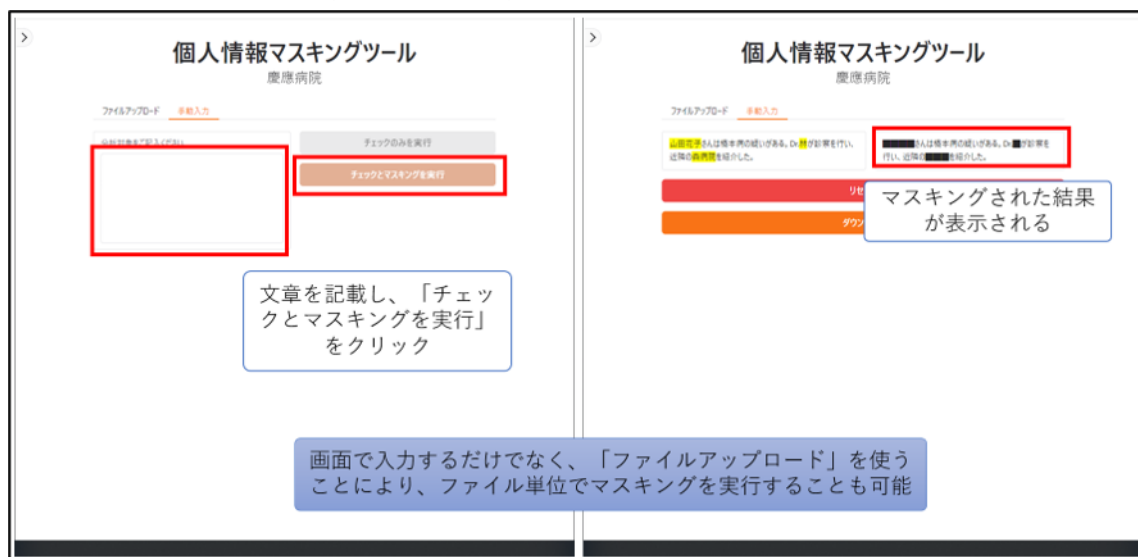


Keio University Special Project for Emergency Medical Care System Support

● FY2025

- Continuing the initiative launched in FY2020, we have hired two physicians in the Department of Gastroenterology and Hepatology and the Department of Emergency and Critical Care Medicine.
- We developed a personal information identification system utilizing a local LLM (generative AI).

Development of a Personal Information Identification System Utilizing a Local LLM (Generative AI)



Overview

A tool was commissioned to check whether medical records taken off-site contain personal medical information. Previously, screening text-based records, such as progress notes, for personal information was time-consuming. The system now automates this screening using generative AI. As a result, an LLM deployed in a local environment now screens records to ensure that information containing personal data does not leave the hospital.

Main Activities of Physicians Hired in FY2025

Gastroenterology and Hepatology

Clinical Practice

- Provided cancer care for gastrointestinal cancer patients, with a focus on chemotherapy in outpatient and inpatient settings
- Staffed specialist outpatient clinics three times per week and a tumor case consultation

- service three times per week, including phone consultations from other departments
- Saw over 200 outpatients annually and served as attending physician for approximately 10 inpatients at any given time
 - In addition to oncology ward conferences and oncology outpatient conferences, took an active part in interdisciplinary conferences covering upper GI, lower GI, pancreas, and major vascular invasion
 - Served as an opinion leader at various conferences, contributing to discussions on clinical management strategies
 - Provided consultative co-management for all referred cases of immune checkpoint inhibitor-related adverse event (irAE) colitis, regardless of referring department, with a dedicated focus on adverse-effect management

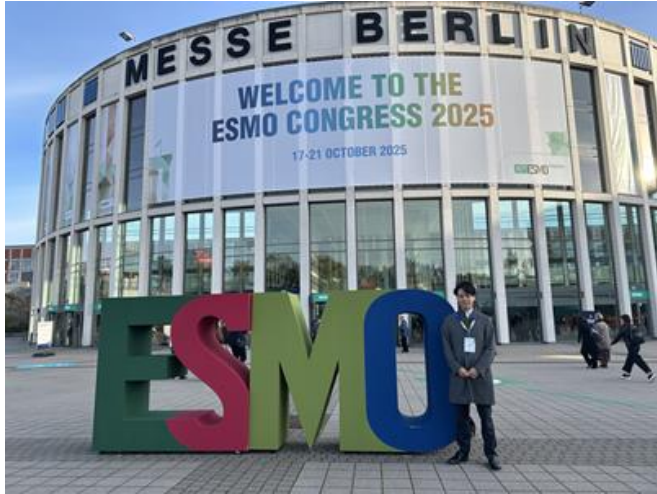
Education and Training

- Provided clinical teaching, medical record documentation guidance, and advice on presentation preparation to medical students rotating through the oncology group
- Served as an examiner for the Post-CC OSCE for sixth-year students, contributing to the objective assessment of clinical competencies
- In basic research, mentored doctoral students whose research focuses on gastrointestinal immunology, covering experimental design, laboratory techniques, and research methodology

