

SYNTHESIS

The Development of Professional Standards in Forensic Anthropology

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ABSTRACT

Over the past 50 years, forensic anthropology has grown and matured into a specialized discipline within anthropology. Because of the potential legal ramifications of conducting casework, it is imperative that forensic anthropology practitioners are aware of their role within the medicolegal system, have received the proper education, mentorship, training, and certification within the discipline, and adhere to published national forensic anthropology standards and best practices. In this paper, we outline the development of professional standards in forensic anthropology in the United States. We review the key milestones in the professionalization of forensic anthropology as a discipline, including its development within the American Academy of Forensic Sciences (AAFS) and the implementation of board certification of practitioners by the American Board of Forensic Anthropology. We next discuss the key organizations involved in the drafting of forensic anthropology standards, including the pioneering efforts of the Scientific Working Group for Forensic Anthropology and the current work of the National Institute of Standards and Technology-administered Organization of Scientific Area Committees for Forensic Science (OSAC). We then discuss the critical role of the AAFS's Academy Standards Board, the standards development organization chosen by the OSAC Forensic Anthropology Subcommittee, which is responsible for further developing and publishing consensus-based national standards and best practices. The development of national standards for forensic anthropology has contributed to the professionalization of the discipline so that practitioners are *ideally* meeting minimum requirements to improve the reliability, consistency, and transparency of forensic anthropology casework.

1 | Introduction

In this paper, we discuss the development of professional standards in forensic anthropology in the United States. Forensic anthropology—defined here as “the application of anthropological method and theory to matters of legal concern, particularly those that relate to the recovery and analysis of the skeleton” (Christensen et al. 2025, 1), has its roots in the late nineteenth

century and was occasionally practiced by anatomists and medical doctors who had formal training in human skeletal anatomy (Işcan 1988; Passalacqua and Clever 2024; Snow 1982; Ubelaker 2018). These early practitioners provided their expertise to law enforcement by answering questions about medicolegal significance (i.e., determination of osseous vs. non-osseous material, human vs. nonhuman remains, and ancient vs. recent remains), providing estimates of skeletal sex, age, stature, and

population affinity from human skeletal remains, and occasionally aiding with personal identification, trauma analysis, and postmortem interval estimations.

It was not until the 1970s, however, that the discipline took its first steps toward professionalization (Bolhofner and Seidel 2019). Although at the time only a handful of physical anthropologists were regularly attending the annual meetings of the American Academy of Forensic Sciences (AAFS), Drs. Ellis Kerley and Clyde Snow helped establish the Physical Anthropology section of the AAFS in 1972 (Kerley 1978; Snow 1982; Stewart 1979). Over the next 5 years, Dr. Kerley also led the charge to develop the first board-certification body for forensic anthropology practitioners in North America. With the support of the AAFS and its Physical Anthropology section, the Law Enforcement Assistance Administration, and funding from the Forensic Science Foundation, the American Board of Forensic Anthropology (ABFA) was established in 1977 (Bartelink et al. 2020; Reichs 1995).

Since their founding, the Physical Anthropology section of the AAFS and the ABFA have grown both literally and figuratively. The Anthropology section is among the largest of the AAFS sections, boasting over 500 members. In 2015, the section chose to change its name to Anthropology (Ubelaker 2018), dropping the “physical” designation to acknowledge contemporary forensic anthropology’s more holistic approach. As of 2025, 176 individuals have earned ABFA board certification, and the ABFA has nearly doubled its certificants in the last 15 years. In 2009, the ABFA became the only forensic anthropology certification body that is accredited by the Forensic Specialties Accreditation Board (Bartelink et al. 2020; Bunch et al. 2017). Traditionally, a doctoral degree was required for ABFA certification (Boyd et al. 2020), but in 2025, the ABFA implemented a tiered certification process, allowing applicants with a master’s or doctoral degree to sit for the new Forensic Anthropology Analyst exam. The Analyst exam focuses mainly on the core competencies needed to conduct forensic anthropology casework. Practitioners who hold a doctoral degree and are certified as an ABFA Analyst can then apply to sit for a second ABFA Diplomate exam, which focuses on more specialized competencies such as an advanced understanding of biomechanical characteristics of bone in relation to trauma, bone remodeling in relation to fracture healing, functional anatomy, and the use of histology. Thus, Diplomate-level remains the highest level of certification for forensic anthropologists. Recertification is required periodically and requires documenting involvement in the discipline through various criteria related to engagement, practice, and continuing education in forensic anthropology.

