



Review

History as a Tool in Anesthesia Education: Leveraging the Past to Teach Professionalism and Shape Professional Identity

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Abstract

The teaching of medical history, once central to medical education, has been progressively displaced by science- and competency-focused curricula. In anesthesiology, despite the presence of historical scholarship and institutional resources, the history of this specialty is rarely used as a formal educational tool. This narrative review explores how historical narratives can support the development of professionalism and professional identity in anesthesia training. An exploratory search of the literature revealed no prior studies explicitly linking anesthesia history to professional identity formation, underscoring a gap in current scholarship. Drawing on the foundational literature in medical education and selected historical examples, including figures such as Crawford Long, Henry Beecher, and Virginia Apgar, this review illustrates how reflective engagement with historical episodes can deepen ethical awareness, foster identity formation, and contextualize the evolving role of the anesthesiologist. It proposes a theoretical framework and strategies for integrating historical content into anesthesia curricula and argues that historical reflection can complement existing methods for teaching professionalism. The history of anesthesia, when purposefully employed, offers a powerful means to humanize training, support critical reflection, and better prepare trainees for the ethical and professional challenges of contemporary practice.



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1. Introduction

Throughout the history of teaching medicine, it has been an education in the history of medicine; it involves walking through the historical, classical, and “great” texts of medicine from which one acquires knowledge and competence. It was with the scientific revolution and professionalization of medicine that the teaching of medicine shifted towards scientific theory and principles. This transition is captured in the decline of the teaching of the history of medicine at medical schools across North America [1–4]. This shift coincided with an accelerated rise in medical ethics and humanities, resulting in a competition familiar to educators for a shrinking pool of curricular resources and hours with an ever-expanding body of knowledge [5]. In this landscape, the teaching of medical history has, at most institutions, been abandoned as a formal part of the curriculum and, in many ways, as a pedagogical tool.

When it comes to the teaching of the history of anesthesia, there is a robust, but small community of scholars and those interested in the history of anesthesia, represented by

various regional and national organizations in the United States, including the Wood-Library Museum, state-level committees, and the Anesthesia History Association with similar institutions in other countries and regions including but not limited to the United Kingdom, Australia, and Japan. However, there is very little regarding the use of the history of anesthesia as a tool for education, or even as a component of anesthesia training programs [6]. While there have been calls and proposals to teach history of anesthesia more comprehensively [7], and expertise appears present at many larger academic centers (as measured by the presence of a faculty member with interest in the history of anesthesia) in the United States [8], a compelling reason and rationale for teaching the history of anesthesia is yet to be articulated despite the teaching of the history of medicine having played a role in medical training earlier in the 20th century.

While it is hard to prove, understanding the forces that have shaped thinking around medical training over the past century, and how this has influenced anesthesia training, perhaps helps highlight why the role of the history of medicine has declined in medical training. Understanding these forces can also help shine a light on opportunities that could make this old teaching tool new. Key events over the past 75 years include the formation of the American Board of Anesthesiology, the institution of board examinations, and the growth of scholarship and research in anesthesiology in the United States [9]. Following World War 2, the gradual formal structuring of graduate medical education (GME) occurred in the United States via various institutions and organizations, including the Accreditation Council for Graduate Medical Education (ACGME). One key event was in 1964 when the ACGME standardized and subsequently recommended a three-year residency for anesthesiology, marking the start of a period in which medical training was defined largely by time spent training [9,10]. Over the past 30 years, there has been a shift towards competency-based medical education, which has shifted anesthesia training from time-based to mastery-based education, defined by features including milestones, entrustable professional activities, and outcome-focused curricula, pedagogically depending on how long learners train and what they can do safely and effectively [9,11,12]. The six core competencies mapped by the ACGME, which are evaluated utilizing milestones, are patient care, medical knowledge, practice-based learning and improvement, systems-based practice, professionalism, and interpersonal and communication skills [11]. Given the ever-expanding skills, body of knowledge, and domains that anesthesiologists are expected to master, it seems reasonable at first glance that the history of this specialty would have a limited role in training excellent clinicians [3,4].

