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What is Law?

Editor Looks to Ancient Rome for Answers

When I attended graduate school to study rhetoric, many friends asked me, “What is rhetoric anyway?” I explained the rhetoric of Isocrates, continued with Plato and Aristotle, discussed Cicero and Quintilian on rhetoric, John Locke’s contributions, and on through Edward Corbett.

However, I found my friends falling asleep soon after my rendition of Plato’s Gorgias. How could I possibly come up with one simple definition? Recently my husband and I began a rather lengthy discussion trying to come up with a simple definition for “law.” I found myself flipping through my dusty graduate books. Cicero had the answer, one I hope you will mull over.

Mary Rose Castelli
Editor-in-Chief

Cicero: Ever since we were children, Quintus, we have learned to call, “If one summon another to court,” other and other rules of the same kind. But we must come to the true understanding of the matter, which is as follows: this and other commands and prohibitions of nations have the power to summon to righteousness and away from wrongdoing; but this power is not merely older than the existence of nations and States, it is coeval with that God who guards and rules heaven and earth. For the divine mind cannot exist without reason, and divine reason cannot but have this power to establish right and wrong. No written law commanded that a man should take his stand on a bridge alone, against the full force of the enemy, and order the bridge broken down behind him; yet we shall not for that reason suppose that the heroic Cicoces was not obeying the law of bravery and following its decrees in doing so noble a deed.

Even if there was no written bravery and following its decrees in doing so noble a deed. Even if there was no written law against rape at Rome in the reign of Lucius Tarquinius, we cannot say on that account that Sextus Tarquinius did not break that eternal law by violating Lucretia, the daughter of Tricipitinus! For reason did exist, derived from the nature of the universe, urging men to right conduct and diverting them from wrongdoing, and this reason did not first become Law when it was written down, but when it first came into existence; and it came into existence simultaneously with the divine mind. Wherefore the true and primal Law, applied to command and prohibition, is the right reason of supreme Jupiter.

Quintus: I agree with you, brother, that what is right and true is also eternal, and does not begin or end with written statutes.

Cicero: Therefore, just as that divine mind is the supreme Law, so, when [reason] is perfected in man, that is Law, and this perfected reason exists in the mind of the wise man; but those rules which, in varying forms and for the need of the moment, have been formulated for the guidance of nations, bear the title of laws rather by favor than because they are really such. For every law which really deserves that name is truly praiseworthy, as they prove by approximately the following arguments. It is agreed, of course, that laws were invented for the safety of citizens, the preservation of States, and the tranquility and happiness of human life, and that those who first put statutes of this kind in force convinced their people that it was their intention to write down and put into effect such rules as, once accepted and adopted, would make possible for them an honorable and happy life; and when such rules were drawn up and put in force, it is clear that men called them “laws.” From this point of view it can be readily understood that those who formulated wicked and unjust statutes for nations, thereby breaking their promises and agreements, put into effect anything but “laws.” It may thus be clear that in the very definition of the term “law” there inheres the idea and principle of choosing what is just and true.

Quintus: One of the greatest goods, certainly.

Cicero: And if a State lacks Law, must it for that reason be considered no State at all?

Quintus: It cannot be denied.

Cicero: Then Law must necessarily be considered one of the greatest goods.

Quintus: I agree with you entirely.

Cicero: What of the many deadly, the many pestilential statutes which nations put in force? These no more deserve to be called laws than the rules a band of robbers might pass in their assembly. For if ignorance and unskillful men have prescribed deadly poisons, instead of healing drugs, these cannot possibly be called physicians’; neither in a nation can a statute of any sort be called a law, even though the nation, in spite of its being a ruinous regulation, has accepted it. Therefore Law is the distinction between things just and unjust, made in agreement with that primal and most ancient of all things, Nature; and in conformity to Nature’s standard are framed those human laws which inflict punishment upon the wicked but defend and protect the good.

—Marcus Tullius Cicero (106-43 B.C.), philosopher, orator and statesman, was a courageous proponent of, and martyr for, republican principles. This excerpt is from Book II of his dialogue.
It's sort of a free for all," says U.S. Senate newcomer Rick Santorum about the opportunity to take the lead on the Senate floor on a lot of different issues. In the House of Representatives, with 435 members observing an unwritten pecking order, you have to wait awhile to be heard. Santorum acknowledges he has just as much right to be in the Senate as anyone else. An old axiom states, "When you get to the United States Senate, you wonder how you got there, and after six months, you wonder how everybody else got there."

After one year in the Senate, the freshman Senator offers the following advice to newcomers: "The most important thing you can do on the Senate floor is make sure you never take anything that occurs on the floor personally."

Just 15 years ago, a young Rick Santorum, only 23 years old at the time, graduated from the University of Pittsburgh's accelerated one-year MBA program. Upon graduation, Santorum entered the political sphere, working as an administrative assistant for State Senator J. Doyle Corman, a member of the Pennsylvania Senate since 1977. While working for Senator Corman, Senator Santorum enrolled in Dickinson School of Law, earning high honors and receiving his Juris Doctorate in 1986.

In 1990, Santorum launched his own grass-roots campaign for a seat in the U.S. House of Representatives, shaking thousands of hands in the process and unseating a twelve-year incumbent, Congressman Doug Walgren.

In his first term of office, Congressman Santorum proved his ability to think independently of party lines and ruffle some feathers in the process. In 1991, he and six other freshman Republicans, fondly known as the Gang of Seven, exposed the U.S. House of Representative's banking scandal.

After an exhausting and well-organized campaign for the United States Senate in which he became a key voice on topics of welfare and health care reform, Santorum finds himself where he is today. Continuously traveling to different cities and towns in the state, discussing and educating Pennsylvania citizens about his proposed health care reforms, he won the seat from incumbent Harris Wofford in November 1994.

Once in the Senate, early successes resulted in the Republican majority moving roughly half of the GOP Contract with America through the House. These successes were thwarted though because Senate Republicans, despite having enough votes to command a majority, found Democratic filibusters and a presidential veto formidable obstacles. While the Republican majority has stayed together under the support of Senator Bob Dole, the Senate Majority Leader, the GOP is learning valuable lessons about the ability of a Republican dominated Congress trying to lead the nation into reform with a Democrat in the White House.

Santorum is eager to let the states go to bat on welfare programs, stating, "The states will do a much better job at implementing these programs in a more rational way than we ever had in Washington, and I'm excited about the potential." The Senator would like to encourage a movement back to the states in some areas of legislation.