The creation of the Physical Anthropology section of the AAFS, and the ABFA provided avenues for forensic anthropologists to discuss case studies, research methods, standardization in data collection, the creation of documented donated human skeletal collections, and board certification. However, progress in developing minimum standards and best practices was slow. In 1986, the Forensic Anthropology Data Bank (FDB) was created to provide a repository for biological profiles and standardized osteometric data from documented skeletal remains, including body donations and identified forensic anthropology cases (Moore-Jansen and Jantz 1986; Ousley and Jantz 1998). Funded

by a grant from the National Institute of Justice, the FDB formed the core database used in the development of *FORDISC*, a software program that performs osteometric analyses to aid in estimations of skeletal sex, stature, and population affinity (Spradley and Weisensee 2017). These developments, along with the publication of *Data Collection Procedures for Forensic Skeletal Material*, which aggregated osteometric measurement descriptions from other sources, aided in the development of standards for osteometric analyses used to estimate parameters of the biological profile (Moore-Jansen et al. 1994). That same year, Buikstra and Ubelaker (1994) published *Standards for Data Collection from Human Skeletal Remains*, an edited compendium of data collection procedures primarily applicable to bioarchaeology, but with some relevance to forensic anthropology as well. These were among the first guides for standardized data collection in human osteology, which was especially important for standardizing the methods used for measuring the human skeleton. This standardization was critical for the use of osteometric analyses for biological profile estimations.

Despite these important milestones, the forensic anthropology community generally lacked an appreciation for standard operating procedures (SOPs), records retention policies (e.g., maintaining field and bench notes from the analysis), and other laboratory quality assurance practices; forensic anthropology practitioners were also largely unaware of the value of laboratory accreditation and maintaining chain-of-custody documentation. This is likely largely due to forensic anthropology’s academic roots (anthropological method and theory), which differ from the biological and physical sciences (e.g., medicine, laboratory sciences) that routinely employ quality assurance measures. Although there are critics who view credentialing through practitioner certification and laboratory accreditation as elitist and gatekeeping, the purpose of these processes is to promote quality assurance and professional practice, with the goal of instilling public confidence in forensic evidence and the justice system.

Similarly, the judicial system seeks to admit only reliable expert witness testimony at trial. Various rules (i.e., legal standards) have been used to determine the admissibility of expert testimony, including the *Frye v. US* (1923) “general acceptance” rule and the Rule 702 of the Federal Rules of Evidence (1975), which states that the testimony must be reliable, relevant, and helpful to the trier of fact. In 1993, the landmark Supreme Court decision, *Daubert v. Merrell Dow Pharmaceuticals Inc.*, (1993) charged trial judges with the “gatekeeping” of expert witness testimony (Holland and Crowder 2019). The legal standard that *Daubert* set has been adopted by 40 of the 50 US states and the District of Columbia. It provides the framework to help judges assess the reliability and relevance of expert testimony for the purposes of determining its admissibility before being presented to the jury. To prevent “junk science” from being admitted into trials, judges may consider several factors when determining if the expert’s opinion is based on valid scientific principles and/or methods, including: (1) Has the method and technique used been tested using the scientific method? (2) Does the method and technique have known or potentially known error rates? (3) Are there standards controlling how the method or technique is used? (4) Has the method or technique been subjected to peer review and publication? Finally, (5) has the method or technique been generally

accepted by the relevant scientific community (Christensen and Crowder 2009; Lesciotto 2015). While *Daubert's* impact on the forensic science community has been substantial, Lesciotto and Christensen (2024) argue that forensic anthropology researchers have often misinterpreted the guidelines as criteria that need to be met for method development. Instead, Lesciotto and Christensen (2024, 9) argue that forensic anthropologists should focus on “adopting quality assurance measures that minimize error and ensure confidence in analytical results and developing and using methods that are grounded in good science.” *Daubert* put the forensic science community on notice that methods must be based on sound scientific principles, tested, and validated.

