



The history of Nagasaki, the Japanese birthplace of Western medicine and its education

Hisayuki Hamada^{1,2,7} · Mariko Morishita^{3,4} · Lucy Vorobej⁵ · Cynthia Whitehead^{5,6}

Received: 13 August 2025 / Accepted: 8 March 2026
© The Author(s) 2026

Abstract

Over the past several centuries, Western medical knowledge and practices have circulated globally through colonial, missionary, and educational networks. Contemporary trends toward standardization continue to shape medical education worldwide, often reinforcing asymmetric power relations between the Global North and South. Although dominant models have frequently marginalized local knowledge and traditions, medical education has also involved processes of adaptation and integration within local contexts. This study adopts a historical case study approach to examine the development of Western medical education in Nagasaki, Japan, during the nineteenth and twentieth centuries, focusing on the Dutch physician who established the Nagasaki Medical School in 1857. Drawing on critical analysis of his writings as primary sources, alongside relevant historical materials, the study explores how Western medical education was introduced, interpreted, and transformed within specific cultural and political conditions. We employed perspectives of colonialism, the Japanese concept of *Wakon Yōsai* (Japanese spirit with Western technology), and Cultural Fusion theory to analyze both the pedagogical intentions of the foreign instructor and the strategic engagement of Western medicine by Japanese students. The findings demonstrate that Western medical education in Nagasaki was not simply imposed but actively negotiated by local actors, resulting in hybrid educational practices. This interaction between foreign instruction and local agency continued to shape medical education beyond the founder's tenure. By foregrounding these historical encounters, this study highlights the role of local actors in negotiating medical knowledge and expertise and underscores the importance of recognizing diverse historical and epistemological foundations in international collaborations in medical education.

Keywords History of medicine · History of medical education · Cultural fusion theory · Critical historical analysis

Extended author information available on the last page of the article

Introduction

The widespread adoption of Western frameworks—often assumed to be universally applicable—reflects a deeper history of colonial influence, even in regions that were never formally colonized (Vorobej et al., 2024; Wondimagegn et al., 2023). The dominance of Eurocentric epistemologies in modern health professions education invites historical investigation into how these frameworks took hold, became normalized globally, and how various regions engaged with and negotiated this process.

We conducted a critical historical analysis of medical education in Japan to gain such insights. Japan has a complex history of accepting Western medicine and medical education and adjusting its systems to fit local contexts. Japan was not colonized by Western countries and experienced partial foreign rules temporarily, a context that nuanced the integration of Western medical knowledge into Japan. Geographical and linguistic barriers also informed its pace and nature. Japan's history of adapting Western medical education provides a compelling case study for the international medical education community to consider the challenges, complexities, opportunities, and adaptations of medical education across cultures.

A rich body of scholarship on Western medical doctors who taught in Japan and how Western medical education was imported and integrated into Japanese medical training already exists (Aikawa, 2012; Bowers, 1970a, 1970b; Fukushima, 2018; Ishida, 1988; Kuwabara et al., 2015; Morishita & Iwakuma, 2022; Ogawa, 1964; Ohmi, 2019; Sakai, 2019, 1982; Ushiba & Suzuki, 1978). Previous studies about how Japanese medical doctors accepted Western medicine showed that Western knowledge, skills and systems were imported, accepted and adjusted (localized) for Japanese doctors, patients and systems (Ishida, 1988; Kuwabara et al., 2015; Morishita & Iwakuma, 2022; Ohmi, 2019). Even though Nagasaki is the place where the first Western medical school was founded by the Edo Shogunate government in the 19th century, it has been mainly a subject of historical analysis for alumni scholars (Aikawa, 2012, Hamada, 2023) and those who are interested in the history of Nagasaki broadly (Nagasaki University Regional Culture Study Group and Masuzaki, 2021). Previous historical studies of Japanese medical education have not focused on the history of Nagasaki, its medical schools, and Western teachers at the beginning of systematic Western medical education in Japan as the primary focus of inquiry (Ishida, 1988; Kuwabara et al., 2015; Morishita & Iwakuma, 2022; Ohmi, 2019). Given Nagasaki's geographic importance as the birthplace of Western medicine and medical education in Japan (Aikawa, 2012) and as the home of the first public Western medical school in Japan, with a systematic curriculum for teaching Western medicine, such a gap in the literature was important to address. We thus chose Nagasaki as the geographic focus of our analysis. To build on earlier scholarship (Aikawa, 2012; Hamada, 2023), our study does not assume a uniform process of diffusion but, instead, used focused contextual and source analysis to nuance broader narratives of the spread of Western medical training around the globe. We also adopted several analytical frameworks to investigate the mixing of Western medicine with local Nagasaki medical education.

This study considers how historical sources that represent Western perspectives can be read differently when we move beyond the history of medical education as a simple narrative of knowledge transfer. What can be learned when Japanese actors are understood as strategic participants in shaping medical education within their own cultural and political contexts? Are there “historical silences” (Miles, 2019; Trouillot, 1995) that need to be

remedied? For us, as scholars and practitioners in health professions education, this historical question prompted deeper reflection on how global standards and ‘best practices’ are defined, taught, and transferred.

In this study, we first provide an overview of the history of Nagasaki and the Japanese historical context from the 16th to the 19th century mainly based on the previous literature about Nagasaki medicine (Aikawa, 2012; Hamada, 2023) with other descriptions of the history of Japanese medical education (Bowers, 1970a, 1970b). We next describe the scope of our case study and methods of historical analysis before presenting the findings of our research.

A brief overview of Nagasaki from the 16th to the 19th century

In the 16th century, feudal lords governed the Japanese with repeated battles over territory. Nagasaki, a city on Kyushu Island located in the Southwestern part of Japan, began as a sparsely inhabited fishing village. In 1567, a Portuguese Jesuit, Luis de Almeida (1525–1583) (Fig. 1) founded a church and opened a port in Nagasaki. Over time, Nagasaki developed as a centre for trade with Portuguese merchants and Christian missionaries.

Nagasaki flourished financially after the port opened. However, concerns over the undue influence of foreign trade, knowledge, and practice encouraged the Edo Shogunate to introduce policies of seclusion (Cullen, 2003). Christianity and its missionaries were prohibited, and in 1641, trade was restricted to the small island in the Nagasaki port, Dejima. Nevertheless, channels of exchange were strategically maintained. The Shogunate government traded with a limited number of countries, including Holland, China, Korea, Ryuku, and

Fig. 1 Monument of Luis de Almeida (Amakusa Christian Museum, Amakusa city)



Ainu (Arano, 2015) and by the middle of the 18th century, Japanese people could learn Western knowledge through imported books, although access to this material was strictly regulated symbolically and in practice—only one short bridge connected the island of Dejima to the mainland, and this thoroughfare was closely guarded day and night (Bowers, 1970a). As the site of official foreign trade, Nagasaki became the centre of Western learning in Japan (Nakamura, 2005).