An area of increasing interest and focus within medical training has been in one of the six ACGME core competencies, professionalism (including physicianship), and the broader concept of professional identity formation (PIF), best represented by the following question: how do we instill the values of a profession in trainees [13,14]? Since the 2000s, there has been an increasing interest among anesthesiology educators regarding these topics, likely enhanced by many factors, including but not limited to ACGME milestones and a growing appreciation of the threat that a lack of professionalism poses to the specialty [15–17]. At the same time, the difficulty of teaching professionalism has been clearly laid out, along with the impact of the “hidden curriculum” on shaping trainees into physicians, the difficulty of unveiling the “hidden curriculum”, and, more explicitly and reliably, teaching professionalism [17]. Various proposals and methodologies have been identified, including explicit teaching of professionalism, role modeling, reflective practice, small group discussions, and other methodologies (Table 1) [15,17]. What is clear is that effective development of professional identity and professionalism in anesthesia trainees requires a thoughtful, multifaceted approach, and despite this, there appears to be little to no discussion in the anesthesia literature regarding the use of medical history, and specifically, the history of

anesthesia, to teach professionalism despite one survey showing more than half of academic departments having faculty with interest and/or expertise in anesthesia history [8]. This review attempts to establish a framework and theoretical basis for educators in anesthesia to consider incorporating medical history as another pedagogical tool for helping trainees achieve competency and mastery of professionalism.

Table 1. Approaches to Professionalism Teaching in Anesthesiology: a synthesis of various approaches to teach professionalism from the anesthesiology literature [15–17].

Approach	Methods and Implementation
Explicit Curriculum	- Formal lectures defining professionalism (respect, compassion, integrity) - Interactive, case-based discussions - Ethics journal clubs and grand rounds
Role Modeling	- Promote and identify positive faculty role models - Formal mentorship programs - Explicitly discuss the hidden curriculum and its influence
Reflective Practice	- Structured self-reflection activities for residents and faculty - Encourage reflective thinking and metacognition
Small Group Discussions	- Peer interaction and active engagement on professional scenarios - Analysis and discussion in small, manageable groups
Multidisciplinary Interaction	- Sessions involving multidisciplinary teams (nurses, allied health staff) - Use external resources (employee assistance programs) for addressing conflicts, cultural competence, and harassment
Comprehensive Evaluation	- 360-degree evaluations from peers, staff, and patients - Regular resident self-assessments - Frequent observational evaluations by faculty
Faculty Development	- Dedicated professionalism curriculum for faculty - Faculty reflection and group discussions - Educate faculty on impacts of their behavior as role models
Context & Conflict Management	- Realistic training in managing professional conflicts - Preparation for challenging scenarios to maintain professionalism under pressure

2. Methodology

2.1. Exploratory Literature Search

To explore the possibility and use of medical history as a tool for PIF, an exploratory literature search was conducted using PubMed to assess the existing scholarship at the intersection of anesthesiology history, professional identity formation, and medical education and training. The goal of this search was to determine whether a body of peer-reviewed literature already existed that could support a traditional narrative or scoping review.

The search strategy was developed using a Boolean combination of four conceptual domains: medical history, professional identity formation, medical education and anesthesiology trainees. The full Boolean search string entered into PubMed can be found in Appendix A, Table A1. No date or language filters were applied. The search was conducted on 14 April 2025, and yielded zero articles that directly assessed all four conceptual domains.