2 | The Development of Professional Standards for Forensic Science

The *Daubert* ruling was among the most consequential events affecting expert witness testimony and the forensic sciences during the 1990s. However, the next decade ushered in a new era in the forensic sciences with the publication of a pivotal report written by the congressionally funded National Research Council (NRC); the 2009 publication, *Strengthening Forensic Science in the United States: A Path Forward*, criticized the lack of scientifically validated methods routinely used in the forensic sciences and provided 13 core recommendations for improving forensic science in the United States. According to the report, several areas of forensic science lacked foundational science, including the ability to accurately and reliably identify individuals or source materials based on comparisons of fingerprints, bite mark patterns, hair characteristics, striation patterns, etc. The lack of uniform terminology, methods, and practice was also deemed problematic. Recommendations made that are particularly relevant to forensic anthropology include the need to: (1) standardize terminology and reporting; (2) conduct new research on the validity, accuracy, and reliability of analytical methods; (3) conduct research on observer bias; (4) conduct proficiency testing of analysts; (5) require mandatory certification of practitioners and accreditation of forensic laboratories; (6) establish quality assurance procedures; (7) develop a standard code of ethics; and (8) support higher education in the forensic sciences. The forensic science community's response to the NRC report was mostly positive, but the framework to adopt their recommendations has been fragmented, in part due to a lack of congressional action to establish a National Institute of Forensic Science. However, the NRC report did provide justification needed to spur the availability of federal funding to support the implementation of the recommendations by crime laboratories and forensic science practitioners. In 2014, such federal funding supported the establishment of the Organization of Scientific Area Committees (OSAC) for Forensic Science, which is administered by the National Institute of Standards and Technology (NIST). OSAC's goals are twofold: (1) to help draft standards that set minimum requirements, define best practices, and promote uniformity in practice, and (2) to encourage the implementation of these discipline-specific, consensus-based standards to ensure analytical results are consistent and reliable. The importance of generating standards documents is the codification of minimum requirements and best practices for practitioners (e.g., qualifications, education, and training) and for performing various forms of forensic science work (e.g., specific analytical

tests, and reporting). Although standards documents are typically implemented voluntarily by laboratories integrating provisions (whole or in part) into their SOPs, they are often adopted by oversight bodies (e.g., accrediting, certifying, and licensing bodies), which can make them mandatory.

2.1 | Standards Documents

Standards documents represent “industry standards,” such as the codification of procedures and guidelines for common forms of technical or scientific work (Solomon 2023). Standards documents are meant to be accessible, objective, consensus-based guidance documents that are used to generate “quality, reliability, efficiency, and consistency among practitioners” (National Research Council 2009, 194). These types of documents are very common in private industry and are used to promote or generate quality assurance of various types of work, as they formally establish uniform approaches for performing various tasks. Regardless of the type of work someone is doing, quality assurance mechanisms should be highly valued, as they exist to ensure work products meet a minimum standard of quality that the public can rely on (thus building and maintaining trust between the producers and consumers of various work products) (Manghani 2011). For example, colleges and universities (as well as many academic programs within these institutions) are accredited. These accreditations exist to demonstrate to the public that these academic institutions have met widely accepted standards of education, and to demonstrate that a degree from one of these accredited schools meets a standardized level of academic rigor (Dill et al. 1996).

