$R. J. Joling, ^1 J. D.$

Educating the Forensic Jurisprudent

Forensic Science is the study and practice of the application of science to the purposes of the law. (American Academy of Forensic Sciences)

The above definition relates to the entire discipline of forensic science. It should be noted that it refers to both the "study" and "practice" of the "application of science" to the "purposes of the law." Thus, those engaged in forensic science must study the application of science to the purposes of the law, and they must practice applying science to the purposes of the law. This connotes that the legal profession must understand what should be studied, as well as what should be practiced, in applying science to any legal purpose. Only when an objective legal decision is made can the judicial process have meaning. Jurisprudence, then, is the repository for final decisions and also the acceptor or rejector of scientific hypotheses. Jurisprudence will judge whether any alleged scientific fact has, in reality, been proved via the judicial process. Only then, within the scope proffered, is it accepted as an evidentiary fact worthy of consideration by court or jury.

Present Educational Basis

Today's jurisprudents receive the standard "casebook" method of education. Legal scholars, educators, and practitioners agree that this method of training within the law schools of the nation is most acceptable. This agreement is predicated on the philosophy that much can be learned from the past since there is no better teacher than experience which explains, in part, why legal precedent is so closely linked to understanding of the theory of and the developing trends in the law. On the other hand, the present is a time for doing—to practice, to apply one's learning, and to assist in immedite application of theories learned in the past. The future is the period to be planned for now. An understanding of the past and an appreciation of the present assists in planning for the future. Thus, an awareness of the legal past without appreciation of the present is legally insufficient.

Too often it would appear that the old cliché concerning the entry of lawyers into this world may possess a semblance of truth. It has been said that lawyers enter the world breech-birth, looking over their shoulders to see from whence they came so as to know to whence they shall go. In the law we refer to this as *stare decisis* or precedent. Yet too often this very legal doctrine of *stare decisis* or precedent has been used as the basis for continuing ignorance, propagating stupidity, and perpetuating further injustice.

The opinions or assertations contained in this article are the private views of the author and they are not to be construed as official, or as reflecting the views of the American Academy of Forensic Sciences or the Forensic Science Foundation.

Presented at the 25th Annual Meeting of the American Academy of Forensic Sciences, Las Vegas, Nev., 20-23 Feb. 1973. Received 8 Feb. 1973; accepted for publication 15 June 1973.

¹ Associate professor of medical jurisprudence, The University of Arizona, College of Medicine, Tucson, Ariz. 85724.

Who Is the Expert?

It has always been most difficult for the advocate within the courtroom, the forensic jurisprudent, to fathom the qualifications of the alleged forensic science expert. In a world where almost everyone wishes to be considered a professional, it is not surprising to find that these same people also want to have the corollary reputation of being expert in their fields. This is true whether the individual is practicing a profession, engaged in a craft or trade, or dabbling in an avocation. Thus, the question is always present: How does one determine who, in fact, is an expert?

Recognizing the difference between the "knowledgeable, experienced witness who is an expert" and the "experienced expert witness" is not always easy. A glib tongue, an air of certainty, a manner of assuredness, and spellbinding articulation may or may not be possessed by a knowledgeable, experienced witness who is an expert, but these attributes are prominent in the personality of the experienced expert witness, even though he is not truly knowledgeable in the field within which he may be called to testify. The forensic jurisprudent, aware of the difficulty of determining who is truly an expert in forensic science, must often go to great lengths in analyzing the background of the individual in question or the topic of immediate consideration. Thus, legal counsel must be adept at researching these areas as well as in developing questions designed to divulge the degree of expertise possessed by the person called to testify.

Basic theories of law are reflected in judicial decisions. Statutes express the codified will of the populace through elected representatives. However, the graduate scholar of law enters the active practice of law ill equipped for his initial encounter in the arena of advocacy. It is doubtful if the embryonic jurisprudent is aware of the various disciplines comprising forensic science.