2.2. Conceptual Narrative Approach

The absence of direct results underscored the conceptual novelty of this intersection and reinforced the need for a theory-guided, propositional review. The lack of empirical literature suggests that the use of history as a pedagogical tool for fostering professional identity in anesthesiology has not yet been systematically studied. Rather than attempting to fit a non-existent empirical base into a systemic format, the study proceeded with a conceptual narrative review informed by:

1. Foundational literature in professional identity formation, reflective practice, and the history of teaching the history of medicine.
2. Selected historical narratives from anesthesiology are chosen for their relevance to professional development.
3. The author's expertise in both anesthesiology and medical education, as well as engagement with scholarly communities, such as the Wood Library-Museum of Anesthesiology.

This method allowed for a synthesized interpretation of how history can function as an educational trigger for reflective learning, identity formation, and professional development within anesthesiology training.

3. Results and Discussion

3.1. Overview of the Teaching of Medical History

Despite periodic revival efforts, the marginalization of history within medical education has deep structural roots. In 1902, Sir William Osler, then nearing the height of his influence, reflected on the absence of structured instruction in medical history. While acknowledging that it was "not desirable to add the 'History of Medicine' as a compulsory subject," he emphasized the importance of fostering historical thinking among students. "Much more valuable," he wrote, "is it to train insensibly the mind of the student into the habit of looking at things from the historical standpoint," a task he undertook informally through weekly meetings with his clerks "over a little beer and baccy." These gatherings centered on the "Masters of Medicine" and drew upon original editions of historical works, exemplifying Osler's belief that history could enrich the intellectual and moral sensibilities of future physicians [18]. Eugene Cordell echoed this sentiment in 1904, outlining six justifications for history's inclusion in medical education, ranging from its inherent capacity as it "broadens the view and strengthens the judgment" as well as its role in preserving the professional memory of physicians as the profession "has benefited the world as no other class has" [19]. These early appeals reflect a moment when medicine's identity as a humanistic and civic profession was still in active dialogue with its scientific aspirations.

By 1939, however, Henry Sigerist and others recognized that the expansion of scientific medicine had led not to the full integration of history but to its increasing marginalization. Sigerist, writing from Johns Hopkins, reported that while many of the country's most prestigious medical leaders, including Welch, Halsted, and Osler, had valued historical scholarship, most American medical schools offered no formal instruction in history [20]. A survey conducted that year found that only a handful of schools had dedicated faculty or required coursework, and many of those were relics of older, more bibliophilic traditions rather than expressions of an integrated pedagogy. Even as Sigerist argued that the "study of history is not a luxury," and essential for physicians to "act consciously and intelligently," he was forced to admit that structural support remained thin [20]. The 1966 Macy Conference report made similar observations, noting the widespread inconsistency of historical teaching and the lack of trained faculty, while also calling for new models of integration and interdisciplinary collaboration [21].

The subsequent decades saw further shifts. As Ackerknecht warned in 1947, history's displacement from the clinical core reflected not just curricular crowding but also a broader cultural drift away from generalist, humanistic conceptions of medicine and one framing is that history was a victim of the advancement of science. As Ackerknecht noted, it was amongst the subjects that had been "relegated . . . into the realm of the not immediately practical and useful,"; in essence, the history of medicine was an anachronism in a system increasingly fixated on specialization and empiricism [22]. Yet by the late 20th century, new approaches began to emerge. Scholars like Jacalyn Duffin pioneered what she called an "infiltrative" model of curricular design, embedding historical questions within anatomy labs, pathology lectures, and clinical rotations to avoid the siloing that had undermined earlier efforts [23]. Others, like Barron Lerner, argued that history could not only cultivate healthy skepticism about medical orthodoxy but also humanize clinical reasoning, reveal the influence of social norms on diagnosis and treatment, and support reflection on controversies such as the legacy of Tuskegee to the ethics of early lobotomy [24]. Most recently, Jones, Greene, Duffin, and Warner have advanced a compelling case for history as a tool not only for teaching professionalism but for enhancing diagnostic reasoning, systems thinking, and reflective practice itself [3]. In short, history offers more than context—it offers critical grammar for thinking about the contingency, uncertainty, and moral stakes of clinical work.