There are multiple types of standards documents that vary depending on an organization's SOPs, as well as on the document's scope and requirements. For forensic anthropology, standards documents include: (1) Standards; (2) Best Practice Recommendations (BPR); (3) Guidelines; and (4) Technical Reports, because these are the document types acceptable based on the forensic anthropology standards development organization's (SDO) operating manual and terms of accreditation (Academy Standards Board (ASB) Manual 2022). A standard “sets objectively verifiable requirements, provides for common and repeated use, rules or characteristics for activities or their results, and is aimed at the achievement of the optimum degree of order in a given context,” and is “written to establish objectively measurable requirements for a given topic or set of actions” (Academy Standards Board (ASB) Manual 2022, 2). In contrast, a BPR “identifies and sets forth the optimal way to carry out an action or actions ... and may include choices and the variants between them as a means of demonstrating optimal choices in different circumstances” (Academy Standards Board (ASB) Manual 2022, 3). A Guideline “provides information and advice on processes and activities contained in a Standard or BPR, or guides users on the implementation of a standard or series of standards. A Guideline may include recommendations but does not establish best practices” (Academy Standards Board (ASB) Manual 2022, 2). Finally, a Technical Report “is an explanatory, information-only document” that may “contain research, findings, terms and definitions, emerging technologies, or techniques” (Academy Standards Board (ASB) Manual 2022, 4). Unlike other types of standards, Technical Reports “do

not contain requirements or recommendations” (Academy Standards Board (ASB) Manual 2022, 4).

2.2 | Scientific Working Groups for Forensic Science

The process for developing standards documents is multifaceted and complex; it relies on multiple organizations and volunteer labor from subject matter experts and other stakeholders. Scientific Working Groups (SWGs) have existed for some forensic science disciplines since the early 1990s, with the goal to improve scientific practice and create consensus-based standards documents (Wilson-Wilde 2018). Existing SWGs were the obvious place to start implementing the NRC recommendations, and several disciplines (e.g., DNA) had already developed robust, validated methods. The Scientific Working Group for Forensic Anthropology (SWGANTH) was formed through the co-sponsorship of the United States Department of Defense's Central Identification Laboratory and the Federal Bureau of Investigation; the bylaws were adopted at the first in-person meeting in 2008 (Holland 2011). The goal of the SWGANTH was to “establish, identify, and publish ‘Best Practices’ within the forensic anthropology discipline” (Holland 2011, 335); the SWGANTH comprised a 20-member executive board of subject matter experts from varying employment contexts (e.g., universities, museums, medical examiner's offices, and federal, state, and government agencies). Although not a regulatory body, the SWGANTH's aim was to engage with the forensic anthropology community in the development and adoption of forensic standards documents, to encourage practitioners to get board-certified, and to promote the value of obtaining laboratory accreditation (Holland et al. 2010; Holland 2011). Best practice documents were drafted by the executive board with input from the forensic anthropology community at large. While focused mainly on forensic anthropology in the United States, the SWGANTH also engaged with forensic anthropologists internationally, including staff from the International Committee of the Red Cross. Draft best practice standards were posted on the SWGANTH website for public dissemination, review, and revision. In total, the SWGANTH developed 21 documents covering analytical procedures, quality assurance, laboratory management, ethics and conduct, and education and training (Holland et al. 2010; Holland 2011).

2.3 | Development of the OSAC for Forensic Science

The SWGANTH was dissolved in 2014 due to the newly created OSAC for Forensic Science, which replaced nearly all existing SWGs. The OSAC was established through a collaboration between the NIST and the US Department of Justice's newly established National Commission on Forensic Science, a Federal Advisory Committee that operated from 2013 to 2017 (Jones II et al. 2023). In 2014, NIST was tasked with administering the OSAC, and the OSAC held its first in-person meeting in 2015. The OSAC was established to create “standards and best practices within and between disciplines related to terminology, methodologies, and training,” and their mission is to “strengthen the nation's use of forensic science by facilitating

the development of technically sound standards, expanding the OSAC Registry with standards that have completed a technical assessment, and promoting the implementation of those standards by OSAC's stakeholders and the forensic science community” (Jones II et al. 2023, 17). Importantly, NIST is focused on promoting the creation and adoption of standards documents, but not the *publication* of standards documents. This means that OSAC *proposed* standards require outside, independent evaluation and development by an accredited SDO, which is responsible for publishing the standards. For forensic anthropology, the AAFS' Academy Standards Board (ASB), established in 2015, was chosen as its SDO.

