Welcome to the American Board of Forensic Odontology (ABFO) Certification Study Guide. This document contains the materials, information and support needed to assist you in becoming a board-certified forensic odontologist. This Study Guide contains the following topics:

1) GENERAL QUALIFICATIONS & REQUIREMENTS
2) APPROVED EDUCATIONAL COURSES
3) LIST OF RECOMMENDED READING MATERIALS
4) ABFO WORKSHOPS
5) ABFO REPOSITORIES
6) APPLICATION PROCESS FOR ABFO CERTIFICATION
7) CERTIFICATION APPLICATION PACKET
8) ABFO CONTACT

The pathway to certification is not easy or quick, but we believe you will find it is very rewarding and worthwhile.

GENERAL QUALIFICATIONS & REQUIREMENTS

The current qualifications and requirements which must be met before an individual can apply to take the ABFO Certification Exam can be found in the ABFO Diplomate’s Reference Manual (DRM). The ABFO DRM is the official and final source of information regarding certification requirements. This document will outline these qualifications and requirements; however, they are subject to periodic change. Therefore, it is recommended that anyone thinking of applying to take the ABFO Certification Exam review the DRM for any updates and requirement changes.

General Qualifications:

A. Applicants must be persons of good moral character, high integrity, good repute, and must possess high ethical and professional standards.
B. Applicants must possess a DDS, DMD or equivalent dental degree from an accredited institution.

Professional Education and Experience

A. Applicants must have:
   1. Attended a minimum of four (4) annual meetings of a national forensic/forensic dental organization. No more than one annual meeting can be claimed per year. Additional meetings attended can be claimed for extra point accumulation as described below.

   2. Participated in a minimum of two annual programs of a national forensic/forensic dental organization approved by the ABFO Examination and Certification (C&E) Committee. The participation may include presentation of papers, acting as a moderator, panelist on the program, or activities as a chairman or member of a committee of the AAFS, odontology
Evidence of these achievements must be documented in a form acceptable to the C&E Committee.

3. Applicants must be currently active and formally affiliated with a medical/legal agency such as a medical examiner/coroner’s office, law enforcement agency, insurance agency, federal dental service or mass disaster team for a minimum period of two (2) years.

4. Applicants must have observed a minimum of five (5) complete medico-legal autopsies attested to by the pathologist in charge.

5. Applicants must perform a minimum of thirty (30) legitimate forensic dental cases up until June 1, 2014. On June 1, 2014 the minimum number of cases will increase to thirty-five (35), because of the new age estimation requirement. These cases must include the following:

   a. A minimum of twenty (20) human identification cases, fifteen (15) of which have resulted in positive dental identification. The applicant must have personally resected, or surgically exposed, the jaws in at least five (5) cases, and personally taken the post-mortem radiographs in at least ten (10) of the cases. The ABFO Dental Identification Workshop may count for up to five (5) identifications.

   b. Jaw surgical exposures/resections or facial dissection performed in conjunction with a multiple fatality incident (i.e. DMORT, state or military ID team deployment) may qualify toward this requirement only if the required procedures were under the supervision of an ABFO Diplomate and/or the Medical Examiner/Coroner (ME) in charge and are confirmed in writing by this individual. Multiple Fatality Incident (MFI) cases may not be included to fulfill the human identification or postmortem radiographic case requirements listed above.

      Note: Applicants whose Medical Examiner/Coroner’s facility discourages jaw resections or completes jaw resections using non-dental personnel, should either personally seek permission to complete the required number of resections on appropriate cases, or request mentorship in another jurisdiction/facility where he/she might meet this requirement.

   c. Dental Age Estimation (DAE) cases

      1. A Candidate shall have been the primary investigator in five (5) DAE cases.

         a. At least one case of the five cases shall have been a case involving:

            i. a child (under age 12 years)

            ii. an adolescent or sub-adult (12-19 years)

            iii. an adult (>19 years). The remaining two cases can be from any of the age groups.

      2. A minimum of one (1) of the five (5) cases shall be from the candidate’s own casework.

      3. A minimum of one (1) of the five (5) cases shall be from the ABFO Age Estimation Workshop or from the ABFO Age Estimation Repository. **
4. DAE cases from ABFO Age Estimation Workshops (or other approved workshops) may be submitted toward the requirement.
   a. No more than three (3) DAE cases from ABFO Workshops (or other approved workshops) shall be considered as counting toward the five (5) required DAE cases.
   b. Only one workshop case from each of the age groups listed in 2.b. shall be considered.
   c. The candidate must show proof that the case(s) submitted from workshops were completed to the satisfaction of the workshop faculty.

