland Clinic, Cleveland, OH (03/2015)
- Lecture (GI fellows), Gastritis and neoplasia, Cleveland Clinic, Cleveland, OH (05/2014)
- Lecture (pathology residents), IBD and IBD associated neoplasia, Cleveland Clinic, Cleveland, OH (01/2014)
- Lecture (GI fellows), Inflammatory conditions of the liver, Cleveland Clinic, Cleveland, OH (04/2013)
- Lecture (pathology residents), GI polyposis, Cleveland Clinic, Cleveland, OH (04/2013)
- Lecture (pathology residents), Pancreatic pathology, Cleveland Clinic, Cleveland, OH (06/2012)

- Lecture (GI fellows), Basic liver pathology, Cleveland Clinic, Cleveland, OH (04/2012)
- Lecture (pathology residents), Non-neoplastic esophageal diseases, Cleveland Clinic, Cleveland, OH (01//2012)
- Lecture (pathology residents), Chronic hepatitis, Cleveland Clinic, Cleveland, OH (06/2011)
- Lecture (GI fellows), Liver pathology: hepatitis, Cleveland Clinic, Cleveland, OH (05/2011)
- Lectures (GI fellows), Basic liver pathology, Cleveland Clinic, Cleveland, OH (05/2010)
- Lectures (pathology residents), Colorectal cancer diagnosis, Cleveland Clinic, Cleveland, OH (01/2010)
- Lectures (pathology residents), Basic liver pathology, Cleveland Clinic, Cleveland, OH (07/2009)
- Lectures (pathology residents), Liver transplantation pathology, Cleveland Clinic, Cleveland, OH (05/2009)
- Seminar (pathology residents), microRNA in Hepatocellular Carcinoma, Cleveland Clinic, Cleveland, OH (05/2009)
- Seminar (pathology residents), NOD-5 in idiopathic inflammatory bowel disease, Cleveland Clinic, Cleveland, OH (05/2008)

Laboratory sessions

- Bacterial Disease Pathology, dental/optometry school, UAB, Birmingham, AL (12/2003).

House staff teaching

- Microscopic sessions for the gastroenterology and hepatology residents and fellows, Cleveland Clinic, Cleveland, OH, 04/2013.
- Microscopic sessions for the pathology residents, Liver disease, Conemaugh Memorial Medical Center, PA, 05/2012.
- Microscopic sessions for the pathology residents, Pancreatic neoplasm/lesion, Conemaugh Memorial Medical Center, PA, 05/2012.
- Microscopic sessions for the pathology residents, Unknown sessions of GI and liver diseases, Conemaugh Memorial Medical Center, PA, 05/2012.
- Microscopic sessions for the gastroenterology and hepatology residents and fellows, Cleveland Clinic, Cleveland, OH, 03/2008.
- Microscopic Unknown Conference for pathology residents, Dept. Anat. Pathol, Cleveland Clinic, Cleveland, OH, 04/2008.
- Slides reviews for the pathology residents, GI Pathology, Dept. of Pathology, UAB, Birmingham, AL, 6/2006.

Study aides for residents

- Created a new collection of GI pathology slides, Dept. of Pathology, UAB, Birmingham, AL, 7/2005-6/2006.

Laboratory sessions for undergraduate students

- Summer undergraduate student research. Designed, guided and arranged experiments for a summer undergraduate student. (5-7/2002).

- Summer undergraduate student research. Designed, guided and arranged experiments for a summer undergraduate student. (5-7/2000).

MAJOR LECTURES AND VISITING PROFESSORSHIPS:

- Recent advances in the understanding of nonalcoholic fatty liver disease, Department of Anatomic Pathology, Cleveland Clinic, Cleveland, Ohio, 11/2006

- Nonalcoholic fatty liver disease, Department of Pathology, University of Alabama in Birmingham, Birmingham, Alabama, 02/2007

- Misdiagnosis: Missing Microscopic Clues. 4th Annual Laparoscopic Colorectal Surgery and Turnbull Symposium. Cleveland, Cleveland Clinic Foundation, Ohio, 11/2007

- Gastrointestinal Pathology Highlights at USCAP'09. Investigational Pathology Society. Boston, Massachusetts, 03/2009

- Diagnosis of Barrett's esophagus and Barrett-related dysplasia. The Asian Barrett's Consortium Annual Meeting, New Orleans, Louisiana, 05/2010

- Hereditary Nonpolyposis Colorectal Carcinoma (HNPCC) Screening: 5-Year Experience at Cleveland Clinic. Grand round, Cleveland Clinic, Cleveland, OH 09/2010

- Lymphocytic/Collagenous Colitis. XXVIII International Congress of the International Academy of Pathology. Sao Paulo, Brazil, 10/2010

- Gastrointestinal Pathology Highlights: Almost Missed and Missed. USCAP '11 Investigational Pathology Society. San Antonio, Texas, 02/2011

- Pancreatic Pathology. A Hands on Approach to Diagnostic Pathology Post Graduate Course, Cleveland Clinic, Cleveland, Ohio, 05/2011

- Colorectal cancer diagnosis and staging. A Hands on Approach to Diagnostic Pathology Post Graduate Course, Cleveland Clinic, Cleveland, Ohio, 05/2011

- Liver pathology: non-neoplastic liver diseases. Conemaugh Memorial Medical Center, Johnstown, PA, 05/2012

- Liver transplant pathology. Conemaugh Memorial Medical Center, Johnstown, PA, 05/2012

- Pancreatic neoplasm/lesion. Conemaugh Memorial Medical Center, Johnstown, PA, 05/2012

- Barrett's esophagus neoplasm. Conemaugh Memorial Medical Center, Johnstown, PA, 05/2012

- GI polyposis. Department of Pathology, New York University, New York, 05/2013

- Idiopathic inflammatory bowel disease-associated neoplasia. Department of Pathology, University of Florida, Gainesville, 05/2013

- Idiopathic Inflammatory bowel disease-associated neoplasia. Grand round, Cleveland Clinic, Cleveland, OH 06/2013

- Histologic evaluation of Barrett's esophagus and its neoplasia. Grand round, Department of Thoracic and Cardiovascular Surgery, Changhai Hospital, Shanghai, China, 06/2013

- Basic liver histology and biopsy diagnosis of common liver diseases. Grand round, Department of pathology, Affiliated Zhongda Hospital, Southeast University, Nanjing, Jiangsu, China, 06/2013.

- Histologic diagnosis of and updates on Barrett's esophagus and its neoplasia. Department of Pathology, University of Florida, Gainesville, 08/2013

- Colorectal cancer: interpretive and sampling issues and role of molecular biology. The 1st multidisciplinary colorectal oncology course. Cleveland Clinic, Cleveland, OH 04/2014.