The eighth Shogun, Tokugawa Yoshimune (in his position, 1716–1745), maintained an interest in Western medicine. In 1739, he ordered a court physician to study Western medicine with the Dutch and commissioned the court librarian to produce a Dutch-Japanese dictionary (Bowers, 1970b). In 1774, Sugita Genpaku (1733–1817) and Maeno Ryotaku (1723–1803), two Japanese physicians, published *Kaitai Shinsho* (1774), a translation of a Dutch anatomy text *Tafel Anatomia*, which fostered the early days of the period known as *Rangaku* (Dutch study) (Kim, 2014; Nakamura, 2005). Fujikawa Yū (1865–1940), a pioneer scholar in the history of medicine in Japan described this translation in 1911 as “an epoch-making and fundamental work” (Kim, 2014). Such interest and support facilitated the establishment of private medical schools. The private Western medical school, Narutaki Juku (Fig. 2) was founded by German medical doctor Franz von Siebold (1796–1866) (Fig. 3).

The mid-19th century was a major turning point in Japan. Under pressure from the United States, the Shogunate began seeking further engagement with Western nations. In 1855, the Edo Shogunate turned to the Dutch to aid in the establishment of a naval military school in Nagasaki (Bowers, 1970b). The following year, they made a second request to send a Dutch physician to teach Western medicine (Bowers, 1970b). This invitation was accepted by Dutch military doctor Johannes Lijdius Catharinus Pompe van Meerdervoort (hereafter referred to as Pompe) (1829–1908).



Fig. 2 Narutaki Juku in the late Edo period (Nagasaki University Library)

Fig. 3 Portrait of Siebold (Nagasaki Museum of History and Culture)



Methodology

This study adopts a historical case study approach to examine how Western medical knowledge was localized through educational practice in nineteenth-century Japan. To set feasible parameters for our study, we focused our critical historical analysis on the writings of Pompe, one of the earliest formal educators of Western medicine in Japan. Pompe arrived in Japan in 1857, determined “to develop a program of medical education at Nagasaki patterned after the best in Europe” (Bowers, 1970b). While Pompe’s stay in Japan was relatively short (1857–1862), he opened a medical school and later a teaching hospital, which laid the foundation for the eventual opening of Nagasaki Medical School (Hamada, 2023). The case of Pompe and the Nagasaki Medical School was selected for two reasons. First, Pompe documented his experience in Japan in a book titled *Vijf Jaren in Japan* (Five Years in Japan) originally written in Dutch and published by a Dutch publisher between 1867 and 1868. These volumes have been preserved at several universities in Japan. As the work has since been translated into both Japanese (Pompe, 1968) and English (Pompe, 1970), we are able to access the texts in these languages. Pompe’s detailed account of his time in Nagasaki provides an extensive primary source that allows for close analysis of his interactions with Japanese students and officials. Second, our exploratory review of the historiography on medical education revealed that Pompe’s writings could provide insights for the international medical education community. A critical reading of the successful institutionalization of Western medical education in Japan with attention to the agency of the local

community contributes to a growing international literature on what does, and does not, constitute respectful knowledge exchange (Jensen & Lopez-Carmen, 2022; Ngwenya et al., 2023; Vorobej et al., 2024; Whitehead et al., 2018; Wondimagegn et al., 2018, 2023). These features make the case both analytically possible and valuable for local and international scholars alike.

Our main period of analysis for the case study were the years of Pompe's time in Japan from 1857 to 1862. We also briefly considered Japan's engagement with the international community following Pompe's departure in 1862. We made this decision to situate Pompe's invitation to Japan and his subsequent work within the longer history of Japanese strategic choice and adaptation in medical education. We analyzed a combination of published secondary literature, translated writings especially of Pompe's documents (Pompe, 1968, 1970) and another foreign teacher, Erwin von Bälz (Bälz, 1932), and available visual materials drawn from the Nagasaki related archives at Nagasaki University Library, Nagasaki Museum of History and Culture and Amakusa Christian Museum. Materials were deemed relevant when their content related directly to the implementation of Western systematic medical education in Japan in the decades surrounding Pompe's arrival and departure from Japan. The lead author (HH) is a faculty member of Nagasaki University and worked closely with the library who provided support for his previous work about the history of Nagasaki medical education (Hamada, 2023), identified materials relevant to the article, and obtained image permissions for this paper.

Following established methods of historical analysis, we evaluated these materials through close reading, contextual interpretation, and source criticism (Schrag, 2021). Unlike systematic reviews in the social sciences, historical research typically does not employ a formalized search protocol of primary source data. Instead, it relies on iterative engagement with primary and secondary sources to formulate analytic insights relevant to the research question and guiding framework (Schrag, 2021). Acknowledging the influence of researchers' positionality, we incorporated reflexive accounts of our experiences to support readers in interpreting the study's perspective and analytical framing.

Framework

In our case study, the frameworks of post-colonialism/Orientalism and *Wakon Yōsai* align closely with the local historical and cultural context. Cultural Fusion theory offered to us as researchers a complimentary perspective that facilitates the identification of broader patterns and implications.

We first used post-colonial theory to guide our reading "against the grain" of our primary sources. Post-colonial theory broadly considers the institutional, cultural, political, and epistemic structures that facilitate a-systemic power relations around the globe (Ashcroft et al., 2024). Specifically, we drew on the lens of Orientalism to situate our analysis within a framework that examines how Western powers have historically constructed non-Western societies through representations and systems of knowledge. Orientalism (Said, 1978) critiques the ways in which the "East" was depicted as exotic and inferior. While terms like "the West/Western" and "the Japanese" risk obscuring the diversity within each group, we employ them in this study to highlight broader patterns of knowledge, power asymmetries, and institutional exchange across cultural boundaries.

In this paper, we examine how Western doctors provided their medical knowledge, skills and enthusiasm to Japanese medical students. Although their intention was not explicitly colonial, their descriptions revealed that they believed in the superiority of their medical knowledge and skills over those of Japanese. With the perspective of Orientalism, we could understand Western visitors' enthusiasm to teach their Western knowledge and skills.

But to examine this history from an Orientalist stance alone was insufficient. To follow Dutch instructors, medical students had to learn both the language and a wide range of new medical terms in areas like anatomy, physiology, and pathology. While these terms have distinct cultural and historical roots, students often understood only their surface meanings, interpreting them through their own Japanese language, experiences, and expressions. To further nuance our analysis, we engaged with the Japanese conceptual framework of *Wakon Yōsai* (和魂洋才)—the notion of retaining a distinctively Japanese moral and cultural spirit while embracing useful Western knowledge and technologies (Sakamoto, 2008). This notion was used strategically during the Meiji period and implied that Japanese spirit and morals are essential and Western technology can be just a tool (or a way) (Sakamoto, 2008). Differing from cultural fusion perspective (theory) in which researchers see phenomena in a third position, *Wakon Yōsai* focuses on a receiver who accepts the new knowledge and skills. In this concept, the receiver is not passive but an active learner with strategies and intentions. This concept directed our attention to how Japanese epistemological priorities shaped local interactions with Western medical education. Finally, we drew on communication scholar Eric Mark Kramer's theory of cultural fusion (Kramer, 2019), which understands cross-cultural encounters as sites of dynamic multi-directional interaction. A cultural fusion perspective encouraged us to recognize how Indigenous (host) culture accepted, rejected and blended knowledge and practices from outside of the community. With this perspective we could consider how Pompe and his students may have blended new knowledge with existing frameworks, including selective engagement with Western and Japanese knowledge. Significantly, in a cultural fusion framework, communication is mutual and collaborating, sometimes conflicting, but never one way. This approach directed us to read our data for signs of negotiated encounters in the historical sources.