Pennsylvania's new GOP Senator feels there is a lot of work still needed on such areas as the Superfund, legal reform and deregulation. Critics have been quick to chastise him and other Republicans on some of those cuts. A 40 percent cut on federal funding of Neighborhood Legal Services has brought cries of foul play from the Democrat minority. Santorum defends the GOP position, stating that the funding has been misused as a political tool.

Another area of criticism for the Republican plans is the area of Medicare. "It's been saved seven times in the past when it was going bankrupt," says Senator Santorum. "Each of those times, what we did was increase taxes."

Unfortunately for the new Republican majority, there is no equitable remedy of specific performance for this contract; it is one built on perspiration and hard work.

By Dennis M. Moskal

Dennis M. Moskal interned in the Congressional office of Rick Santorum in 1994 and on Senator Santorum's 1994 senate campaign. Moskal is a second-year day student at the Duquesne University School of Law.
In the waning years of the millennium, the legal profession and legal education confront massive challenges. The future of legal education can only be gauged in the context of the future of the profession. It is important to recognize the current challenges to the profession.

While criticism of lawyers in society has been with us from time immemorial, serious criticisms as well as lawyer jokes have reached unprecedented levels of meanness, and even worse, disdain. The conventional wisdom has the entire profession pursuing frivolous claims, Jarndycian delays and fees predicated exclusively upon greed. Older members of the profession yearn for the days of greater civility at the bar. They express anxiety over the current economics of practice where the supply of lawyers severely outstrips the demand. This ambience casts a pall over the ideal of practicing law in the grand tradition with its attendant virtues of diligence, meticulousness, trust, reliability, decorum and a love of the profession.

There are frivolous actions and there are signs of greed. There is behavior that is unethical and more that borders on the unethical. Such behavior is often widely promulgated while virtuous efforts are ignored. Lay ignorance of the true adversary process is pervasive. Televised samples of that process often present a series of distortions in highly publicized trials that manifest varying levels of incompetence and questionable advocacy. To paraphrase the Bard, the ignoble acts of lawyers live long after them, but the pro bono acts are oft interred with their bones. There is a formidable amount of pro bono work performed regularly by our sisters and brothers. Yet it is neither publicized widely nor is it recorded in any reliable fashion.

The overwhelming majority of lawyers in America work very hard and genuinely care about their clients and society. Notwithstanding the slings and arrows, most of the fortunes of our neighbors as well as their futures continue to be trusted to lawyers, and rightly so. One of the better descriptions of who we are came from Edmund Burke more than 200 years ago, and it still rings true. When asked by a colleague why so many Colonists studied law, Burke suggested that his colleague should understand what these lawyers do. They are, he said, prompt in attack, ready in defense and filled with resourcefulness—they sniff tyranny in every tainted breeze. Burke described a classic and noble profession. The law student must be educated to understand the nobility of the profession and be made ready to practice in the grand tradition.

But where will she practice? Why go to law school if, in fact, the opportunities for practice continuously diminish as the law schools produce even more graduates for a saturated market? In a letter to his mother, one new lawyer expressed despair over the large number of lawyers in society. He even wondered if he would starve to death in this profession. The young man was John Adams who later found himself leading a fledgling nation.

As in the 18th century, the number of lawyers in our highly litigious democracy looms large. One could argue that we have now reached the zenith of supply. Yet, as we will see, it is the uniqueness of a legal education that provides a workable solution to this challenge and other challenges.

Law schools and the bar have made conscious choices in America to open wide the door of opportunity to practice law. Among the many universities that added law schools in the last half of the twentieth century, some had motives that were less than noble. Compared to some other disciplines, law schools were much less costly and, in some cases, became “cash cows” for the university. The size of a class in a typical law school would be viewed as much too large in any other graduate program. The standard bearer in this development was Harvard where student rosters began to include photos to enable the teacher to identify individuals...
among the large throng who sat before the feet of the masters. If Harvard could provide effective legal education with large classes, who would argue with that standard?

Notwithstanding the size of the class, law professors became efficient and effective in pursuing some form of the socratic method, giving the lie to claims in other disciplines that it could not be done. This interactive mode, however, became quite natural for the generations of law professors who had, themselves, witnessed the effective use of a quasi-socratic methodology on a regular basis during their halcyon days as law students. They loved almost every minute of it and they happily continued that methodology from the first moment of their joyous knighthoods as academic lawyers standing before a captive and eager audience on a daily basis.

What could be more intellectually exciting than to challenge and be challenged by some of the brightest and most enthusiastic students that a teacher would ever desire? The “game” was quickly learned by the 1L who often became obsessed with the intellectual parry and thrust of the class in torts, contracts and other foundational courses. For decades, this methodology co-existed with the primitive lecture method by teachers in other disciplines who emulated their professors in the traditional method. It is only in recent years that many other disciplines have pursued anything like an interactive methodology.

The popularity of legal education is based, in part, on this methodology. Compared to four years of lecture, the case/problem method is exciting. But the method is not used because it is exciting; it is used because it is effective. It focuses upon understanding rather than memory—on the proven basis that memorized concepts are inevitably forgotten, but once concepts are understood, they are never forgotten. Moreover, the principles, ideas and rules of law are not mere information. They are the lawyer’s surgical instruments in performing delicate operations in the conflict resolution process. If a surgeon can only identify surgical instruments but not use them with consummate skill, the patient is in peril. Similarly, a law student who can parrot rules of law without a true understanding and facility to apply them to complex fact situations is incapable of serving a client effectively.

In this sense of basic analytical skills, the goals of legal education have not and will not change. Beyond a comprehensive understanding of the principles and rules of law, analysis is and will remain the essential focus of legal education. In many associations with law professors in various law schools, I often asked my colleagues who they viewed as their premier law professor in their student days and why. The best answer came from a colleague who identified a teacher of the civil procedure course
in his law school. His admiration for this professor had nothing to do with the subject matter. Rather, he explained, this professor was the exemplar of “the legal mind at work.”

The objective of the first year of law school beyond acquaintance with the foundational subjects was and is to begin the process of learning to “think like a lawyer.” As we know, this metamorphosis in our mental apparatus not only changes the way we think about the law, it changes the way we think about everything. For most, it is a profound change. It is the basis for that “resourcefulness about which Burke spoke 200 years ago. It is why so many millions come to lawyers to seek their advice about their futures. Those who seek us out impliedly believe we possess a unique form of mature judgment which we may even call wisdom.