- A practical approach to molecular testing in CRC. Department of Pathology, Peking University, Health Science Center, Beijing, China, 06/2014.

- Lymphocytic and collagenous colitis. Department of Gastroenterology, the 1st Affiliated Hospital, Peking University, Health Science Center, Beijing, China, 06/2014.

- A practical approach to molecular testing in CRC. Chongqing Society of Pathologists, Annual meeting. Chongqing, China, 06/2014.

- Common liver diseases: practical approach. Cleveland Clinic Pathology in China Workshop. Co-organized by Sichuan University, KingMed Diagnostics and Cleveland Clinic. Chengdu, Sichuan providence, China, 06/2014.

- A practical approach to molecular testing in CRC. The Affiliated Zhongnan Hospital, Wuhan University School of Medicine, Wuhan, Hubei Providence, China, 06/2014.

- Common liver diseases: practical approach. The Affiliated Zhongnan Hospital, Wuhan University School of Medicine, Wuhan, Hubei Providence, China, 06/2014.

- Barrett's esophagus (BE) and its neoplasia: updates. Shanghai Chest Hospital, Shanghai, China, 09/2014.

- Interpretation of histopathology in fatty liver disease: practical approach and common mistakes. Shanghai International Conference on Digestive Diseases: Focus on Fatty Liver and Inflammatory Bowel Diseases. Shanghai, China, 09/2014.

- Practical Approaches to Common Liver Diseases. Nanshan Hospital, Shenzhen, China, 09/2014.

- Practical Approaches to Molecular Testing in Colorectal Cancer (CRC). Nanshan Hospital, Shenzhen, China, 09/2014.

- Diagnosis of Barrett's Esophagus and Its Neoplasia. Nanshan Hospital, Shenzhen, China, 09/2014.

- Diagnosis of Fatty Liver Disease in Biopsy: Practical Approach. Departments of Hepatology and Pathology. Hangzhou Normal University Affiliated Hospital, Hangzhou, Zhejiang, China, 10/2015.

- IBD-Associated Neoplasia. 2015 Workshop on Pathologic Evaluation of Inflammatory Bowel Disease and Associated Neoplasia. Hosted by University of Chicago Center in Beijing, Beijing, China, 10/2015.

- IBD Diagnosis and Management: Clinicopathologic Correlation. 2015 Workshop on Pathologic Evaluation of Inflammatory Bowel Disease and Associated Neoplasia. Hosted by University of Chicago Center in Beijing, Beijing, China, 10/2015.

- IBD-Associated Neoplasia: Clinicopathologic Correlation. 2015 Workshop on Pathologic Evaluation of Inflammatory Bowel Disease and Associated Neoplasia. Hosted by University of Chicago Center in Beijing, Beijing, China, 10/2015.

- IBD-Associated Neoplasia. The 3rd Annual Summit Forum for IBD Dalian China, Dalian, China, 10/2015.

- IBD Diagnosis and Management: Clinicopathologic Correlation. The 3rd Annual Summit Forum for IBD Dalian China, Dalian, China, 10/2015.

- IBD Diagnosis and Management: Clinicopathologic Correlation. Department of Pathology, the First Xiangya Hospital, Central South University, Changsha, China, 10/2015.

- Histologic Evaluation and Updates on Barrett's Esophagus (BE) and its Neoplasia. Department of Pathology, Temple University, Philadelphia, PA, 11/2015.

GRANT SUPPORT (PAST AND CURRENT):

- Alcohol and tissue injury: from mechanisms to treatments. **Co-Investigator/Co-Core Leader** (12/05/2015-11/30-2020) 1P50AA024333-01 P50 grant. $8,000,000 (total cost) (salary support 5% effort), transferred to Dr. Daniela Allende in the Department of Pathology at CCF after moving to UF.

- Novel therapies for alcoholics. **NIH/NIAAA.** U01AA021893. **Co-investigator** (salary support 9,164/year, 0.2 calendar months, 5% effort) (07/01/2015-06/30/2016.

- β-Catenin-mediated overexpression of α-methylacyl-CoA racemase (AMACR): the potential missing link between APC defect and colon tumorigenesis". **Principle investigator** (No salary support). AP Residual Funds, CCF. $12,500 (total cost) (11/01/2013-11/01/2014).

- RIP3-mediated necropotosis and alcohol-induced liver injury. Cleveland Alcohol Center. **Co-Principle Investigator** (salary support $5,000/year). $50,000 (total cost) (12/01/2011-11/30/2013).

- MIF in progression and treatment of ALD. **NIH/NIAAA.** 1U01 AA020821-01A1 (Nagy) $347,331 (Year 1 direct cost) **Co-investigator** (salary support $16375/year, 0.75 calendar months). 09/01/2012-08/31/2017.

- Alcoholic liver disease: biochemical, cellular and systemic responses to ethanol. **NIH/NHLBI**. **Co-Investigator.** (salary support $5,900/year). $296,496 (total cost) (2009-2014).

- Alcoholic liver disease: biochemical, cellular and systemic responses to ethanol. **NIH/NIAAA.** Pilot Project 1: RIP3-mediated necroptosis and alcohol-induced liver injury. **Co-Project Leader.** (salary support $6,000/year, 0.2 calendar months). 9/1/2011-08/31/2014.

- Ulcerative colitis pouch genomic biomarkers of cancer risk. Pathology and Laboratory Medicine Institute (PLMI) Development Award. **Principle Investigator** $75,000 (total cost) (2011-2012)**.**

- Epigenetic regulation of IBD-associated fibrosis: potential for novel anti-fibrotic therapies. The Eli and Edythe Broad Foundation. **Collaborator** (no salary support). $110,000 (total cost) (10/2011-10/2012).

- Progesterone receptor and estrogen receptor expression in solid-pseudopapillary neoplasm of the pancreas. Resident research fund. **Principle Investigator.** Department of Pathology at UAB. $1,000 (total cost) (01/06-12/06).

- Mechanistic examination of the role of calpain in cell death in proximal tubular cells. Predoctoral fellowship from the American Heart Association. **Principle Investigator.** $36,000 (total cost) (7/1/2000-6/30/2002).

GRANT APPLICATION (FUNDING PENDING):

GRANT APPLICATION (Collaborator):

- Cellular and Molecular Mechanisms of Fatty Liver Disease. Submitted to NIH in Nov. 2015. Principle Investigator Dr. Liqing Yu, University of Maryland. .

PATENT APPLICATION (PENDING):

- Predicting colon cancer recurrence based on a system. Elena Manilich, Mikhail Teverovskiy, Feza Remzi, Xiuli Liu. Filed on 10/07/2013. Serial number 61/887573.