These three frameworks offered rich guidance for our data analysis. With Orientalism, we could interpret Pompe's writings within the intellectual context of the late 1800s. *Wakon Yōsai* provided a way to consider how Japanese collaborators strategically acquired skills and knowledge from other regions and cultures. Using these two frameworks, we could reflect and change our positions, examining historical sources from different standpoints. Cultural fusion theory which can be regarded as a meta-positional theory, helped us overcome overly rigid dichotomies. With cultural fusion theory, encounters from different cultures are afforded the possibility of mixtures and even creative moments, although there could be still conflicts and sometimes rejections (Fig. 4).

As an international authorship team, these frameworks also shaped our work as collaborators. Each researcher's perspective and experience understandably affected our critical analyses. The Canadian authors approached this work as critical scholars primed to look for power imbalances in historical international collaborations. The Japanese authors approached this work recognizing both Pompe's struggles encountering different cultural traditions and the praise and respect afforded him by Japanese medical educators as the founder of their university. Together, we could examine the potential benefits of asymmetric and locally negotiated knowledge transfer, while also acknowledging the attendant prob-

Colonialism/ Orientalism

The notion that Eastern spirit and moral are inferior and exotic, while Western things are superior and rational. Western power could acculturate Eastern thoughts.



Wakon Yōsai

Retaining a Japanese moral and cultural spirit, embracing Western knowledge and technology. It is a strategical thought to unite nation with a single concept, Japanese.



Cultural fusion perspective

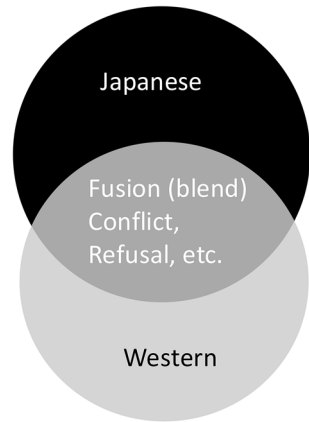


Fig. 4 Diagrams of the theoretical frameworks, Colonialism/Orientalism, Wakon Yōsai and cultural fusion perspective

lems of colonization. These discussions and analytic orientations informed our interpretations of historical significance, taking historical perspectives, and developing a historical argument (Schrag, 2021). Through attention to these three guiding frameworks and ongoing reflective discussion, our research process achieved a richness of insight that would have been far more challenging to achieve alone.

Reflexivity

This study originated when the first author (HH), while organizing the 2023 Japanese Society for Medical Education conference and discussing various issues in Japanese medical education, recognized the importance of examining historical changes and case studies (Hamada, 2023). The first (HH) and last authors (CW), both speakers at that conference, recognized the connections between their historical interests in medical education and initiated this collaboration. Their work together has included a workshop at AMEE 2024, along with other international collaborators. There, the first author presented research with Japanese, Canadian, Ethiopian, and Pakistani-British participants on how Western medicine was accepted in non-Western countries, which further deepened this research.

This manuscript is the work of two Japanese and two Canadian authors. HH is a physician and medical educator who also researches the history of medical education as a library director at Nagasaki University. His experience and interests in the history of Nagasaki and its medical school influenced the perspective we have for Pompe. Since HH went to Canada to study medical education, he wondered Japanese doctors had not understood the philosophical bases of Western medicine (Hamada, 2023). This reflection could have influenced

his plenary talk at 2023 Japanese Society for Medical Education conference (Hamada, 2023) and echoed with the analysis and discussion in this manuscript. MM is an academic family physician and health profession education researcher. She has been involved in historical studies focusing on educational materials used for Western medical education in Japan with the concept of cultural fusion (Morishita & Iwakuma, 2022) and students' and teachers' past narratives. She could have contributed to the deliberate choice of the authors to consider multiple perspectives, from orientalism and *Wakon Yōsai* to the concept of cultural fusion. LV is a disciplinary-trained historian with research interests in the history of health care, education, and colonialism. CW is an academic family physician and health professions education scientist whose research regularly involves historical analyses.

As a research team, we recognized that the language and cultural differences between the Japanese and Canadian authors required close attention to ensure that we were communicating clearly and taking care to question our assumptions. The writing of the manuscript involved multiple rounds of discussion and clarification, allowing all authors to provide critical perspectives.

Both Canadian and Japanese authors examined primary and secondary sources written in English. As some relevant secondary sources were available only in Japanese, these materials were reviewed by the Japanese authors, who translated and incorporated pertinent information into the manuscript as necessary. Although the Canadian authors had limited direct access to historical sources written in Japanese, they were able to engage with the relevant content through English translations and summaries provided by the Japanese authors. Given the study's focus as a case study of Japanese medical education, the expertise of the Japanese authors was prioritized in the final interpretation of the historical sources. The Canadian authors, in turn, contributed their expertise in historical methodologies and knowledge of trends related to the international spread of Western medical education.

Findings

Pompe's project: Western medicine and educational reform in Japan

Johannes Lijdius Catharinus Pompe van Meerdervoort arrived in Nagasaki in 1857 at the age of 28, having completed medical school in Holland, followed by six years as a surgeon in the Dutch Navy. With the support of the Dutch Commissioner and the Japanese government, Pompe was instructed to "make whatever arrangements were necessary" to develop a medical school that focused on Western medicine and surgery (Bowers, 1970b, p. 409). Despite his relative youth, Pompe was determined to succeed.

Pompe was committed to provide medical education in line with his own training at Utrecht Military Medical School (Ishida, 1988). Certainly, his writings indicate a clear belief in the superiority of Western medical knowledge and training over Japanese forms (Pompe, 1970). He therefore took on the ambitious and impressive goal of establishing a full five-year program of training (Bowers, 1970a; Pompe, 1970). The curriculum was composed of the following subjects, taught consecutively: physics, chemistry, wound dressing, anatomy, histology, physiology, general medicine and healing, pharmacology, descriptive and operative surgery, and ophthalmology, with the inclusion of forensic medicine and public health, if time allowed (Pompe, 1970, p. 85). Even though he was a young doctor,

Pompe attempted to provide the whole curriculum by himself. Through his close collaborator, Matsumoto Ryōjun (1832–1907), a practitioner who had studied Western medicine, Pompe was promised the cooperation of the highest government officials (Pompe, 1970; Bowers, 1970a). The governor of Nagasaki, Okabe Suruga-no-Kami, was particularly supportive (Pompe, 1970). It is easy to imagine that officials and students were impressed with Pompe's enthusiasm and energy. (See Fig. 5).

The medical school opened on the 12th of November 1857 with twelve students (Pompe, 1970). For Pompe, the early days of teaching presented some “serious problems (Pompe, 1970, p. 85).” Chief among them was the need for the constant translation of his lectures and course materials from Dutch to Japanese. Pompe and his students were committed to intellectual exchange, and after a few months, they “came to understand each other sooner than [Pompe] had dared to hope” (Pompe, 1970, p.85).

Other challenges remained. Pompe recalled the resistance of students to his curriculum. Some students did not want to study many matters, especially basic medicine. Some students asked Pompe to change the curriculum, abandoned classes, and even dropped out of school (Pompe, 1970, p. 85, as cited in Hamada, 2023). Believing that the students had simply not anticipated ‘our’ science to require so much study” (Pompe, 1970, p. 85), Pompe refused to remove any of his planned curriculum from the course. He did, however, adjust his teaching methods. Noting his students’ proficiency with visual means of learning, Pompe often produced demonstrations of theoretical concepts to aid them (Pompe, 1970).

