

Curriculum Vitae

Name: Kwang Hyuck Lee, M.D. Ph.D.
Family Name: Lee
First Name: Kwang Hyuck
Position: Associate Professor of Medicine
Division of Gastroenterology
Department of Medicine
Samsung Medical Center
Sungkyunkwan University School of Medicine
Department of Clinical Research Design & Evaluation, SAIHST,
Sungkyunkwan University

Licensure: Mar/1995 Licensed to Practice Medicine in Republic of Korea (55425)
Mar/2000 Diploma, Korean Board of Internal Medicine (6678)

Education:

1989-1991 Pre-Medical School, Seoul National Univ. Seoul, Korea
1991-1995 M.D. College of Medicine, Seoul National Univ.
2003-2004 M.Sc. (internal medicine) Graduate School, SNU
2009-2012 Ph.D.(Internal Medicine), College of Medicine, Dongguk Univ.

Postgraduate Training:

1995-1996 Internship, Seoul National University Hospital,
Seoul, Korea
1996-2000 Residency in Internal Medicine,
Seoul National University Hospital
2000-2003 Obligatory Military Service
Positioned at Captain Army Surgeon
2003-2005 Fellowship in Internal Medicine,
Gastroenterology and Liver
Seoul National University Hospital

Postdoctoral Fellowship

2006-2007
Sol Goldman Pancreatic cancer research center
Johns Hopkins University School of Medicine
Baltimore Maryland USA

Faculty Appointment:

2005-2006 Gastroenterology and Liver faculty
Department of Internal Medicine
Seoul National University Bundang Hospital
Seoul National University School of Medicine
2006-present Gastroenterology and Liver faculty
Department of Internal Medicine
Samsung Medical Center,
Sungkyunkwan University School of Medicine.

Membership of Professional Societies:

- Korean Medical Association (1995)
- Korean association of Internal Medicine (2000)
- Korean society of gastroenterology (2004)
- Korean society of gastrointestinal endoscopy (2004)
- Korean society of pancreatobiliary disease (2005)
- American Gastroenterology Association (2008)
- Korean society of gastrointestinal cancer (2010)
- American Association of Cancer Research (2014)

