

Thiyaphat Laohawetwanit, MD



Personal details

Date of birth May 26th, 1993
Nationality Thai
Address Division of Pathology, Chulabhorn International College of Medicine, Thammasat University, Pathum Thani, Thailand
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Education

2010 – 2016 Doctor of Medicine (M.D.) (First Class Honors), Faculty of Medicine, Chulalongkorn University, Bangkok, Thailand
2016 – 2019 Higher Graduate Diploma of Clinical Sciences Program in Anatomic Pathology, Department of Pathology, Faculty of Medicine, Chulalongkorn University, Bangkok, Thailand
Sep 2018 Visiting scholar (Liver pathology), Department of Pathology, National University Hospital, Singapore
May 2019 Visiting scholar (Pulmonary pathology, digital pathology, and artificial intelligence), Department of Pathology, Nagasaki University Hospital, Nagasaki, Japan
Jan – Jun 2024 Visiting scholar (Liver pathology), Anatomic Pathology Unit, Humanitas Research University Hospital, Milan, Italy
Jul – Dec 2024 Visiting scholar (Gastrointestinal and liver pathology), Department of Pathology, University of California, San Francisco, California, USA

Primary appointment Associate Professor of Pathology, Chulabhorn International College of Medicine, Thammasat University (May 2023 – present)

Work experience

Aug 2019 – Apr 2021 Lecturer, Chulabhorn International College of Medicine, Thammasat University
Apr 2021 – May 2023 Assistant Professor of Pathology, Chulabhorn International College of Medicine, Thammasat University

Academic service

Nov 2019 – present Member, Executive Committee, International Academy of Pathology, Thailand Division (IAP-Thailand)
Aug 2024 – present Editorial Board Member, *Annals of Diagnostic Pathology*
May 2025 – present Editorial Review Board Member, *Sage Open Pathology*

Professional service

Aug 2019 – present Consultant pathologist (GI/HBP, surgical), Thammasat University Hospital
Jan 2020 – present Consultant GI/HBP pathologist, National Healthcare Systems Co., Ltd. (N Health)
Sep 2024 – present Consultant GI/HBP pathologist, Bangkok R.I.A. Co., Ltd.
Jan 2025 – present Consultant GI/HBP pathologist, Pathology Diagnostic Center Co., Ltd.
Mar 2025 – present Consultant GI/HBP pathologist, Siriraj Hospital
July 2025 – present Consultant GI/HBP pathologist, Hi-tech Lab Co., Ltd.
June 2026 – present Consultant GI/HBP pathologist, Siriraj Piyamaharajkarun Hospital

Language Thai (Native), English (Fluent)

Areas of interest Hepatobiliary and gastrointestinal pathology
Multimodal generative artificial intelligence
Digital pathology
Pathology education