Pompe was not short of praise for his students. He clearly respected the diligence with which his students worked, approved of their consistent questioning to clarify their understanding, and celebrated their enthusiastic uptake of more practical knowledge, including wound dressing (Pompe, 1970) and pharmacology (Pompe, 1970). While some students did choose to leave the school, the student body soon numbered more than forty (Pompe, 1970). Those who remained attended classes faithfully and Pompe was very pleased with their progress (Pompe, 1970).

Although Pompe portrayed himself as a teacher attuned to his students’ perspectives and difficulties, it is important to remember that these attributes did not disrupt his belief in the superiority of Western medical science over traditional Japanese medicine. Pompe’s belief



Fig. 5 Hospital of the Nagasaki Medical School (Yōjō-sho) (Nagasaki University Library)

could reflect what Edward Said identifies as the epistemic hierarchy at the core of Orientalism (Said, 1978). Pompe presented himself as a lone crusader into a field where the locals had neither the awareness nor the resources to engage systematically with Western medical education without his (or his compatriots) intercession. His time in Nagasaki did not change this view. As he wrote, “The more I got to know the young Japanese doctors, the more I became convinced that their knowledge of medicine was not very thorough” (Pompe, 1970, p. 86). Here Pompe does not qualify “Western medicine.” Instead, he assumes that modern and progressive medical knowledge is the exclusive domain of his intellectual tradition. In positioning himself as the indispensable agents capable of introducing modern medicine to Japan, Pompe effaced in his mind the intellectual history and methodological sophistication of indigenous medical practice.

In doing so, Pompe disregarded Japanese longstanding traditions of syncretic medical knowledge that has been shaped by cross cultural interactions with Chinese and Korean systems (Khan et al., 2022; Johnston, 1995). At that time, Japanese medical knowledge and practice was not monolithic but encompassed a diverse range of approaches shaped by regional, institutional, and intellectual contexts, drawing on varying combinations of Chinese, Korean, and indigenous traditions (Aoki, 2012; Arisaka, 2013; Takaku, 2013).

Nor did Pompe take seriously that Japanese doctors and students could have prioritized learning practical procedures, over adopting yet another theoretical canon. When Pompe observed students “lose heart” in the face of complex mathematical formulas, he concluded that the content was simply beyond their abilities (Pompe, 1970, p. 88). It would not have been surprising if many Japanese doctors and medical students at that time only wanted to quickly master practical medical procedures that they believed Pompe and Western medicine offered. As historian Tetsuo Najita noted, “Dutch studies represented natural ontology as an applied science, emphasizing practical experience and diagnosis, it was not a framework for theoretical reasoning. Dutch was a language to translate, not to theorize with” (Najita, 1991). With cultural fusion theory, Pompe’s writings can be read to identify Orientalist viewpoints and to discern their historical silences (Miles, 2019; Trouillot, 1995). What Pompe did not discuss or engage with reveals as much about embedded source bias and the limitations from writing histories from this viewpoint alone.

Pompe’s writings pay limited attention to the strategically restricted placement of the Dutch on Dejima. According to historians Sukehiro and Wakabayashi, “given the physical isolation in which Tokugawa scholars of Dutch studies labored, there was never any possibility of their identifying themselves completely with the alien culture. This geographical limitation contributed to the emphasis on retaining and strengthening the ‘Japanese spirit’ while pursuing ‘Western skills’” (Hirakawa & Wakabayashi, 1989). Pompe’s writings do not reflect an awareness or appreciation of the selective, strategic, and situated ways in which Japanese students and practitioners engaged with foreign expertise. Pompe nevertheless maintained his careful attention to Japanese habits which reflected a genuine interest in understanding about how his students learned and practiced Western medicine.

In 1859, two years after the opening of the medical school, Pompe went on to found Koshima Yōjō-sho, the origin of Nagasaki University Hospital and the first modern Western-style hospital in Japan (Fig. 5) (Hamada, 2023; Yasutake, 2021). It was completed in 1861 with the approval of the Edo Shogunate. It was a state-of-the-art H-shaped two-story hospital of the time, with a ventilation system (Hamada, 2023; Yasutake, 2021). Pompe designed the building himself, worked hard to obtain permission from the shogunate, and raised funds

to build it. From the beginning, Pompe expected to take full responsibility for the hospital's design and furnishings and establish its regulations. However, that authority was not initially granted to him (Pompe, 1970). Instead, a committee of administrators made key decisions, including that patients would sleep on the floor, in keeping with local customs, and would be provided with Japanese food, clothing, and, according to Pompe, "many more folkways" (Pompe, 1970, p. 102). Pompe's resistance was immediate and persistent. Pompe declared that he alone would determine the hospital's medical and administrative policies. Significantly, this was not the first time Pompe justified his right to "demand complete confidence" because of his outsider status as a Dutch officer and teacher (Pompe, 1970). In the end, Pompe's stubbornness won out, but resistance remained (Pompe, 1970). The hospital's primary function was to care for the ill. Pompe also insisted necessity of Western-type of hospital where he could provide clinical bedside teaching (Pompe, 1970). During his five-year stay in Nagasaki, Pompe treated 13, 600 patients (not including the patients whom Pompe saw at the hospital) (Pompe, 1970,) and earned the immense trust of the citizens of Nagasaki for his efforts to stop cholera and smallpox from landing on the island through vaccination campaigns and treatment (Pompe, 1970, as cited in Hamada, 2023). Pompe's guide to tackling cholera was printed and distributed in Nagasaki and throughout Japan, which contributed to the treatment and prevention of cholera (Su, 2025). He was given a Japanese sword by the Shogun for his efforts (Pompe, 1970, as cited in Hamada, 2023).

These experiences, Pompe believed, convinced the students that "our [western] knowledge was really better than theirs" (Pompe, 1970, p. 90). Pompe demonstrated his firm belief in the superiority and universality of Western medicine.

Pompe's educational agenda of Westernization also met resistance in the social realm. At that time, most of the young people who learned modern Western medicine from Pompe were upper class (Pompe, 1970, p. 89, as cited in Hamada, 2023). The status system in Japan at that time stipulated samurai as a governing class and others including farmers, artisans and merchants. Doctors were treated in a special way. They were outside the system, which seems to have been in line with the samurai's class (Jang, 2007).

Medical students at the Nagasaki Medical School were an elite group of people from all over Japan, and they were quite wealthy. Students objected to Pompe's attitude of rescuing any sick person regardless of their rank. They opposed Pompe visiting small houses and huts, saying that it would spoil his reputation (Pompe, 1970, p. 89, as cited in Hamada, 2023). Pompe noted that the students did not agree with the idea of medical treatment without distinction of class. Despite their objections, Pompe remained committed to his egalitarian approach, insisting that a physician should not consider social status when treating the sick. As he wrote, "I told them that I had not come to Japan to help perpetuate Japanese customs that were wrong" (Pompe, 1970, pp. 89–90). Yet notably, Pompe's own writings make no mention of the class-based nature of much Western medical practice at the time, including Pompe's native Netherlands (Huisman, 1992; Kooij & Sapounaki-Dracaki, 2003). This romanticization—conscious or unconscious—invites reflection on how the presentation of Western medicine and medical education can transform when they are employed in new contexts.

In 1862, Pompe informed the Japanese government of his decision to return to the Netherlands. While officials wished to continue his work in Japan, he stressed his fatigue, his need to resume his own scientific training, and the importance of exposing students to more than one teacher (Pompe, 1970).