Bibliography (SCI)¹⁻¹⁰⁴

1. Lee KH, Yoon WJ, Ryu JK, et al. [Mutations of SPINK1 and PRSS1 gene in Korean patients with chronic pancreatitis]. *Korean J Gastroenterol* 2004;44:93-8.
2. Hwang JH, Ryu JK, Yoon YB, et al. Spontaneous activation of pancreas trypsinogen in heat shock protein 70.1 knock-out mice. *Pancreas* 2005;31:332-6.
3. Kim KM, Kim YJ, Lee KH, et al. [Clinical characteristics of factory workers with asymptomatic liver function test abnormalities found on serial health examination]. *Korean J Hepatol* 2005;11:144-56.
4. Lee KH, Ryu JK, Yoon WJ, et al. Mutation analysis of SPINK1 and CFTR gene in Korean patients with alcoholic chronic pancreatitis. *Dig Dis Sci* 2005;50:1852-6.
5. Lee KH, Yoon WJ, Lee JK, et al. [Quantification of plasma DNA as a tumor marker in patients with pancreatic cancer]. *Korean J Gastroenterol* 2005;46:226-32.
6. Lee JK, Ryu JK, Park JK, et al. Risk factors of acute cholecystitis after endoscopic common bile duct stone removal. *World J Gastroenterol* 2006;12:956-60.
7. Ryu JK, Lee WJ, Lee KH, et al. SK-7041, a new histone deacetylase inhibitor, induces G2-M cell cycle arrest and apoptosis in pancreatic cancer cell lines. *Cancer Lett* 2006;237:143-54.
8. Yoon WJ, Lee DH, Jung YJ, et al. Histologic characteristics of gastric polyps in Korea: emphasis on discrepancy between endoscopic forceps biopsy and endoscopic mucosal resection specimen. *World J Gastroenterol* 2006;12:4029-32.
9. Yoon WJ, Lee JK, Lee KH, et al. A comparison of covered and uncovered Wallstents for the management of distal malignant biliary obstruction. *Gastrointest Endosc* 2006;63:996-1000.
10. Chang TC, Wentzel EA, Kent OA, et al. Transactivation of miR-34a by p53 broadly influences gene expression and promotes apoptosis. *Mol Cell* 2007;26:745-52.
11. Kim BG, Lee DH, Ye BD, et al. Comparison of 7-day and 14-day proton pump inhibitor-containing triple therapy for *Helicobacter pylori* eradication: neither treatment duration provides acceptable eradication rate in Korea. *Helicobacter* 2007;12:31-5.
12. Lee JK, Park JK, Yoon WJ, et al. Risk for post-ERCP pancreatitis after needle knife precut sphincterotomy following repeated cannulation attempts. *J Clin Gastroenterol* 2007;41:427-31.
13. Yoon WJ, Ryu JK, Park JK, et al. Intraductal papillary mucinous neoplasms of the pancreas with anomalous union of the pancreaticobiliary ducts. *Pancreas* 2007;35:196-8.
14. Lee JS, Lee KT, Jung JH, et al. [Factors associated with malignancy in gallbladder polyps without gallbladder stone]. *Korean J Gastroenterol* 2008;52:97-105.
15. Lee SH, Hwang JH, Yang KY, et al. Does endoscopic sphincterotomy reduce the recurrence rate of cholangitis in patients with cholangitis and suspected of a common bile duct stone not detected by ERCP? *Gastrointest Endosc* 2008;67:51-7.
16. Yoo JW, Ryu JK, Lee SH, et al. Preventive effects of ulinastatin on post-endoscopic retrograde cholangiopancreatography pancreatitis in high-risk patients: a prospective, randomized, placebo-controlled trial. *Pancreas* 2008;37:366-70.
17. Yoon WJ, Lee JK, Lee KH, et al. Cystic neoplasms of the exocrine pancreas: an update of a nationwide survey in Korea. *Pancreas* 2008;37:254-8.
18. Chang WI, Kim BJ, Lee JK, et al. The clinical and radiological characteristics of focal mass-forming autoimmune pancreatitis: comparison with chronic pancreatitis and pancreatic cancer. *Pancreas* 2009;38:401-8.
19. Hwang JH, Lee SH, Lee KH, et al. Cathepsin B is a target of Hedgehog signaling in pancreatic cancer. *Cancer Lett* 2009;273:266-72.
20. Kim KH, Lee KT, Jung HW, et al. [A patient diagnosed as autoimmune pancreatitis 6 years after onset of jaundice]. *Korean J Gastroenterol* 2009;53:257-60.
21. Lee KH, Lee JS, Kim BJ, et al. Pancreatic involvement in Korean patients with von Hippel-Lindau disease. *J Gastroenterol* 2009;44:447-52.
22. Lee KH, Lotterman C, Karikari C, et al. Epigenetic silencing of MicroRNA miR-107 regulates cyclin-dependent kinase 6 expression in pancreatic cancer. *Pancreatol* 2009;9:293-301.
23. Park SH, Lee KH, Kang KJ, et al. [A case of carcinosarcoma in the liver]. *Korean J Gastroenterol* 2009;53:198-201.
24. Park SS, Lee KT, Lee KH, et al. [Diagnostic usefulness of PET/CT for pancreatic malignancy]. *Korean J Gastroenterol* 2009;54:235-42.
25. Shin SR, Lee JK, Lee KH, et al. Can the growth rate of a gallbladder polyp predict a neoplastic polyp? *J Clin Gastroenterol* 2009;43:865-8.

