# OSAC 2025-N-0002 Standard for Qualifications for Forensic Anthropology Practitioners

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### **OSAC** Proposed Standard **OSAC 2025-N-0002 Standard for Qualifications for Forensic Anthropology Practitioners** Prepared by Forensic Anthropology Subcommittee Version: 1.0 November 2024 **Disclaimer:** This OSAC Proposed Standard was written by the Forensic Anthropology Subcommittee of the Organization of Scientific Area Committees (OSAC) for Forensic Science following a process that includes an open comment period. This Proposed Standard will be submitted to a standard developing organization and is subject to change. There may be references in an OSAC Proposed Standard to other publications under development by OSAC. The information in the Proposed Standard and underlying concepts and methodologies may be used by the forensic science community before the completion of such companion publications. Any identification of commercial equipment, instruments, or materials in the Proposed Standard is not a recommendation or endorsement by the U.S. Government and does not imply that the equipment, instruments, or materials are necessarily the best available for the purpose.



### 58 Foreword

- 59 Anthropology is a broad discipline dedicated to the study of humanity in both the past and
- 60 present. Forensic anthropology is a specialized subdiscipline focused on the search, recovery, and
- 61 analysis of human remains within the context of the medicolegal death investigation system.
- 62
- 63 Currently, uniform qualifications do not exist for forensic anthropologists, leading to variability
- 64 in competency to practice. This standard was developed to provide minimum qualifications for
- 65 forensic anthropology education, training, certification, ethics, and professionalism in the United
- 66 States of America.
- 67 This document supplements ASTM 2917-24 Standard Practice for Forensic Science Practitioner
- 68 Training, Continuing Education, and Professional Development Programs. This standard is of
- 69 value to 1) forensic anthropology students and practitioners as they acquire and maintain their
- knowledge, skills, and certification; 2) institutions and/or organizations (within and outside of
- 71 academia) in their development of student and professional educational, training, and
- 72 certification programs; and 3) forensic anthropology service providers and consumers in their
- 73 evaluation of forensic anthropology competency.

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90	Keywords: forensic anthropology; education; training; qualifications
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### 105 Standard for Qualifications for Forensic Anthropology Practitioners 106 107 1 Scope 108 109 This standard describes the minimum qualifications for forensic anthropologists in professional 110 practice, including education, training, experience, certification, ethics, and professionalism in 111 the United States of America. 112 This standard does not prescribe or endorse any specific educational curriculum or training 113 program, nor does it supersede any requirements from certification or licensing bodies. 114 2 Normative References 115 The following reference is indispensable for the application of the standard. 116 ASTM Standard E2917-24, Standard Practice for Forensic Science Practitioner Training, 117 Continuing Education, and Professional Development Programs. 118 119 **3** Terms and Definitions 120 121 3.1 122 The American Board of Forensic Anthropology (ABFA) 123 Certification body for practicing forensic anthropologists, accredited by the Forensic Specialties 124 Accreditation Board (FSAB). 125 126 3.2 127 ABFA diplomate (D-ABFA) 128 A forensic anthropologist certified through the American Board of Forensic Anthropology. 129 130 3.3 131 chain of custody 132 A chronological record of the handling and storage of an item from its point of collection to its 133 final return or disposal. 134 135 3.4 136 competency 137 A forensic science practitioner's acquisition and demonstration of necessary specialized 138 knowledge, technical skills, and abilities to successfully perform examinations and analyses prior 139 to independent practice. 140 141 142 143 144



### 145 **3.5**

### 146 continuing education

147 The formal mechanism through which a forensic science practitioner increases or updates 148 knowledge, skills, or abilities (KSAs), reinforces knowledge or learns of the latest research, 149 developments, or technology related to their profession.

150 151 **3.6** 

# 152 education

Formal academic coursework from an accredited school, college, or university, that counts towards an academic degree.