Publications

1. **Laohawetwanit T**, Boonkasem W, Thongsawang B, Chankate P, Kaileaw W, Shuangshoti S, Teerapakpinyo C. Increasing demand for MSI testing and prevalence of MSI-H cancers in Thai patients: Experience at Chulalongkorn GenePro Center. *BKK Med J*. 2018; 14(2): 1-5. <http://doi.org/10.31524/bkkmedj.2018.09.001>
2. **Laohawetwanit T**, Chantranuwatana P, Ongcharit P. Heart transplant for multiple recurrences of familial cardiac myxomas in an adolescent patient: A case report and literature review. *Asian Arch Pathol*. 2019; 2: 34-44.
3. **Laohawetwanit T**, Tanaka K, Zaizen Y, Tabata K, Ando K, Ishimoto H, Mukae H, Miyazaki Y, Bychkov A, Fukuoka J. A case report of pulmonary amyloidosis recognized by detection of AA amyloid exclusively in alveolar macrophages. *Respir Med Case Rep*. 2020; 30: 101046. <https://doi.org/10.1016/j.rmcr.2020.101046>
4. **Laohawetwanit T**. The use of virtual pathology in teaching medical students: First experience of a medical school in Thailand. *MedEdPublish*. 2020; 9(1): 116. <https://doi.org/10.15694/mep.2020.000116.1>
5. **Laohawetwanit T**, Klaikaew N. Pathological aspects of mucinous cholangiocarcinoma: A single-center experience and systematic review. *Pathol Int*. 2020 Sep; 70(9): 661-70. <https://doi.org/10.1111/pin.12983>
6. **Laohawetwanit T**. Preclinical medical student perspectives on nonforensic autopsy presentations as instruments for understanding basic medical sciences: A small-scale study at an international college of medicine in Thailand. *J Med Assoc Thai*. 2021; 104(3): 453-9. <http://doi.org/10.35755/jmedassocthai.2021.03.11907>
7. **Laohawetwanit T**, Lerttanatum N, Wanpiyarat N, Manasilp N, Chaiparnich S. Combined hepatocellular-cholangiocarcinoma and its mimickers: Diagnostic pitfalls in surgical pathology. *Ann Diagn Pathol*. 2021; 53: 151770. <https://doi.org/10.1016/j.anndiagpath.2021.151770>
8. Kantasiripitak C, **Laohawetwanit T**. Embracing online virtual microscopy and web conferencing for pathology residents in Thailand: A paradigm shift in pathology education in the midst of COVID-19 pandemic. *AMJAM*. 2021 Aug; 21(2): 145–50.
9. **Laohawetwanit T**, Hareerak T, Thamwongskul C, Boon-Ing N. Extramucosal anal canal adenocarcinoma, non-anal gland type, and non-fistula-associated with mucinous appearance: A recently described diagnostic entity. *Pathol Int*. 2021;71(10):715-8. <https://doi.org/10.1111/pin.13146>
10. **Laohawetwanit T**. Online pathology education for medical students: Lessons learned during COVID-19 lockdown in central Thailand. *AMJAM*. 2022 Jan; 22(1): 64-9.
11. Surapatpichai M, Taedomkul S, Jiragawasan C, **Laohawetwanit T**. Cytomegalovirus colitis in an immunocompromised patient presenting with massive lower gastrointestinal bleeding. *IDCases*. 2022;28:e01500. <https://doi.org/10.1016/j.idcr.2022.e01500>
12. **Laohawetwanit T**, Apornvirat S, Wanpiyarat N, Lerttanatum N. Interpretation pitfalls in immunohistochemistry of primary liver carcinoma: A retrospective analysis of liver biopsy specimens. *J Med Assoc Thai*. 2022; 105(5): 450-6. <http://doi.org/10.35755/jmedassocthai.2022.05.12421>
13. **Laohawetwanit T**, Wanpiyarat N, Lerttanatum N. Useful histopathologic features for diagnosing focal liver lesions with spindle cell morphology: A clinicopathologic study. *Ann Diagn Pathol*. 2022;59:151975. <https://doi.org/10.1016/j.anndiagpath.2022.151975>
14. Kantasiripitak C, **Laohawetwanit T**, Apornvirat S, Niernapa K. Validation of whole slide imaging for frozen section diagnosis of lymph node metastasis: A retrospective study from a tertiary care hospital in Thailand. *Ann Diagn Pathol*. 2022;60:151987. <https://doi.org/10.1016/j.anndiagpath.2022.151987>
15. Swatesutipun V, Tangpaitoon T, Tangkaew N, Chawong S, **Laohawetwanit T**. IgG4-related ureteral stricture. *Urology*. 2022;168:e18-e20. <https://doi.org/10.1016/j.urology.2022.07.026>