These insights are especially urgent in anesthesia, a specialty deeply shaped by technological innovation, procedural identity, and institutional positioning. As the field continues to evolve through perioperative medicine, pain management, and critical care, the question is not whether history should be taught, but how it might be used to reconnect trainees to the intellectual, ethical, and social contours of the specialty. Whether through case-based explorations of ether day, the rise in neuromuscular blockade, the evolution of patient safety movements, or the gendered and racialized labor of nurse anesthetists, historical inquiry helps surface the hidden architectures of anesthesiology's past. In doing so, it invites learners to reflect on what kind of science, and what kind of service anesthesiology has been, and could still become. To be able to do this, a theoretical foundation for PIF is needed.

3.2. Professional Identity Formation

Professional identity formation has emerged as a central focus in medical education, shifting attention from simply teaching "professionalism" as a list of behaviors to cultivating the internalization of professional values and roles [25,26]. The goal is not only for trainees to do the work of a physician, but that they come to be physicians in identity and character [26]. PIF is commonly defined as the dynamic process by which an individual integrates the knowledge, skills, values, and norms of the medical profession into their own sense of self [27]. Through this process, which unfolds in stages over time, learners gradually "think, act, and feel like a physician," as they internalize the profession's value system [25]. Crucially, this goes beyond acquiring competencies; it entails a transformation in how trainees see themselves and their role in society [26]. Cruess et al. argue that the development of a professional identity should be an explicit goal of medical training, with teaching professionalism serving as a means to that end. In other words, the traditional instruction on ethical duties and behaviors is most effective when it supports learners' deeper identification with the ideals of the "good physician".

Frameworks of PIF in the medical education literature emphasize both individual development and social context. Jarvis-Selinger and colleagues describe PIF as a developmental and adaptive process occurring at two levels: individually, through psychological growth, and collectively, through socialization into professional communities. Cruess et al. highlight that complex networks of social interaction, role modeling, and experien-

tial learning (including tacit knowledge from the “hidden curriculum”) gradually shape each learner’s identity. This perspective draws on Wenger’s notion of situated learning in communities of practice: newcomers become part of the professional community through “legitimate peripheral participation,” steadily adopting the language, values, and behaviors of seasoned members. In essence, identity formation is relational and contextual, forged through clinical experiences and the collective meaning-making that happens in medical environments [27,28]. As trainees engage in the day-to-day practices of their field, they assimilate the attributes that align their thoughts, actions, and attitudes with the standards of the profession.

Current perspectives reinforce that PIF is an ongoing, multifaceted process, influenced by personal and contextual factors. Recent studies have begun to unpack how trainees internalize professional values in diverse settings. For example, a qualitative study of anesthesiology residents from 2024 identified multiple dimensions of identity development, from clinical expertise to interpersonal and emotional competencies, and found that individuals prioritize these elements differently [29]. Such findings underscore that professional identity is not monolithic; each learner’s identity formation pathway may vary based on their experiences, specialty culture, and personal background. The study’s authors advocate for a holistic approach to anesthesia education that “intertwines” medical science with the humanities and tacit learning, thereby fostering more resilient, well-rounded physicians [29]. Likewise, a longitudinal study of medical students’ reflective journals from 2025 highlighted reflexivity, the critical self-reflection on one’s experiences, as a dominant theme in students’ professional growth [28]. Students who actively reflected on their emotional responses, ethical dilemmas, and evolving perceptions of their role showed deeper internalization of professional norms. These recent insights reinforce earlier frameworks by illustrating how personal narrative and context shape the journey of “becoming” a physician. They also signal that supporting PIF requires adaptable strategies (e.g., mentorship, individualized feedback, identity-safe learning environments) to accommodate the varied ways trainees come to embody professional values [29].