26. Chang BJ, Kim SH, Park HY, et al. Distinguishing xanthogranulomatous cholecystitis from the wall-thickening type of early-stage gallbladder cancer. *Gut Liver* 2010;4:518-23.
27. Choi HK, Lee JK, Lee KH, et al. Differential diagnosis for intrahepatic biliary cystadenoma and hepatic simple cyst: significance of cystic fluid analysis and radiologic findings. *J Clin Gastroenterol* 2010;44:289-93.
28. Choi SC, Lee JK, Jung JH, et al. The clinicopathological features of biliary intraductal papillary neoplasms according to the location of tumors. *J Gastroenterol Hepatol* 2010;25:725-30.
29. Kim BJ, Kang P, Lee JK, et al. Are the echogenicities on intraductal ultrasonography really biliary microlithiasis? *Dig Dis Sci* 2010;55:836-41.
30. Kim HS, Yi SY, Jun HJ, et al. Definitive chemoradiation therapy with capecitabine in locally advanced pancreatic cancer. *Anticancer Drugs* 2010;21:107-12.
31. Kim J, Jang KT, Kim KH, et al. Aberrant maspin expression is involved in early carcinogenesis of gallbladder cancer. *Tumour Biol* 2010;31:471-6.
32. Kim JH, Lee JY, Lee KT, et al. RGS16 and FosB underexpressed in pancreatic cancer with lymph node metastasis promote tumor progression. *Tumour Biol* 2010;31:541-8.
33. Lee JH, Lee KT, Park J, et al. Predictive factors associated with malignancy of intraductal papillary mucinous pancreatic neoplasms. *World J Gastroenterol* 2010;16:5353-8.
34. Cho HC, Lee JK, Lee KH, et al. Are endoscopic or percutaneous biliary drainage effective for obstructive jaundice caused by hepatocellular carcinoma? *Eur J Gastroenterol Hepatol* 2011;23:224-31.
35. Choi ER, Chung YH, Lee JK, et al. Preoperative evaluation of the longitudinal extent of borderline resectable hilar cholangiocarcinoma by intraductal ultrasonography. *J Gastroenterol Hepatol* 2011;26:1804-10.
36. Kim J, Jang KT, Mo Park S, et al. Prognostic relevance of pathologic subtypes and minimal invasion in intraductal papillary mucinous neoplasms of the pancreas. *Tumour Biol* 2011;32:535-42.
37. Kim YJ, Lee KT, Jo YC, et al. Hepatobiliary scintigraphy for detecting biliary strictures after living donor liver transplantation. *World J Gastroenterol* 2011;17:2626-31.
38. Lee JK, Choi ER, Jang TH, et al. A prospective comparison of liquid-based cytology and traditional smear cytology in pancreatic endoscopic ultrasound-guided fine needle aspiration. *Acta Cytol* 2011;55:401-7.
39. Lee KH, Lee JK. Interventional endoscopic ultrasonography: present and future. *Clin Endosc* 2011;44:6-12.
40. Lee YY, Gwak GY, Lee KH, et al. Predictors of the feasibility of primary endoscopic management of biliary strictures after adult living donor liver transplantation. *Liver Transpl* 2011;17:1467-73.
41. Park J, Lee KT, Jang TH, et al. Risk factors associated with the postoperative recurrence of intraductal papillary mucinous neoplasms of the pancreas. *Pancreas* 2011;40:46-51.
42. Park YG, Lee KH, Lee JK, et al. [MicroRNA expression pattern in intraductal papillary mucinous neoplasm]. *Korean J Gastroenterol* 2011;58:190-200.
43. Yi JH, Lee J, Park SH, et al. A prognostic model to predict clinical outcomes with first-line gemcitabine-based chemotherapy in advanced pancreatic cancer. *Oncology* 2011;80:175-80.
44. Bae SY, Lee KT, Lee JH, et al. Proper management and follow-up strategy of branch duct intraductal papillary mucinous neoplasms of the pancreas. *Dig Liver Dis* 2012;44:257-60.
45. Chung YH, Choi ER, Kim KM, et al. Can percutaneous cholecystostomy be a definitive management for acute acalculous cholecystitis? *J Clin Gastroenterol* 2012;46:216-9.
46. Kim KM, Lee JK, Shin JU, et al. Clinicopathologic features of intraductal papillary neoplasm of the bile duct according to histologic subtype. *Am J Gastroenterol* 2012;107:118-25.
47. Kim KM, Lee KH, Chung YH, et al. A comparison of bilateral stenting methods for malignant hilar biliary obstruction. *Hepatogastroenterology* 2012;59:341-6.
48. Kim MJ, Lee KH, Lee KT, et al. The value of positron emission tomography/computed tomography for evaluating metastatic disease in patients with pancreatic cancer. *Pancreas* 2012;41:897-903.
49. Kim ST, Lee J, Park SH, et al. Safety and efficacy of adjuvant chemoradiation therapy with capecitabine after resection of pancreatic ductal adenocarcinoma: a retrospective review. *Am J Clin Oncol* 2012;35:432-8.
50. Lee JH, Kim SA, Park HY, et al. New-onset diabetes patients need pancreatic cancer screening? *J Clin Gastroenterol* 2012;46:e58-61.
51. Park HD, Kang ES, Kim JW, et al. Serum CA19-9, cathepsin D, and matrix metalloproteinase-7 as a diagnostic panel for pancreatic ductal adenocarcinoma. *Proteomics* 2012;12:3590-7.
52. Shin JU, Lee CH, Lee KT, et al. Prognostic significance of ATM and cyclin B1 in pancreatic neuroendocrine tumor. *Tumour Biol* 2012;33:1645-51.
53. Shin JU, Lee JK, Kim KM, et al. Endoscopic naso-gallbladder drainage by using cholangioscopy for