5. DAE cases from the ABFO Age Estimation Repository may be submitted toward the requirement.
   a. The request for repository cases may not be made until after the candidate has completed one (1) DAE case originating from the candidate’s own casework.
   b. Repository cases must be completed on time and to the satisfaction of the Age Estimation Committee to be considered toward certification application.
   c. A maximum of two (2) repository cases may be used to meet the minimum case experience requirement in DAE.
   d. A repository case may not be considered as a case from the candidate’s own casework.

**This new dental age estimation requirement will go into effect in February 2017.**

d. A minimum of seven (7) bitemark cases in which the pattern(s) was determined to be a bitemark(s) of human origin compared to the dentition of the biter must be included. In at least one (1) of these bitemark cases, the applicant must be the primary investigator of the bitemark and have performed the documentation of the dental evidence. The ABFO Bitemark Workshop may count toward one (1) of the required bitemark cases, but cannot be claimed as a case in which the candidate is to be the primary investigator. At least one (1) bitemark case must be developed by the ABFO’s Bitemark and Patterned Injury Committee that includes multiple potential biters. The remaining cases may be either cases provided by the ABFO to the candidate or other cases in which the candidate was involved. The bitemark cases must be submitted in their entirety with complete documentation (write-ups and copies of all comparative material such as photographs, dental models, overlays, or other materials as applicable to the case). These cases should demonstrate the applicant’s knowledge, methodology, and capabilities in bitemark analysis. All submitted materials become the property of the ABFO and will not be returned. Cases provided to the potential applicants by the ABFO remain the property of the ABFO. None of these materials shall be shared with any other persons. Except for the preparation of reports to the ABFO these materials must not be duplicated, or published in any form. The materials provided to potential applicants must be returned with the case report(s). In the event the applicant decides to forego application to the ABFO the materials must be immediately returned to the ABFO.
e. The remaining three (3) cases can be human identification, bitemark analysis, malpractice/personal injury, human abuse, peer review or age estimation cases.

f. The applicant must have provided sworn testimony in court or through sworn deposition in two (2) identification, bitemark or civil litigation cases involving forensic odontology. The applicant must provide copies of the transcripts. The ABFO Civil Litigation Workshop may count towards one (1) case of sworn testimony.

Note: All claimed forensic cases must be submitted on the ABFO Summary of Forensic Cases form with all appropriate columns completed. The ABFO C&E Committee determines the acceptability of each case. Candidates are encouraged to submit cases in excess of the minimum number of thirty-five (35) in the event some cases are rejected by the C&E committee.

B. One (1) identification, one (1) dental age estimation and one (1) bitemark case in which the applicant was the primary investigator must be electronically submitted with complete documentation including forensic dental reports, copies of all comparative material (i.e. photographs, radiographs and other appropriate work products applicable to the case). The stone study models used in the bitemark cases must also be submitted. These should be significant and challenging cases that best demonstrate the applicant’s knowledge, methodology and capabilities. Cases undertaken as part of ABFO Workshops or the ABFO Test Cases are not acceptable for these three submissions. All submitted materials become the property of the ABFO and will not be returned. This requirement shall be subject to waiver by the ABFO only under unusual circumstances such as litigation in progress or military restrictions.

C. Applicants must present additional evidence of forensic dental activity. The activities are calculated on the basis of a point system. A minimum of three hundred fifty (350) points is required. Activities and accomplishments in fulfillment of section A or B cannot be reclaimed for point credits in this section. It is the responsibility of each applicant to submit documentation of all accomplishments claimed for point credit. The acceptability and ultimate assignment of points will be at the discretion of the C&E Committee. It is advisable that the candidate submit at least enough material to accumulate three hundred fifty (350) points, as follows:

1. Twenty (20) points for each authentic forensic dental case in excess of the Thirty-five (35) obligatory cases. The maximum number of cases that will be considered for point credit in this area is five (5), for a maximum of one hundred (100) points.

2. Twenty (20) points per additional court deposition or testimony. Transcripts must accompany the application. The maximum number of transcripts that will be considered for extra point credit in this category is five (5), for a maximum of one hundred (100) points.

3. One (1) point per hour for attendance at a formal, institutional, elective or continuing education course in forensic dentistry; or a formal scientific session at an annual meeting of a nationally recognized forensic science organization. These points are accrued in addition to the mandatory four (4) meetings. Certificates or other verification of course attendance must be submitted. A maximum of one hundred (100) points can be claimed in this area.
4. Twenty-five (25) points for presenting an original lecture or laboratory demonstration at a formal session of a recognized forensic science organization, dental association meeting, or institutional course in forensic dentistry. Abstracts, course brochures or other verification are to be supplied to the C&E Committee for point credit. A maximum of one hundred (100) points can be claimed in this area.