OSAC is currently composed of seven Scientific Area Committees (SACs), including Biology, Chemistry: Seized Drugs and Toxicology, Chemistry: Trace Evidence, Medicine, Digital/Multimedia, Physics/Pattern Interpretation, and Scene Examination; over 800 members participate in forensic standards development at the OSAC. The 22 subcommittees formed within the SACs focus on specific forensic disciplines. For example, the Forensic Anthropology Subcommittee (FA SC) is located within the Medicine SAC along with forensic odontology, forensic nursing, and medicolegal death investigation. The FA SC currently has 20 voting members, including a chair, a vice-chair, and a secretary, and 6 non-voting affiliate members. The FA SC has forensic anthropologists employed by medical examiners' offices, universities, museums, and federal laboratories; the subcommittee also includes a forensic pathologist, an attorney, and experts in quality assurance/quality control and human factors (i.e., bias). Most of the FA SC's proposed standards were brought over from the SWGANTH for further development.

The OSAC subcommittees are responsible for developing proposed standards documents, which are drafted and revised by task groups within each subcommittee. Once drafted, the proposed standards document is discussed among the entire subcommittee, which provides edits and suggestions, including a comprehensive review by Resource Task Group members (e.g., human factors, legal, quality, statistics, and terminology). The document is then submitted to the Forensic Science Standards Board (FSSB), which oversees the work of the subcommittees and facilitates moving documents through the various stages of the approval process. The FSSB reviews the draft and, for certain types of documents (e.g., non-technical documents), a separate review by a Scientific Technical Review Panel (STRP) is conducted. The STRP is composed of subject matter experts who provide feedback on the document to the subcommittee, which, in turn, must then adjudicate each comment prior to resubmission to the FSSB for review. Once reviewed, the FSSB submits comments to the subcommittee and discusses any suggestions or concerns before voting on whether to approve the document as a proposed standard.

2.4 | OSAC Registry and the AAFS ASB

The OSAC Registry is a repository of selected published and proposed standard documents for forensic science. As of 2025, the OSAC currently has 235 standards published on its Registry, 157 standards that are SDO-published, and 78 that are OSAC Proposed Standards (<https://www.nist.gov/organization-scientific-area-committees-forensic-science/about-us>). Once a proposed

standards document is placed on the OSAC registry, an SDO must agree to further develop the document prior to publication of the standard. The SDO development process requires that the SDO make the proposed standards document available to the public to solicit feedback; like the OSAC open comment period, the SDO must adjudicate all public comments. Multiple rounds of public comment and adjudication may be needed before a document reaches consensus and is ready for publication, which may take several months.

For the FA SC, the ASB has served as the sole external SDO. The ASB is accredited by the American National Standards Institute (ANSI) and is composed of 14 consensus bodies that review, revise, and develop OSAC-proposed standards for publication; the ASB also can develop its own documents, such as best practice versions of its published standards, revised editions of published standards, and other documents. The ASB's Anthropology Consensus Body has 20 voting members who, like OSAC, represent expertise from a variety of workplace contexts, including medical examiners' offices, universities, and federal laboratories (Fleischman and Bartelink 2025).

The ASB's extensive public comment period provides transparency to the process and allows forensic science practitioners, legal experts, and other stakeholders to provide critical feedback. Once an ASB standards document is published, it is posted on the ASB website and is available for the OSAC's FA SC to complete a technical merit review. The technical merit review involves comparing the published document against OSAC's 12 registry criteria, which include its purpose, scope, terminology, clarity, measurement uncertainty, error rates, quality assurance factors, validation, and feedback from the Resource Task Groups, including legal, human factors, quality, and statistics. The subcommittee then votes on the standard's technical merit, and if a two-thirds majority votes in favor, the document is then submitted to the FSSB for consideration to be placed on the OSAC Registry. A simplified flowchart documenting the standards development process is shown in Figure 1.