The ideals Pompe promoted during his time in Japan appear to have left a lasting imprint on Japanese medical education (Hamada, 2023). As a medical educator, he was a rather strict evaluator; only 22 students completed the first class, which was deemed sufficient for academic skills (Aikawa, 2012; Hamada, 2023). (See Fig. 6).

Those who did pass his courses went on to significant leadership positions, including the field of public health which took root in Japan through his disciplines, Matsumoto Ryōjun (the first Army Surgeon General) and Nagayo Sensai (1838–1902) the founder of public health administration in Japan (Aikawa, 2012; Hamada, 2023). Pompe's students also went on to become leaders in medicine and medical education in Japan, including Shiba Ryōkai (Aichi Prefectural Public Hospital) and Satō Takanaka (Juntendō University) (Johnston, 1995; Hamada, 2023).

When Pompe left Japan, his departure was marked by ceremonial honors from both Dutch and Japanese officials, including the joint hoisting of the two nations' flags (Pompe, 1970, p. 123). It was an apt homage to Pompe's contributions to the Japanese medical education system and a symbolic acknowledgement of the cross-cultural encounter that occurred (See Fig. 7).

Medical education after Pompe: continuity, adaptation, and the politics of pedagogy

The samurai era under the Edo Shogunate ended in 1868 with the rise of Emperor Meiji whose government sought to 'modernize' Japan with further engagement with Western collaborators. Medicine was expected to play an important role in this process (Oberländer & Morris, 2005, pp. 13–16).

While a fellow Dutch physician had replaced Pompe when he left the country, by the Meiji period, Japanese leaders in medical education began to question their relationship



Fig. 6 Group photo of Pompe, Matsumoto Ryōjun, and students: Pompe sitting on the right chair and Matsumoto Ryōjun on the left. (Nagasaki University Library)



Fig. 7 Students of the Nagasaki Medical School: the number of students registered as the school students was 139. (Nagasaki University Library)

with the Dutch and looked for further collaboration with other European countries, notably Germany (Kim, 2014; Hirakawa & Wakabayashi, 1989).

At the end of the 19th century, Germany was a world leader in medical research and the Japanese were well aware that many of the Western medical texts entering Japan via Dejima were originally written in German and had been translated into Dutch (Bowers, 1970a). In 1870, prominent Japanese physician and reformer Dr. Sagara Chian made an official request to the Meiji government to invite German medical professors to Japan (Bowers, 1970a). Once again, Japanese leaders made strategic choices in light of changing international, political, and educational contexts. The Germans appeared to be no more immune to epistemological assertiveness and the resulting concurrent frustrations than the Dutch. In 1901, during a celebration marking his 25 years of teaching in Japan, Erwin von Bälz (1849–1913)—a German physician invited by the Japanese government in 1876—publicly pointed out what he perceived as the superficial adoption of Western knowledge and technology by the Japanese. He remarked that “From all the lands of the West there have come to you teachers eager to implant this [Western] spirit in the Land of Rising Sun [which means Japan] and to enable you of Japan to make it your own. Often enough, however, their mission has been misunderstood. They have been looked upon merely as purveyors of scientific fruit, whereas they really were, or wanted to be, the gardeners of science. Often you have expected them to hand over to you the finished ‘product’ of contemporary science, where their business was to sow the seeds out of which in Japan the tree of science could

continue its independent growth—the tree which, when properly cared for, will continue forever and a day to produce new and more beautiful fruit” (Bälz, 1932, p. 150).

These remarks likely left a strong impression on the Japanese guests in attendance and have continued to resonate within Japanese medical circles (Kurokawa et al., 2016). Bälz’s critique could have echoed earlier tensions in Japan’s engagement with Western medicine, revealing a continuity in how foreign educators struggled to reconcile their pedagogical aims with local ways of thinking. At the same time, his remarks, particularly those referring to the “tree of science,” have been repeatedly cited by Japanese scholars as an aphorism highlighting the importance of understanding the underlying spirit of Western medicine and science (Kurokawa et al., 2016).

Japanese negotiation and adaption were dramatically called forward in the final months of the Second World War and its aftermath. Nagasaki, which had flourished through the introduction of technology from the West and a thriving shipbuilding industry was targeted by American forces. At 11:02 a.m. on 9 August 1945 an atomic bomb was dropped from the U.S.B-29 bomber named as “Bockscar”, devastating Nagasaki University (Hamada, 2023). Nagasaki Medical University, located only 600 meters from the hypocenter, was almost destroyed, and 898 people, including President Tsuno, students and faculty members, lost their lives (Akazawa, 2021; Hamada, 2023). August 15th was the day World War II ended for Japan.

After World War II, Japan was occupied by the United States (1945–1952). During this period, the General Headquarters (GHQ), the Supreme Commander for the Allied Powers, involved in reforming Japan’s medical education system (Horigome, 2008). The GHQ halted Japan’s efforts to follow the German system and enforced an educational system based on the American model. The GHQ compelled the Japanese government to establish a Medical Education Council, which introduced the National Medical Licensing Examination, the internship system, and the Model Hospital Plan (Horigome, 2008; Fukushima, 2011). In the end of the World War II, there were several types of medical schools, including imperial universities, colleges and specialty schools (Sakai, 2010). Specialty schools offering shortened medical training programs were closed due to concerns about the quality of their medical education (Fukushima, 2011). These measures may be comparable to the reforms initiated following the Flexner Report in the United States during the 1920s (Fukushima, 2011).

Again, Japanese leaders and educators rose to the challenge. The site of the destroyed Nagasaki Medical University was relocated multiple times within Nagasaki Prefecture, and negotiations with the national government continued to prepare for the establishment of a new university in accordance with new standards (Nagasaki Medical School, 1961). In 1949, Nagasaki Medical University merged with Nagasaki Economic College and other institutions to become the Faculty of Medicine at Nagasaki University, comprising five departments. The faculty had 60 students and 106 faculty members (Nagasaki University, school of medicine, 2009).

After regaining sovereignty, Japan introduced a national health insurance system different from that of the United States and has continued to maintain a six-year medical school program and one-year clinical training system (internship) (Fukushima, 2018; Sakuma, 2020). Nagasaki University has also maintained a tradition of selective engagement with varied Western collaborators. Despite the substantial influence of the United States following the war, it is Pompe’s dictum that remains the motto of Nagasaki University: “Once he

has chosen this vocation (doctor), he no longer belongs to himself, but to the sick. If you do not like it, choose another profession (Nagasaki University, school of medical sciences, 2025).” In 2025, the university will celebrate its 168th year as the birthplace of Western medical education in Japan under Pompe. As of 2025, the Nagasaki University Medical School Library houses a paper-based anatomical atlas (Kunstlijck) used by Pompe for educational purposes 165 years ago. Miraculously spared from destruction despite the atomic bomb, this anatomical atlas serves as a reminder of the origins of medical education and the value of peace for current students (Hamada, 2023).

Japan’s commitment to epistemological sovereignty and its syncretic medical education enabled the Japanese to maintain cultural continuity through successive waves of foreign influence—from Portugal, the Netherlands, Germany, and the United States—each bringing new technologies and educational models. Western medical education was accepted as a means of modernization, but its interpretation and practice were always filtered through Japan’s moral, linguistic, and institutional lens (Hamada, 2023). Even after the postwar reforms introduced an American-style certification and licensing system, the enduring persistence of master-disciple relationships and collective responsibility within Japanese medical schools might reflect the continued assertion of local epistemological values.

