PREAMBLE¹

Purpose²

The purpose of this document is:

- To provide principles and rules for individual scientist's conduct in the practice of forensic science.
- To provide a template for evaluating an individual's professional actions.
- To offer protection to individuals if asked to perform unethical acts.
- To ensure uniformity and quality of service to colleagues, the justice system, and the general public.

<u>Scope</u>

This document outlines principles and rules for the practice of forensic science and applies to individuals who:

- Recognize, preserve, collect, analyze, or examine evidence.
- Write or review a forensic science reports or testify in a court of law as an expert witness in forensic science.
- Manage or supervise within a forensic laboratory.
- Consult, advise, research, or teach in forensic science.

These individuals are referred to as "forensic scientists" in the Code of Ethics.

Additional principles and rules specific to an area of expertise, an agency, or a company, may be addressed by that body as a supplement to this document.

Introduction

Forensic professions include those that are concerned with the examination or scientific analysis of evidence and related testimony. They involve the application of principles, techniques, and methods of science, and have as their primary objective the determination of facts that may be significant in legal cases. In fulfilling this duty, forensic scientists shall use all of the means at their command to ascertain the facts relevant to the matters under investigation. Having made factual determinations, forensic scientists may then interpret and evaluate those facts. Forensic scientists shall practice within the limitations of their knowledge, skills, and abilities.

The duty of any forensic scientist is to serve the interests of justice at all times. Conclusions, opinions, and facts shall be reported with all the accuracy and skill of which the forensic scientist is capable. In carrying out these functions, the forensic scientist shall be guided by those practices and procedures that are generally recognized within the profession to be consistent with a high level of professional ethics.

Forensic scientists shall be aware of recent scientific advances and new standards, guidelines, policies, and regulations. Staying current may be accomplished by reading peer-reviewed technical publications and other publications, attending professional conferences, taking classes, or exchanging information with other forensic scientists. New developments should be presented to the profession. In order to continually improve the profession, research and training should be encouraged.

Although each individual case may vary and no set of standards can precisely fit every occasion, the principles and rules set forth in this document are the conduct requirements expected of forensic scientists. Failure to meet or maintain these standards can justifiably cast doubt upon an individual's fitness for such responsibilities. Motives, methods, and actions shall, at all times, be consistent with proper moral conduct. Forensic scientists

¹ This document has been developed by a committee of the California Association of Criminalists. Comments are welcome and should be addressed to Peter Barnett (pbarnett@fsalab.com)

² This Code of Ethics for Forensic Scientists has been developed in response to Recommendation 9 in the National Academy of Sciences' Report, *Strengthening Forensic Science in the United States: A Path Forward.* (NAS *Report*) This recommendation calls for a "national code of ethics for all forensic science disciplines. ..[that]could be enforced through a certification process for forensic scientists." (NAS *Report*, p. 7-19) This document is therefore intended to serve as a model which could be adopted by organizations that provide certification for forensic scientists, without which certification "no person (public or private) should be allowed to practice in a forensic discipline or testify as a forensic scientist." (Recommendation 7, NAS *Report*, p.7-18)

A MODEL FOR A NATIONAL CODE OF ETHICS IN THE FORENSIC SCIENCES

shall take responsibility for work done under their direction. Managers and supervisors should recognize that their actions have the potential to place their employees in unethical situations. Therefore, managers and supervisors shall be aware of this Code of Ethics and act in a manner that supports it.

STANDARDS OF PRACTICE

1. Objectivity

Forensic scientists shall be objective and unbiased. They shall recognize any biases and design procedures and experiments to address them. Being unaware of relevant information may result in bias. For this reason, the forensic scientist should be responsible for determining the information required to effectively conduct analyses and examinations and reach reliable conclusions. Examined evidence should be preserved to facilitate reanalysis or reexamination by another expert.

- 1.1. Analyses and Examinations
 - 1.1.1. Reasonable steps shall be taken to obtain all relevant data needed to complete an analysis.
 - 1.1.2. All available relevant data shall be assessed.
 - 1.1.3. Additional information or evidence which may be relevant to the examination shall be documented in examination records
 - 1.1.4. All observations, examinations, analyses, alterations, and results shall be documented in the examination records at the time they are performed.
 - 1.1.5. Conclusions or opinions shall be based on the analysis or examination of all available relevant evidence.
 - 1.1.6. Assumptions shall be documented in examination records.
 - 1.1.7. Reasonable steps shall be taken to encourage that all relevant evidence in a case receive appropriate technical analyses.
- 1.2. Potential Conflicts of Interest
 - 1.2.1. All conflicts of interest to an employer, client, or the justice system shall be documented and disclosed.
 - 1.2.2. Services shall not be provided on a contingency-fee basis.
 - 1.2.3. An assignment in which there might be a conflict of interest shall not be accepted.
 - 1.2.3.1. In litigation matters involving multiple defendants or plaintiffs, work shall not be done for more than one litigant without disclosure and consent from the other parties with similar interest.
 - 1.2.3.2. After working for one adversarial side, work shall not be done for the opposing side unless legally ordered or otherwise permitted.
- 2. Communication