AD HOC REVIEWER:

- Human Pathology (2008-present)

- Medscape Journal of Medicine (2009-present)

- Journal of Clinical Pathology (2009-present)

- Archive of Pathology and Laboratory Medicine (2010-present)

- Journal of Histochemistry & Cytochemistry (2011-present)

- Inflammatory Bowel Disease (2012-present)

- Pathology Research International (2012 – present)

- Pathology Research and Practice (2014-present)

- Modern Pathology (2014-present)

- Digestion (2015-present)

- Cancer Biomarkers (2015-present)
- Gastroenterology Report (2015-present)
- BMC Cancer (2015-present)
- Histopathology (2015-present)

BIBLIOGRAPHY:

Manuscript published

1. Chen B, **Liu X**, Savell VH, Dilday BR, Johnson MW, Jenkins JJ, and Parham DM. Increased DNA methytransferase expression in rhabdomyosarcomas. *Int. J. Cancer* 83:10-14, 1999.

2. Chen J, **Liu X**, Mandel LJ, and Schnellmann RG. Progressive disruption of the plasma membrane during renal proximal tubule cellular injury *Toxicol Appl. Pharmacol.* 171: 1-11, 2001. [Journal Cover]

3. **Liu X**, Rainey JJ, Harriman JF, and Schnellmann RG. Calpains mediate acute renal cell death: role of autolysis and translocation. *Am. J. Physiol. Renal Physiol.* 281: F728-738, 2001.

4. Harriman JF, **Liu X**, Aleo MD, Machaca KA, and Schnellmann RG. Endoplasmic reticulum Ca^{2+} signaling and calpains mediate renal cell death. *Cell Death Differ.* 9: 734-741, 2002.

5. **Liu X**, Harriman JF, and Schnellmann RG. Cytoprotective properties of novel nonpeptide calpain inhibitors in renal cells. *J. Pharmacol. Exp. Ther.* 302: 88-94, 2002.

6. **Liu X,** and Schnellmann RG. Calpain mediates progressive plasma membrane permeability and proteolysis of cytoskeleton-associated paxillin, talin, and vinculin during renal cell death. *J. Pharmacol. Exp. Ther.* 304:63-70, 2003.

7. **Liu X,** Van Vleet T, and Schnellmann RG. The role of calpain in oncotic cell death. *Annu. Rev.Pharmacol. Toxicol.* 44: 349-370, 2004.

8. **Liu X**, Godwin ML, and Nowak G. Protein kinase C-alpha inhibits the repair of oxidative phosphorylation after S-(1,2-dichlorovinyl)-L-cysteine injury in renal cells. *Am. J. Physiol. Renal Physiol.* 287: F64-73, 2004.

9. **Liu X,** Lazenby AJ, and Siegal GP. Signal transduction cross-talk during colorectal Tumorigenesis. *Adv. Anat. Pathol.* 13: 270-274, 2006.

10. **Liu X**, Rauch TM, Siegal GP, and Jhala N. Solid-pseudopapillary neoplasm of the pancreas: three cases with a literature review. *Appl. Immunohistochem. Mol. Morphol.*. 14: 445-453, 2006.

11. Covelli C, **Liu X,** Jhala N, and Abrams GA. Advanced liver disease associated with the rare alpha 1- antitrypsin phenotype IZ. *Gastroenterol Hepatol.* 2: 761-763, 2006.

12. Howard JH, Litovsky SH, Tallaj JA, **Liu X,** and Holman WL. Xenograft calcification in Reiter's syndrome. *J. Heart Valve Dis.* 16:159-161, 2007.

13. **Liu X**, Adams A. Mucoepidermoid carcinoma of the bronchus: A review. *Arch. Pathol. Lab. Med.* 131: 1400-1404, 2007.

14. **Liu X,** Lazenby AJ, Clements RH, Jhala N, and Abrams GA. Resolution of nonalcoholic steatohepatitis after gastric bypass surgery. *Obes. Surg.* 17: 486-492, 2007.

15. **Liu X,** Wilcox CM, Nodit L, and Lazenby AJ. Multiple gastrointestinal stromal tumors and lipomatosis. *Arch. Pathol. Lab. Med.* 132: 1825-1829, 2008.

16. Lai K, **Liu X.** Cystic pancreatic mass in a 39 year old female. USCAP eAcademy APECS Case. 2009.

17. Burford H, Baloch Z, **Liu X,** Jhala D, Siegal GP, Jhala N. E-cadherin/Beta-catenin and CD10: a limited immunohistochemical panel to distinguish pancreatic endocrine neoplasm from solid-pseudopapillary neoplasm of the pancreas on endoscopic ultrasound-guided fine-needle aspirates of the pancreas. *Am. J. Clin. Pathol.* 132: 831-839, 2009.

18. **Liu X**, Hameed O. Treponema pallidum immunostain distinguishing syphilitic gastritis from Helicobacter pylori-associated gastritis. *Hum Pathol.* 41: 617-619, 2010.

19. Messick CA, Church JM, **Liu X,** Ting A.H., and Kalady M.F. Stage III colorectal cancer: molecular disparity between primary cancers and lymph node metastases. *Ann. Surg. Oncol.* 17: 425-431, 2010.

20. Brown JM, Betters JL, Lord C, Ma Y, Han X, Yang K, Alger HM, Melchior J, Sawyer J, Shah R, Wilson MD, **Liu X,** Graham MJ, Lee R, Crooke R, Shulman GI, Xue B, Shi H, and Yu L. CGI-58 knockdown in mice causes hepatic steatosis but prevents diet-induced obesity and glucose intolerance. *J. Lipid Res.* 51: 3306-3315, 2010.

21. Shen B, **Liu X.** *De novo* collagenous cuffitis. *Inflamm. Bowel Dis*. 17: 1249-50, 2011.

22. Obusez EC, **Liu X,** and Shen B. Large pedunculated inflammatory cap polyp in an ileal pouch causing intermittent dyschezia. *Colorectal Dis.* 13:e308-309, 2011.

23. **Liu X,** Jakubowski M, Hunt JL. *KRAS* mutations in colorectal cancer is correlated with increased proliferation and spontaneous apoptosis. *Am. J. Clin. Pathol.* 135: 245- 252, 2011.

24. **Liu X,** Jiang W, Aucejo F, Kim R, Miller C, Byrne M, Lopez R, and Yerian L. Insulin-like Growth Factor I Receptor β Expression in Hepatocellular Carcinoma. *Hum. Pathol.* 42: 882-891; 2011.

25. Kim R, Tan A, Lai KK, Jiang J, Wang Y, Rybicki LA, and **Liu X.** Prognostic roles of human equilibrative transporter 1 (hENT-1) and ribonucleoside reductase subunit M1 (RRM1) in resected pancreatic cancer. *Cancer* 117: 3126-3134, 2011.