16. **Laohawetwanit T**, Kunjantarachot A, Apornvirat S. The role of online virtual microscopy in improving medical students' performance and preference in pathology: Experience from a medical school in Thailand. *AMJAM*. 2023;23(1):69-74.
17. Taeudomkul S, Surapatpichai M, Kantasiripitak C, **Laohawetwanit T**. Unusual morphologic features of small duct intrahepatic cholangiocarcinoma with ductal plate malformation. *AMJAM*. 2023;23(1):81-5.
18. **Laohawetwanit T**, Lerttanatum N, Wanpiyarat N. Prognostic value of tumor budding in hepatocellular carcinoma patients: A clinicopathologic study. *J Med Assoc Thai*. 2024;107:39-46. <http://doi.org/10.35755/jmedassocthai.2024.1.13934>
19. Apornvirat S, Namboonlue C, **Laohawetwanit T**. Comparative analysis of ChatGPT and Bard in answering pathology examination questions requiring image interpretation. *Am J Clin Pathol*. 2024;162(3):252-60. <https://doi.org/10.1093/ajcp/aqae036>
20. **Laohawetwanit T**, Wanpiyarat N, Lerttanatum N, Apornvirat S, Kantasiripitak C, Atiroj N, et al. Histopathologic evaluation of gastric intestinal metaplasia in non-neoplastic biopsy specimens: Accuracy and interobserver reliability among general pathologists and pathology residents. *Ann Diagn Pathol*. 2024;70:152284. <http://doi.org/10.1016/j.anndiagpath.2024.152284>
21. Apornvirat S, Thinpanja W, Damrongkiet K, Benjakul N, **Laohawetwanit T**. Comparing customized ChatGPT and pathology residents in histopathologic description and diagnosis of common diseases. *Ann Diagn Pathol*. 2024;73:152359. <https://doi.org/10.1016/j.anndiagpath.2024.152359>
22. **Laohawetwanit T**, Apornvirat S, Kantasiripitak C. ChatGPT as a teaching tool: Preparing pathology residents for board examination with AI-generated digestive system pathology tests. *Am J Clin Pathol*. 2024;162(5):471-9. <https://doi.org/10.1093/ajcp/aqae062>
23. **Laohawetwanit T**, Gonzalez RS, Bychkov A. Learning at a distance: results of an international survey on the adoption of virtual conferences and whole slide imaging by pathologists. *J Clin Pathol*. 2024;77(9):632-8. <https://doi.org/10.1136/jcp-2023-208912>
24. **Laohawetwanit T**, Apornvirat S, Kantasiripitak C. The association between histopathological growth patterns with tumor budding and poorly differentiated clusters in colorectal liver metastasis treated with preoperative systemic therapy. *Pathol Int*. 2024;74(10):583-91. <https://doi.org/10.1111/pin.13473>
25. **Laohawetwanit T**, Apornvirat S, Namboonlue C. Thinking like a pathologist: Morphologic approach to hepatobiliary tumors by ChatGPT. *Am J Clin Pathol*. 2025;163(1):3-11. <https://doi.org/10.1093/ajcp/aqae087>
26. **Laohawetwanit T**, Pinto DG, Bychkov A. A survey analysis of the adoption of large language models among pathologists. *Am J Clin Pathol*. 2025;163(1):52-9. <https://doi.org/10.1093/ajcp/aqae093>
27. Sa-ngiamwibool P, **Laohawetwanit T**. Comparative analysis of ChatGPT and human expertise in diagnosing primary liver carcinoma: A focus on gross morphology. *Siriraj Medical Journal*. 2025;77(2):119-29. <https://doi.org/10.33192/smj.v77i2.271596>
28. **Laohawetwanit T**, Namboonlue C, Apornvirat S. Accuracy of GPT-4 in histopathological image detection and classification of colorectal adenomas. *J Clin Pathol*. 2025;78(3):202-7. <http://doi.org/10.1136/jcp-2023-209304>
29. Panzeri D, **Laohawetwanit T**, Akpınar R, De Carlo C, Belsito V, Terracciano L, et al. Assessing the diagnostic accuracy of ChatGPT-4 in the histopathological evaluation of liver fibrosis in MASH. *HepatoL Commun*. 2025;9(5). <https://doi.org/10.1097/hc9.0000000000000695>
30. Kantasiripitak C, Kaewnopparat W, Kintarak J, Angthong W, Limpavitayaporn P, **Laohawetwanit T**. 2025 Coexisting hepatic myopericytoma and multiple biliary hamartomas: A case report. *AMJAM*. 2025;25(2):50-3. <https://doi.org/10.70933/2773-9465.1027>
31. **Laohawetwanit T**, Apornvirat S, Asaturova A, Li H, Lami K, Bychkov A. Evaluation of general-purpose large language models as diagnostic support tools in cervical cytology. *Pathol Res Pract*. 2025;274:156159. <https://doi.org/10.1016/j.prp.2025.156159>
32. Apornvirat S, Pisutpunya A, Atiroj N, **Laohawetwanit T**. From lecture slides to personalized assessments: ChatGPT-driven digestive pathology questions for targeted learning. *Pathol Int*. 2026;76(1):e70083. <https://doi.org/10.1111/pin.70083>