It is our challenge to ascertain that such reliance by our clients is justified. What kind of formal education in the law is necessary to assure such competency? It cannot be gainsaid that we must be grounded in the basic principles and rules of law, but the problem has been exacerbated over the last three decades. Now the law student and lawyer must not only be aware of the traditional courses in contracts, property, torts, criminal law and procedure, civil procedure, constitutional law, corporations, commercial law, evidence, conflicts and other staples, but we must also understand administrative law, environmental law, securities regulations, and a panoply of other tax and regulatory laws including those dealing with health law, ERISA, Superfunds and the like. International law, particularly developments in international trade law and international contracts, are no longer simply nice electives in the law school curriculum.

If all of these competencies are to be assimilated in the same three-year span that was allocated to legal education when many of these courses were, at best, in the mind’s eye, how is this to be accomplished? More than three decades ago, the great torts scholar, William Prosser, complained even then that “we are trying to stuff more and more into the same size (three-year) bag.” One can only imagine what Prosser would say today.

What has become the traditional answer to this concern is the fact that no law student can take all that is offered in three years—and this was true, to a much lesser extent, three decades ago or more. The new lawyer, however, can achieve competence in an area to which he has not been exposed in law school because he has the analytical tools to become competent in any facet of the law. He has developed the lawyerlike mind.

Another answer is that continuing legal education has now become mandatory. Even the most modern version of a law school course requires supplementary education in this rapidly changing society. Yet, CLE is anything but comprehensive. The effective lawyer will maintain and enhance her competence in appropriate areas regardless of a requirement to maintain a license to practice. But how does she manage to deal with the volume and expanse of developments in her profession?

How many lawyers have complained over many years of their inability to keep up with the “advanced sheets”—those pulp records of the latest state and federal opinions, or the surfeiting amount of other materials? On a broader scale, consider the lawyer at work in a law library preparing a brief, or a law professor preparing for class or pursuing research for a book or article.

Murray on future attorneys: “Those who genuinely love the practice and pursue it with complete diligence for their clients and society will succeed admirably.”
The scene used to be a table filled with volumes of the West Reporter, some opened, others stacked with bookmarks. Among the scatter, one might also find statutes, law reviews, a CCH or Prentice-Hall binder, an occasional ALR volume, a text or a treatise. In the center of this collage, we find the lawyer, in deep concentration, fussing over a footnote or quote that may be included in the finished work product. The inevitable yellow pad was at hand and the creator would use a pencil or pen to write the first draft.

This scene was filled with problems for other actual or potential users of the library. All of these materials are dedicated to the work of one person—the first user to take the materials from the stacks. Unless there were duplicate volumes (typically only reporters, and even with reporters only one or a maximum of two duplicates), the entire law school student body, faculty and practitioners in the city who used that law library were deprived of these critical materials. How many times were users frustrated because the essential volume they required was not on the shelves? Absent the availability of a given volume, work stopped until it was returned to the shelves.¹

For many, but certainly not all, the new scenario is more than materially different. There are no volumes, nor pads nor pencils or pens. There is a monitor, computer, keyboard and printer. The cases, statutes, most of the law reviews and other services are at the fingertips of the user via one or more databases or a CD. She can now find things that were virtually unfindable under the antiquated system. She can print anything on a disk or paper that magically appears in professionally finished form from a self-fed printer. Quite literally, the lawyer has a vast library at her fingertips and it extends beyond anything that she used to find in a law library, alone. The use of this technology has now invaded courtrooms across America.

The lawyer need not pursue this electronic process in the library. He can remain in his office or home with the same access to the complete data bases accessed through the library. Indeed, he need not leave the comfort of home on a snowy evening to trapse to the library to continue his research. He simply retreats to his computer where he can pursue this quest at any time of the day or night with no interruptions other than those he chooses to recognize. The needed book or volume is always available in the electronic stacks. The enhancement of efficiency is of geometric proportions. Now there is time to assimilate the multiple expansions and totally new additions to any chosen field.

Like the practicing lawyer, the law student enjoys similar advantages. Recall the casebook with a principal case followed by notes with citations to other cases. Were the cited cases always read, or was it prohibitively difficult to get to the library to look at those cases for the next class? Now, those cases can appear on a screen within seconds. Beyond the citable electronic services, there is a massive amount of legal and related material already available on the "net" through myriad "web" sites. One concern is the addiction to the computer which has already caused certain relationships to suffer. Another is the ease of research and composition of a brief or any other document where paragraphs can be moved instantaneously and footnotes can be inserted or deleted with automatic justification causing documents to be interminably long and creating diabolically difficult choices in shortening the final version to the length required by a court or other recipient.

The law school classroom is not much different from past classrooms, but it is beginning to manifest radical changes. It is not uncommon to be in a class where the background includes the muffled clicks of a laptop computer. This is the tip of an electronic iceberg. In the foreseeable future, many law school classrooms will be filled with these muffled sounds as students use electronic casebooks and other electronic materials—where a case, statutory, law review or other reference on a screen can, by one muffled click, be exploded into the full text of that reference. A traditional book of a thousand pages becomes an electronic book or source of many thousands of pages. The student inserts class notes instantaneously in this electronic book and they are automatically justified, suggesting that the notes are part of the book. Electronic "white" boards in classrooms containing professorial notes or diagrams will be automatically inserted into the student’s electronic book. This very scene is occurring right now, in experimental fashion.

Like other disciplines, legal education will also see the great use of distance learning with professors from other schools discussing certain materials with students in classrooms hundreds or thousands of miles away. Law students will, in much greater numbers, have their questions answered by E-Mail, perhaps late at night. Professors will spend time, often in their homes, with such questions. Seminars and independent studies will be carried on, to a greater or lesser extent, through the computer. CD-Rom applications already allow students to review large amounts of material for law school or bar examinations in increasingly effective ways. Multi-media applications will enhance learning in the law as it does in other disciplines. At this time, the most important step in that direction is total computer and multi-media literacy of law faculty as well as students.²

Continuing education for practitioners will also benefit heavily from this technology. It will be possible to fulfill mandatory CLE requirements through the computer since the instructor will know whether the practitioner-student is paying attention and otherwise participating in such a CLE computer course from a distance. These applications augur a much more interesting, effective and efficient method of CLE over the methods currently used which are often not even interactive, but in the lecture mode, causing newspapers or magazines to be conspicuously present in certain CLE classes.