5. Up to fifty (50) points for the acceptance or publication as principal author of a forensic dental article in a refereed scientific journal, electronic journal posting or textbook, with a reprint or copy sent to the C&E Committee. The determination of the point count will be made by the C&E Committee based upon the nature and content of the article and the journal in which it was published. A maximum of twenty-five (25) points will be awarded for a second article or for an article in which the candidate served as a collaborating author, both of which must be accepted or published in a refereed journal or textbook.

6. Twenty (20) points per year for a formal affiliation with a recognized medical/legal agency beyond the mandatory two (2) years. An affidavit from the authorized agent must be included. A maximum of sixty (60) points may be claimed in this category.

7. Forty (40) points maximum for the organization of, or participation in a Mass Fatality Incident (MFI) training exercise or event, mass disaster team membership or symposium. The points are to be divided as follows: twenty-five (25) points for organizing and directing the exercise; one (1) point per hour for attending the exercise, (up to a maximum of fifteen (15) points).

8. Twenty-five (25) points for being the chairperson of an odontology committee, or ten (10) points for serving on an odontology committee of a recognized forensic organization or similar committee of a local, state or federal dental organization acceptable to the C&E Committee. Maximum point count of one hundred (100).

GENERAL QUALIFICATION & REQUIREMENTS
(Page # of DRM located in the lower left corner of page)

- MEMBERSHIP AND CERTIFICATION/ ELIGIBILITY (pg. 15 of DRM)
- GENERAL QUALIFICATIONS (pg. 79 of DRM)
- PROFESSIONAL EDUCATION AND EXPERIENCE (pg. 79 of DRM)
-IMPORTANT DATES AND FEES (pg. 86 of DRM)

EDUCATIONAL COURSES

There are a number of organizations and educational resources available to assist individual’s desiring to acquire foundational and advanced knowledge and skills necessary to perform forensic odontology casework. These educational courses can be used to meet the requirements in item F.3. listed above. Forensic organizations offering continuing educational opportunities approved by the ABFO Certification
and Education Committee include: ABFO (Workshops - see below), American Academy of Forensic Science (Workshops), The American Society of Forensic Odontology (Annual Meeting), and the Southwestern Association of Forensic Scientists. In addition, there are a number of university courses symposiums, fellowships and masters programs also approved by the ABFO Certification and Education Committee. These are listed with associated contact information below.

EDUCATIONAL COURSES, FELLOWSHIPS AND MASTERS PROGRAMS

- **APPROVED FORENSIC ODONTOLOGY COURSES:**
  - University of Detroit - kimberly.perry@udmercy.edu - Dr. Allan Warnick
  - McGill University - nikoo.taghavi@mcgill.ca - Dr. Robert Dorion
  - Fellowship in Forensic Odontology University of Texas - senn@uthscsa.edu - Dr. David Senn
  - Southwest Symposium on Forensic Dentistry - senn@uthscsa.edu - Dr. David Senn
  - Annual International Association of Coroners and Medical Examiners/Las Vegas, NV – fud@clarkcountynv.gov

- **INFORMATION ON MEMBERSHIP IN AMERICAN ACADEMY OF FORENSIC SCIENCES (AAFS)**
  - [www.aafs.org](http://www.aafs.org)

- **INFORMATION ON MEMBERSHIP IN AMERICAN SOCIETY OF FORENSIC ODONTOLOGY (ASFO)**
  - [www.asfo.org](http://www.asfo.org)

- **INFORMATION ON MEMBERSHIP IN SOUTHWESTERN ASSOCIATION OF FORENSIC SCIENTISTS (SWAFS)**
  - [www.swafs.org](http://www.swafs.org)

**RECOMMENDED READING MATERIALS**

A list of pertinent resource and reference material is maintained by the ABFO. This list is not exhaustive, but is thorough, and covers foundational material that will be tested on the ABFO Certification Exam.

**RESOURCES AND REFERENCES**

- **DENTAL SCHOOL CURRICULUM GUIDELINES FOR FORENSIC ODONTOLOGY**
  - (pg. 67 DRM)

- **ABFO SUGGESTED READING MATERIALS LIST FOR CERTIFICATION EXAM:**

Many of these books can be found for purchase at CRC Press
- [http://www.crcpress.com/browse/?category=FRN02A](http://www.crcpress.com/browse/?category=FRN02A)

**FOR CURRENT ASFO MANUAL**
- [www.ASFO.org](http://www.ASFO.org)
The following list of resources and references are provided as a guide to the scientific literature and foundational knowledge from which the ABFO Certification Examination is derived. It is provided as a resource for you in preparation to challenge the written and practical portions of the examination.