- 155
- 156 **3.7**

### 157 ethical conduct

- 158 Behavior that conforms to relevant published standards of professional conduct (e.g., follows 159 applicable Codes of Ethics for the discipline).
- 160
- 161 **3.8**

### 162 experience

- 163 Direct observation of and participation in the practice of a discipline.
- 164
- 165 **3.9**
- 166 expertise
- 167 Knowledge, skills, and abilities to perform tasks with minimum competency or greater.
- 168 169 **3.10**

## 170 forensic science service provider (FSSP)

- 171 An organization or individual that provides forensic science services.
- 172
- 173 **3.11**

### 174 fourier-transform infrared spectroscopy (FTIR)

- 175 A technique used to obtain an infrared spectrum from a solid, liquid, or gas emission or 176 absorption.
- 177
- 178 **3.12**

### 179 human remains

- 180 Human soft, osseous and dental tissues, and/or samples thereof (e.g., hair, fingernails, cuttings
- 181 for DNA or isotopic testing, extracts derived from a primary source).
- 182
- 183
- 184
- 185



### 186 **3.13**

187 internship

188 An in-depth educational or training program that offers a period of supervised practical 189 experience in a forensic science setting.

- 190
- 191 **3.14**

### 192 medicolegal authority

193 A person or agency charged by law with conducting death investigations for the purpose of 194 certifying deaths (e.g., Coroners, Medical Examiners, Justices of the Peace).

195

### 196 **3.15**

### 197 professional development

198 The mechanism through which a forensic science practitioner improves personal skills, 199 successfully handles increasing responsibility, makes contributions to the profession, and 200 reinforces ethical behaviors.

201

## **3.16**

203 proficiency testing

Evaluation of participant performance against pre-established criteria using inter-laboratorycomparisons.

### 206 207 **3.17**

## 208 qualifications

209 The combined education, training, and experience of an individual.

# 210211**3.18**

### 212 quality management

- 213 The coordinated activities to direct and control an organization concerning quality. Direction and
- control with regard to quality generally include the establishment of a quality policy and quality
- 215 objectives, quality planning, quality control, quality assurance, and quality improvement.
- 216

### 217 **3.19**

## 218 Stable isotope analysis

219 Identification and measurement of stable isotopes (alternative stable forms of organic and 220 inorganic elements with different molecular weights) used to reconstruct dietary and migration

- 221 patterning.
- 222
- 223
- 224
- 225
- 226

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### 227 **3.20**

### training

Formal, structured process of teaching and assessment outside of academic coursework, often
 at a laboratory or other non-educational institution, but also includes continuing education

231 opportunities. Often results in a certificate or formal documentation of completion.

- 232
- 233 **3.21**

## 234 technical record

All pertinent items created or used to support findings of a forensic anthropological examination.

236 Technical records may be field and/or laboratory notes documenting tests undertaken, 237 photographs and medical imaging forming the basis for analysis or technical conclusions, test 238 records, antemortem medical and dental records, and other documentation (e.g., bench notes,

- 239 inventories, observations, diagrams, sketches, charts).
- 240
- **3.22**

# 242 X-ray diffraction (XRD)

- 243 A technique using X-rays to determine elemental composition and phases of a material.
- 244
- 245 **3.23**

## 246 X-ray fluorescence (XRF)

247 A technique using X-rays to determine elemental composition of a material.

248

## 249 **4** Qualifications

250

Forensic anthropologists shall have discipline-specific expertise to conduct forensic anthropological examinations. The following represent minimum qualifications for forensic anthropology education, training and experience, certification, continuing education and professional development, and adherence to ethical and other professional standards.

- 255
- 256 **4.1.1** Education

257 Forensic anthropologists shall have a graduate degree in anthropology from an accredited 258 university. This degree should be a Ph.D. with an educational curriculum that includes a broad 259 foundation in anthropology and a focus in forensic anthropology. The discipline of forensic 260 anthropology does not currently have a standardized curriculum comparable to other forensic 261 specialties such as medicine, dentistry, genetics, or toxicology. Therefore, the academic 262 transcripts of forensic anthropologists are variable. To ensure educational programs are meeting the needs of future forensic anthropology practitioners, the competency areas outlined in 263 264 Appendix A shall be addressed in formal coursework, regardless of course title. If competencies 265 are not acquired through formal coursework, see Section 4.1.2.