Forensic science is related to any science which could conceivably be used for evidentiary purposes in the courtroom, whether involved in the civil or criminal process. For this reason the American Academy of Forensic Sciences has constructed sections which, when conceived as a whole, constitute the Academy. Thus, the American Academy of Forensic Sciences is currently made up of the following sections: Criminalistics, General, Jurisprudence, Odontology, Pathology and Biology, Physical Anthropology, Psychiatry, Questioned Documents, Toxicology and Immunology, and Engineering (in initial stage).

A review of these sections illustrates the imaginative and forward thinking of the founders of the Academy. By having a General Section, any person knowledgeable and expert in any field of science, but not qualified for one of the other specific disciplines, can be brought under the umbrella of the Academy. In time, ten or more people can form a section to carry forth their mutual specialty. Thus, it is conceivable that ten orthopedic surgeons, once accepted within the General Section and covered by the umbrella of the Academy, could establish an Orthopedic Section. So, too, sections originating in the future could well involve ecology, space-age science not yet conceived, or any other scientific specialty.

Because each profession is part science and part art and by reason of the belief that other vocations are also part science and part art, conceptual difficulties arise. These are occasioned by the emphasis placed by a particular vocation on the degree that pure science is employed versus the degree of art employed. Although there is commonly little room for disagreement with respect to acceptable standards and criteria for proper conduct, in all vocations a great disparity in the methodology or exercise of judgment may be present. For these reasons disagreements sometimes arise between various disciplines

as to the relative role each should play within the concepts of application of all the sciences to the purposes of the law. And it is for these precise reasons that the author is addressing himself to the topic of educating the forensic jurisprudent.

Objectives

An awareness and appreciation of the limitations of available law school course materials must be recognized in determining the objectives desired in the education of the forensic jurisprudent in the roles of the various forensic sciences. Anyone cognizant of the many diverse facets within the practice of law is immediately aware of the severe limitation imposed on the selection of subjects and course materials in a three-year curriculum. All law students must have general courses in torts, criminal law, taxation, domestic relations, corporate law, constitutional law, practice, procedure, evidence, wills and estates, trusts, partnerships, and contracts, to name but a few. Further compounding the problem is the fact that each of these general courses could become an area of specialization for the practicing attorney. An understanding of the needed legal tools of the forensic jurisprudent becomes evident when several of these basic legal courses are combined with special emphasis in areas of scientific evidence used in the courtroom.

The forensic jurisprudent, without question, has a need for training in the concepts of all the courses outlined above. In addition, he is in critical need of special education in forensic science, both in law school and most certainly at the postgraduate level after entering the active practice of law.

Thus, it is my opinion that the basic education in forensic science should be initiated within the curriculum of the law school. In addition, postgraduate education for the practicing attorney should include the opportunity to receive the same basic courses relating to forensic sciences that should be afforded the law student. Finally, continuing educational programs should be planned for the practicing forensic jurisprudent to enable him to engage in intensive refresher courses relating to particular areas of scientific expertise.

Exemplary Undergraduate Courses

Since this article suggests that there be different types of curriculum in the spectrum of curricula for the forensic jurisprudent, it is advisable that exemplars be given. For want of space these must be restricted to a few selected examples which are not intended nor presumed to be exclusive. Additional disciplines as well as subdisciplines in forensic science should be added. However, the examples given should serve as a base upon which a curriculum could be built and expanded.

First consideration should be given to an undergraduate curriculum in forensic science which will give to the prospective jurisprudent both a broad understanding of the various forensic sciences and experience in solving problems pertaining to each of the disciplines. These suggested curricula are designed to prepare the inexperienced forensic jurisprudent for his initial courtroom appearance in the areas presented. Although not all-inclusive, they do provide a springboard for the aspiring forensic jurisprudent and should whet his interest in continuing his education through postgraduate courses.