The rapidly expanding body of knowledge in the forensic sciences implies a professional obligation to keep abreast of the current literature in the field, particularly with respect to forensic odontology. In preparation for this examination, each candidate is encouraged to consult appropriate scientific articles and texts in the discipline. The following list comprises the suggested literature that will be helpful in preparing for the examination. The cited references are also a source of many of the test items on the examination. Not included in this list but of special importance are the vast number of individual articles that appear in such journals as the Journal of Forensic Sciences, Journal of the American Dental Association, Journal of Forensic Odonto-Stomatology, Forensic Science International, American Journal of Forensic Medicine and Pathology, and the International Journal of Legal Medicine. Reprints of many pertinent articles from these sources will be a desirable addition to the forensic odontologist’s personal reference library. Questions on ABFO exams are primarily from texts that are still in print but out-of-print texts add knowledge to the candidate preparing for the exam and a career in forensic odontology.


*The following references are considered “no longer in print”. The ABFO C&E Committee believes that these materials may provide a significant historical framework for current references:*


**ABFO WORKSHOPS**
Some of the requirements needed to apply to take the ABFO Certification Examination may be met by successful participation in training workshops offered by the ABFO. Currently, there are four hands-on workshops available and are presented in alternating years. They include: the Civil Litigation Workshop, the Dental Age Estimation Workshop, the Bitemark Workshop, and the Dental Identification Workshop. Registration information including dates offered can be found on the ABFO website homepage, [http://www.ABFO.org](http://www.ABFO.org). Individuals may register as an “Attendee” or as a “Participant” in any of the workshops. “Attendees” and “Participants” receive the same didactic and hands-on instruction. “Participants” will additionally receive forensic odontology cases that must be completed and returned for evaluation and review. Case credit for Workshop participation is not automatic but rather dependent upon the participant’s ability to meet workshop specific criteria.

**WORKSHOPS**

- ABFO WORKSHOPS (pg. 90 of DRM)
- ABFO HOMEPAGE [http://www.ABFO.org](http://www.ABFO.org)

**ABFO REPOSITORIES**

The ABFO has established two repositories: 1) Bitemark Repository and 2) Dental Age Estimation Repository. Repository cases may be accessed by potential ABFO candidates to help attain credits towards ABFO board eligibility. Repository casework is evaluated by the respective ABFO Bitemark and Dental Age Estimation Committees for technique, skill and accuracy. It is advised that only individuals with sound forensic odontology foundational skills attempt to access either of the ABFO Repositories. The protocol and associated fees to access each repository can be found in the DRM or by contacting the respective ABFO Committee/Repository chairperson.

**REPOSITORIES**

- ABFO REPOSITORIES (pg. 92 of DRM)
- ABFO HOMEPAGE [http://www.ABFO.org](http://www.ABFO.org)

**APPLICATION PROCESS FOR ABFO CERTIFICATION**

An application may be obtained from the ABFO Registrar when a candidate believes that she/he has met all the requirements outlined in the ABFO Diplomate’s Reference Manual to become “Examination Eligible”. The completed application must be submitted to the ABFO Certification and Examination Committee, Chair at:
The C&E Committee will evaluate the application to determine if the requirements have been properly met and whether or not the candidate may proceed to challenge the Certification Examination.

There are annual documentation deadlines and fees associated with the certification process. The current deadlines and fees are listed below; however, they are subject to change and the official and final list can be found in the DRM as well as on the ABFO Website (http://www.ABFO.org) within the document entitled “4. Procedure for Application and Certification” under “application documents” of the “apply” tab.

The ABFO Certification Examination consists of three parts. Part 1 is a written computer examination. This timed exam consists of over 200 multiple-choice and true-false questions drawn from a large pool of ABFO approved questions. There are ten subject areas of forensic odontology science and practice that are tested in Part 1 of the Certification Exam. A test subject legend for Part 1 can be found on the ABFO website. The candidate must attain a passing score of 70% or better in each one of the ten subject categories. If one or more of the sections is not passed in the first attempt, the candidate may retake the failed section(s) two times. If the candidate does not successfully pass all sections after the third attempts, she/he will be required to start the examination process over and repeat the Part 1 examination in its entirety. The Part 1 examination must be taken at a local testing center that provides proctoring. Testing arrangements are made through ORA, Inc. There is a short “sample test” available on the ORA website (http://www.ORAInc.com).