Beyond the use of this technology for far more efficient and more effective learning, the technology itself, must be understood to practice law effectively. Statutory and other changes have al-
ready occurred because of this technology and we have just begun to recognize these changes.

In recent years, we struggled with questions concerning software, e.g., whether it is "goods" to which the UCC applies or whether we must now have a completely revised UCC to deal with what it really is, licensing, and the need to know about intellectual property. We live in a society where the percentage of service production continues to gain on the percentage of manufactured goods. Technology is an integral part of such services raising a host of unanswered legal questions about intellectual property as well as fundamental issues such as whether an electronic record is the equivalent of a required writing to evidence a contract. Like other professionals and academics, some have been loath to surrender the old ways for the new electronic ways. We may recall one of the many pieces of wisdom from Benjamin Nathan Cardozo, "If we cannot escape the Furies, at least we should understand them." For many of us, the smell of the stacks will remain with us always, but the new technology is infinitely better and really does allow us to cope with huge expansion of that which we must understand.

The central question remains: If I choose to pursue this difficult, fascinating, frustrating yet wonderful education, will I be able to support myself and my family in a world filled with so many who have chosen a similar path? This brings us full circle to the essence of legal education. With the demise of liberal education in so many universities over the last four decades, many now view legal education as the last vestige of liberal education. The study of law is the study of logic, epistemology, ethics, literature, language, rhetoric, writing, composition, sociology, economics, psychology and a host of other disciplines. An education that emphasizes critical thinking skills, creativity, high levels of written and oral communication skills and that inevitable resourcefulness of which Burke spoke enables the student to pursue innumerable opportunities in widely diverse fields.

It has never been uncommon to discover leaders in business, government, education or any other field who list law degrees on their resumes. A letter from a former student revealed his current occupation—an opthamologist. He felt compelled to tell me that, though he thoroughly enjoys "making people see again," he continues to regard his legal education as the most significant educational experience of his entire life. Regardless of the field, lawyers abound and they are often leaders.

"There is no more noble path than to practice law in the grand tradition."

There was a time when many legal educators expressed the view that one should not be admitted to law school without a desire to practice law for a living. That view has been overcome for many reasons, but primarily because a legal education has proven to be so desirable in myriad walks of life. Many who have left law school regard even their partial law school experience as particularly significant in their successful careers. Modern legal education reflects these trends in numerous joint degree programs. Dual or multi-disciplinary preparation continues to expand in fields involving business, health law, dispute resolution, environmental science, public policy and administration, international affairs, computerization and so many others.

Legal education is, indeed, unique in its scope, its development of myriad skills in developing prudent judgment and decision-making. These attributes transcend disciplines and work environments. After moderating a friendly panel discussion among clergy of different faiths, I recall the rabbi on the panel saying to me, "You're a lawyer, aren't you?" Moreover, I am pleased to report that his question was stated with some admiration for the skills of our profession. Notwithstanding the criticisms, these skills continue to be admired and, for the most part, trusted.

Though the lawyer can be effective in so many different fields, the central mission remains the practice of law. Regardless of supply and demand, those who genuinely love the practice and pursue it with complete diligence for their clients and society will succeed admirably. They will work very hard and love every minute of it as they sniff tyranny in every breeze while they care for others and carry their burdens. There is no more noble path than to practice law in the grand tradition.

Notes

1. Norwithstanding such frustrations, there was a certain and even wonderful ambience of the stacks, including the smells and surrounding silence as one gazed upon an empty yellow pad with the confidence that it would eventually be filled with words that would convince any court or other forum of the compelling nature of the argument to be created.

2. By "literacy," I do not mean "programming" or any other highly complex effort. The use of computers and multi-media applications is really not very difficult. The only successful route for most effective use, however, is continued usage until a level of comfort appears. At that point, incidentally, the computer becomes indispensable. In some ways, learning to use a computer is something like exercising on a variety of exercise machines, many of which remain unused in the households of America. There is an initial reluctance—in the case of computers, a phobia—which must be overcome. Once computer phobia is overcome, the computer is a lot easier than exercise machines.
Quality Improvement in Legal Education: A Student’s View

By Steven M. Regan

Probate, Estate and Fiduciary Law typically governed by state probate codes, can be very complex and confusing. Moreover, familiarizing oneself with the substantive law only partially prepares the law student for eventual practice. With a morass of state and local procedural rules setting forth how, when and in what form petitions and motions are to be presented to the Orphans’ Court Divisions in Pennsylvania, a newly-admitted member of the Bar may be at a loss as to how to initiate guardianship proceedings for an alleged incapacitated person or construct and file an accounting of an estate’s assets.

The law schools cannot, simply due to time constraints, provide the student with this procedural knowledge and experience. However, much more can be done to adequately prepare the law student in this vital and growing area of the law so that upon admission to the Bar, one is better prepared in both substance and procedure. A comprehensive educational system is necessary for the preparation of law students so that upon our admission to the Bar, we possess adequate knowledge as to both substance and procedure, and as a result, will hopefully render legal services in a more efficient and effective manner.

Probate and Estate law is the focus of this article because it is apparent that this will become a more prominent area of the law in the near future. A recent article in American Demographics reported that “today’s retirees will eventually pass on $10 trillion in inheritances to their [baby] boomer children,” making “115 million bequests that average $90,167 apiece.”

In order for one to be prepared to practice in Probate and Estate law and to assume the responsibility of dutifully ensuring that estate assets are managed and transferred in accordance with a client’s wishes, it is necessary, according to Robert A. Kelly, Administrative Judge of the Orphans’ Court Division of the Court of Common Pleas of Allegheny County, to possess excellent trial lawyering skills, because one of the greatest misconceptions about Orphans’ Court is that it is noncontentious. In reality, probate and estate work often involves family acrimony that devolves into outright battles pitting sibling versus sibling.

To acquire insight as to the present state of legal education and the quality of the performance of probate and estate practitioners, the judges of the Orphans’ Court Division were kind enough to proffer their assessments of each and provide their views on how legal education can be improved.

The Role of The Law School

It is quite simple to place the entire burden of improving the quality of legal education on the law schools. That, however, is a grave mistake. The entire responsibility cannot logically or practically be placed on law school administrators and faculty to provide an edu-
A Student's View

cational system for each substantive discipline. That does not mean there is no room for improvement.

The majority of the judges of the Orphans' Court are of the opinion that the law schools do a more than adequate job of preparing students for practice in probate and estate matters, although there seems to be a lack of procedural knowledge among many novice and some experienced attorneys.