First Semester, Junior Year

Introductory courses in forensic science should relate to specific disciplines. Broadly speaking, lectures should relate to (1) pathology and biology, (2) toxicology and immunology, (3) criminalistics, (4) odontology, (5) physical anthropology, (6) psychiatry,

(7) questioned documents, (8) engineering, and (9) general, including other related sciences (for example, ecology, space science, and other subspecialties, such as orthopedics).

Each main topic could be readily followed by appropriate lectures involving the use, purpose, methodology, evidentiary value, and implications of each discipline. Two-hour lectures given twice weekly would provide the law student with a curriculum totalling 64 classroom hours. A portion of the usually required semester hours could be devoted to assigned reading with adequate written reviews submitted at a specified time prior to the semester final examination. Such a course would be classified as a two-hour elective credit course.

Second Semester, Junior Year

Following the introductory courses of the first semester, the curriculum for the second semester of the junior year should be concerned with solving specific problems applicable to each area of the forensic sciences, thus exposing the student to the applied sciences involved in each. The exemplar presented here is for legal medicine, which might well include the following subjects presented for two hours twice weekly during the second semester.

- I. Introduction to Legal Medicine
 - A. Purpose and scope
 - B. History and progress of legal medicine
 - C. Patterns of education and logic in law and medicine
 - 1. Terminology
 - a. Legal
 - b. Medical
 - 2. Principles of common and statutory law
 - a. History
 - b. Application
 - 3. Mechanics
 - a. Medical practice
 - b. Legal practice
 - D. The role of government
 - 1. Areas of influence in the practice of law and medicine
 - 2. Administrative law
 - a. Workmen's compensation
 - b. Licensure in law and medicine
 - (1) Ethics of physicians and lawyers
 - (2) The "social role" of physicians and lawyers
 - 3. Local, state, and Federal regulations concerning accountability in law and medicine
 - a. Federal Drug Administration
 - b. Internal Revenue Service
 - c. Other governmental agencies

II. Legal Theory Applied to Medical Practice

- A. Medical and legal application of agency
 - 1. Private and public institutions
 - a. Hospital
 - b. Clinic
 - c. Office
 - 2. Governmental institutions
 - a. Hospital
 - b. Armed forces

- 3. Paraprofessionalism—a new horizon
 - a. Doctor's assistant
 - b. Nurse's assistant
 - c. Licensed practical nurse
 - d. Practical nurse
 - e. Nurse's aide
- B. Commercial law
 - 1. Express warranty
 - a. Practice
 - b. Medication and prescribed drugs
 - 2. Implied warranty
 - a. Practice
 - b. Medication and prescribed drugs
- C. Form of practice
 - 1. Sole practitioner
 - 2. Partnership
 - 3. Professional corporation
 - 4. Clinic service
- D. Tort theory of recovery
 - 1. Negligence
 - a. Rights and duties
 - b. Breach of duty
 - c. Damages
 - d. Causation
 - e. Foreseeability
 - 2. Specific theories applicable to professional negligence
 - a. Standards of care
 - b. Community rule
 - c. Respondeat superior-Ship's captain rule
- E. Rules of evidence
 - 1. Privileged and confidential communications
 - 2. The medical record
 - a. Hospital
 - b. Office
 - c. Third-party access
 - d. Governmental right to access
 - (1) Reportable diseases
 - (2) Statutory requirement to report
 - 3. The hypothetical question
 - a. Form
 - b. Contents
 - 4. Medical history of patient and event
- F. Constitution law concepts
 - 1. Property rights
 - 2. Ownerships
 - 3. Uniform Anatomical Gifts Act
 - 4. Chain of evidence
- G. Legal concepts versus medical concepts of disability and responsibility
- III. Specific Problems in Law and Medicine
 - A. Criminal Law
 - 1. Responsibility for conduct
 - a. Drugs