As of 2025, the ASB has published 12 OSAC-derived forensic anthropology standards documents (<https://www.aafs.org/academy-standards-board>), four of which have been placed on the OSAC Registry (<https://www.nist.gov/osac/registry>), including standards on pathological conditions and anomalies, scene detection and processing, resolving commingled remains, and a BPR for facial approximation. Two additional published ASB standards on age estimation and skeletal trauma have been submitted by the FA SC to the OSAC Registry and are awaiting approval. Finally, six published ASB standards were not approved for the OSAC Registry, including standards on the estimation of skeletal sex, stature, population affinity, medicolegal significance, taphonomic observations in support of the postmortem interval, and personal identification. The standards development process, both at OSAC and ASB, can be lengthy, and the criteria used by OSAC for Registry approval have changed over the past decade, creating challenges during the technical merit review phase. However, because standards must be revised and renewed at least every 5 years, the ASB can more easily address technical merit criteria when drafting revised second editions of any standards documents not approved by the OSAC for the

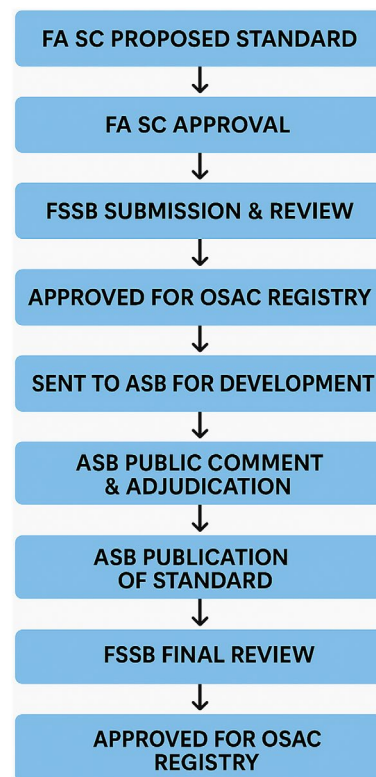


FIGURE 1 | Simplified flowchart of the OSAC-ASB standards development process.

registry during technical merit review. A summary of the status of current forensic anthropology standards is provided in Table 1.

New standards documents are also in the process of publication. Two OSAC-proposed standards have been accepted for the OSAC Registry, the *Standard for Qualifications for Forensic Anthropology Practitioners* and the *Standard for Skeletal Preparation and Sampling in Forensic Anthropology*. Both are currently being developed by the ASB for publication. Two OSAC-proposed standards documents are in review by the FSSB and are pending placement on the registry, followed by subsequent SDO development and publication; these include the *Standard for Case File Management and Reporting in Forensic Anthropology* and the *Standard for a Quality Assurance Program in Forensic Anthropology*. Finally, a companion document, *Guidelines for a Quality Assurance Program in Forensic Anthropology*, is in review and will aid in the implementation of a quality assurance program for forensic anthropology.

The OSAC FA SC continues to develop new documents, including a *Standard for Isotope Sample Preparation in Forensic Anthropology*, which is now in review by the FA SC. In addition, OSAC submitted the proposed standard for the *Ethical Treatment of Human Remains and Associated Data for Curation, Education, Research, and Training in Forensic Anthropology* (ASB Standard 217) directly to the ASB for development as a joint venture (also see Passalacqua et al. 2025). The ASB has a draft technical report (ASB Technical Report 214) on *Terminology Used for Forensic Anthropology* in public comment, the second edition documents of published standards that are due for revision and review, and best practice versions of several previously

TABLE 1 | Published ASB standards, proposed OSAC standards, and their status on the OSAC registry.