- acute cholecystitis combined with cholangitis or choledocholithiasis (with video). *Gastrointest Endosc* 2012;76:1052-5.
54. Sung YK, Lee JK, Lee KH, et al. The clinical epidemiology and outcomes of bacteremic biliary tract infections caused by antimicrobial-resistant pathogens. *Am J Gastroenterol* 2012;107:473-83.
 55. Yang MH, Lee KT, Yang S, et al. Guggulsterone enhances antitumor activity of gemcitabine in gallbladder cancer cells through suppression of NF-kappaB. *J Cancer Res Clin Oncol* 2012;138:1743-51.
 56. Bahng S, Yoo BC, Paik SW, et al. Photodynamic therapy for bile duct invasion of hepatocellular carcinoma. *Photochem Photobiol Sci* 2013;12:439-45.
 57. Jeon J, Song SY, Lee KT, et al. Clinical significance and long-term outcome of incidentally found bile duct dilatation. *Dig Dis Sci* 2013;58:3293-9.
 58. Kang CI, Sung YK, Lee KH, et al. Clinical impact of inappropriate initial antimicrobial therapy on outcome in bacteremic biliary tract infections. *Scand J Infect Dis* 2013;45:227-34.
 59. Kim KM, Lee JK, Bahng S, et al. Role of endoscopic ultrasonography in patients with intermediate probability of choledocholithiasis but a negative CT scan. *J Clin Gastroenterol* 2013;47:449-56.
 60. Lee JK, Choi JH, Lee KH, et al. A prospective, comparative trial to optimize sampling techniques in EUS-guided FNA of solid pancreatic masses. *Gastrointest Endosc* 2013;77:745-51.
 61. Lee JK, Lee KT, Choi ER, et al. A prospective, randomized trial comparing 25-gauge and 22-gauge needles for endoscopic ultrasound-guided fine needle aspiration of pancreatic masses. *Scand J Gastroenterol* 2013;48:752-7.
 62. Park HY, Lee YJ, Lee JH, et al. Endoscopic ultrasound-guided fine needle aspiration of solid pseudopapillary tumors of the pancreas: a report of three cases. *Korean J Intern Med* 2013;28:599-604.
 63. Shin JU, Lee JK, Kim KM, et al. The differentiation of autoimmune pancreatitis and pancreatic cancer using imaging findings. *Hepatogastroenterology* 2013;60:1174-81.
 64. Shin JU, Lee KH, Kim SA, et al. Intraductal thermal injury using a heat probe and radiofrequency ablation electrode in a swine model of biliary stenosis. *Clin Res Hepatol Gastroenterol* 2013;37:159-65.
 65. Yang S, Lee KT, Lee JY, et al. Inhibition of SCAMP1 suppresses cell migration and invasion in human pancreatic and gallbladder cancer cells. *Tumour Biol* 2013;34:2731-9.
 66. Yun HS, Min YW, Lee MJ, et al. Clinicoradiologic characteristics and outcomes of metastatic cancer to the pancreas and double primary pancreatic cancer. *Clin Res Hepatol Gastroenterol* 2013;37:182-8.