342 JOURNAL OF FORENSIC SCIENCES

- b. Alcohol
- c. Social crimes
- 2. Penal consequences or rehabilitation
- 3. Acts mala probibitum (for example, speeding)
- 4. Acts mala per se (for example, homicide)
- B. Domestic relations and family law
 - 1. Abortion
 - 2. Battered-child syndrome
 - 3. Artificial insemination
 - 4. Blood typing
 - a. Marriage
 - b. Bastardy
 - 5. Custody of minors
 - 6. Welfare reform and responsibility
- C. Homotransplantation
 - 1. Tissue matching
 - 2. Blood typing
 - 3. Sale or service theory in use of blood
 - 4. Time of death
- D. Workmen's compsensation
 - 1. Environmental cause for injury
 - 2. Safe employment
 - 3. Other causative problems
- E. Right to medical and legal services
 - 1. Indigent patient and client
 - 2. Obligations of the professions of law and medicine
 - a. Ethical considerations
 - b. Moral considerations
- F. Influence of insurance
 - 1. Receipt of treatment and services
 - 2. Judgment of costs and expenses
 - 3. Establishment of degree of disability and compensation
 - 4. Determination of improprieties
- G. Proof of facts
 - 1. Investigation
 - 2. Discovery proceedings
 - 3. Selection of the witness who is an expert
 - 4. Immunity and privileges of witnesses

Senior Year

In the senior year the law student should have his course material in forensic science scheduled in such a way as to engage him in solving specific problems during the first semester. The final semester could then be devoted to further study of the disciplines involved in the forensic sciences, including their roles in sociolegal problems of public concern. Outlines of possible course materials in legal medicine are offered as exemplary, and again it is suggested that the student receive two-hour lectures twice weekly during each semester.

- I. Medical Terminology
 - A. Anatomy and physiology
 - B. Terminology peculiar to medical specialties

II. Coroner's Autopsy (Medical Examiner's Case)

- A. Constitutional basis for obtaining specimen
- B. Determination of time and cause of death
- C. Sheltered remains
- D. Role of toxicologist in identifying toxins
- E. Tissue identification
- F. Blood and fluid identification
- G. Preservation of specimens
- H. Nature and cause of traumatic injuries
- I. Case histories

III. Rights of Deceased Person or Next of Kin

- A. Ownership incident to the body
- B. Statutory modifications of common law
- C. Uniform Anatomic Gifts Act
- D. Mutilation of a corpse
- E. Duty to bury

IV. Reportable versus Nonreportable Incidents

- A. Homicide
- B. Suicide
- C. Injuries
 - 1. Gunshot
 - 2. Stab
 - 3. Other
- D. Abortion
 - 1. Therapeutic
 - 2. Criminal
- E. Battered-child syndrome
- F. Other

V. Legal Relationships of Physician

- A. To patient
 - 1. Implied warranty
 - 2. Nature of contract and necessary ingredients
 - a. Rights and duties expressed or implied
 - b. Applicable rules in experimental medicine
 - c. Capacity to make contract
 - d. Disability to enter into contract
 - (1) Void by reasons of being mala per se
 - (2) Statutory incapacity
 - (3) Mental incapacity
 - (4) Age determinants-emancipated or unemancipated minor
 - (5) Role of guardian and guardian ad litem
 - 3. Confidential and privileged communications
 - 4. Patient waivers and judicial immunity
 - 5. Fiduciary relationship of doctor and patient
- B. To hospital administration
 - 1. Staff privilege
 - 2. Borrowed servant doctrine
 - 3. Respondeat superior

344 JOURNAL OF FORENSIC SCIENCES

- C. To hospital personnel (for example, nursing)
- D. To office staff
- E. To courts and attorneys
- F. To governmental agencies
- G. To public at large
 - 1. Emergency care
 - a. Good Samaritan statutes
 - b. Implied consent
 - c. Intentional torts versus negligence
 - d. Duty to render care
 - 2. Other

VI. Federal and State Regulations

- A. Licensure
- B. Drug and alcohol abuse
- Liability for errors and omissions in manufacturing, dispensing, and prescribing drugs and medications
 - 1. Strict liability theories
 - 2. Negligence versus strict liability
 - 3. Physician's liability
 - 4. Manufacturer's and dispenser's liability
 - a. Product liability
 - b. Warranties, implied or expressed
 - (1) Marketability
 - (2) Merchantability