Judge Kelly, a 12-year veteran of the bench and Administrative Judge of the Orphans' Court, stated that law schools can do nothing more to prepare students as to probate and estate procedure because "The law school has the student for only three or four years and needs every bit of that time to convey the substantive law." Furthermore, Judge I. Martin Wekselman, a 23-year veteran of the bench, stated that there is nothing that the law schools can do to prepare a student procedurally in probate and estate matters because that is "too particular" to be adequately covered in a substantive course and too specialized to warrant its own course.

Judge Paul R. Zavarella, a 21-year veteran of the bench and former Administrative Judge of the Orphans' Court and President Judge of the Court of Common Pleas, stated that law schools now provide "a more advanced and sophisticated" education with the advent and prominence of computer legal research, and most importantly, "the certification of law students to practice law" within the parameters of a clinical program that allows the student to gain practical experience that was not available in the past.

Although many of the judges stated they, like many of the novice attorneys that now come before the court, were not prepared procedurally for practice in Orphans' Court upon admission to the Bar, it is apparent that the loss of certain requirements has diminished the quality and effectiveness of legal education as to procedural knowledge.

First, all five Orphans' Court judges had to fulfill the requirements of a mandatory six month clerkship or "preceptorship" in a law office as a condition of graduation. Judge Nathan Schwartz, who has been on the bench for twenty-two years, stated that he was prepared for practice in Orphans' Court upon admission to the Bar because it was mandatory for students to work in the office of a seasoned practitioner for two months while in school and another four months after graduation. Why these mandatory "preceptorships" were discontinued is unclear. Judge Zavarella surmises that increased law school enrollments had made it increasingly more difficult to accommodate everyone in need of a preceptorship, and in order to obtain one, the student had to know a practitioner willing to act as one.

"What the law school can do... is to reintroduce certain practical writing exercises to each of the substantive classes...."

While these clerkships seemed to have a positive effect on preparing prospective members of the Bar procedurally, it seems unlikely that they will be revived. A principal reason why these clerkships are unlikely to be reinstated, is that with the strong demand for seats in the law school's evening division, as a practical matter, it is virtually impossible for a great number of law students to find time to complete this type of requirement due to their need to maintain full-time employment.

What the law school can do, however, is reintroduce certain practical writing exercises to each of the substantive classes that would give the student experience drafting a complaint, a petition and motion, interrogatories, and a will. The reason why these exercises should be reintroduced is that they were apparently incorporated into substantive law courses at Duquesne in the past. For instance, Judge Kelly, a Duquesne alumnus, stated that he was required to draft a will in his Trusts and Estates course and, Judge Wekselman, also a Duquesne alumnus, was required to do a title search on a piece of property and report on his findings in a course entitled Pennsylvania Real Property. To use Judge Wekselman's words, "the more clinical experience a student obtains the better so long as it does not interfere with the substantive part of the course." I cannot see how these requirements could have possibly interfered with the substantive part of the course and, thus, should be reinstated.

While I realize this is not a novel suggestion, its value should not be lost for want of a mechanism with which to evaluate the student's performance in completing these practical exercises. Adapting the teaching assistant system used in the Legal Research and Writing courses to the substantive courses would solve the problem. The teaching assistant system would serve a dual beneficial purpose of relieving the faculty of the burden of wading through these exercises while providing the students chosen to be teaching assistants with additional experience in certain practical and procedural areas, which would also look good on one's resume.

The Role of the Bar

As stated above, there was a time when the members of the Bar took a more active role in helping law students get that all-important experience. But, for whatever reason, the clerkships died off. Perhaps there is a causal connection between the explosion in the size of the Bar and the concurrent loss of these and other practical opportunities.

It seems safe to say that with more attorneys competing for limited "business" opportunities, that it is not in the best interests of many skilled practitioners to sacrifice time engaging in the tutelage of "law clerks" instead of tending to the business of law and their practices. Judge Schwartz stated that prac-
ticing lawyers do not take care of law students by sharing their “so-called knowledge” as they had done in the past.

It was encouraging to see a concerted effort to reinvolve members of the Bar via the Alumni Assistance Program (TAAP) last year, although it now seems that this tremendous idea died quickly. Though matching law students with alumni is a tremendous idea and will provide the student with a valuable source of advice, both substantive and procedural matters. He first suggests that a student interested in practicing in probate and estate matters attend their future practices. Organizations such as these would be the ideal venue for students to become familiar with the Probat e, Estate and Fiduciary Law Society should be organized and chartered at the law school.

Judge Kelly cites several means by which a law student can become more knowledgeable in both substantive and procedural matters. He first suggests that a student interested in practicing in probate and estate matters attend Orphans' Court hearings as all are held in open court, with the exception of adoptions.

Also, all of the Orphans' Court records, except adoptions, are public records and available at the Register of Will's Office in the City-County Building. In fact, Judge Kelly stated that when he first began practicing, he would review files, especially the testimony, so that he would know the right questions to ask and what must be filed and in what form.

The valuable suggestions of Judge Kelly can be carried a step further. If one reviews the law society choices at our law school, they are very few and highly specialized. Further, there are no clinical opportunities currently available that would provide a student with experience in probate and estate matters, unless the student procured his or her own "externship" with a seasoned practitioner. Thus, a Probate, Estate and Fiduciary Law Society should be organized and chartered at the law school.

Next, proceedings should be commenced to charter, organize and incorporate a non-profit legal clinic that will provide a variety of legal services to the many low income and indigent individuals who fall through the cracks. Some of the services such a clinic could provide are as follows:

1. Prepare and present petitions and orders of court for the appointment of guardians of the person for minors.
2. Represent petitioners in incapacitated proceedings where the person is indigent.
3. Represent indigent incapacitated persons who seek review hearings to have the guardianship either limited or removed.
4. Represent the next-of-kin of an alleged incapacitated person who wishes to address the court to suggest alternatives for the care of the incapacitated person.
5. Represent the low income next-of-kin who contest an estate accounting.
6. Devise and implement a Fiduciary Training Program designed to inform laypersons newly appointed as guardians of their duties and responsibilities to the ward and his or her property.
7. Investigate instances of physical and financial abuse of the elderly and initiate the appropriate proceedings.

A legal clinic focused on this area of the law could and would provide the student with invaluable client relations and court experience while concurrently serving the needs of a significant segment of the Allegheny County population that is now underserviced.