26. Boncher J, Bonner M, Goldblum JR, **Liu X.** Reticulin staining clarifies florid benign signet ring cell change with mitotic activity in a penetrating gastric ulcer. *Am. J. Surg. Pathol.* 35: 762-766, 2011.

27. Navaneethan U, **Liu X,** Bennett AE, Walsh RM, Venkatesh P, Shen B. IgG4-associated ampullitis and cholangiopathy in Crohn's disease. *J Crohns Colitis* 5: 451-456, 2011.

28. Morrison J, Bronner M, Leach BH, Downs-Kelly E, Goldblum JR, **Liu X**, Lynch syndrome screening in newly diagnosed colorectal cancer in general pathology practice: from the revised Bethesda guidelines to a universal approach. *Scand. J. Gastroenterol.* 46: 1340-1348, 2011.

29. Zhang L, Chari S, Smyrk TC, Deshpande V, Kloppel G, Kojima M, **Liu X,** Longnecker DS, Mino-Kenudson M, Notohara K, Rodriguez-Justo M, Srivastava A, Zamboni G, Zen Y. Autoimmune pancreatitis (AIP) type 1 and type 2: an international consensus study on the histopathologic diagnostic criteria. *Pancreas* 40: 1172-1179, 2011.

30. Landau M, Goldblum JR, DeRoche T, Dumot J, Downs-Kelly E, Rice TW, Xiao SY, **Liu X.** Esophageal carcinoma cuniculatum: report of 9 cases. *Am. J. Surg. Pathol.* 36: 8-17, 2012.

31. Mahajan D, Goldblum JR, Xiao SY, Shen B, **Liu X.** Lymphocytic colitis and collagenous colitis: a review of clinicopathologic features and immunologic abnormalities. *Adv. Anat. Pathol.* 19: 28-38, 2012.

32. Kalady MF, DeJulius KL, Sanchez JZ, Jarrar AM, **Liu X,** Manilich E, Skacel M, Church JM. BRAF mutations in colorectal cancer are associated with distinct clinical characteristics and worse Prognosis. *Dis Colon Rectum* 55: 128-133, 2012.

33. Lin J, Goldblum JR, Bennett AE, Bronner MP, **Liu X.** Composite intestinal adenoma-microcarcinoid. *Am. J. Surg. Pathol.* 36: 292-295, 2012.

34. Lin ZX, **Liu X,** Patil DT, Lian L, Kiran RP, Remzi FH, Ni RZ, and Shen B. Clinical significance of indefinite for dysplasia on pouch biopsy in patients with underlying inflammatory bowel disease. *J. Gastrointest. Surg.* 16:562-571, 2012.

35. Asfaw SH, Kundu N, **Liu X,** Abdel-Aziz H, and Loor MM. Heterotopic pancreas as a lead point for ileo-ileal intussusception. *American Surgeon* 78:E187-E189, 2012.

36. Gilliot MA, Goldblum JR, **Liu X.** Signet-Ring Cell Melanoma of the Gastroesophageal Junction: A case report and literature review. *Arch. Pathol. Lab. Med.* 136(3):324-328, 2012.

37. Roychowdhury S, Chiang DJ, Mandal P, McMullen MR, **Liu X,** Cohen JI, Pollar J, Feldstein AE, Nagy LE. Inhibition of apoptosis protects mice from ethanol-mediated acceleration of early markers of CCl4-induced fibrosis but not steatosis or inflammation. *Alcohol Clin. Exp. Res.* 36:1139-1147, 2012.

38. Patil DT, Bronner MP, Portier BP, Fraser CR, Plesec TP, **Liu X.** A 5-marked panel within multiplex PCR accurately detects microsatellite high (MSI-H) colorectal tumors without DNA. *Diagn. Mol. Pathol.* 21:127-133, 2012.

39. **Liu X,** Melton GB, Xie H, Dietz DW. Extramammary Paget Disease in Peristomal Skin: Report of a Unique Case. *J. Gastrointest. Surg*. 16:1967-1971, 2012.

40. Xie H, Lin J, Thomas DG, Jiang W, **Liu X,** Ribonucleotide reductase M2 does not predict survival in patients with resectable pancreatic adenocarcinoma. *Int. J. Clin. Exp. Pathol.* 5:347-355, 2012.

41. Jiang W, Shadrach B, Carver P, Goldblum JR, Shen B, **Liu X.** Histomorphologic and colecular features of ileal pouch adenocarcinoma: a comparison to ulcerative colitis-associated adenocarcinoma. *Am. J. Surg. Pathol.* 36:1385-1394, 2012.

42. **Liu X,** Goldblum JR, Zhao X, Landau M, Leach BH, Pai R, Lin, J. Distinct clinicohistologic features of inflammatory bowel disease-associated colorectal adenocarcinoma: in comparison to sporadic microsatellite stable and Lynch syndrome-related colorectal adenocarcinoma". *Am. J. Surg. Pathol.* 36:1228-1233, 2012.

43. Wu B, **Liu X,** Shen B. Refractory cuffiits resovled after temporary ileostomy and lysis of adhesion surgery. *Inflamm. Bowel Dis*. 19:E32-33, 2013.

44. Mahajan D, Downs-Kelly E, **Liu X,** Pai R, Patil D, Rybicki L, Bennett A, Plesec T, Cummings O, Rex D, Goldblum JR. Reproducibility of the villous component and high-grade dysplasia in colorectal adenomas <1 cm: implications for endoscopic surveillance. *Am J Surg Pathol.* 37:427-433, 2013.

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BOOK CHAPTERS:

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2. **Hernandez Gonzola D, Liu X.** Role of histology in pouch diseases.

3. **Yu W, Liu X.** Microscopic colitis (显微镜下结肠炎).

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ABSTRACTS:

Platform Presentations

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4. Jiang W, Tan A, Jiang J, Wang Y, Kim R, Palma JF, Zhang Y, **Liu X.** Low expression of ribonucleotide reductase M1 (RRM1) determined by quantitative reverse transcription-PCR (QRT-PCR) is predictive of adjuvant gemcitabine treatment benefit in patients with resectable pancreatic adenocarcinoma: a pilot study. USCAP meeting, March 2010.

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14. Jhala, N., **Liu, X.,** Siegal G.P., Eltoume I., Crowe D.R., Chhieng D.C., and Jhala, D. Cytoplasmic vacuolation an underrecognized cytologic feature in diagnosis of solid pseudopapillary neoplasm of the pancreas on EUS-FNA samples. The 54th American Society of Cytopathology annual meeting, Toronto, Canada. November 2006.

15. Liu, X., Webster J. and Chhieng D.C. Use of CDX2 and villin in the identification of carcinomas arising from the gastrointestinal tract in cytologic preparation. The 54th American Society of Cytopathology annual meeting, Toronto, Canada. November 2006.