VII. Occupational Diseases and Hazards

- A. Workmen's compensation laws—theory and application
- B. Pre-employment examination requirements
- C. Industrial traffic safety
- D. Medical records of employer
- E. Environmental factors in causation and aggravation of specific diseases and disabilities
 - 1. Hearing loss
 - 2. Lung disease
 - 3. Traumatic injuries
 - 4. Other

VIII. Mental and Psychiatric Determinants

- A. Role of psychiatrist, psychologist, and others
- B. Insanity defined
 - 1. ALI rule
 - 2. Durham rule
 - 3. McNaughton rule
 - 4. Diminished capacity and responsibility rule
 - 5. Others
- C. Commitment procedure
- D. Capacity to contract, make a will, marry, etc
- E. Tort liability in voluntary intoxication or drug abuse

- F. Recidivism and rehabilitation
- G. Rights as a citizen
- H. Rights of a minor

IX. Medical Records

- A. Origination and methods of keeping
- B. Property right in record and information
- C. Third-party access to records
- D. Procedure and policy manuals in hospitals
- E. Informed consent
- F. Nurses' entries
- G. Peer review committee reports
- H. Evidentiary use

X. The Expert as a Witness

- A. Preparation and evaluation of evidentiary material
 - 1. Medical report in trauma or disease etiology
 - 2. Autopsy findings in death cases
 - 3. Determination of degree of disability or impairment
- B. Trial preparation
- C. Direct and cross examination of the expert
- D. Compensation for assisting counsel in preparation
- IX. Arbitrating the Medicolegal Problem

Continuing Education in Forensic Sciences

If the practicing forensic jurisprudent desires to initiate study in the forensic sciences or to refresh his recollection, the following basic curriculum could be used as the initial part of a proffered course in continuing education. Obviously, the other disciplines not included in this exemplar because of space limitations could be outlined in as much detail, and course material tailored to the requirements of each should be made readily available.

- I. Introduction to Forensic Sciences
 - A. Ethics
 - B. Psychological adjustments between vocations
 - C. Interdisciplinary relationships to problems and solutions
 - D. Teaching techniques within a discipline
 - E. Research
- II. Introduction to Legal Problems
 - A. Intradisciplinary problems
 - B. Interdisciplinary problems
 - C. Sources of legal problems
 - 1. Constitution
 - 2. Statutes
 - 3. Administrative decisions
 - 4. Common law

346 JOURNAL OF FORENSIC SCIENCES

- III. The Coroner and Medical Examiner Systems
 - A. Medical legal autopsy
 - B. Determination of time of death
 - C. Determination of cause of death
 - D. Use of coroner's jury at inquest
 - E. Inquest of specific crimes

IV. Role of Toxicology

- A. Identification of drugs, alcohol, toxins, and other substances
- B. Preservation of specimens
- C. Specimens as evidence in civil and criminal cases
- D. Constitutional basis for obtaining specimens

V. Role of Pharmacology

- A. State and Federal regulations
- B. Liability for error in dispensing
- C. Liability for errors in manufacturing and in identification
- D. Negligence versus strict liability
- E. Implied and express warranty defined
- F. Product liability
- G. Warnings and directions on label

VI. Roles of Immunology and Hematology

- A. Typing of tissue stains
- B. Typing of blood stains
- C. Tissue and blood specificity
- D. The immune response
- E. Anaphylatic reaction and homotransplantation
- F. Transfusion reactions
- G. Clerical errors and negligence
- H. Blood paternity determination
 - 1. Medicolegal aspects
 - 2. Individual blood grouping and typing
- J. Sale of goods versus medical service
- K. Identification of criminal suspects
- L. State and Federal regulatory statutes
- M. Current case law

VII. Role of Psychiatry

- A. Civil proceedings
 - 1. The psychiatrically insane-defined
 - 2. Commitment procedures