The forensic scientist shall be truthful and forthright in all aspects of professional activity. Communication shall be precise, accurate, and clear. Whenever possible, commonly accepted terminology should be used. Information shall not be obscured by inclusion, omission, or any other means. Scientific and legal principles require that those who use or evaluate the conclusions or opinions of the scientist shall be able to verify them by the review of data, the replication of experiments, the testing of alternative hypotheses, and by challenging the process used in arriving at the expressed conclusions. For this reason, clear and complete documentation of data and methods used to form a conclusion or opinion shall be provided and shall be readily available for evaluation by all interested parties.

- 2.1. Stated qualifications shall accurately represent education training, experience, areas of expertise, or certification status.
- 2.2. Reports and Testimony
 - 2.2.1. Intentionally misleading language shall not be used.
 - 2.2.2. Facts, conclusions, and opinions, including qualifications and limitations, shall be fully explained.
 - 2.2.2.1. Yes-or-no answers shall be explained or qualified if not doing so would be misleading.
 - 2.2.3. Data, and opinion based on that data, shall be clearly differentiated.
 - 2.2.4. Court exhibits and tutorials shall be informative and relevant.
 - 2.2.5. If the answer to a question is not known, or if that question is outside the forensic scientist's area of expertise, the forensic scientist shall say so.
 - 2.2.6. Technically correct statements shall be made in all written and oral reports, testimony, technical publications, and technical presentations.

2.2.7. Testimony shall be restricted to matters within the forensic scientist's knowledge, skills, and abilities.

2.3. Disclosure

- 2.3.1. A complete and accurate disclosure of all methods, findings, conclusions, and opinions shall be written into technical records for all work done.
- 2.3.2. When apparent, any errors or omissions shall be documented and disclosed to the employer or client.
- 2.3.3. Any changes in conclusions or opinions shall be documented and disclosed to the employer or client.
- 2.3.4. Additional information or evidence which may be relevant shall be documented in the report.
- 2.3.5. Any attempt by a second party to alter results or improperly influence conclusions shall be documented and disclosed to appropriate statutory or legal authority.
- 2.3.6. The release of material authorized by management to be released shall not be obstructed or misrepresented.
- 2.3.7. Confidential information, including information derived from evidence, shall not be inappropriately disclosed.
- 2.3.8. Reports or other records shall not be constructed, and information shall not be withheld, for strategic or tactical litigation advantage.
- 2.4. Professional Associations
 - 2.4.1. Information on membership application forms to professional associations shall be accurately represented.
 - 2.4.2. Membership status in any professional association shall be accurately represented.
 - 2.4.3. In dealing with professional association boards or their representatives, the forensic scientist shall be forthright.
 - 2.4.4. Certification shall only be attained from approved certifying bodies.
 - 2.4.5. Statements or beliefs expressed at professional meetings shall not be repeated without putting them into the context in which they were made.
 - 2.4.6. All reasonable efforts to fulfill professional association duties and to protect and return professional association property shall be made.

3. Procedures

The forensic scientist, while being open to new concepts and methods, is responsible for evaluating them critically prior to casework.

The forensic scientist should determine the most appropriate protocol for analyses. The forensic scientist, while being open to new concepts and methods is responsible for evaluating them critically prior to applying them to casework. Novel methods may be used when required.

- 3.1. Methods and Materials
 - 3.1.1. Whenever possible, validated reliable methods that are generally accepted shall be used.
 - 3.1.2. Appropriate and reliable reagents, standards, and controls shall be used.
 - 3.1.3. Methods used shall have appropriate accuracy and precision.
- 3.1.4. Superfluous tests shall not be done in an attempt to give a conclusion or opinion more weight. 3.2. Sampling
 - 3.2.1. The identity and integrity of evidence shall be confirmed prior to examination.
 - 3.2.2. Evidence shall be sampled in a representative manner.
 - 3.2.3. Sufficient sample shall be retained for additional testing whenever possible.
 - 3.2.4. Evidence shall not be consumed unnecessarily.
- 3.3. Equipment, Facilities, and Circumstances
 - 3.3.1. Appropriate equipment in adequate facilities shall be used.
 - 3.4. Verification and Review
 - 3.4.1. When appropriate, results shall be verified,.
 - 3.4.2. If possible, work shall be technically reviewed,.
- 4. Responsibility

Forensic scientists shall be fair and respectful when interacting with colleagues, clients, attorneys, and the public. Forensic scientists are responsible for their own work and may be responsible for work done under their direction. Each individual is responsible for conforming to the Code of Ethics. Violations of the Code of Ethics shall not be tolerated or concealed.