16. **Liu, X.,** Abrams G.A., Clements R., Jhala N., and Lazenby A.J. Improvement of Nonalcoholic Fatty Liver Disease after Laparoscopic Roux-en-Y Gastric Bypass Surgery for Morbid Obesity. USCAP 96th annual meeting, San Diego, CA March 2007.

17. **Liu, X.,** Siegal G.P., Jhala, N. Chromogranin A, E-cadherin, and CD10 but not Progesterone Receptor Differentiates Solid-Pseudopapillary Neoplasm of the Pancreas from Pancreatic Endocrine Tumor. CAP'07 annual meeting, Chicago, IL, October 2007.

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19. Burford H.N., Jhala D., **Liu X.,** and Jhala N. E-cadherin, CD10 and progesterone receptor: an immunohistochemical trio to distinguish pancreatic endocrine neoplasm from solid-pseudopapillary neoplasm of the pancreas. USCAP 97th annual meeting, Denver, CO, March 2008.

20. Lai KK, **Liu X.** Direct Immunofluorescence in Esophageal Lichen Planus. *Arch. Pathol. Lab. Med.* 2009; 133:1627 (CAP'09 annual meeting, Washington D.C. October 2009).

21. Kaneshiro DK., Jiang Y., Wang Y., **Liu X.** The effect of Hollande's fixative on the mRNA levels in normal pancreas. USCAP meeting, March 2010.

22. Lai KK., Tan A., Kim RD., Jiang J., Wang Y., Rybicki LA., **Liu X.** Prognostic value of hENT-1 in patients with resected pancreatic adenocarcinoma. USCAP meeting, March 2010.

23. Lai KK., **Liu X.** Identification of reference genes for gene expression analysis by real time quantitative PCR (RTQ-PCR) in pancreatic adenocarcinoma. USCAP meeting, March 2010.

24. Post JC., Bronner M., Leach B., Downs-Kelly E., **Liu X.** Revised Bethesda Guidelines directing MSI testing of colorectal cancers in routine surgical pathology practice: A single institution experience. USCAP meeting, March 2010.

25. Portier BP., Bronner M., **Liu X.** A combination of NR-21, BAT25, and MONO27 run in one polymerase chain reaction (PCR) accurately detects microsatellite instability high (MSI-H) tumors. USCAP meeting, March 2010.

26. Jiang W., **Liu X.,** Aucejo F., Kim R., Yerian LM. Insulin-like growth factor I receptor beta (IGF-IR beta) expression in hepatocellular carcinoma (HCC). USCAP meeting, March 2010.

27. Tan A., **Liu X.,** Rybicki L.A., Jiang J., Wang Y., Palmam J.F., Tiu R.V., Pelley R.J., Kim R.D. Significance of hENT-1 and RRM1 expression in resected pancreatic cancer. The 2010 Gastrointestinal Cancers Symposium. Orlando, FL, January 2010.

28. Shen B, Lian L, and **Liu X.** Prevalence and clinical significance of granulomas in Crohn's disease (CD) of the pouch. Digestive Disease Week meeting. New Orleans, LA. May 2010.

29. Teh M., Cook M., **Liu X.,** Yerian L., Shimoda T., Hsu C-T., To KF., Petersson F., Seet JE., Ng SB., Putti T., Thamboo T., Kwan V., Lee M., Chow W-H., Wong JYY., Ho KY., and Asian Barrett's Consortium. Inter-rater reliability in the histopathologic diagnosis of Barrett's esophagus and associated neoplasia among asian pathologists. UEGW Congress, Barcelona, Spain October 2010.

30. Zhang L., Chari S., Smyrk T., Deshpande V., Kloppel G., Kojima M., **Liu X.,** Longnecker D., Mino-Kenudson M., Notohara K., Rodriguez-Justo M., Srivastava A., Zamboni G., Zen Y. Autoimmune pancreatitis (AIP) Type 1 and type 2: An internation consensus study on histopathologic diagnostic criteria. USCAP meeting, March 2011.

31. Pai R., McMohan J., Yerian L., Bennett A., **Liu X.** Complement 4d deposition in liver transplant is independent of ischemic injury or biliary impairment. USCAP annual meeting, San Antonion, Texas, March 2011.

32. Pai, R., MCMohan J., Yeruan L., Bennett A., **Liu X.** Re-evaluation of clinical diagnostic value of complement 4d in liver transplant. USCAP annual meeting, San Antonio, Texas, March 2011.

33. Patil DT., Bronner M., Plesec TP., Fraser CR., **Liu X.** Can a three-marker panel)NR-21, BAT-25 and MONO-27) accurately detect microsatellite high (MSI-H) colorectal tumors without control DNA? USCAP annual meeting, San Antonio, Texas, March 2011.

34. Post J., Bronner M., **Liu X.** Universal screening for Lynch syndrome in newly diagnosed colorectal cancer significantly increases the detection rate. USCAP annual meeting, San Antonio, Texas, March 2011.

35. Gilliot M., Bronner M., Patil DT., Plesec TP., **Liu X.** High frequency of instability in penta D in Microsatellite Instability High Colorectal Cancer: Potential pitfall in tumor DNA identity interpretation. USCAP annual meeting, San Antonio, Texas, March 2011.

36. **Liu X.,** Patil DT., Shen B. Epithelial changes indefinite for dysplasia in the pouch and peri-pouch but not rectal cuff is associated with inflammation and warrants close follow-up. USCAP annual meeting, San Antonio, Texas, March 2011.

37. **Liu X.,** McMahon J., Yerian L., Bennett A., Pai R. Sinusoidal deposition of complement 4d is more commonly seen in liver allografts in patients with primary sclerosing cholangitis (PSC). USCAP annual meeting, San Antonio, Texas, March, 2011.

38. Law R., **Liu X.,** Walsh RM., Yerian L., Stevens T. Missed opportunities: Pancreatic Resections for autoimmune pancreaitis (AIP). Digestive Disease Week meeting, Chicago, IL, May 2011.

39. Law R.., Yerian L., Walsh RM., Stevens T., **Liu X.** Natural clinical course of histologically proven autoimmune pancreatitis: experience from a single institution. Digestive Disease Week meeting, Chicago, IL May 2011.

40. Gaffney KA., Remer E., **Liu X.,** Lopez R., Shen B. Distinction between Crohn's colitis and ischemic colitis using contrasted computerized tomography. ACG meeting, Washington DC. October 2011.

41. Xie H., Jiang W., Jiang J., Wang Y., Kim R., **Liu X.** Low expression of ribonucleotide reductase M1 predicts adjuvant gemcitabine treatment benefit in patients with resectable pancreatic adenocarcinoma. USCAP annual meeting, Vancouver, Canada, March, 2012.