ANSI/ASB Standard #	Document name	Approved for OSAC Registry
045	Standard for Stature Estimation in Forensic Anthropology, 2019, 1st ed.	No
089	Best Practice Recommendation for Facial Approximation in Forensic Anthropology, 2020, 1st ed.	Yes
090	Standard for Sex Estimation in Forensic Anthropology, 2019, 1st ed.	No
132	Standard for Population Affinity Estimation in Forensic Anthropology, 2023, 1st ed.	No
133	Standard for Age Estimation in Forensic Anthropology, 2024, 1st ed.	In Review
134	Standard for Analyzing Pathological Conditions and Anomalies in Forensic Anthropology, 2024, 1st ed.	Yes
135	Scene Detection and Processing in Forensic Anthropology, 2023, 1st ed.	Yes
146	Standard for Resolving Commingled Remains in Forensic Anthropology, 2021, 1st ed.	Yes
147	Standard for Analyzing Skeletal Trauma in Forensic Anthropology, 2024, 1st ed.	In Review
148	Standard for Personal Identification in Forensic Anthropology, 2024, 1st ed.	No
149	Standard for Taphonomic Observations in Support of the Postmortem Interval, 2022, 1st ed.	No
150	Standard for Determination of Medicolegal Significance from Skeletal Remains in Forensic Anthropology, 2021, 1st ed.	No
Proposed OSAC Standard #		
2021-N-0010	Proposed Standard for Skeletal Preparation and Sampling in Forensic Anthropology	Yes
2025-N-0002	Proposed Standard for Qualifications for Forensic Anthropology Practitioners	Yes
2024-S-0016	Standard for Case File Management and Reporting in Forensic Anthropology	In Review
2025-S-0013	Standard for a Quality Assurance Program in Forensic Anthropology	In Review
2025-S-0014	Guidelines for Implementing a Quality Assurance Program in Forensic Anthropology	In Review

published standards. Because standards development is an ongoing process, it is important to review the most current standards on the ASB webpage and the OSAC registry.

3 | Professionalizing Forensic Anthropology

In addition to developing standards documents, the discipline of forensic anthropology has been undergoing other forms of professionalization over the last 25 years (Boyd 2025; Langley and Tersigni-Tarrant 2020; Langley et al. 2025; Passalacqua and Pilloud 2018, 2021). While these processes were underway before the publication of the 2009 NRC report, they have continued to evolve, in large part, in reaction to its recommendations. Most importantly, as the scope of forensic anthropology continues to

expand, it has become more imperative to ensure that all practitioners have been evaluated for their expertise and competence through processes such as formal training, competency testing, and ABFA certification. In addition, forensic anthropology laboratories are strongly encouraged to develop robust quality control and quality assurance measures and to seek accreditation as crime laboratories. We briefly discuss these issues in light of the future directions that are essential for forensic anthropology to be more in line with other professional forensic science disciplines.

3.1 | Expertise, Competence, and Certification

Some of the earliest publications in the discipline acknowledged that specialized knowledge and skills (i.e., expertise) unique to

forensic anthropology are imperative to competent practice (e.g., Işcan 1988; Krogman 1962; Stewart 1951). This recognition may be, at least in part, why the ABFA was originally established—to demonstrate that forensic anthropology is a unique domain of expertise in which not all biological anthropologists are competent (Passalacqua et al. 2021, 2023).

Since its inception, the ABFA has only offered certification at the Diplomate level, which was available for qualifying individuals with a doctoral degree emphasizing forensic anthropology, human skeletal biology, or closely related specialization. However, in 2023, the ABFA announced it was revising its certification process and creating a multilevel certification that would add the level of “Analyst.” The rationale behind creating this multilevel certification is complex but includes consideration of the NRC’s Recommendation #7 which states: “Laboratory accreditation and individual certification of forensic science professionals should be mandatory, and all forensic science professionals should have access to a certification process” (National Research Council 2009, 25). As multiple individuals are practicing forensic anthropology in the United States with a terminal master’s degree, developing this multilevel certification now gives them access to a certification process. Additionally, the availability of multilevel certification makes it so individuals without a doctoral degree cannot be dismissive of certification.