When a forensic scientist is hired as a consultant by an individual, a confidential relationship is presumed to exist between them. When a forensic scientist is retained by an attorney representing a litigant, an attorneyclient relationship is presumed to exist between them. A reasonable fee may be charged for the services of a forensic scientist.

Different conclusions or opinions in a case may be reached by different experts. If aware that there is a difference, the forensic scientist shall strive to reconcile those differences with the other expert with the understanding that differences may be legitimate. The forensic scientist shall discuss with the client the means by which to achieve reconciliation. Appropriate means may include the exchange of information, samples, or data; jointly conducting appropriately designed experiments; referral to a third expert; or other means.

- 4.1. Violations of the Code of Ethics shall not be tolerated or concealed.
 - 4.1.1. Serious or repeated violations of the Code of Ethics shall be reported to the relevant association.
 - 4.1.2. Any conflict between the Code of Ethics and responsibilities as defined by the employer, policies, law, regulation, or other legal authority shall be reported to the employer or client.
 - 4.1.2.1. Reasonable measures shall be taken to resolve the conflict.
 - 4.1.3. Any report of a violation of the Code of Ethics shall follow the policies and procedures outlines in the Enforcement of the Code of Ethics.
- 4.2. Responsibility to Professional Associations
 - 4.2.1. Association bylaws shall be followed.
 - 4.2.2. Statements on behalf of the association shall not be made without prior approval from the association's governing body.
 - 4.2.3. Forensic scientists shall cooperate with any official investigation conducted by an association to which they belong.
 - 4.2.4. Membership in an association or employment in an agency or company shall not be used to obtain unjustified benefits, privileges, or exemptions.
- 4.3. Responsibility to the Profession
 - 4.3.1. Conduct detrimental to the profession shall not be exhibited. This may include illegal conduct.
 - 4.3.2. Forensic scientists shall discourage the association of their names with developments, publications, or organizations to which no significant contributions were made.
 - 4.3.3. Forensic scientists shall not engage in plagiarism: work done by others shall be properly credited.
 - 4.3.4. When giving advice regarding the questioning of another witness, the purpose shall be to prevent
 - incompetent and misleading testimony, and make known facts that are legally relevant.
- 4.4. Responsibility of Managers and Supervisors
 - 4.4.1. Laboratory managers and supervisors shall facilitate, support, and promote an environment conducive to ethical conduct
 - 4.4.2. Laboratory managers and supervisors shall ensure that laboratory services are provided in a manner which maximizes organizational efficiency and ensures an economical expenditure of resources and personnel.
 - 4.4.3. Laboratory managers and supervisors shall ensure that employees have sufficient academic qualifications, experience, knowledge, and training to perform work within their areas of expertise and operate in accordance with the Code of Ethics.
 - 4.4.4. Laboratory managers and supervisors shall establish and maintain an appropriate quality system.
 - 4.4.5. Laboratory managers and supervisors shall promote and support participation in professional associations, certification programs, and technical working groups.
 - 4.4.6. Laboratory managers and supervisors shall not allow employees to be pressured to perform substandard work, take technical shortcuts, or arrive at conclusions not supported by scientific data.
- 4.5 Responsibility professional organizations
 - 4.5.1. Professional organizations shall have a published Code of Ethics patterned after the National Model.
 - 4.5.2. Professional organizations shall have an investigative procedure that provides substantive due process for members accused of violations of the Code of Ethics.
 - 4.5.3. Professional organizations shall maintain appropriate confidentially concerning members accused of ethical violations, members or others making such accusations, and the investigative process. Such confidentiality shall be maintained until such time as the investigative procedure permits publication of such information.

- 4.5.4. Professional organizations shall impose appropriate sanctions, up to and including expulsion from membership, as called for in the organizations investigative procedure.
- 4.5.5. Professional organizations shall support members and others who bring matters of potential unethical conduct to the attention of the organization.