A well organized and operated Probate, Estate and Fiduciary Law Society and clinical program, with the benefit of both a faculty advisor and practitioner consultant, would provide the law student with a full view of this vital area of the law and would prove invaluable in preparing law students for their future practices. Organizations such as these would be the ideal venue for students to become familiar with the Probate, Estate and Fiduciary Code, which according to Judge J. Warren Watson, is a necessity, as many that come before the court have an insufficient grasp of its contents.

Steven M. Regan is a second-year evening student at the Duquesne University School of Law and serves as Senior Editor of Juris.

Reference

The Crime Doctor

Dr. Cyril Wecht Goes Over a Crime Victim With Tenacity—

When He’s Not Helping Investigators Solve Crimes, the Nationally Renowned Forensic Pathologist Teaches Law at Duquesne University

By Elisa Tighe (with contributions from Steven M. Regan)

The collective faculty of the Duquesne University School of Law consists of preeminent scholars and educators nationally and internationally known for their contributions to the law and legal education, a fact that seems to belie its classification as a regional law school. Dr. Cyril Wecht, a Duquesne professor since 1962, is one such individual.

Dr. Wecht earned his medical degree from the University of Pittsburgh Medical School in 1956 and while interning at St. Francis General Hospital, he took the Law School Admissions Test. He recalls “scoring in the 99th percentile on the exam despite having been on call the night before.” Although Dr. Wecht was accepted at Harvard and Yale law schools, he decided to attend the University of Pittsburgh Law School so that he could complete his medical residency requirements at the Veterans’ Administration Hospital. In addition to attending law school and the demands of his residency, Dr. Wecht also moonlighted at three or four different hospitals and despite this hectic schedule, he stated that he “still managed to do things [such as] have dates at the hospital where we would sit and have coffee and talk.”

After two years of law school and his residency, Dr. Wecht was summoned for military service as an Air Force Pathologist. He served at the Air Force Center for Pathology at Maxwell Air Force Base in Montgomery, Alabama. Because the Air Force Center of Pathology was so large and offered Dr. Wecht the ability to tend to a large and diverse workload, he “received credit for two years of my [medical] residency without having to pay the military back.”

After his commitment to the Air Force ended, Dr. Wecht was able to finish his law degree in the evening at the University of Maryland Law School in Baltimore while employed during the day as Associate Pathologist and Research Fellow in the Office of the Chief Medical Examiner for the state of Maryland.

Dr. Wecht has served as the Chief Pathologist and Chairman of the Department of Pathology for Pittsburgh’s St. Francis Medical Center since 1973. Now, one could say that his career in public service has come full circle as he was once again elected as Coroner of Allegheny County last November after having previously served in that capacity from 1970 to 1980.

Why would a world renowned forensic pathologist return to public office after a 15-year hiatus? Dr. Wecht stated that while he “initially rejected the concept of running for the office again”
because he “did not need it in my life financially or professionally,” he was drawn back to the Coroner’s Office for a number of factors. First, he was concerned that his opponent in the primary election lacked the requisite expertise in forensic pathology, a qualification he feels is very important. Secondly, he stated, “many pathologists were very unhappy about how the office was deteriorating and implored me to come back.” Finally, and most importantly, Dr. Wecht returned to the office he held for the entire decade of the 1970s because, “It’s what I do, what I know and what I teach, write and talk to groups about. This is my field.”

Although Dr. Wecht had earlier in his career been adamant about maintaining the Allegheny County Coroner’s Office as an elective office rather than changing to an appointed medical examiner, he is less vigilant than before. “I used to be a total hardliner for an elected medical examiner,” he said, “but I’m balanced today.” While Dr. Wecht still prefers the elective method “to ensure the office would function on a professional basis,” he would not oppose legislation, if introduced, that would change the Coroner’s office to an appointed position.

Dr. Wecht prefers the elected form of retention for the Coroner’s office because, “[The] office functions as a quasi-magisterial office. There are tremendous powers of inquiry in the coroner’s office which medical examiners do not have.” Most importantly, Dr. Wecht believes that electing a coroner is preferable to an appointed medical examiner because, “medical examiners do not have the power to make in-depth investigations, and the few that do have it do not utilize it. I cannot even think of an example of an appointed medical examiner office that has done the kind of full-blown open inquiry that was done, for example, in the Jonny Gammage case. It is not because these offices don’t care. It is because that they do not enjoy the independence from the executive and legislative branches in the counties in which they serve.

In his first book, Cause of Death, and in his forthcoming book, due later this year, Dr. Wecht analyzes and criticizes the handling of many high profile deaths and the examination of the corpses. He stated that it is no coincidence that most of these cases involved appointed rather than elected medical examiners. He stated, “The difference between the two systems is a matter of attitude and philosophy. It involves an understanding and appreciation of what the job entails and what the overall obligations are to society.” According to Dr. Wecht, this kind of awareness and appreciation of the sense of obligation to community and society does not necessarily extend to or arise out of a system where the medical examiner is appointed.

Upon his return to Pittsburgh in 1962, Dr. Wecht began his practice as an attorney, forensic pathologist and Duquesne law school professor. In the three decades he has been associated with Duquesne, he has also held faculty positions in the School of Pharmacy and Graduate School of Health Sciences.

Although Dr. Wecht has strong beliefs as to the future of legal education and particularly legal medicine, he feels that as an adjunct professor, his involvement as to the law school should not extend beyond fund-raising endeavors because, as he stated, “I don’t think it would be proper for me to engage in the decision-making processes other than to help with fund-raising. The full-time faculty are the ones that should make the decisions.”

That is not to say that Dr. Wecht has not been involved in more than fund-raising. Recently, he was instrumental in organizing a two-day seminar for appellate court judges on issues involving forensic science, medicine and their impact on the law. Duquesne was chosen as the sponsor by Pennsylvania Supreme Court Justice John Flaherty. According to Dr. Wecht, “It was a big honor for the school. Dean Cafardi contacted me and asked me if I had some ideas for the seminar in the field of forensic science and medicine. So I lined up all the faculty,” which included the now famous Barry Scheck of the Benjamin N. Cardozo School of Law. Dr. Wecht stated that the program, held at Nemacolin Woodlands, was very informative and the judges were more than satisfied with the results (see page 15).