Limitations

Pompe’s pivotal role in founding the Nagasaki Medical School is important to remember and Pompe’s writings provide insights into the development of systematic Western medical education in Japan more broadly. Understanding how the knowledge, and techniques disseminated by Westerners were adapted and incorporated by the recipients can lead to significant insights in medical education research.

However, as a source of evidence, Pompe’s writings have limitations in scope and perspective. Pompe was a Dutch man and a recent arrival in Japan when he began his work in medical education. His writings therefore can only provide insights into the views of an outsider. While we have also drawn on Japanese archival sources, a limitation of this work is that it does not include an in-depth examination of Japanese sources. The use of this focus allowed us to consider the extent to which epistemological superiority of Western medicine may have blinded Pompe to alternative or more culturally nuanced interpretations of the various ways Japanese students and physicians engaged with Western medicine.

Further historical research could add valuable insight into local acceptance and negotiation of foreign systems of knowledge and education. Pompe’s students, Matsumoto Ryōjun, and Nagayo Sensai wrote their autobiographies including descriptions about Pompe and his involvement in medical practice in Nagasaki (Matsumoto & Nagayo, revised and annotated by Sakai & Ogawa, 1995). From their descriptions, we might be able to elucidate how the Japanese medical students saw the Western teacher, his education and themselves who studied Western medicine.

For example, did medical students of the time draw on the Japanese concept of Bushido, a Japanese ethical code known as the way of a samurai (Nishigori et al., 2014; Nitobe, translated by Yamamoto; Nitobe & Yamamoto, 2014; Nitobe, 2020), in their engagement with Pompe or his lessons? Bushido, in the broadest sense, refers to a uniquely Japanese ethical framework that defines the norms and values expected of those who possess military

power and emphasizes their cultivation through rigorous training. According to Bushido, individuals should refrain from self-indulgence or self-satisfaction in their personal affairs and instead devote themselves to serving their load and society.

If the idea of “not being self-indulgent” gradually moved toward a more universal focus (on the people, living creatures, learning, art, and traditions of the world, etc.), Bushido could appear similar in many ways to the professionalism of Western physicians. Perhaps many of the men and women who studied with Pompe in Nagasaki might have adopted an attitude of doctors in Western medicine through bushido or other cultural concepts familiar to them instead of Western medicine’s concept of professionalism.

Discussion

Epistemic imperialism remains a powerful force in global medical education (Wondim-agegn et al., 2023). As challenges to it grow, we argue that knowledge of past syncretic approaches to medical education can fuel this momentum. Recognizing epistemic adaption as a historical fact enables the global medical education community to draw upon the rich knowledge contained in historical records, offering insights into both effective practices and recurring pitfalls. Neither medicine nor education can be simply packaged and exported from one country to another, there is a constant process of reception, translation, and negotiation (Kim, 2014; Kramer, 2019; Morishita & Iwakuma, 2022).

Understanding Japan’s epistemological sovereignty challenges the binary narrative of Western domination and local submission. Instead, it reveals a dynamic process of negotiation in which external forms were strategically utilized to reinforce national identity and professional ethics. In the case of Japan, the epistemic influence on medical education was diverse rather than singular. Its retention of epistemic sovereignty, despite successive Western influences, demonstrates how knowledge systems can be simultaneously adaptive and resistant. This complexity disrupts simplified dichotomies of oppressor and oppressed (Freire, 2017), revealing instead a continuum of negotiation and agency. Recognizing this complexity not only deepens the historical narrative of Nagasaki as a site of intercultural exchange but also prompts contemporary educators to reflect critically on who the global medical education community has, and continues to, afford the status of knowledge producer. In doing so, it highlights how epistemic sovereignty can foster more contextually balanced and equitable global collaboration in medical education.

Even today, Japanese medical education continues to Westernize under the banner of “global standards.” The critical historical analysis of Pompe’s writings is a reminder that even when colleagues come together with the best of intentions, they must be constantly cautious that their assumptions of best practices do not marginalize multiple and valuable local ways of knowing. In cross-cultural practice and research, medicine should not be positioned as coherent and singular (Khan et al., 2022; Morishita & Nishigori, 2019) nor should the extension of certain epistemologies and practices be framed as singularly positive or problematic (Frambach et al., 2019; Cullen, 2003). By using a historical lens, we can move forward in a more equitable manner and leverage the potential benefits of a broader range of future models.

Concluding remarks

Historical analysis of Japanese engagement with Western medical education in Nagasaki illustrates the value of historical inquiry in health professions education. This approach allows researchers to understand the layered complexities of cross-cultural educational collaboration and to critically assess the nature of past international exchanges with possible insights for future work. In the case of Japan, we unsettled narratives of assimilation or cross-cultural accommodation and, instead, highlighted the role of local actors play in defining what counts as valuable knowledge, drawing on their own expertise and agency to decide for themselves what is useful. As a result, we were able to draw attention to the subtle, often overlooked ways in which power, expertise, and identity are negotiated on all sides of educational encounters across cultures. While these insights have broader applicability, historical research's added value is in its attention to contingency, context, and specificity. By attending to the particularities of past encounters, historical research equips us to approach contemporary cross-cultural collaborations with greater insights, recognizing that our partners bring distinct histories, and ways of knowing that shape how knowledge is received and adapted. A powerful reminder that meaningful insight and impactful work emerge not from cultural collision, but from respectful collaboration.

Acknowledgements The authors are grateful to Ms. YAGYU Noriko, Nagasaki University Library and to Kyoto University Archives. The authors also thank to Dr AIKAWA Tadaomi and Dr MASUZAKI Hideaki, Dr NAGAYASU Takeshi and Dr HAMASAKI Keiko for sharing their knowledge and thoughts about the history of medical education in Nagasaki. The authors appreciate members of the Center for Medical Education, Graduate School of Medicine, Nagoya University in Japan for valuable comments on the manuscript.

Author contributions HH drafted the original manuscript based on historical archives and his experience as a medical educator in Nagasaki, Japan. He also incorporated detailed descriptions in response to co-authors' questions and comments, drawing on his expertise in the subject matter. All permissions for the images included in the manuscript were obtained by him. MM repeatedly revised the manuscript, serving as a translator and mediator who bridged Japanese historical content, analyses, and perspectives between the Japanese and Canadian authors. LV contributed additional historical descriptions based on primary and secondary sources, refining the methodology to align more closely with the academic field of medical education. CW conceptualized, managed, and supervised the collaborative project, applying critical historical perspectives to the study of medical education. All authors recognized that linguistic and cultural differences between the Japanese and Canadian contributors required careful attention to ensure clear communication and to critically examine underlying assumptions. The manuscript underwent multiple rounds of discussion and clarification, enabling all authors to contribute their perspectives and writings. The final version of the manuscript was approved by all authors.

Funding No funding was received to assist with the preparation of this manuscript.

Data availability The text data in the analyses are published documents cited in the manuscript. The pictures used in the manuscript have a caption with an institution's name preserving them. All the permission for printing and replicating the pictures were obtained and submitted along with the manuscript.

Declarations

Ethics approval and consent to participate Not applicable.

Consent for publication Not applicable.

Competing interest The authors declare no competing interests.