 67. Chang WI, Min YW, Yun HS, et al. Prophylactic pancreatic stent placement for endoscopic duodenal ampullectomy: a single-center retrospective study. *Gut Liver* 2014;8:306-12.
 68. Choi MK, Choi JY, Lee J, et al. Prognostic and predictive value of metabolic tumor volume on (18)F-FDG PET/CT in advanced biliary tract cancer treated with gemcitabine/oxaliplatin with or without erlotinib. *Med Oncol* 2014;31:23.
 69. Jeon J, Ahn J, Yoo H, et al. Hepatoduodenal fistula formation following transcatheter arterial chemoembolization and radiotherapy for hepatocellular carcinoma: treatment with endoscopic Histoacryl injection. *Korean J Intern Med* 2014;29:101-5.
 70. Lee KH. [Chemo-sensitivity study in pancreatic cancer]. *Korean J Gastroenterol* 2014;64:317-9.
 71. Lee KH, Lee SJ, Lee JK, et al. Prediction of malignancy with endoscopic ultrasonography in patients with branch duct-type intraductal papillary mucinous neoplasm. *Pancreas* 2014;43:1306-11.
 72. Woo YS, Lee JK, Oh SH, et al. Role of SpyGlass peroral cholangioscopy in the evaluation of indeterminate biliary lesions. *Dig Dis Sci* 2014;59:2565-70.
 73. Yang MH, Kim HT, Lee KT, et al. KML001 inhibits cell proliferation and invasion in pancreatic cancer cells through suppression of NF-kappaB and VEGF-C. *Anticancer Res* 2014;34:3469-74.
 74. Jung JG, Lee JK, Lee KH, et al. Comparison of endoscopic retrograde cholangiopancreatography with papillary biopsy and endoscopic ultrasound-guided pancreatic biopsy in the diagnosis of autoimmune pancreatitis. *Pancreatology* 2015;15:259-64.
 75. Jung JG, Lee KT, Woo YS, et al. Behavior of Small, Asymptomatic, Nonfunctioning Pancreatic Neuroendocrine Tumors (NF-PNETs). *Medicine (Baltimore)* 2015;94:e983.
 76. Kim KM, Park JW, Lee JK, et al. A Comparison of Preoperative Biliary Drainage Methods for Perihilar Cholangiocarcinoma: Endoscopic versus Percutaneous Transhepatic Biliary Drainage. *Gut Liver* 2015;9:791-9.
 77. Kim TH, Song TJ, Hwang JH, et al. Predictors of malignancy in pure branch duct type intraductal papillary mucinous neoplasm of the pancreas: A nationwide multicenter study. *Pancreatology* 2015;15:405-10.
 78. Lee KH, Lee JK, Choi DW, et al. Postoperative prognosis prediction of pancreatic cancer with seven microRNAs. *Pancreas* 2015;44:764-8.
 79. Lee YJ, Park YK, Lee MJ, et al. Different Strategies for Transpancreatic Septotomy and Needle Knife