3.3. *Reflective Practice*

Reflective practice is widely recognized as a catalyst for professional identity formation. Reflective practice can be defined as the disciplined, critical examination of one’s experiences to derive insight and improve future action [30]. In medical education, engaging learners in structured reflection helps connect concrete clinical encounters with the abstract ideals of professionalism. By deliberately analyzing successes and failures, reflecting on emotional and moral challenges, and questioning one’s assumptions, trainees cultivate greater self-awareness and a clearer sense of their professional self [30]. This process is thought to drive the moral and personal development that underlies identity formation. Indeed, reflection has been described as the “bridge” between experience and identity: through mindful retrospection, “the lessons of experience” are integrated into practice and into one’s understanding of what it means to be a physician [30]. Over time, such reflective learning helps learners align their behaviors with their core values and professional ideals, reinforcing the internalization central to PIF [28,30]. Key elements of PIF pedagogy, as articulated by Wald, include guided reflection, narrative exercises, and relationship-building, all in a supportive community of practice [31]. These strategies encourage learners to actively process their experiences rather than passively absorb information. For example, reflective writing is a commonly used tool that invites trainees to articulate their thoughts and feelings about clinical experiences, revisit their values and assumptions, and consider changes in perspective [28]. These strategies encourage learners to actively process their experiences rather than passively absorb information. For example,

reflective writing is a commonly used tool that invites trainees to articulate their thoughts and feelings about clinical experiences, revisit their values and assumptions, and consider changes in perspective. In essence, reflective practice acts as a form of deliberate identity work, helping trainees make meaning of their journey and continuously mold their identity as healers and professionals.

Narrative and critical reflection are particularly powerful in shaping professional identity. Narratives, whether personal anecdotes, patient stories, or historical vignettes, serve as mirrors and windows for learners to examine professional values in context. Educational research suggests that guided group reflection on narratives can “foster moral development alongside professional identity formation” in trainees [30]. By discussing stories of physicians (contemporary or historical) confronting ethical dilemmas or exemplifying virtues, learners engage in vicarious experience and perspective-taking. This narrative reflection allows them to critically appraise the actions and character of role models, and in doing so, clarify the kind of professional they aspire to become. The critical reflection aspect is key: it involves re-examining one’s own beliefs and biases in light of these narratives and considering how one might act or feel in similar situations [30]. Through such dialogue and introspection, learners internalize abstract principles like compassion, integrity, or altruism as personally held values rather than just rules. Additionally, narrative work often humanizes the process of professional growth; for instance, hearing how an esteemed anesthesiologist overcame a failure can normalize struggle and encourage resilience in one’s own identity formation. Learning is thus “situated” not only in the clinical setting but also in the storytelling culture of the profession, where shared narratives transmit professional norms and wisdom. By critically reflecting on these narratives and on their own experiences, trainees engage in situated learning that is identity-forming [27,31]. They move from being passive recipients of history or stories to active participants in a community’s ongoing narrative, finding personal meaning and professional purpose in the process.

The literature indicates that professional identity formation is an active, reflective, and social process. It requires medical trainees to internalize the ethos of the profession through experiential learning, mentorship, and critical reflection. The act of reflection, especially when prompted by narratives or guided inquiry, is a driving force that helps convert clinical and historical experiences into professional values and identity [28,30]. As such, developing a reflective mindset and providing opportunities for narrative reflection are seen as vital strategies for shaping professional identity and fostering professionalism. This theoretical foundation suggests that drawing on the history of anesthesia in education, for instance, through stories of pioneering anesthesiologists, ethical controversies, or transformative events in the field, can serve as a rich narrative canvas for reflection. By reflecting on the profession’s past in a critical and structured way, today’s trainees may better understand what it means to “be” an anesthesiologist, internalizing the values and ideals that define the specialty. These concepts of PIF and reflective practice thus form an intellectual bridge between appreciating the history of medicine and implementing concrete strategies to shape the identities of future physicians. They underscore why engaging with historical narratives, coupled with guided reflection, can be a powerful pedagogical approach in anesthesiology education, one that not only imparts knowledge but also molds the professional identity of the next generation [28,31].