266

267

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### 269 **4.1.2** Training and Experience

270 Forensic anthropologists shall supplement their education with discipline-specific training and

271 experience, as outlined in ASTM Standard E2917 ("Standard Practice for Forensic Science 272 Practitioner Training, Continuing Education, and Professional Development Programs").

273 Forensic training may be obtained through internships, postgraduate fellowships, continuing 274 education coursework, and other types of professional mentoring.

275 Experience is an important component of building and maintaining competency as a forensic 276 anthropology practitioner. Experience shall include both practical and theoretical aspects of the 277 discipline. For example, it is recommended that forensic anthropologists have experience 278 working with medicolegal authorities, including observation of casework in a medicolegal setting 279 (e.g., medical examiner/coroner facility) and observation of courtroom testimony when possible

280 and appropriate.

281 Although the length and depth of training and experience are dependent on the scope and setting 282 of work to be performed, they shall focus on addressing the competency areas listed in Appendix

283 Α.

284 All training and experience should be from accredited educational and training programs and 285 supervised by a certified forensic anthropologist, when possible. Forensic anthropology practitioners shall demonstrate and document training and related experiences. Training and 286 287 experiences should be documented in a training log verified by a subject matter expert.

### 288 4.1.3 Certification

289 Forensic anthropology practitioners shall obtain certification from an accredited body that 290 assesses expertise and competence in forensic anthropology. Certification is a necessary 291 component of professional development, in part, because it provides an objective means of 292 demonstrating competence to practice. It is a key indicator to stakeholders (e.g., employers, 293 medicolegal community, legal practitioners, families of decedents, and the public) that an 294 individual is a competent practitioner in the area(s) in which they practice. It also mandates 295 adherence to a code of ethics and a recertification program.

296

297 Certification assesses competency to practice. Competency in a discipline is assessed through the 298 demonstration of the requisite knowledge, skills, and abilities in areas specific to that discipline. 299 It is typically established by passing certification and/or competency exams.

300 Accredited certification to become an ABFA Diplomate (D-ABFA) is currently available for forensic 301 anthropologists through the American Board of Forensic Anthropology (ABFA) 302 (www.theabfa.org) and involves a formal review of application materials and successful passing of examinations designed to test core forensic anthropology competencies similar to those in 303 304 Appendix A.



306 **4.1.4** Continuing Education and Professional Development

All forensic anthropology practitioners shall remain current in their discipline through continuing education and professional developmental activities, with the goals of maintaining competency and broadening their knowledge, skills, and abilities. These activities are available in multiple forms and should include professional involvement in formal and/or informal programs and activities, such as:

- Research, including publication in peer-reviewed volumes and/or presentation at
   professional meetings
- Teaching of forensic anthropology, forensic science, and associated topics (e.g., 315 archaeology, anatomy, osteology, introduction to the forensic sciences)
- Attendance and active participation at professional meetings, seminars, and workshops
- Professional service, including participation in professional forensic committees in the
   discipline, including the OSAC, ASB, ABFA, AAFS
- International initiatives in forensic anthropology
- Short courses or other continuing education opportunities at an advanced educational/training level
- Presentation of invited lectures
- Visiting scientist or scholar positions
- Internships/fellowships/postdocs
- Mentoring and peer-review
- Reading peer-reviewed journals containing forensic anthropology research
- Participation in communities of practice in forensic anthropology.
- 328 All continuing education and professional development shall be documented.