33. Tachibana Y, Bychkov A, Lami K, Munkhdelger J, Pham H, **Laohawetwanit T**, et al. Extracting histologic features to distinguish primary and metastatic squamous cell carcinoma of the lung. *Pathol Int*. 2026;76(1):e70084. <https://doi.org/10.1111/pin.70084>
34. Thinpanja W., Kaewnopparat W., Stiithsuksanoh C., Sooksaen P., Chajitrawan P., Khueankaeo C., ... **Laohawetwanit T**. Validation of a low-cost whole slide imaging system for pathological diagnosis of gastric ulcers in biopsy specimens by pathology residents. *Asian Pac J Cancer Prev*. 2026;27(1):319-326. <https://doi.org/10.31557/apjcp.2026.27.1.319>
35. Jangyubol K, Kittikongwat S, Yimnoon J, Petcharat B, Sinthuwiwat T, **Laohawetwanit T**, et al. Determination of the optimal cell count for HER2 status assessment in fluorescence in situ hybridization. *Ann Diagn Pathol*. 2026;84:152652. <https://doi.org/10.1016/j.anndiagpath.2026.152652>.
36. **Laohawetwanit T**, Dixit S, Agarwal S, Yoshikawa AL, Bychkov A. Evaluating the diagnostic performance of multimodal large language models in thyroid cytology. *Hum Pathol*. 2026;175:106156. <https://doi.org/10.1016/j.humpath.2026.106156>

Textbooks

1. **Laohawetwanit T**, Apornvirat S, Kunjantarachot A. *Atlas of Digital Pathology for Health Science Students*. Pathum Thani (Thailand): Thammasat University Press; 2022.
2. **Laohawetwanit T**. *Surgical Pathology of Liver Tumors: From Basic Insights to ChatGPT Applications*. Pathum Thani (Thailand): Thammasat University Press; 2025.

Invited presentations – Local

- 2025 Research productivity. Department of Pathology, Faculty of Medicine, Thammasat University.
- 2025 Research 101: What I wish I knew during residency. Department of Pathology, Faculty of Medicine, Chulalongkorn University.
- 2025 Research productivity for medical students. International Federation of Medical Students Association (IFMSA) – Thailand. Faculty of Medicine, Chulalongkorn University.

Invited presentations – National

- 2018 Interesting case. The 58th IAP-Thailand Annual Meeting, Bangkok, Thailand.
- 2019 Interesting cases. Hepatobiliary pathology workshop and review, NHealth Academy of Pathology, Bangkok, Thailand.
- 2025 Small biopsies, big challenges: Pathologic insights into focal liver lesions. Liver and bile duct pathology long course. The 35th RCPATH-Thailand annual meeting, Bangkok, Thailand.
- 2026 Applications of multimodal generative AI tools in pathology. The 36th RCPATH-Thailand annual meeting, Bangkok, Thailand.
- 2026 Survival guide to solid pancreatic tumors: Tips for everyday practice. Pancreas and gallbladder pathology long course. The 36th RCPATH-Thailand annual meeting, Bangkok, Thailand.