3.4. How to Utilize the History of Anesthesia

Even for programs that have resources related to the history of anesthesia, it is often taught strictly as a set of historical facts without deeper contextual exploration or deliberate use as a tool for professional identity formation or fostering professionalism. How can the history of anesthesia become a tool in this endeavor? If PIF is understood as the

process of becoming and not merely doing the work of a physician, then the tools that support this transformation must go beyond competencies and checklists. As the preceding sections have shown, reflective practice and narrative engagement are vital mechanisms for internalizing professional values. History offers a uniquely potent source of narrative reflection: it not only chronicles the evolution of the profession but also dramatizes the ethical dilemmas, human struggles, and transformative choices that define it. Yet, in many anesthesiology training programs, history remains siloed; taught, if at all, as a sequence of milestones or names, divorced from the moral and professional questions they embody. Looking at examples of historical narratives in anesthesiology can be reanimated as pedagogical tools: not to celebrate past figures as trivia, but to use their stories to challenge, inspire, and guide today's learners, which can help educators incorporate this tool. By connecting historical events to contemporary professional challenges, educators can create rich opportunities for identity formation, reflection, and ethical growth. It is perhaps the essence of the specialty itself to alleviate suffering and care for the critically ill, and the history of this endeavor, which lends itself so richly to utilizing it to the benefit of our trainees (Table 2). While the examples here are more focused on the United States, examples can be adapted regionally.

Table 2. Historical Narratives as Pedagogical Tools for Professional Identity Formation in Anesthesiology.

Historical Example	Core Professional Themes	Suggested Method of Integration	Reflective Practice Opportunities
Crawford Long and the first use of ether anesthesia (1842)	Medical ethics; equality in pain management; social justice	Small group case discussion during intro to anesthetic techniques or ethics sessions	Prompted writing: "How do we define equitable care today? What assumptions do we make about pain tolerance?"
Henry Beecher and the ethics of human experimentation (1966)	Informed consent; moral courage; physician advocacy	Embedded narrative in medical ethics curriculum; role-play exercise based on Beecher's NEJM paper	Reflective journaling: "Describe a moment you felt discomfort about a routine practice. How might historical context shape your thinking?"
Opioid regulation and the legacy of pain undertreatment (1900s–present)	Advocacy; health policy; complexity of medical responsibility	Integration into pain medicine or public health modules	Group reflection: "What is our responsibility in balancing relief of suffering with societal risk?"
Virginia Apgar and the invention of the Apgar Score (1952)	Compassionate vigilance; innovation in service of the vulnerable; systemic change	Historical vignette paired with discussion on neonatal care or patient safety	Narrative reflection: "What hidden suffering do we overlook in current practice? How can we bring it into focus?"
Anesthesia during COVID-19 pandemic (2020–2021)	Adaptability; professionalism under crisis; public duty	Use in debriefs or faculty-led panels on pandemic experiences	Story circles: "How did the pandemic reshape your view of what it means to be an anesthesiologist?"

One example is the story of Crawford Long, whose first use of ether anesthesia is celebrated in the United States as National Doctor's Day on March 30th of each year. While William Morton's demonstration of ether anesthesia at Massachusetts General Hospital on October 16, 1846, is often taught and celebrated, Long's story provides valuable context for teaching anesthesiologists about professional identity by highlighting the intersection of medical ethics, equality in pain management, and reflective practice. Long's use of ether anesthesia across racial and gender divides in the antebellum South challenges historical assumptions about pain tolerance and underscores the ethical complexities in medical experimentation and its legacies [32]. Reflecting on Long's story can encourage trainees to reconsider assumptions they may hold about routine clinical practice and foster an appreciation of their professional responsibility toward equitable patient care.

