

Recognition of Distinction in Global Health

University of Alabama at Birmingham Heersink School of Medicine

Clinical Elective: Kyoto University**Date of Training: June – July 2025****Student: Leslie Donoghue Seeley****Date of Reflection: September 2025**

This past summer, my elective at Kyoto University Hospital marked a transformative turning point in my medical journey. As a member of the pioneering cohort of the Recognition of Distinction in Global Health (RDGH), I ventured into uncharted territory—an experience without precedent or external expectations but driven by genuine openness and curiosity toward Kyoto and the Japanese healthcare system. After four immersive weeks observing diverse clinical practices, I can reflect and better understand how culture and context fundamentally shape medicine.

The most striking contrast between Japanese and U.S. healthcare emerged in the emergency department (ED). Kyoto University Hospital has only six ED beds. Several times, I saw all of them empty—an unimaginable situation in most U.S. academic hospitals, where emergency departments are often over capacity, with patients admitted in hallways. The department received, on average, just one helicopter transports each month, showing both lower trauma cases and different prehospital triage patterns. Instead of mainly dealing with firearm injuries or multi-trauma from vehicle accidents—which are common burdens in U.S. hospitals—the ED here focuses heavily on earthquake preparedness. A departmental lecture on earthquake readiness discussed detailed diversion routes, surge capacity plans, and transfer strategies across Kyoto’s hospital system. This ongoing readiness for natural disasters shows how local disease patterns and geography shape emergency priorities.

Another notable difference was the scope of emergency physicians. Many were dual trained in emergency medicine and subspecialties like nephrology or gastroenterology. They also managed two of the hospital’s three ICUs, acting as both acute resuscitation specialists and long-term intensivists. This contrasted with the more siloed division of labor in the U.S., where intensivists and emergency physicians rarely overlap. The breadth of their training demonstrated a more integrated approach to acute care. The medical student schedule also highlighted structural differences. Japanese students rotated for one week at a time through nearly every specialty, gaining breadth across disciplines without needing to secure outside shadowing experiences. In contrast, U.S. students often feel compelled to seek additional exposure and demonstrate initiative beyond formal assignments. For visiting students like myself, the structure provided a comprehensive snapshot of clinical practice and reduced the competitive pressure that often shadows U.S. training.

Japan’s aging population was immediately evident in the ED and inpatient census. Most of the admissions I saw were elderly patients, often presenting with falls, fractures, or complications from chronic disease. One memorable patient was a 102-year-old woman admitted after a fall from ground level—a testament to both longevity and frailty within this group. Analgesic management varied significantly. Opioids were seldom prescribed, and even postoperative patients often received limited

pharmacologic pain control. The lack of accidental overdose cases or opioid-related health issues was notable, reflecting both prescribing habits and societal norms. Cultural beliefs also influence end-of-life care. Brain death determination followed a far stricter process than in the U.S. (EEG requirements), and the number of organ transplants remained comparatively low, partly due to spiritual concerns regarding body integrity after death. These differences underscore how bioethical frameworks are not universal but are shaped by cultural and societal context.

The daily workflow revealed additional differences. Morning meetings took place in a conference room, with case reviews before very short bedside rounds. Unlike U.S. academic centers, where bedside rounds are often lengthy and teaching—focused, Kyoto’s approach emphasized efficiency and rapid patient evaluation. These conferences will also separate department representatives (e.g., infectious disease, pathology, etc.) to discuss cases more collaboratively. With nearly all ED attendings present, their additional subspecialty trainings comprehensively assessed patient statuses. On one round, I remember seeing the range of patients the hospital cares for: a one-month-old infant in one bed and a ninety-year-old man in the neighboring bed. Since there is no separate pediatric hospital, age extremes share the same clinical space, highlighting how health systems and training customs can limit a physician’s patient population when practicing in the US.