329 **4.1.5** Ethics and Professionalism

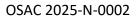
Forensic anthropologists, as forensic science service providers (FSSPs), shall conform to a code of professional responsibility. This includes strict adherence to a code of ethical conduct. As forensic scientists, forensic anthropologists shall adhere to the National Code of Professional Responsibility for Forensic Science and Forensic Medicine Practitioners (see Appendix B for website address). Forensic anthropologists who are members of professional forensic science organizations (e.g., AAFS, ABFA) shall also conform to their codes of ethics.

336

### **337 5 Documentation of Qualifications**

Forensic anthropology practitioners shall maintain documentation of all qualifications, including
 education, training, certification, and continuing education and professional development.

Forensic anthropology qualifications shall also be documented within Quality Management programs governing forensic anthropologists' work, including proficiency testing, competency testing, and memoranda indicating training completion and/or ability to perform supervised/independent casework. Developing and maintaining SOPs discussing training and proficiency will assist with this process.





### 345 6 Unacceptable Practices

346

347 Forensic anthropology practitioners shall not:

- misrepresent education, training, qualifications, or experience
- fail to maintain certification in the discipline
- fail to seek/maintain current and accurate records of education, training, or certification
   in the discipline
- violate codes of ethical conduct and professional responsibility for the practice of forensic
   science.
- 354



355	Annex A
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357	Competency Areas for Forensic Anthropology Practice
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359	Forensic anthropologists, at a minimum, shall be competent in the following areas:
360	
361	<ul> <li>Human osteology, musculoskeletal anatomy, comparative osteology</li> </ul>
362	<ul> <li>Bone biology, human variation, skeletal growth and development</li> </ul>
363	<ul> <li>Laboratory methods for processing human remains (e.g., maceration)</li> </ul>
364	Determining medicolegal significance of remains
365	<ul> <li>Evaluation of commingled assemblages</li> </ul>
366	Estimation of the biological profile
367	<ul> <li>Personal identification comparative methodology (e.g., evaluating medical and/or dental</li> </ul>
368	imaging)
369	<ul> <li>Skeletal trauma and the role of bone biomechanics in trauma interpretation</li> </ul>
370	<ul> <li>Evaluation of microscopic, histological representations of bone</li> </ul>
371	<ul> <li>Evaluation of pathological conditions and anomalies of the skeleton</li> </ul>
372	<ul> <li>Taphonomic modifications and estimating the postmortem interval/time since death</li> </ul>
373	<ul> <li>Field search, recovery, and scene and evidence documentation and handling</li> </ul>
374	• Evidence handling (e.g., chain of custody) and documentation (e.g., creation and
375	management of technical records)
376	<ul> <li>Professional standards and ethical conduct in forensic anthropology</li> </ul>
377	Medicolegal system, including legal terminology, expert witness testimony, relevant court
378	rulings, and familiarity with medicolegal authorities and jurisdictions
379	Statistics (univariate and multivariate)
380	
381	



382	Annex B
383	
384	Recommended Areas of Education, Training, and Experience
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386 387	Forensic anthropologists are encouraged to have education, training, and/or experience in the following areas:
388	
389	• General knowledge of forensic science disciplines and their relevance to and impact on
390	case analysis
391 392	<ul> <li>Bone histology (e.g., sampling and preparation) and light microscopy</li> <li>Biomolecular and chemical methods of skeletal analysis (e.g., XRF, XRD, FTIR, stable</li> </ul>
393	<ul> <li>Biomolecular and chemical methods of skeletal analysis (e.g., XRF, XRD, FTIR, stable isotope, DNA)</li> </ul>
394	<ul> <li>Bone and cartilage tool mark characteristics for classification</li> </ul>
395	<ul> <li>Photography (e.g., effective lighting/exposure, orientation/distance, and scale/case</li> </ul>
396	number placement)
397	Laboratory management
398	Quality management including quality assurance
399	Laboratory accreditation
400	Geographic Information System (GIS)
401	<ul> <li>Unidentified decedent databases (e.g., NamUs, NCIC, NCMEC)</li> </ul>
402	<ul> <li>Human Factors (e.g., cognitive bias and its effect on forensic anthropology).</li> </ul>
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