Once the candidate has passed Part 1, she/he is considered to be “test eligible” (note: NOT “board-eligible”), and may apply to take the remainder of the ABFO Certification Examination. The second portion of the exam is administered in association with the Annual Meeting of the AAFS. This section of the examination consists of three sub-parts: Part 2A: a written exam covering dental identification, Part 2B: a written exam covering bitemark analysis, and Part 3: a case based oral examination of each candidate on materials provided to the candidate on the day of the examination by the ABFO Certification and Examination Committee. The candidate must successfully attain a passing score of 70% in each sub-section, Parts 2A and 2B of this phase of the Certification Examination. Part 3, the oral examination, will examine the working knowledge of a forensic odontologist and will consist of approximately 30% identification cases, 30% bitemark cases, 15% human abuse cases, 15% age estimation cases, and 10% miscellaneous forensic cases. Part 3 is awarded only a pass/fail designation. If any one part is not passed, the candidate is allowed up to two attempts at retaking the failed portion(s) of the examination. If all parts are not passed after three attempts, the candidate will be required to start the application process over and must meet any new requirements set forth by the ABFO to become “Examination Eligible”. All testing materials are the property of the ABFO, Inc., and are considered to be confidential intellectual property. Candidates certainly may and are encouraged to study with each other--or with an ABFO Diplomate--but it is expected the Candidate will complete all
portions of the examination without inappropriate assistance of any sort and no part of the examination shall be disclosed to anyone in any way.

Summary of deadlines and fees:

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<tr>
<th>Dates</th>
<th>Fees (USD)</th>
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<tr>
<td>June 1</td>
<td>Deadline for receipt of COMPLETED application by the ABFO registrar (AAFS) to include supporting documentation</td>
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<tr>
<td>July 1</td>
<td>Deadline for correction of any deficiencies in application documentation</td>
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<td>August 1</td>
<td>Notification to applicant(s) by ABFO of Examination Eligible status</td>
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<tr>
<td>Aug/Sept</td>
<td>Certification-Examination Committee meets to review and discuss board eligible candidates etc.</td>
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<td>November 1 ORA 1</td>
<td>Deadline to successfully pass written examination section in order to take Practical Examination (Parts 2A, 2B and 3)</td>
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<tr>
<td>December 1</td>
<td>Deadline for receipt of payment for Practical Exam (non-refundable except for medical or catastrophic reasons, in which case $900 will be refunded pending Certification Examination Committee review)</td>
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<td>Deadline for receipt of payment for re-examination of either Part 2A (ID) or Part 2B (Bitemark) Practical</td>
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<td>Deadline for receipt of payment for re-examination of Part 3, Oral Examination</td>
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<tr>
<td></td>
<td>Deadline for receipt of payment for re-examination of Part 2A (ID), Part 2B (Bitemark) and Part 3 (Oral).</td>
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<tr>
<td>Feb</td>
<td>Practical Examination Sections 2A and 2B must have been taken by the Friday preceding the AAFS Annual Meeting.</td>
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<td>Practical Examination Section 3 will be administered the weekend prior to the AAFS Annual Meeting.</td>
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**ORA (Occupational Research and Assessment, Inc.)**

- Original test fee $150.00 US funds
- Service fee (initial test) $20.00
- Retest fees (on-line if needed, per section) $50.00 per section
- Retest fees (hard copy if needed, per section) $75.00 per section
- Late registration fee $75.00 per section
• Local testing center approx. $75.00 (estimated)
  o Retest fees are per session required approx. $75.00 (estimated)
  *Arrangements are made by candidate at testing center of their choice*

CERTIFICATION APPLICATION

ABFO APPLICATION & WRITTEN EXAMINATION FEE (pg. 63 of DRM)

• ATTAINING STATUS OF *EXAMINATION ELIGIBLE* (pg. 83 of DRM)
• PROCEDURE FOR APPLICATION (pg. 83 of DRM)
• THE EXAMINATION PROCESS (pg. 84 of DRM)
• GENERAL PROVISIONS CONCERNING CERTIFICATION (pg. 86 of DRM)
• WRITTEN TEST SUBJECT LEGEND [http://www.ABFO.org](http://www.ABFO.org)
• TESTING ARRANGEMENTS [http://www.ORAInc.com](http://www.ORAInc.com)

ABFO CONTACT

If a certification candidate encounters difficulties or has questions regarding board certification not covered specifically in this Study Guide they may direct their questions to *Stephen Lojeski, DMD, DABFO who is the 2015 ABFO Certification and Education Committee, Chair.*

*Stephen Lojeski, DDS, DABFO at [Steve1512@roadrunner.com](mailto:Steve1512@roadrunner.com)*