



NATIONAL COMMISSION ON FORENSIC SCIENCE

NIST
National Institute of
Standards and Technology
U.S. Department of Commerce

Defining Forensic Science and Related Terms

Subcommittee

Interim Solutions

Commission Action

On May 1, 2015, the Commission voted unanimously to adopt the recommendation.

Type of Work Product

Views Document

Statement of the Issue

It is the view of the National Commission on Forensic Science (NCFS) that, for purposes of its work, the terms *forensic science*, *forensic science service provider*, *forensic science agency*, *forensic science practitioner*, *forensic medicine*, *forensic medicine service provider*, *forensic medicine agency*, and *forensic medicine practitioner* will be defined as follows:

FORENSIC SCIENCE—The application of scientific or technical practices to the recognition, collection, analysis, and interpretation of evidence for criminal and civil law or regulatory issues.

FORENSIC SCIENCE SERVICE PROVIDER—A forensic science agency or forensic science practitioner providing forensic science services.

FORENSIC SCIENCE AGENCY—An organization in the public or private sector that employs forensic science practitioners and issues reports prepared by forensic science practitioners.

FORENSIC SCIENCE PRACTITIONER—An individual who (1) applies scientific or technical practices to the recognition, collection, analysis, or interpretation of evidence for criminal and civil law or regulatory issues, and (2) issues test results, provides reports, or provides interpretations, conclusions, or opinions through testimony with respect to such evidence.

FORENSIC MEDICINE —The application of medical knowledge and practices to the investigation of the medicolegal aspects of death, injury, neglect, or behavior.

FORENSIC MEDICINE SERVICE PROVIDER—A forensic medicine agency or forensic medicine practitioner providing forensic medicine services.

FORENSIC MEDICINE AGENCY—An organization in the public or private sector that employs forensic medicine practitioners and issues reports prepared by forensic medicine practitioners.

FORENSIC MEDICINE PRACTITIONER—A physician, physician extender, or other health care provider who applies medical knowledge and practices to the investigation of the medicolegal aspects of death, injury, neglect, or behavior.

Background

As a way to foster meaningful discussion and avoid misunderstanding, terms relevant to the work of the NCFS must be clear and understood by all. Much of the work of the NCFS centers on recommendations pertaining to people and groups dealing with topics and subject matter. These people, groups, topics, and subject matter must be readily understood to facilitate clear understanding of the recommendations and any future action regarding them.

Terms often having multiple interpretations were identified and defined for NCFS use and, more importantly, for the entire forensic science profession and others who interact with it. For the purposes of this document, the term “forensic science” is used with regard to a broad array of activities, with the recognition that some of these activities might not have a well-developed research base, are not informed by scientific knowledge, or are not developed within the culture of science.¹

It is noted that there are varying subtleties to the definition of “science” even among scientists. As far back as the late 17th century, Sir Isaac Newton stated that the “[s]cientific method refers to the body of techniques for investigating phenomena, acquiring new knowledge, or correcting and integrating previous knowledge. It is based on gathering observable, empirical, and measurable evidence subject to specific principles of reasoning.”²

Rather than define the term “science” in this document, some sources are provided to represent different characterizations of it. Mannoia, James V. *What Is Science?: An Introduction to the Structure and Methodology of Science*. University Press of America, 1980. Goodstein, David. *How Science Works, National Research Council. Reference Manual on Scientific Evidence: Third Edition*. Washington, DC: The National Academies Press, 2011. Institute of Medicine, National Academy of Sciences, and National Academy of Engineering. *On Being a Scientist: A Guide to Responsible Conduct in Research: Third Edition*. Washington, DC: The National Academies Press, 2009.

Recommended Implementation Strategy

All NCFS subcommittees will adopt these definitions, cite them as footnotes in their work products, and take the scope of the definitions into account when developing their own implementation strategies relating to policy or directive recommendations.

¹ This definition is adapted from the Committee on Identifying the Needs of the Forensic Sciences Community, National Research Council, *Strengthening Forensic Science in the United States: A Path Forward*, 2009, pages 38-39.

² Isaac Newton (1687, 1713, 1726) “Rules for the study of natural philosophy,” *Philosophiae Naturalis Principia Mathematica*.