Invited presentations – International

- 2018 Poster presentation. The 64th Autumn Annual Meeting of the Japanese Society of Pathology, Kure, Hiroshima, Japan.
- 2019 Poster presentation. The Spring Scientific Meeting 2019, The International Academy of Pathology, Hong Kong Division, Hong Kong.
- 2019 Poster presentation. The 11th Asia Pacific International Academy of Pathology Congress, Hefei, China.
- 2019 Poster presentation. The Asia Pacific Digestive Week 2019, Kolkata, India.
- 2020 Oral presentation. The 19th Meeting of the Japanese Society of Digital Pathology, online.
- 2020 E-poster presentation. The 32nd Congress of the European Society of Pathology and 33rd International Congress of the International Academy of Pathology, online.
- 2021 E-poster presentation. The 33rd Congress of the European Society of Pathology, online.
- 2022 Poster presentation. The 34th International Congress of the International Academy of Pathology, Sydney, Australia.

- 2023 Poster presentation. The United States and Canadian Academy of Pathology 112th Annual Meeting, New Orleans, Louisiana, USA.
- 2023 E-poster presentation. The 13th Asia Pacific International Academy of Pathology, online.
- 2024 Oral presentation. The 20th European Congress on Digital Pathology, Vilnius, Lithuania.
- 2024 Poster presentation. The 35th International Congress of the International Academy of Pathology, Cancun, Mexico.
- 2025 Poster presentation (2 posters). The United States and Canadian Academy of Pathology 114th Annual Meeting, Boston, Massachusetts, USA.
- 2025 Beyond the usual: Two surprising cases of colonic ulcers. SGIAP-ASEAN Pathology Webinar Series, The International Academy of Pathology, Singapore Division, online.
- 2025 E-poster presentation. The International Association for Health Professions Education Annual Meeting (AMEE 2025), Barcelona, Spain.
- 2025 E-poster presentation. The 37th Congress of the European Society of Pathology, Vienna, Austria.
- 2025 Podium and e-poster presentation. The 2nd Annual Congress of the Asian Society of Digital Pathology, Mumbai, India.
- 2025 International poster presentation. The 77th Annual Fall Meeting and the 2nd International Congress of the Korean Society of Pathologists, Seoul, South Korea.

Awards

- 2020 Most outstanding instructor award (voted by undergraduate students). Chulabhorn International College of Medicine, Thammasat University.
- 2020 Outstanding young researcher award. Thammasat University.
- 2020 Second runner-up, Excellence in research award. Chulabhorn International College of Medicine, Thammasat University.
- 2022 Runner-up, Resident research competition award (senior author). Faculty of Medicine, Thammasat University.
- 2024 Giordano Fellowship (Liver pathology, Milan, Italy). The European Society of Pathology
- 2024 Best poster award. The 35th International Congress of the International Academy of Pathology, Cancun, Mexico.
- 2025 Young researcher travel award. The 2nd Annual Congress of the Asian Society of Digital Pathology, Mumbai, India.
- 2025 International poster presentation award. The 77th Annual Fall Meeting and the 2nd International Congress of the Korean Society of Pathologists, Seoul, South Korea.
- 2025 Best oral presentation award (senior author). The 14th Asia Pacific International Academy of Pathology Congress, Bangkok, Thailand.
- 2026 Outstanding young academic researcher award. Chulabhorn International College of Medicine, Thammasat University.
- 2026 Most research publications (2025). Chulabhorn International College of Medicine, Thammasat University.
- 2026 Runner-up, most research publications in Scopus Quartile 1 (2025). Chulabhorn International College of Medicine, Thammasat University.