- Infundibulotomy Due to the Presence of Unintended Pancreatic Cannulation in Difficult Biliary Cannulation. *Gut Liver* 2015;9:534-9.
80. Oh CR, Kim MJ, Lee KH. [A Case of Intra-abdominal Paragonimiasis Mimicking Metastasis of Lung Cancer Diagnosed by Endoscopic Ultrasound-guided Fine Needle Aspiration]. *Korean J Gastroenterol* 2015;66:41-5.
 81. Park HY, Oh SH, Lee KH, et al. Is cholecystectomy a reasonable treatment option for simple gallbladder polyps larger than 10 mm? *World J Gastroenterol* 2015;21:4248-54.
 82. Park J, Yun HS, Lee KH, et al. Discovery and Validation of Biomarkers That Distinguish Mucinous and Nonmucinous Pancreatic Cysts. *Cancer Res* 2015;75:3227-35.
 83. Yang MH, Lee KT, Yang S, et al. KML001 enhances anticancer activity of gemcitabine against pancreatic cancer cells. *Anticancer Res* 2015;35:183-9.
 84. Hyun SH, Kim HS, Choi SH, et al. Intratumoral heterogeneity of (18)F-FDG uptake predicts survival in patients with pancreatic ductal adenocarcinoma. *Eur J Nucl Med Mol Imaging* 2016;43:1461-8.
 85. Park JK, Kang KJ, Oh CR, et al. Evaluating the Minimal Specimens From Endoscopic Ultrasound-Guided Fine-Needle Aspiration in Pancreatic Masses. *Medicine (Baltimore)* 2016;95:e3740.
 86. Woo YS, Lee JK, Noh DH, et al. SpyGlass cholangioscopy-assisted guidewire placement for post-LDLT biliary strictures: a case series. *Surg Endosc* 2016;30:3897-903.
 87. Woo YS, Lee KH, Lee JK, et al. Novel flower-type covered metal stent to prevent cholecystitis: experimental study in a pig model. *Surg Endosc* 2016;30:1141-5.
 88. Cho JH, Lee KH, Kim JM, et al. Safety and effectiveness of endobiliary radiofrequency ablation according to the different power and target temperature in a swine model. *J Gastroenterol Hepatol* 2017;32:521-526.
 89. Lee KH, Kim EY, Cho J, et al. Risk factors associated with adverse events during endoscopic ultrasound-guided tissue sampling. *PLoS One* 2017;12:e0189347.
 90. Oh SH, Lee JK, Lee KT, et al. The Combination of Cyst Fluid Carcinoembryonic Antigen, Cytology and Viscosity Increases the Diagnostic Accuracy of Mucinous Pancreatic Cysts. *Gut Liver* 2017;11:283-289.
 91. Park G, Park JK, Shin SH, et al. Characterization of background noise in capture-based targeted sequencing data. *Genome Biol* 2017;18:136.
 92. Park J, Lee E, Park KJ, et al. Large-scale clinical validation of biomarkers for pancreatic cancer using a mass spectrometry-based proteomics approach. *Oncotarget* 2017;8:42761-42771.
 93. Park JK, Lee YJ, Lee JK, et al. KRAS mutation analysis of washing fluid from endoscopic ultrasound-guided fine needle aspiration improves cytologic diagnosis of pancreatic ductal adenocarcinoma. *Oncotarget* 2017;8:3519-3527.
 94. Woo YS, Lee KH, Lee KT, et al. Postoperative changes of liver enzymes can distinguish between biliary stricture and graft rejection after living donor liver transplantation: A longitudinal study. *Medicine (Baltimore)* 2017;96:e6892.
 95. Woo YS, Lee KH, Noh DH, et al. 22G versus 25G biopsy needles for EUS-guided tissue sampling of solid pancreatic masses: a randomized controlled study. *Scand J Gastroenterol* 2017;52:1435-1441.
 96. Chung MJ, Kang H, Kim HG, et al. Multicenter phase II trial of modified FOLFIRINOX in gemcitabine-refractory pancreatic cancer. *World J Gastrointest Oncol* 2018;10:505-515.
 97. Kim SH, Woo YS, Lee KH, et al. Preoperative EUS-guided FNA: effects on peritoneal recurrence and survival in patients with pancreatic cancer. *Gastrointest Endosc* 2018;88:926-934.
 98. Kim TH, Woo YS, Chon HK, et al. Predictors of Malignancy in "Pure" Branch-Duct Intraductal Papillary Mucinous Neoplasm of the Pancreas without Enhancing Mural Nodules on CT Imaging: A Nationwide Multicenter Study. *Gut Liver* 2018;12:583-590.
 99. Noh DH, Choi K, Gu S, et al. Comparison of 22-gauge standard fine needle versus core biopsy needle for endoscopic ultrasound-guided sampling of suspected pancreatic cancer: a randomized crossover trial. *Scand J Gastroenterol* 2018;53:94-99.
 100. Park G, Park JK, Son DS, et al. Utility of targeted deep sequencing for detecting circulating tumor DNA in pancreatic cancer patients. *Sci Rep* 2018;8:11631.
 101. Park JK, Lee JK, Yang JI, et al. Long term outcome of EUS-based strategy for suspected choledocholithiasis but negative CT finding. *Scand J Gastroenterol* 2018:1-7.
 102. Park JK, Woo YS, Noh DH, et al. Efficacy of EUS-guided and ERCP-guided biliary drainage for malignant biliary obstruction: prospective randomized controlled study. *Gastrointest Endosc* 2018;88:277-282.
 103. Yang JI, Lee JK, Ahn DG, et al. Predictive Model for Neoplastic Potential of Gallbladder Polyp. *J Clin Gastroenterol* 2018;52:273-276.
 104. Park JK, Yang JI, Wi JW, et al. Long term outcome and recurrence factors after percutaneous cholecystostomy as a definitive treatment for acute cholecystitis. *J Gastroenterol Hepatol* 2019.