Open Access This article is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License, which permits any non-commercial use, sharing, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if you modified the licensed material. You do not have permission under this licence to share adapted material derived from this article or parts of it. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by-nc-nd/4.0/>.

References

- Aikawa, T. (2012). *Dejima no Igaku*. Nagasaki bunken sha
- Akazawa, Y. (2021). Nagasaki Ikadaisei tachi no 1945 nenn. In H. Masuzaki & Nagasaki University Regional Culture Study Group (Eds.), *Ima to muka shi no Nagasaki ni asobu* (pp. 227–240). Kyushu University Press.
- Aoki, T. (2012). *Edo jidai no igaku, meiji tachi no 300 nenn*. Yoshikawa Kōbunkan.
- Arano, Y. (2015). Kinsai no kokusai kankei to “sakoku/kaikoku” gensetsu-19seiki no Asia to Nihon, nan-igadou kawattanoka-. [International relations in modern Japan and discourse about “self-isolation”- in 19th century, what changes Japan and Asian countries experienced-]. *Center for Comparative Japanese Studies Annual Bulletin*, 11, 6–17.
- Arisaka, M. (2013). Bakumatsu Kyoto ni okeru ika to iryou. In Kyoto Tachibana jyosei rekishi bunka kenkyujo [Institute for Women's history and culture of Kyoto Tachibana University] (ed.). In *Iryou no shakai-shi, shou, rou, byou, shi*. Shibunkaku Publishing.
- Ashcroft, B., Griffiths, G., & Tiffin, H. (2024). *The postcolonial studies reader* (3rd ed.). Routledge. <https://doi.org/10.4324/9780429469039>
- Bälz, T. (1932). Closing years of university life. In E. Paul & Paul, C. (Eds.), *Awakening Japan: The diary of a German doctor: Erwin Baelz*. Viking press.
- Bowers, J. Z. (1970a). *Western medical pioneers in feudal Japan*. Johns Hopkins Press.
- Bowers, J. Z. (1970b). The history of medical education in Japan: The rise of Western medical education. In *The history of medical education: An international symposium held February 5-9, 1968* (pp. 391–416). University of California Press. <https://doi-org.myaccess.library.utoronto.ca/10.1525/9780520313446-017>
- Cullen, L. M. (2003). *A history of Japan, 1582-1941, internal and external worlds*. Cambridge University Press.
- Frambach, J. M., Talaat, W., Wasenitz, S., & Martimianakis, M. A. T. (2019). The case for plural BPL: An analysis of dominant and marginalized perspectives in the globalization of problem-based learning. *Advances in Health Sciences Education*, 24(5), 931–942. <https://doi.org/10.1007/s10459-019-09930-4>
- Freire, P. (2017). *Pedagogy of the oppressed*. Penguin Classics.
- Fukushima, O. (2011). Reform of medical education frame after the World War II. Symposium report. The 112th General meeting of the Japanese society for the history of medicine. *Journal of the Japanese Society for the History of Medicine*, 57(2), 123.
- Fukushima, O. (2018). History of medical education in Japan. *Medical Education Japan*, 49(5), 421–428. https://doi.org/10.11307/mededjapan.49.5_421
- Hamada, H. (2023). Igaku kyoikuku no hikari to kage. [Paradigm shift in health professions education: Reflecting on the history and the bright future ahead.]. *Medical Education Japan*, 54(5), 445–460. https://doi.org/10.11307/mededjapan.54.5_445
- Hirakawa, S., & Wakabayashi, T. B. (1989). Japan's turn to the West. In Wakabayashi, Tadashi B. (Ed.), *Modern Japanese thought*. Cambridge University Press.
- Horigome, T. (2008). Historical study on the reform of the Japanese health service system by GHQ- the medical educational system and the hospital administration-. *Japanese Journal of Health Economics and Policy*, 20(1), 35–48.
- Huisman, F. (1992). *Stadsbelang en standsbesef: Gezondheidszorg en medisch beroep in Groningen, 1500–1730 [City interest and sense of class: Health care and the medical profession in Groningen 1500-1730]*. Erasmus Publishing (Pantaleon-reeks no. 8).
- Ishida, S. (1988). Nihon ni okeru igaku kyoiku shisutem no juyou. In *Rangaku no haikai*. Shibunkaku Publishing.