During my elective, three American patients presented to the hospital, each highlighting different facets of cross-cultural care. The first was a 24-year-old male on paternity leave in Kyoto with his wife and child, who presented with gross hematuria. Accustomed to U.S. emergency departments where one physician might oversee multiple patients simultaneously, he appeared alarmed when more than six physicians clustered around his bed. This underscored how differing provider-to-patient ratios can influence patient perception of care. The second case involved a patient with minor trauma following a bicycle accident, a relatively straightforward clinical course. The third was more complex: an 81-year-old man developed a gallbladder abscess that progressed to sepsis. After three weeks in the ICU, he remained critically unstable. Despite his tenuous condition, arrangements were underway to transport him via private medical jet to Michigan. Given Kyoto’s lack of a nearby airport, the logistics were extraordinary. From a clinical perspective, I questioned the appropriateness of such a transfer in the setting of ongoing septic shock and high vasopressor requirements. Yet the case illustrated how cultural expectations and family-driven decision-making differ across countries, particularly regarding the pursuit of maximal interventions.

Of all my rotations, infectious disease (ID) resonated most strongly. The diagnostic reasoning, integration of microbiology with clinical care, and global relevance of ID cases were deeply engaging. The practice was like U.S. standards—culture, broad differentials, guideline-based antimicrobial stewardship—though vaccination uptake was less politicized than in current American practice. Despite the department’s strengths, residents were reportedly difficult to recruit, reflecting broader workforce distribution challenges. Across Japan, including Kyoto University, a new virulent strain of *Aspergillus* is growing in infection rates. In the research these ID physician doctors were conducting, the specific *Aspergillus* was traced back to the Netherlands, likely from tulip exports with soil containing *Aspergillus*. Across continents, the impact of infectious disease strongly resonates with me, which reinforces my belief that global health is a necessary entity in healthcare and medical schools.

Kyoto University’s reputation as a research-intensive institution was readily apparent. Faculty consistently approached cases not only as problems to be managed but as opportunities for inquiry. Even

during routine case discussions, there was an undercurrent of scientific curiosity, reinforcing the hospital's role as a center of discovery. This environment aligned closely with my own research interests and left a lasting impression. On the other hand, despite the country's technological sophistication, clinical documentation remained heavily paper based. I often observed physicians and nurses consulting paper labs. This reliance on paper was surprising, though perhaps reflective of entrenched administrative systems. In contrast, cost transparency stood out positively. Patients were informed of their expenses upfront, avoiding the phenomenon of "surprise billing" that plagues U.S. healthcare. This clarity highlighted how systems can prioritize patient trust in ways that extend beyond clinical outcomes.

The most substantial personal challenge I faced was the language barrier. While some faculty and trainees spoke English, the pace and complexity of clinical discussion in Japanese often left me trailing behind. This barrier became an opportunity where I leaned into the aspects of medicine that transcend language: interpreting imaging, reviewing laboratory results, observing procedural techniques, and analyzing workflow. I discovered that clinical reasoning can be practiced visually and analytically even when verbal comprehension is incomplete. Reading CT scans of abdominal abscesses, interpreting ECGs, and reviewing echocardiographic findings became my entry points into discussions that otherwise would have been opaque. This adaptation reinforced for me that medicine is both universal and particular: universal in physiology, laboratory values, and imaging; particular in language, culture, and systems of care.

From my first day at Kyoto University Hospital, I felt this rotation would be deeply impactful. The dedication of the physicians struck me, as did the emphasis on research and the way cultural values permeated medical practice. I came to appreciate that global health is not limited to practicing in low-resource settings. It also involves understanding how advanced systems operate under different cultural, demographic, and geographic pressures. Japan's emphasis on disaster preparedness, its grappling with an aging population, and its restrained use of analgesics provided a counterpoint to the U.S. system's challenges with firearm injuries, opioid epidemic, and resource strain. My rotation was transformative in ways I could not have anticipated. I also encountered the limits of my own communication, and in doing so, discovered new ways of engaging with medicine. By focusing on imaging, laboratory interpretation, and careful observation, I was able to participate meaningfully despite linguistic challenges. Most of all, I left with a deeper understanding of how medicine reflects the society it serves. The lessons of Kyoto—about preparedness, restraint, longevity, and cultural humility—will continue to shape how I view my role as a future physician.