Research

- Conducted clinical research informed by clinical experience in parallel with basic research in tumor immunology
- In clinical research, designed and conducted studies focusing primarily on GIST, esophageal cancer, and gastric cancer
- Authored a paper that was the first to demonstrate the site-specific prevalence of NFE2L2 mutations in esophageal squamous cell carcinoma (ESCC), showing that those in the middle thoracic region are associated with prognosis (Chida A, et al. Int J Clin Oncol. 2025)
- Currently planning the ANTIEqUE study—a WJOG multi-institutional, single-arm Phase II study of FTD/TPI plus nivolumab for gastric cancer patients in third-line therapy or beyond—with patient enrollment scheduled to begin in April 2026
- In basic research, identified a novel gene with specific expression in intratumoral effector regulatory T cells (Tregs)
- Using two-photon microscopy-based in vivo imaging analysis, demonstrated that this gene plays a role in Treg motility and immunosuppressive function
- Pursued collaborations with researchers both domestically and internationally
- Visited the Okinawa Institute of Science and Technology (OIST) and exchanged research findings with multiple laboratories (September 18–20, 2025)

- Attended the European Society for Medical Oncology (ESMO) Congress in Berlin, Germany (September 16–21, 2025), gathering the latest international insights and strengthening clinical and research networks
- Plans to continue contributing to the advancement of gastrointestinal oncology from both clinical and basic research perspectives



Attending the European Society for Medical Oncology (ESMO) Congress 2025 (Berlin)

Emergency and Critical Care Medicine

Clinical Practice

- Managed a wide range of emergency presentations, from level-one through level-three, in the emergency department
- Focused on operational improvements to reduce patient length of stay and enhance clinical efficiency
- Consistently attended to an average of more than 10 cases per shift, contributing to improvements in both emergency care quality and patient satisfaction
- In addition to high-care unit (HCU) management, commenced ICU clinical practice in collaboration with the Department of Anesthesiology from this fiscal year
- Contributed to strengthening admission capacity for critically ill inpatients
- Leveraged continuous electroencephalography (cEEG) to develop a neurocritical care framework
- Served as attending physician for critically ill patients with conditions including septic shock, respiratory failure, and altered consciousness
- Collaborated with multiple departments to ensure thorough early diagnosis and early treatment, contributing to improved patient outcomes
- Also served as the primary physician for emergency department inpatients
- Contributed to treatment plan coordination and the promotion of team-based care through conferences

Education and Training

- Engaged in educational activities in emergency and critical care medicine
- Organized and instructed emergency department conferences, ICLS training sessions, and Journal Club
- Contributed to strengthening educational infrastructure
- Delivered clinical clerkship supervision and lectures to students
- Led voluntary research projects with interested students
- Delivered a lecture on mechanical ventilation management at a luncheon seminar for residents, which was well received for its clear and clinically practical content
- Promoted knowledge sharing and reinforced the supervisory framework in interprofessional, multi-level education

Research

- Continued basic research on the therapeutic potential of NMN in post-cardiac arrest brain injury
- Published findings (PLOS ONE. 2025;20:e0334608)
- Presented findings from basic research on post-cardiac arrest brain injury at the Japanese Society of Intensive Care Medicine Annual Meeting, the AHA Resuscitation Science Symposium 2025, and an institutional retreat
- Research was recognized with grant funding, including a Grants-in-Aid for Scientific Research (KAKENHI) and an institutional retreat award
- Advancing research toward establishing novel neuroprotective strategies for post-cardiac arrest brain injury
- Conducted clinical research on optimal cooling rates in post-resuscitation targeted temperature management and presented the findings at the Japanese Association for Acute Medicine Annual Meeting
- Driving research from both basic science and clinical perspectives to improve outcomes for post-cardiac arrest patients



Presentation at the AHA Resuscitation Science Symposium