42. Xie H., Lin J., Thomas DG., Jiang W., **Liu X.,** Ribonucleotide reductase M2 is not predictive of adjuvant gemcitabine treatment benefit in patients with resected pancreatic adenocarcinoma. USCAP annual meeting, Vancouver, Canada, March, 2012.

43. **Liu X.** Paneth cell in colorectal adenoma and sessile serrated polyp: a comparative study. USCAP annual meeting, Vancouver, Canada, March, 2012.

44. Mahajan D., Downs-Kelly E., **Liu X.,** Pai R., Patil D., Rybicki L., Bennett A., Plesec T., Cummings O., Rex D., Goldblum JR. Reproducibility of villous component and high grade dysplasia in colorectal adenomas < 1 cm: Implications for endoscopic surveillance. USCAP annual meeting, Vancouver, Canada, March, 2012.

45. **Liu X.** Lin J. Young age and high frequency of multiplicity, well differentiation, Crohn's-like reaction, tumor heterogeneity, and signet ring differentiation in inflammatory bowel disease-associated colorectal adenocarcinoma. USCAP annual meeting, Vancouver, Canada, March, 2012.

46. Teh M., Cook M., **Liu X.,** Yerian L., Shimoda T., Hsu C-T., To KF., Petersson F., Seet JE., Ng SB., Putti T., Thamboo T., Kwan V., Lee M., Chow W-H., Wong JYY., Ho KY., and Asian Barrett's Consortium. Inter-rater Reliability in the Histopathologic Diagnosis of Barrett's Esophagus and Associated Neoplasia Among Asian Pathologists. Gastroenterology 142 (5), suppl. 1, page S-748, 2012.

47. Shadrach B., Jiang W., Settle M., Bronner M., **Liu X.** Loss of cyclin D1 or p53 in non-dysplastic surveillance biopsies predicts pouch neoplasia: a pilot study. American Molecular Pathology annual meeting, San Diego, CA, October 2012.

48. Xie H., **Liu X.** Diagnostic utility of p53 and cytokeratin 7 immunohistochemistry in idiopathic inflammatory bowel disease-associated neoplasia. The 32nd CCF Research Day. October 2012.

49. Xie H., **Liu X.** Predictive and prognostic roles of ribonucleotide reductase M1 in resectable pancreatic adenocarcinoma. The 32nd CCF Research Day. October 2012.

50. Roychowdhury S., McMullen MR., Pisano SG., **Liu X.,** Nagy LE. Absence of receptor interacting protein kinase 3 prevents ethanol-induced liver injury. The 63th AASLD meeting, November 2012.

51. Lai K., Wang Y., Xie H., Shen B., Goldblum JR., **Liu X.** Clinical outcome after the diagnosis of indefinite for dysplasia in patients with idiopathic inflammatory bowel disease. USCAP 2013 Annual meeting, Baltimore, MD, March 2013.

52. Xie H., Lai K., Xiao S-Y., Pai R., Jiang W., Shadrach B., Carver P., Wang Y., Shen B., **Liu X.** Diagnostic utility of p53 and cytokeratin 7 immunohistochemistry in idiopathic inflammatory bowel disease-associated neoplasia. USCAP 2013 Annual meeting, Baltimore, MD, March 2013.

53. Lai K., Jiang W., Carver P., Liu A., Liu H., Zhang B., Goldblum JR., **Liu X.** Nuclear immunoreactivity of β-catenin is associated with higher expression of AMACR, lower rate of nodal metastasis, and left-side location in surgically resected deeply invasive colonic cancer. USCAP 2013 Annual meeting, Baltimore, MD, March 2013.

54. Zhu H., Li Z., Rice TW., Rybicki LA., Goldblum JR., **Liu X.** Esophagogastric junction intramucosal adenocarcinoma arising in Barrett's negative background: etiology and clinicopathologic features. USCAP 2013 Annual meeting, Baltimore, MD, March 2013.

55. Jiang W., Bronner M., Shadrach B., Wu X., Shen B., **Liu X.** Alterations in cyclin D1 in non-dysplastic surveillance biopsies predicts pouch neoplasia. USCAP 2013 Annual meeting, Baltimore, MD, March 2013.

56. Chen D., Goldblum JR., Landau M., Rice TW., Pai RK., Xiao S-Y., **Liu X.** Semiquantitative histologic evaluation improves diagnosis of esophageal carcinoma cuniculatum on biopsy. USCAP 2013 Annual meeting, Baltimore, MD, March 2013.

57. Xie H., Jiang W., Shadrach B., Carver P., **Liu X.** Inflammatory bowel disease (IBD)-associated colorectal adenocarcinoma is immunophenotypically different. USCAP 2013 Annual meeting, Baltimore, MD, March 2013.

58. Whitcomb E., **Liu X.,** Xiao S-Y. Crohn's-associated small bowel adenocarcinomas exhibit gastric differentiation. USCAP 2013 Annual meeting, Baltimore, MD, March 2013.

59. Thakur V., Ulatowski L., **Liu X.,** Manor D. Vitamin E and nonalcoholic fatty liver disease. The American Society for Biochemistry and Molecular Biology (ASBMB) annual meeting at Experimental Biology 2013, ASBMB press release.

60. Hernandez-Gonzalo D., **Liu X.,** Patil D., Bennett A., Plesec T., Goldblum JR., Kuan S-F., Downs-Kelly E., Shadrach B., Pai RK., and Pai RK. Morphologic and molecular analysis of appendiceal serrated lesions: colorectal terminology may not be applicable. USCAP 2013 Annual meeting, Baltimore, MD, March 2013.

61. Hernandez-Gonzalo D., Lai KK., **Liu X.,** Patil D., Bennett A., Goldblum JR., Walter H. Henricks, Downs-Kelly E., Jeanie Na, Rybicki LA., Shadrach BL., Carver P., Pai RK., and Pai RK. Gene expression profiling of serrated colorectal polyps: Identification of genes that can differentiate hyperplastic polyps from sessile serrated polyps. USCAP 2013 Annual meeting, Baltimore, MD, March 2013.

62. Basturk O., Hruban R., Adsay V., Krasinskas A., Jang K-T., **Liu X.,** Vakiani E., Zhang L., Frankel W., Giordano T., Bellizzi A., Chen J-H., Deshpande V., Yang Z., Klimstra D. High-grade neuroendocrine carcinomas of the pancreas: a clinicopathologic analysis of 60 cases. USCAP 2013 Annual meeting, Baltimore, MD, March 2013.

63. Askar M, Yerian L, Klingman L, Zhang A, **Liu X.** The frequency of *de novo* HLA specific antibodies (DSA) and their association with histological findings and C4d staining in Transplant Liver biopsies. The 2013 Banff meeting, August 2013.