As an educator, Dr. Wecht feels most comfortable. Despite taking on the additional responsibilities of Coroner of Allegheny County, he has continued to teach. He stated that he does not have to teach “for identification or enhancement of my credentials,” but continues to do so because, “I like students and talking to lawyers and doctors because I like to deal with the pragmatics of the field.”

As to that field, law and medicine, Dr. Wecht has seen substantial growth and change. He surmises that the growing importance of medicine and medical evidence in the law can be traced to the Supreme Court’s several landmark decisions concerning constitutional criminal procedure and the rights of defendants handed down during the era of Chief Justice Earl Warren. Dr. Wecht stated that prior to those changes in the law, “it was common for a defendant to be moved from police station to police station so that it would be difficult for the defendant’s counsel and family to locate him, and it was common for police to abuse a defendant to solicit a confession in a way that no physical traces were left, such as flushing his head in a commode.” After those decisions were rendered, Dr. Wecht continued, “police and homicide detectives had to pay much closer attention to physical evidence,” which is where the medical and forensic pathology aspects of the law made their initial significant inroads.

In his Legal Medicine course taught at Duquesne law school, Dr. Wecht’s students have many opportunities to learn what he terms “the pragmatics of the field.” In addition to discussing many of the current issues and problems in the medicolegal field, Dr. Wecht presents actual cases which invoke those very issues and also offers the class the opportunity to visit the Coroner’s Office where his staff recently instructed his class on the functions of the office and educated them as to how the legal and medical fields merge, in
their experience. Dr. Wecht also urges and encourages his students to observe coroner’s inquests and autopsies.

In terms of presenting actual cases, there is no one with greater knowledge and experience to impart on students than Dr. Wecht. His first book, Cause of Death, published three years ago, recounted his experience and involvement as medical examiner and forensic pathologist for some to the most well known high profile deaths in the history of our country. Cases treated in the book included the deaths of John F. and Robert Kennedy, Mary Jo Kopeckne, Elvis Presley and Sunny Von Bulow, among many others. His second book, due out late this summer or early fall, will be much like his first, only the subjects will include his involvement with cases such as the O.J. Simpson trial, the Branch Davidian disaster at Waco, Texas, and the still controversial suicide of Vincent Foster, former staff counsel for President Clinton. Dr. Wecht’s students are truly fortunate to have a professor with such extensive experience.

In addition to the growing importance of bio-ethical issues such as the right to die, the right to treatment, abortion, surrogate motherhood, and physician assisted suicide, Dr. Wecht sees one very pressing issue hovering on the horizon of legal medicine involving medical economics, the law and ethics. That issue is the ramifications of managed care and gatekeeper system of primary care physicians. Although Dr. Wecht stated that “medical economics is another field altogether not under the rubric of legal medicine, such economic decisions impact legal decisions.”

To elaborate, Dr. Wecht hypothesized that legal issues will arise if and when a “managed care organization hires a particular group of primary care physicians to be their gatekeepers for $1 million for one year, but if the group goes over the contract amount, the physicians practice will pay the difference and the [managed care organization] will replace them with other gatekeepers, but if they cost the organization less than $1 million, then the gatekeepers get the balance as a profit.” Dr. Wecht surmised that the result of such a system is that the general practitioners will retain many of the patients they had previously referred to specialists and economics will enter the decision as to what health care will be delivered to the customer.

The legal ramifications of such a system will likely be if economics takes precedence over what is medically necessary to treat the patient, then issues of medical malpractice will surface. Also, financial arrangements between health care organizations and their gatekeepers similar to the one discussed above, may result in the managed care organization being held vicariously liable for the injuries or death of a patient not afforded appropriate treatment. To Dr. Wecht, “the bottom line is that you do not consider money in those situations. The patient’s welfare is most important.”

Dr. Wecht sees other significant areas where the areas of medicine, economics, ethics and the law will converge and present the practitioners involved and the family of the patient with a most difficult quandary. For instance, Dr. Wecht foresees a dilemma where it will have to be decided “how much to spend on an infant weighing less than two pounds and with several severe birth defects, or on a seventy-nine year old who has had four strokes and is presently on life support.” Not only will the cost factor be of significant contention, but also determining who will make the decision to continue treatment will be a point of issue among all interested parties.

Such complex issues have no simple solution, but, according to Dr. Wecht, law schools need to shed their “stodginess and conservatism” so as to implement fundamental changes in their basic educational product. For instance, Dr. Wecht believes that “curriculum changes have not been as dynamic nor have they kept up with the societal demands to the extent that they should have.” Dr. Wecht foresees one fundamental change that law schools will eventually have to recognize. As the practice of law becomes more complex and fields become more diverse and technical, law schools will soon have to realize that three years is not enough time to impart a quality education for the paying student. Dr. Wecht stated, “schools of pharmacy have recognized that five years is necessary” to deliver a quality education “and other disciplines have reached the same conclusion. Medical schools are getting close to realizing that more time is needed but still offer four year degrees. “For law school, it is becoming increasingly obvious that three years isn’t enough. It is impossible to educate a law student in the same three years that was given fifty years ago. When you think about it, it doesn’t really make sense.”

To augment the delivery of the substantive law, Dr. Wecht, although commending law schools for clinical offerings, believes there should be more of them. He stated that a law school residency requirement “analogous to medical school residencies and structured like medical residencies should be developed so a student interested in criminal defense work works with criminal trial lawyers.” Dr. Wecht also stated that he would be receptive to establishing a clinical program with the Coroner’s Office but, “it would have to be done in conjunction with the public defender’s office or District Attorney’s Office because there is not enough legal in nature” in the Coroner’s office for it to sustain its own legal clinic.

At this point in his career, Dr. Wecht’s plate is still very full. His many roles include elected Coroner of Allegheny County, Chief Pathologist and Chairman of the Department of Pathology for St. Francis Hospital, law professor, and author. Legal education reformer is just not in the cards for Dr. Wecht. He stated, “If I were thirty-five years younger, I might try to get something going, some kind of ad hoc committee regarding legal education reform to feed into the American Bar Association.” For now, The Duquesne University School of Law, including the student body, will just have to be content with having Dr. Cyril Wecht as an adjunct professor.

Elisa Tighe is a second-year day student at the Duquesne University School of Law.
Under the Microscope
Issues of Science and Law Examined at Judicial Conference

By Kim Strohm

The Conference entitled "Science & the Law" was organized and presented by the Supreme Court of Pennsylvania and Duquesne University School of Law’s Institute of Judicial Education.