- 3. Capacity
 - a. To contract
 - b. To marry
 - c. To make last will and testament
 - d. In tort liability
- B. Criminal proceedings
 - 1. Legal variables of insanity
 - 2. Recidivism
 - 3. Rehabilitation
 - 4. Mitigation of penalty
- C. Specific problems
 - 1. The addict
 - a. Drug
 - b. Alcohol
 - 2. The antisocial person
 - 3. The psychopathic and sociopathic personality
- VIII. Role of Pathology
 - A. Office of medical examiner or coroner's pathologist
 - B. Medical legal autopsy
 - C. Determination of specific injuries resulting from trauma
 - D. Specific problems (exemplary only)
 - 1. Asphyxia
 - a. Mechanics
 - b. Carbon monoxide
 - c. Accident
 - d. Homicide
 - e. Misadventure
 - f. Sex perversion
 - 2. Injuries of head and spine
 - 3. Penetrating wounds
 - a. Homicide
 - b. Accident
 - 4. Malignancies
 - a. Etiology
 - b. Traumatic causes
 - E. Photography
 - 1. The injury
 - 2. Photomicrographs of specimen
 - F. Radiologic evidence
 - G. Toxicologic data
 - 1. Poisons
 - 2. Drugs
 - 3. Blood tests versus Breathalyzer in alcohol determinations
- IX. Role of Some Other Medical Specialties
 - A. Eugenic and voluntary sterilization
 - B. Artificial insemination
 - C. Rape-diagnosis

- D. Abortion
 - 1. Criminal
 - 2. Therapeutic
- E. Evaluation of traumas
 - 1. Medical report
 - 2. Third-party access to records
 - 3. Disability versus impairment
 - 4. The hyperflexed (extended) cervical spine
 - 5. Physical trauma and emotional injury
 - 6. Postconcussion syndrome
 - 7. The unconscious patient
 - 8. Effects on fetus
 - 9. Trauma and heart disease
 - a. Coronary arteriosclerosis
 - b. Workmen's compensation
- X. Prophylactic Medicine and Malpractice
- XI. Expert Testimony
 - A. Role in trial preparation
 - B. Direct and cross examination of expert

The Role of the American Academy of Forensic Sciences

The necessary basic exposure under the above proposed law school curriculum relates solely to the future. That which the forensic jurisprudent presently has gained has been received only from individual effort, knowledge, training, and exposure in the past. That which the forensic jurisprudent needs in the future has not been definitively planned. It is in the postgraduate education of the forensic jurisprudent that the American Academy of Forensic Sciences may well desire to effect an impact. This presumes that the Academy will have the personnel, monetary base, and educational material available to accomplish the proposed goal. This also presumes that if the Academy within its present structure cannot undertake such a task, it will create some vehicle by which this can be accomplished.

How then can the American Academy of Forensic Sciences implement the postgraduate education for the forensic jurisprudent?

Recognizing that within the various disciplines of the Academy reposes the best expertise available in the United States and recognizing, specifically, that the Jurisprudence Section of the Academy has an active, interested membership committed to the purposes of the law, it would appear that the personnel problem could be readily resolved.

Recognizing that innumerable members of the individual sections of the Academy have been constantly aware of the needed interrelationships between the various disciplines, that a great number of Academy members are authors and lecturers of high regard and excellence in their respective fields of expertise, that a goodly proportion of Academy members have professional status within academe, and that other members are equally as qualified although not presently filling academic positions, it would appear that educational material could be readily designed for a postgraduate education curriculum.