The ABFA’s restructuring of their certification process means that moving forward, all individuals seeking board-certification must first be certified at the Analyst level. Analyst level certification in forensic anthropology is available to individuals with master’s degrees and doctoral degrees in anthropology from accredited institutions. The ABFA Analyst certification examination focuses on testing fundamental laboratory skills and foundational knowledge. Once certified as an Analyst, individuals with conferred doctoral degrees specializing in biological anthropology can apply for the ABFA’s Diplomate certification. Diplomate certification builds on Analyst competencies; accordingly, the Diplomate examination evaluates an examinee’s advanced knowledge, synthesis, and interpretation, especially in relation to more specialized knowledge relating to the biomechanics of bone, antemortem bone fracture repair, functional anatomy, and histology. The ABFA certifies individuals at its minimum competencies but is not a licensing body. This contrasts with two of the forensic science disciplines most closely related to forensic anthropology: forensic pathology (i.e., medicine) and forensic odontology (i.e., dentistry), both of which require licenses to practice (Langley et al. 2025). Unlike certification, which is a voluntary credential for individuals to demonstrate their expertise in a domain, licenses are credentials that are required to practice within a domain and are enforced through state and/or federal laws. There are currently no mandatory licenses specific to forensic anthropology. In 2015, Texas passed 84(R)SB 1287 (effective in 2019), which requires forensic scientists in certain disciplines (e.g., ones that the Texas Code of Criminal Procedure requires accreditation, such as Forensic Biology and Toxicology) to have a license issued by the Texas Forensic Science Commission to practice in the state; however, forensic anthropology is not one of the disciplines that currently requires a license. At present, forensic anthropologists conducting casework for the State of Texas may opt to obtain a voluntary

General Forensic Analyst License, although the Texas Forensic Science Commission could institute a mandatory license for forensic anthropology in the future.

4 | Conclusion

Professionalism in forensic anthropology focuses on the importance of qualifications (specialized knowledge, training, and expertise), the adherence to ethical principles of conduct established by professional scientific organizations, and the need to conduct casework without conflicts of interest (Passalacqua and Pilloud 2018). Over the past 50 years, forensic anthropology in the United States has been transformed from a small subfield within biological anthropology that involved occasional consultations by anthropologists on human remains cases to a fully professionalized discipline embedded within the medicolegal system. The professionalization of the discipline over time occurred alongside increases in the number of forensic anthropology practitioners (Pilloud and Passalacqua 2022), expansions in the scope of expertise required to practice within the domain, changes in the judicial landscape, and improvements to the practice of forensic science as a whole. As forensic anthropology grew in popularity, breadth, and notoriety, so too grew the need to define what forensic anthropology was, who was competent to practice, and who can call themselves a forensic anthropologist (Işcan 1988).

The creation of the Physical Anthropology section of the AAFS and the ABFA corresponded with increasing appreciation for forensic anthropology as a discipline requiring expertise that is unique from other areas of anthropology. As forensic anthropology became more ingrained within the medicolegal death investigation system, it needed to embrace laboratory and evidentiary requirements for traceability, confidence, and error (Christensen and Crowder 2009; Christensen et al. 2025). The creation, publication, and adoption of forensic anthropology standards, beginning with the SWGANTH and followed by the OSAC and ASB, are key achievements in the continuing professionalization of the discipline. These milestones demonstrate a recognition of the importance of forensic anthropology as a service-based discipline focused on providing its stakeholders with a high-quality work product and the promise of continued improvement. Published national standards and BPR, when used in conjunction with certified practitioners and a robust quality assurance/quality management system within an accredited laboratory, provide the best assurance that casework is being practiced at the highest scientific level.

Author Contributions

Eric J. Bartelink: conceptualization, writing – original draft, writing – review and editing, investigation. **Nicholas V. Passalacqua:** conceptualization, investigation, writing – original draft, writing – review and editing. **Wendy E. P. McQuade:** conceptualization, investigation, writing – original draft, writing – review and editing.

Conflicts of Interest

The authors declare no conflicts of interest.

Data Availability Statement

Data sharing not applicable to this article as no datasets were generated or analysed during the current study.

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