64. Manilich EA, Teverovskiy M, **Liu X.,** Remzi FH. A Novel Prognostic Model for Early Stage Colon Cancer Using Automated Quantitative Tumor Tissue Analysis. Submitted to the American College of Surgeons' 99th Clinical Congress (October 6-10, 2013, Washington, DC).

65. Eng K., Baskar S, Schweiger M, **Liu X.,** Radhakrishan K., Kay M. A pediatric cases series of Mauriac syndrome: not yet an obsolete entity. Submitted to North American Society for Pediatric Gastroenterology, Hepatology and Nutrition (Oct. 10-12, 2013, Chicago, IL).

66. Lee L., Rish P., Xie H., **Liu X.,** Allende D. Annexin A10 as a Potential Marker of Sessile Serrated Polyps in Idiopathic Inflammatory Bowel Disease. USCAP 2014 Annual meeting, San Diego, CA, March 2014.

67. Lee L., Rish P., Xie H., **Liu X.,** Allende D. Serrated Colorectal Polyps in Idiopathic Inflammatory Bowel Disease. USCAP 2014 Annual meeting, San Diego, CA, March 2014.

68. Brown K., Gordon I., Liu X., **Liu X.,** Allende D. Diagnostic utility of p40 in gastrointestinal squamous neoplasm. USCAP 2014 Annual meeting, San Diego, CA, March 2014.

69. Kwak A., Whitcomb E., Reddy P., Kobzev Y., Joseph L., **Liu X.,** Xiao S. K-ras genetic mutational analyses of small bowel adenocarcinoma in sporadic versus Crohn's disease associated cases. USCAP 2014 Annual meeting, San Diego, CA, March 2014.

70. Kissiedu J., Tan CD., Rodriguez R., Downs-Kelly E., **Liu X.,** Patil D. Mesenteric arterial and venous dysplasia / Vasculopathy (MAVD/V) is distinct from fibromuscular dysplasia. USCAP 2014 Annual meeting, San Diego, CA, March 2014. Selected for a Poster Presentation in the *Stowell-Orbison and Surgical/Autopsy Pathology Awards Competition*

71. Horvath B., Allende D., Pai R., Patil D., Plesec T., Xie H., Thota P., Singh P., **Liu X.** Clinical significance of interobserver variability in interpreting Barrett's esophagus biopsies with a diagnosis of indefinite for dysplasia. USCAP 2014 Annual meeting, San Diego, CA, March 2014.

72. Horvath B., Allende D., Pai R., Patil D., Plesec T., Xie H., Thota P., Singh P., **Liu X.** Barrett`s esophagus with indefinite dysplasia: Clinical outcome and risk stratification. USCAP 2014 Annual meeting, San Diego, CA, March 2014. Selected for a Poster Presentation in the *Stowell-Orbison and Surgical/Autopsy Pathology Awards Competition*

73. Chen D, Xiao S-Y., MDugum M., Horvath B., **Liu X.** Clinical and Demographic Clues to Syndromic Inflammatory/Hyperplastic Small Bowel Polyps. USCAP 2014 Annual meeting, San Diego, CA, March 2014.

74. Chen D, Xiao S-Y., MDugum M., Horvath B., **Liu X.** Small Bowel Inflammatory/Hyperplastic Polyps: Can Histology Differentiate Syndromic from Sporadic Cases? USCAP 2014 Annual meeting, San Diego, CA, March 2014.

75. Wiland H., Goldblum JR., **Liu X.,** Patil D., Pai R. Traditional serrated adenomas: a morphologic, immunohistochemical , and molecular assessment. USCAP 2014 Annual meeting, San Diego, CA, March 2014.

76. Horvath B., Singh P., Xie H., Thota P., Singh P., **Liu X.** Evaluation of clinical and endoscopic parameters as predictors for neoplastic progression in Barrett`s esophagus patients with a diagnosis of indefinite for dysplasia. 2014 DDW Annual meeting, May 2014.

77. Wu X-R., Remzi FH., **Liu X.,** Lian L., Stocchi L., Ashbum J., Shen B. Disease course and management strategy of pouch neoplasia in patients with underlying inflammatory bowel diseases. 2014 DDW Annual meeting, May 2014.

78. Rose J., **Liu X.,** Shen B. Association between smoking and small intestinal bacterial overgrowth. 2014 DDW Annual meeting, May 2014.

79. Dugum M, **Liu X.** Clinical outcomes following postoperative chemotherapy in patients with idiopathic inflammatory bowel disease (IBD)-associated colorectal adenocarcinoma (CAC): a comparison study to patients with sporadic CAC. ACG annual meeting, Oct. 2014.

80. Jackson WE, Achkar J-P, Lee L, **Liu X,** Pai R, Lopez R, Allende D. Significance of sessile serrated lesions in inflammatory bowel disease. ACG annual meeting, Oct. 2014. Am J Gastroenterol 109: S519. (IBD Research Award and Presidential Poster)

81. Liu G, Ma J, **Liu X,** Shen B. Clinical implication of non-caseating granulomas on histology in patients with ileal pouches. Annual ACG meeting, Orlando, FL, November 2014.

82. Kwak A, **Liu X,** Allende D, Pai R, J Hart, Xiao S. Comparison of morphologic subtypes of intraductal papillary mucinous neoplasm of the pancreas with their mucin immunoprofiles. Accepted by USCAP 2015 Annual meeting, Boston, MA, March 2015.

83. Kwak A, **Liu X,** Allende D, Pai R, J Hart, Xiao S. Reproducibility of the morphologic subtypes of intraductal papillary mucinous neoplasm of the pancreas. Accepted by USCAP 2015 Annual meeting, Boston, MA, March 2015.

84. Willis E, Wiland H, Allende D, Cruise M, Goldblum J, **Liu X**, Pai R, Plesec T, Yerian L, Carver P, Patil D. Expressonof ARID1A and p53 in patients with a consensus diagnosis of Barrett's foveolar and intestinal-type dysplasia. Accepted by USCAP 2015 Annual meeting, Boston, MA, March 2015.

85. Horvath B, Wu X, Lai KK, Shen B, **Liu X.** p53 but not cytokeratin 7 expression predicts colorectal neoplasia risk in patients with inflammatory bowel disease and mucosa indefinite for dysplasia. Accepted by USCAP 2015 Annual meeting, Boston, MA, March 2015.

86. Esnakula A, Pai R, Shadrach B, **Liu X**, Allende D. BRAF mutations in IBD-associated sessile serrated polyps and comparison with sporadic counterparts. Accepted by USCAP 2015 Annual meeting, Boston, MA, March 2015.

