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Major Field	Gastrointestinal, Hepatobiliary & Pancreas pathology Molecular pathology	
Educational Background	03/1996-02/2002	M.D The Catholic University of Korea, Collage of Medicine
	03/2006-02/2013	The Catholic University of Korea, Graduate School of Biomedical Science (Ph.D.)
	04/2016-02/2017	Certified Physician in Biomedical Informatics (CPBMI)
License	03/1996-02/2002	Medical license
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Major Biography	03/2002-02/2003	Internship, Catholic medical center, The Catholic University of Korea.
	05/2006-02/2007	Teaching Assistant, Department of Pathology, College of Medicine, The Catholic University of Korea.
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Achievements (Publications, others)	**MEMBERSHIPS** Full Member, the Korean Society of Pathology Full Member, Korean Society for Cytopathology Full Member, the Gastrointestinal Pathology Study Group of Korean Society of Pathologists **Publications (First-author or Corresponding author, from 2017)** 1. Jeong HY, Ham IH, Lee SH, Ryu D, Son SY, Han SU, Kim TM, Hur H. Spatially distinct reprogramming of the tumor microenvironment based on tumor invasion in diffuse-type gastric cancers. Clin Cancer Res. 2021 Aug 12:clincanres.0792.2021. 2. Lee SH, Song IH, Jang HJ. Feasibility of deep learning-based fully automated classification of microsatellite instability in tissue slides of colorectal cancer. Int J Cancer. 2021 Aug 1;149(3):728-740. 3. Jang HJ, Song IH, Lee SH. Deep Learning for Automatic Subclassification of Gastric Carcinoma Using Whole-Slide Histopathology Images. Cancers (Basel). 2021 Jul 29;13(15):3811. 4. Yim K, Jang WM, Lee SH. Modified Tumor Budding as a Better Predictor of Lymph Node Metastasis in Early Gastric Cancer: Possible Real-World Applications. Cancers (Basel). 2021 Jul 7;13(14):3405. 5. Lee CS, Song IH, Lee A, Kang J, Lee YS, Lee IK, Song YS, Lee SH. Enhancing the landscape of colorectal cancer using targeted deep sequencing. Sci Rep. 2021 Apr 14;11(1):8154. 6. Oh CK, Lee BI, Lee SH, Kim SJ, Lee HH, Lim CH, Kim JS, Cho YK, Park JM, Cho YS, Lee IS, Choi MG. Circumferential submucosal incision prior to endoscopic mucosal resection versus conventional endoscopic mucosal resection for colorectal lesions with endoscopic features of sessile serrated lesions. Surg Endosc. 2021 Apr 28. 7. HJ Jang, IH Song, SH Lee. Generalizability of Deep Learning System for the Pathologic Diagnosis of Various Cancers. Appl. Sci. 2021, 11(2), 808. 8. Jang HJ, Lee A, Kang J, Song IH, Lee SH. Prediction of clinically actionable genetic alterations from colorectal cancer histopathology images using deep learning. World J Gastroenterol. 2020 Oct 28;26(40):6207-6223. 9. Lee SH, Yoo J, Song YS, Lim CH, Kim TM. Mutation Analysis of Colorectal and Gastric Carcinomas Originating from Adenomas: Insights into Genomic Evolution Associated with Malignant Progression. Cancers (Basel). 2020 Jan 31;12(2):325. 10. Cho KO, Lee SH, Jang HJ. Feasibility of fully automated classification of whole slide images based on deep learning. Korean J Physiol Pharmacol. 2020 Jan;24(1):89-99 11. Lee HH, Lee SH, Song KY, Na SJ, O JH, Park JM, Jung ES, Choi MG, Park CH. Evaluation of Slug expression is useful for predicting lymph node metastasis and survival in patients with gastric cancer. BMC Cancer. 2017 Oct 3;17(1):670 12. Yim K, Won DD, Lee IK, Oh ST, Jung ES, Lee SH. Novel predictors for lymph node metastasis in submucosal invasive colorectal carcinoma. World J Gastroenterol. 2017 Aug 28;23(32):5936-5944. 13. Lee SH, Yoo HJ, Rim DE, Cui Y, Lee A, Jung ES, Oh ST, Kim JG, Kwon OJ, Kim SY, Jeong SW. Nuclear Expression of GS28 Protein: A Novel Biomarker that Predicts Prognosis in Colorectal Cancers. Int J Med Sci. 2017 Apr 9;14(6):515-522. 14. Won DD, Lee JI, Lee IK, Oh ST, Jung ES, Lee SH. The prognostic significance of KRAS and BRAF mutation status in Korean colorectal cancer patients. BMC Cancer. 2017 Jun 5;17(1):403. 15. Lee SH, Jung SH, Kim TM, Rhee JK, Park HC, Kim MS, Kim SS, An CH, Lee SH, Chung YJ. Whole-exome sequencing identified mutational profiles of high-grade colon adenomas. Oncotarget. 2017 Jan 24;8(4):6579-6588. 16. Lee SH, Chung AM, Lee A, Oh WJ, Choi YJ, Lee YS, Jung ES. KRAS Mutation Test in Korean Patients with Colorectal Carcinomas: A Methodological Comparison between Sanger Sequencing and a Real-Time PCR-Based Assay. J Pathol Transl Med. 2017 Jan;51(1):24-31.