- Jang, G. (2007). Baku-i Han-i no Shakaiteki chii ni kansuru kisoteki kosatsu. [Exploring positions of doctors working for the Shogunate government and for a feudal domain]. *Kokushi Danwa Kai Zasshi*, 48, 1–20.
- Jensen, A., & Lopez-Carmen, V. A. (2022). The “elephants in the room” in U.S. global health: Indigenous nations and white settler colonialism. *PLOS Global Public Health*, 2(7), e0000719. <https://doi.org/10.1371/journal.pgph.0000719>
- Johnston, W. (1995). *The modern epidemic: Tuberculosis in Japan*. Harvard University Asia Center.
- Khan, M. M. A., Lam, S., & Gavrus, D. (Eds.) (2022). Knowing and transposing: Text, medicine, and learning in the Medieval non-West. In *Transforming medical education: Historical case studies of teaching, learning, and belong in medicine in honour of Jacalyn Duffin* (pp. 31–35). McGill Queen’s University Press.
- Kim, H.-E. (2014). *Doctors of empire: Medical and cultural encounters between imperial Germany and Meiji Japan*. University of Tronto Press.
- Kooij, P., & Sapounaki-Dracaki, L. (2003). Health care in Greece and the Netherlands in the Nineteenth Century. A tale of two cities. *Gesnerus*, 60(3–4), 188–219. <https://doi.org/10.1163/22977953-0600304003>
- Kramer, E. M. (2019). Cultural fusion theory. In Kramer, E. M. *Oxford research encyclopedia of communication*. Oxford University Press. <https://doi.org/10.1093/acrefore/9780190228613.013.679>
- Kurokawa, K., Nagai, R., & Bälz, M. (2016). *Gakujyutsu no ki to shiten no igakuwo: Nihon Kindai igaku no chichi Elwin Bälz rainichi 140 syuunen*. https://www.igaku-shoin.co.jp/paper/archive/y2016/PA03200_01
- Kuwabara, N., Miu, Y., Yee, K., & Kurahara, D. (2015). The evolution of the Japanese medical education system: A historical perspective. *Public Health*, 74(3).
- Masuzaki, Hideaki (eds). Nagasaki University Regional Culture Study Group. (2021). *Ima to, mukashi no Nagasaki ni asobu*. Kyushu University Press.
- Matsumoto, R., & S., revised and annotated by, Ogawa, Teizo, & Sakai, Shizu (1995). *Matsumoto Jun jiden, Nagayo Sensai jiden [autobiography of Matsumoto Ryōjun, autobiography of Nagayo Sensai]*. Toyo bunko.
- Miles, J. (2019). Historical silences and the enduring power of counter storytelling. *Curriculum Inquiry*, 49(3), 253–259. <https://doi.org/10.1080/03626784.2019.1633735>
- Morishita, M., & Iwakuma, M. (2022). Diffusion of innovations from the West and their influences on medical education in Japan. In *Oxford reserch encyclopedia of communication*. <https://doi.org/10.1093/acrefore/9780190228613.013.984>
- Morishita, M., & Nishigori, H. (2019). Doctors as objects of worship: Reconsidering doctors’ competency based on cultural context. *The Asia Pacific Scholar*, 4(3), 99–101. <https://doi.org/10.29060/TAPS.2019-4-3/PV2089>
- Nagasaki Medical Shool. (1961). *A history of Nagasaki medical school: 100 Years*. (pp. 811–901). Nagasaki University, school of medical sciences. About school of medical sciences, basic philosophy. last accessed, 31st December, 2025 https://www.med.nagasaki-u.ac.jp/med/introduction/rinen_e.html
- Nagasaki University, school of medicine. (2009). *150th anniversary*
- Najita, T. (1991). History and nature in eighteenth-century Tokugawa thought. In J. W. Hall (Ed.), *The cambridge history of Japan* (pp. 596–659). chapter, Cambridge University Press.
- Nakamura, E. G. (2005). *Practical pursuit: Takano Chōei, Takahashi Keisaku, and Western medicine in Nineteenth-century Japan*. Cambridge University Press.
- Ngwenya, N., Dziva Chikwari, C., Seeley J. & Ferrand, R. A. (2023). Are concepts of adolescence from the global North appropriate for Africa? A debate. *BMJ Global Health*, 8(12), e012614. <https://doi.org/10.1136/bmjgh-2023-012614>
- Nishigori, H., Harrison, R., Busari, J., & Dornan, T. (2014). Bushido and medical professionalism in Japan. *Academic Medicine*, 89(4), 560–563. <https://doi.org/10.1097/ACM.0000000000000176>
- Nitobe, I. (2020). *Bushido, the soul of Japan (Amazon classics, kindle)*. Amazon classics.
- Nitobe, I., & Yamamoto, H., Trans. (2014). *Bushido (Chikuma e-books)*. Chikuma shobo.
- Oberländer, C., & Morris, L. (2005). The rise of Western “scientific medicine” in Japan: Bacteriology and Beriberi. In *Building moden Japan: Science, technology and medicin in the Meiji era and beyond* (1st ed., pp. 13–36). New York: Palgrave Macmillan.
- Ogawa, T. (1964). *Igaku no Rekishi [History of medicine]*. Chuo koron sha.
- Ohmi, K. (2019). Rinsyo-igaku kyoiku ni okeru ishi to igaku no genjoh to shitsuyou-teion Doitsu igaku to America igaku no heyoyoh ni kansuru ichi shiron. In *Igaku Kyoiku no rekishi*. Hosei University Press
- Pompe van Meedervoort, J. L. C. (1970). *Doctors on Desima: Selected chapters from J. L. C. Pompe van Meedervoort’s Vijfjaren in Japan [Five years in Japan] (1857–1863)*. A Monumenta Nipponica Monograph. Translated and annotated by E. P. Wittermans & J. Bowers. Sophia University, Tokyo.
- Pompe, V. M., (1968). *Pompe nihon taizaikenbunki [Five years in Japan] translated in Japanese by Numata, Jiro and Aarase Susumu. Shin-ikoku sohsyo. Yushodo shuppan*.
- Said, E. (1978). *Orientalism*. Pantheon Books
- Sakai, S. (1982). *Nihon no iryoshi*. Tokyo Shoseki

- Sakai, T. (2010). Historical development of the systems of medical education and medical licensure and its effect on the evolution of medical schools in Japan. *Medical Education Japan*, 41(5), 337–346
- Sakai, T. (2019). *Igaku kyoiku no rekishi kokon to tohzei*. Hosei University Press
- Sakamoto, R. (2008). Confucianising science: Sakuma Shōzan and *wakon yōsai* ideology. *Japanese Studies*, 28(2), 213–226. <https://doi.org/10.1080/10371390802249180>
- Sakuma, Y. (2020). Sengo naze igaku-bu to Shigaku-bu nomiga rokunensei daigaku to naretaka. *Japanese Journal of Medical History*, 66(1), 105–107
- Schrag, Z. (2021). *The Princeton guide to historical research*. Princeton University Press
- Su, Q. (2025). The introduction of Chinese-translated Western books and the development of Japanese medicine during the late Edo period: Focusing on the cholera outbreaks in the Ansei era. *SOKENDAI Review of Cultural and Social Studies*, Vol.21. http://www.bunka.soken.ac.jp/journal_bunka/21_03_su/index_en.html
- Takaku, R. (2013). Meijizenki no mura to eisei, byoki. Kyoto otokunigun kamiuenomura wo taisyoni. In *Kyoto Tachibana jyosei rekishi bunka kenkyujo* [Institute for Women's history and culture of Kyoto Tachibana University] (ed.). In *Iryou no shakai-shi, shou, rou, byou, shi*. Shibunkaku Publishing
- Trouillot, M.-R. (1995). *Silencing the past: Power and the production of history*. Beacon Press.
- Ushiba, D., & Suzuki, J.-I. (1978). Medical education in Japan. *Social Science & Medicine*, 12, 525–532
- Vorobej, L., Wondimagegn, D., Baheretibebe, Y., Bizuneh, B., Hodges, B., Petros, A., Jobin, S., & Whitehead, C. R. (2024). Probing the past: Historical case study analysis to inform more just and sustainable global health partnerships in education. *BMJ Global Health*, 9(11), e015415. <https://doi.org/10.1136/bmjgh-2024-015415>
- Whitehead, C., Wondimagegn, D., Baheretibebe, Y., & Hodges, B. (2018). The international partner as invited guest: Beyond colonial and import-export models of medical education. *Academic Medicine*, 93(12), 1760–1763. <https://doi.org/10.1097/ACM.0000000000002268>
- Wondimagegn, D., Cartmill, C., Genene, L., Rashid, M. A., & Whitehead, C. (2023). Broadening relevance and representation in global health medical education research: Centring context, content, and voice. *Canadian Medical Education Journal*. <https://doi.org/10.36834/cmje.76686>
- Wondimagegn, D., Pain, C., Baheretibebe, Y., Hodges, B., Wakma, M., Rose, M., Sherif, A., Piliotis, G., Tsegaye, A., & Whitehead, C. (2018). Toronto addis ababa academic collaboration: A relational, partnership Model for Building educational capacity between a high- and low-income University. *Academic Medicine*, 93(12), 1795–1801. <https://doi.org/10.1097/ACM.0000000000002352>
- Yasutake, A. (2021). The Western-style hospital that was born in Nagasaki: Nagasaki Koshima Yōjō-sho. In *Nagasaki University Regional Culture Study Group* (pp. 209–225). Kyushu University Press.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Authors and Affiliations

Hisayuki Hamada^{1,2,7} · Mariko Morishita^{3,4} · Lucy Vorobej⁵ · Cynthia Whitehead^{5,6}

✉ Hisayuki Hamada
hhamada@nagasaki-u.ac.jp

¹ Medical Education Development Center, Nagasaki University Hospital, Nagasaki, Japan

² Nagasaki University Library, Nagasaki, Japan

³ Department of Patient Safety, Kyoto University Hospital, Kyoto, Japan

⁴ Center for Medical Education, Graduate School of Medicine, Nagoya University, Nagoya, Japan

⁵ The Wilson Centre, University Health Network and University of Toronto, Toronto, Canada

⁶ Department of Family and Community Medicine, Temerty Faculty of Medicine Toronto University, Toronto, Canada

⁷ Nagasaki University School of Medicine, Sakamoto 1-12-4, Nagasaki 852-8523, Japan