87. Klungboonkrong V, Bullend J, Bennett S, Yerian L, Allende D, Liu X, Bennett AE, Patil D, Plesec P, Tuthill RJ, Pai R, Hashimoto K, Fujiki M, Eghtsad B, Kelly D, Quintini C, Aucejo FN, Miller C, Kappor B, Haddadin I, Spain J, Gill A, Levitin A, Karuppasamy K, McLennan G. Does drug eluting beads size matter with degree of tumor necrosis? A retrospective study from single institute experience. WCIO 2015, New York City, May 2014.

88. Kissiedu J, Allende D, Pai R, Liu X. Interobserver agreement study on diagnosing serrated polyps with stromal changes. CAP 2015 Annual meeting, Nashville, TN, Oct. 2015.

89. Roma A, Liu X, Patil DT, Xie H, Allende D. New proposed terminology for anal squamous lesions: Its application and interobserver agreement among pathologists in academic and community hospitals. CAP 2015 Annual meeting, Nashville, TN, Oct. 2015.

90. Roma A, Liu X, Patil DT, Xie H, Allende D. P16 used in the diagnosis of anal squamous intraepithelial lesions: new guidelines application and interobserver agreement results. CAP 2015 Annual meeting, Nashville, TN, Oct. 2015.

91. Mannan AASR, Liu X, Mukhopadhyay S. Lung metastasis from composite adenocarcinoma-carcinoid of the small bowel presenting as interstitial lung disease after a 14-year recurrence-free interval. ASCP annual meeting, Long Beach, CA, Oct. 2015.

92. Lan N, Shen B, Liu X. Comparison of clinical features and outcomes of collagenous sprue, celiac disease, and collagenous colitis. ACG annual meeting, Hawaii, Oct. 2015.

93. Zhang Y, Liu X. Different Genetic Alteration of *KRAS*, *TP53*, and *CDKN2A* in Pancreatic Adenocarcinoma Detected from Endoscopic Ultrasound-Guided Fine-Needle aspiration (EUS-FNA) by Next-Generation Sequencing - Less can be more. ASC meeting, Washington, DC, Nov. 2015.

Abstracts accepted

1. Horvath B, Xie H., Guirguis J., Allende D., Jeung J., Lapinski J., Patil D., McCullough, Dasarathy S., Liu X. Interobserver variability in interpreting liver biopsies with a diagnosis of alcoholic hepatitis. USCAP meeting, March 2015..

2. Horvath B., Guirguis J., Allende D., Cruise M., Patil D., O'Shea R., Rivas J., Yordanka R., Lan N., Liu X. Glutamine synthetase expression in liver biopsies from patients with congestive heart failure. Accepted by USCAP meeting, September 2015.

3. Horvath B., Xie H., Allende D., Cruise M., Patil D., O'Shea R., Rivas J., Yordanka R., Liu X. Reproducibility of evaluation of liver biopsies from patients with congestive heart failure. USCAP meeting, March 2015..

4. Yuan L., Lan N., Shen B., Liu X. Re-appraisal of clinical features, treatment, and outcome in patients with a histologic diagnosis of collagenous sprue. Submitted to USCAP meeting, September 2015.

5. Alpert L, Liu X., Pai R., Samowitz WS., Setia N., Xiao S-Y., Hart J., Pai RK. Colorectal carcinomas with isolated loss of PMS2 by IHC: an usual subset of MSI-H tumors. USCAP meeting, March 2015..

6. Shih AR., Liu X., Silva A, Pesci A, Soslow R, Deshpande V, Oliva E. Refined characterization of hepatoid differentiation in gynecologic tract neoplasm. USCAP meeting, March 2015.

7. Shih AR., Bal M., Zukerberg L., Brown I., Lauwers GY., Liu X., Kelly P., Oliva E., Ahn S., Kim K., Deshpande V. Hepatoid carcinomas of the gastrointestinal tract: a reappraisal of morphological and immunohistochemical features. USCAP meeting, March 2015.

Abstracts submitted

1. Yuan L., Li Y., Shen B., Xie H., Liu X. Mesenteric nodal granuloma in the resected bowel in patients with Crohn's disease is associated with young age and transmural inflammation. Submitted to CAP meeting, 2015.

2. Zou Y., Zhang Y., Church J., Liu X. Lymphoid enhancer-binding factor (LEF-1): a potentially useful ancillary stain in the diagnosis of desmoid fibromatosis. Submitted to CAP meeting, 2015.

3. Kissiedu J., Wang Z., Esnakula A., Pai R., Shadrach B., Liu X., Allende D. Molecular and immunohistochemical characterization of inflammatory bowel disease (IBD) associated sessile serrated polyps in comparison to sporadic counterparts. Submitted to CAP meeting, 2015.

4. Petrosky JA, Agbroko SO, **Liu X,** Dean R, Church J, Costedio M. Asymptomatic colonic mucosa-associated lymphoid tissue (MALT) lymphoma found incidentally on colonoscopy: a case series and review of treatment guidelines. Submitted to DDW annual meeting. December 2015.

RESEARCH LAB EXPERIENCE:

- DNA techniques: Subcloning, PCR, sequencing, gel shifts, library construction, *in vitro* transfection, Southern blot.

- RNA techniques: RNA extraction and isolation from frozen human tissues, cDNA Library construction and screening, reverse transcription-PCR (RT-PCR), differential gene expression analyzed by microarray.

- Protein techniques: SDS PAGE, protein isolation and purification using HPLC, Western blots, Immunoprecipitation, immunohistochemistry, calpain activity assays, FITC-casein zymography, ELISA, and Lowry and BCA protein assays.

- Cell Biology techniques: Renal proximal tubules isolation and purification, measurement of intracellular free Ca^{2+} using spectrometry, light/fluorescent/confocal microscopy, flow cytometry, and cell injury/death measurement using PI staining and LDH release assay, oxygen consumption measurement.

- Primary culture of renal epithelial cells, culture of Hela cell line, mitochondrial isolation and purification, mitochondrial function measurement, and Na^+/K^+-ATPase assay.

EXTRACURRICULAR EXPERIENCE:

- Student representative of Southcentral Chapter to national SOT (2000-2001)
- Vice Chair, Graduate Student Association, UAMS (1999-2000).

MISCELLANEOUS:

Research Associate

Dept. of Pharmaceutical Sciences, Univ. of Arkansas for Med. Sci., Little Rock, AR (2002 – 2003)
Studied the role of PKC and EGFR-mediated signaling pathway in repair and regeneration of renal proximal tubular epithelium.

Research Assistant

Dept. of Pathology, Univ. of Arkansas for Med. Sci., Little Rock, AR (1997 – 1998)
Studied methylation of the *MyoD1* gene and translocation of PAX3-FKHR in rhabdomyosarcoma.

Instructor and staff physician

Dept. of Internal Medicine, Dalian Medical University, Dalian City, P.R.China, 7/94-8/95

Rev 1/31/2016