There are numerous such stories in anesthesia including Henry Beecher's complicated relationship with psychedelics, medical ethics, and his subsequent landmark paper that shaped medical ethics for nearly 80 years [33], or how understanding the complex story

of opioid regulation through the 20th century and its relation to the opioid epidemic of the 21st century can help anesthesiologists understand how to advocate for patients [34]. Virginia Apgar, an anesthesiologist and obstetric pioneer who developed the Apgar Score in 1952 transformed newborns previously deemed “stillborn” into critically ill patients who needed immediate intervention, exemplifying anesthesiology as both a medical and moral practice of vigilance and compassion and the role of the anesthesiologist to reveal silent suffering, advocate for the vulnerable, expand the physical practice space of the anesthesiologist, and prove that systemic change is both necessary and possible [35].

These are a few examples that illustrate that the history of anesthesia is not merely a set of facts; rather, it is a way to offer meaningful opportunities for anesthesia educators to impart valuable lessons to trainees, shape their professional identity, and foster deeper reflection on professionalism. Many anesthesia departments in the United States, and even in other nations, have individuals who conduct scholarship in or have an interest in anesthesia history, and thus, have resources and individuals to leverage in this endeavor. Through contextualizing advances in anesthesia and how the practice today has developed, anesthesia educators can help trainees better understand the ethical complexities, social responsibilities, and moral foundations intrinsic to their roles as anesthesiologists, and prepare them for the unknown in their careers; moments that the COVID-19 pandemic showed are all too possible. Emphasizing these aesthetic narratives within a broader historical, political and social context can transform anesthesia history into a pedagogical tool and provide trainees with examples of how anesthesiologists have navigated complex issues, advocated for vulnerable patients, and expanded the scope and moral dimensions of the practice.

Fully realizing this potential is not without its challenges. The purposeful integration of history into anesthesia training offers a compelling but currently underutilized opportunity to support professionalism and professional identity formation. However, several practical barriers must be acknowledged. These include limited curricular time, competing educational priorities, and a relative lack of faculty with formal training in medical history or humanities-based pedagogy. In many programs, faculty with an interest in history may lack institutional support, structured time, or resources to translate this interest into educational programming. Furthermore, the increasing pressure to deliver competency-based, outcomes-driven curricula often deprioritizes subjects not perceived as directly contributing to clinical skills.

Yet these limitations also present opportunities. Many academic anesthesia departments already house faculty with historical interest or scholarly output, which is an underleveraged resource. Collaboration with historians, librarians, and museums can help overcome faculty development gaps. Curricular integration need not be extensive or time-intensive to be meaningful; brief modules, case-based discussions, and reflective exercises grounded in historical narratives can be woven into existing professionalism or ethics sessions. By surfacing stories of past anesthesiologists confronting moral, ethical, or societal dilemmas, trainees are offered a mirror through which to examine their own emerging professional values.

In summary, while logistical and institutional constraints exist, they should not deter innovation. The deliberate use of anesthesia history can enrich trainees’ understanding of their professional identities, inspire them to uphold the highest ideals of the specialty, and better equip them to navigate contemporary and future professional challenges.

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Abbreviations

The following abbreviations are used in this manuscript:

PIF	Professional Identity Formation
GME	Graduate medical education
ACGME	Accreditation Council for Graduation Medical Education

Appendix A

Table A1. Boolean search string for PubMed search.

("history of medicine"[MeSH] OR "medical history" OR "history of anesthesiology" OR "anesthesia history" OR "historical narrative")

AND

("professional identity" OR "professional identity formation" OR "professionalism"[MeSH] OR "professional socialization" OR "reflective practice"[MeSH] OR "medical humanities"[MeSH])

AND

("medical education"[MeSH] OR "education, medical, graduate"[MeSH] OR "resident education" OR "anesthesiology education")

AND

("anesthesiology"[MeSH] OR "anesthesiology trainees" OR "anesthesiology residents" OR "anesthesia training" OR "residency, anesthesiology")

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