The monetary base remains the sole cause for concern. Very few Academy members are sufficiently wealthy to be able to donate their time and money to any active postgraduate educational effort. Unfortunately, the Annual Meeting of the American Academy of Forensic Sciences is not the place for the type of educational program proposed. The time is too short. But there exists a need for planned educational seminars staffed by com-

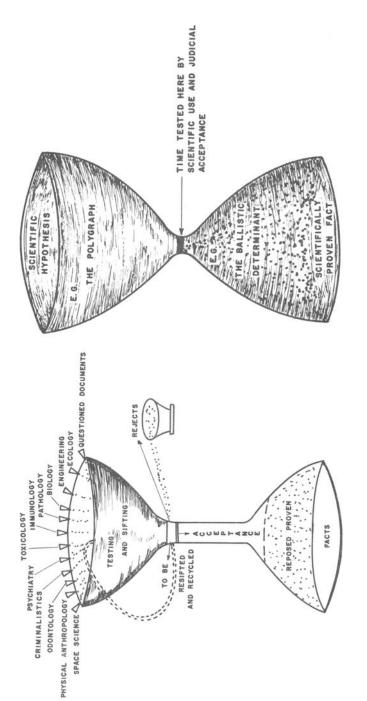


FIG. 1—The hourglass of jurisprudence, repository for the forensic sciences.

petent forensic scientists. These seminars should be monetarily underwritten by an established tax-exempt corporate entity having sufficient funds to initiate and continue the projected educational effort. These seminars could be readily presented in various regional areas throughout the United States on an ongoing basis. Perhaps this could be a subject of interest to the Forensic Sciences Foundation as an adjunct to the activities of the Academy. Surely it would appear to deserve some contemplation.

Each discipline could cooperatively endeavor with other disciplines in research projects of mutual interest or concern. For example, the odontology and jurisprudence disciplines might be mutually interested in questions involving informed consent or the necessity of a search warrant in cases involving the taking of dental impressions. Psychiatry and criminalistics sections might be concerned with ascertaining abnormal behavior before the commission of specific crimes. The disciplines of pathology, biology, toxicology, immunology, and hematology have varied areas of mutual interest. Questioned documents, psychiatry, and jurisprudence sections have problems intertwined with provocative probabilities. The physical anthropology, engineering, and odontology fields have areas of mutual interest, particularly in reconstructing traumatic injuries and determining causative physical factors. In fact, all disciplines have a repository in jurisprudence. Therefore, dialogue becomes increasingly important as each discipline becomes more sophisticated in methodology as well as in theory. Cross-conference, cross-fertilization, and crosspollination of ideas, coupled with pragmatic application and didactic presentation of facts and conclusions, appear to be most sensible approaches to the acquisition of knowledge and understanding for the forensic jurisprudent.

Relationship Between Jurisprudence and Other Forensic Disciplines

If we conceive of the law as the repository of all legally acceptable hypotheses, jurisprudence can be conceived as an hourglass to receive and repose scientific data.

The top half of the hourglass is filled with variables which are hypothetical in nature. For example (Fig. 1), the scientific hypothesis of the polygraph has been placed into the top of the imaginary hourglass of jurisprudence, but it has not yet been time tested by scientific use to the degree necessary for juducial acceptance. On the other hand, the scientific hypotheses relating to ballistic determinants have passed the time test of scientific investigation and have been judicially accepted as scientifically valid. Thus, each discipline places its ingredients into the hourglass of jurisprudence to be sifted, sorted, accepted, rejected, and retested.

Once accepted, once deposited as fact, the scientifically valid data may now be disseminated not only as palatable but also acceptable. It is this function of dissemination that is being proposed in this article—dissemination in the form of education. The Jurisprudence Section of the American Academy of Forensic Sciences must take the lead.

For the past 25 years we have struggled to learn; in the next 25 years we must struggle to learn and to educate. As a discipline within the Academy we must learn as much as possible from our fellow forensic counterparts. At the same time we must be willing to impart our knowledge and expertise to those aspiring to become forensic jurisprudents. Education cannot be a one-way street, selfishly gained for individual attainment. Education is a continuous process of learning, relearning, imparting, and teaching. Because of its pivotal role, the Jurisprudence Section should take the lead in this effort, and it should assume that role of leader now. Support is needed for the vision of our innovative and forward-thinking Fellows and the efforts of the present endeavors of the Fellows of the Academy now in positions of leadership.