The Conference began with opening remarks by Justice John P. Flaherty, Jr. who explained this was the first "historic conference" for the collaboration, and it would be the beginning of what he hopes to be many more conferences. After remarks by Dean Nicholas Cafardi of Duquesne Law School, the floor was turned over to Dr. Cyril Wecht, who served as moderator for the two-day event.

As explained by Dr. Wecht, the particular topics for the conference were chosen with an emphasis placed on appellate judicial education.

The areas of law chosen were based upon their significance, prominence and controversy in the legal arena currently and with anticipation for the future.

The speakers which made presentations are all prominently known in their areas of expertise and in the case of Professor Barry Scheck, from the Benjamin M. Cardozo School of Law, to the general public as well.

Professor Scheck spoke about "DNA and its Application in Civil and Criminal Cases;" Wecht, Chairman, Department of Pathology and Chief Pathologist, St. Francis Central Hospital, discussed "Legal Medicine and Forensic Science;" Professor James Starrs, The George Washington University School of Law, reviewed "Recent Developments in Federal and State Rules Pertaining to Medical and Scientific Testimony;" Professor Lewis Kuller, University of Pittsburgh School of Public Health, informed his audience on "Epidemiology Studies—Relevance and Significance in Litigation;" Professor George Annas, Boston University Schools of Medicine and Public Health, addressed "Right to Die Medicolegal Issues;" and the conference concluded with a discussion on "Toxic Torts" by Professor Jack Snyder from Thomas Jefferson University.

Knowing Barry Scheck was attending, I have to admit I was very excited about his presentation. It was the closest I had ever come to meeting someone who was involved in the O.J. Simpson trial.

Professor Scheck did make light of the "trial of the century" by sharing with us some humorous news reports and publications about the trial, but he quickly focused on his primary objective: to give his audience a better understanding of the procedures and tests conducted in relation to DNA evidence. He had quite a weighty task considering DNA was something I left back in my high school science books.

Professor Scheck emphasized throughout his discussion the great attention to detail and precision necessary during the various stages of (1) collecting the samples, (2) conducting the laboratory tests and (3) calculating the statistical analysis of the actual test results. Any error(s) made during these stages will make the results of the test unreliable.

As an example, Professor Scheck explained that blood stains are the most difficult to test for DNA because DNA comes from white blood cells, and if the blood of more than one individual is present, it is very difficult to sort out the mixture. During the statistical analysis the calculations involved magnify any errors from the difficulty in sorting which makes the DNA results and interpretation very unreliable.

The opportunity for such error makes it difficult in the court system to rely upon the DNA evidence being presented in a particular case. Professor Scheck recommends a regulatory system for the laboratories with a review board so that minimum and consistent standards are met to combat the chance for error. Professor Scheck pointed out that
having such a system would reduce the
costs involved in DNA cases because ad­
missibility hearings would not last for
two months at a time. According to Pro­
fessor Scheck, such a hearing was even

too expensive for OJ. Simpson.

For those interested in learning
more about this area of law, Professor
Scheck recommends reading “DNA Tech­
nology in Forensic Science” by the Na­
tional Research Council which discusses
the future of and challenges for this new

technology.

Expanding upon the need for regu­
lating laboratories, Professor Starrs from
George Washington University com­
mented in his presentation that when
deciding to admit evidence during a trial,
it is not enough for the judge to merely
look at the theoretical status of the meth­
odology. Rather, the judge must decide
to accept the fact that the person who con­
ducted the procedures involved in test­
ing did so properly by performing all the
steps in the proper sequence and time
limitations.

For instance, if the laboratory tech­
nician or retriever merely sneezes, that
can contaminate the sample, and the
DNA of the technician will be amplified
in the test results. Following the proper
protocol is the key of determination once
the established methodology is accepted.

Professor Starrs also clarified a com­
monly misplaced reliance on the often
used statement that a gun was “recently
fired.” He informed us there is no scien­
tific evidence to prove this. What this
statement means is only that the gun had
been fired since its last thorough clean­
ing, which may not have necessarily been
recent. So this is an inconclusive state­
ment.

Overall Professor Starrs expressed
his view that we should restrain the use
of scientific evidence by making certain
all necessary steps which were conducted
during the testing are admitted as evi­
dence to show whether proper techniques
were followed. This is the holding of Frye
v. United States.¹

The problem arises, however, in the
interpretation of what is “scientific” evi­
dence. For instance, Professor Starrs says
that some evidence is considered to be just
like a photograph, and thus the Frye test
does not apply because no scientific is­

The opportunity for...error makes it difficult in the court system
to rely upon the DNA evidence being presented in a particular case.
Professor Scheck recommends a regulatory system for the laboratories
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expensive for O.J. Simpson.”

¹ 293 F. 1012 (D.C. Cir., 1923).
Snuffing Out Reasonable Doubt

Forensic Evidence Often Snuffs Doubt from the Jury’s Mind; The Tricky Part for Prosecutors is Getting It Admitted at Trial.

By Michele A. Forte

In the past one hundred years our society has developed a strong reliance on science and technology. The criminal justice system, as a function of society, has also developed such a reliance. When science and technology are applied to evidentiary issues in the law, it is known as forensic science.

Forensic science is a broad classification that encompasses many specialty areas. For example, forensic medicine is the application of medical science to legal problems. Forensic odontology is the application of dentistry to human identification. Forensic psychology is used to establish criminal profiles and to evaluate an individual’s psychiatric condition in relation to his actions constituting criminal behavior. The broad term “criminalistics” is used when referring to trace evidence such as fingerprints, fiber analysis, blood and body fluids, firearms and tool mark comparison and drug identification.

Any of these techniques can produce scientific evidence that can be used by law enforcement to investigate crimes, and later introduced as circumstantial evidence at trial by either the prosecutor or defense attorney.

Some commentators attribute the increase in the importance of forensic evidence to the United States Supreme Court’s “Warren Years” where many cases were decided fashioning the 4th, 5th and 6th Amendment exclusionary rules.1 Decisions such as Gideon v. Wainwright,2 Escobedo v. Illinois,3 and Miranda v. Arizona,4 along with others, forced police to develop new approaches to investigation and placed a much greater emphasis on the use of forensic evidence.

Prosecutors who formerly relied primarily on physical evidence, confessions and lay testimony soon began to use scientific evidence and expert testimony routinely at trial. The use of expert testimony at trial aids the judge and jury in their understanding of complex or specialized scientific principles.

Presumably “the trial process seeks out expert testimony because the expert ... possesses knowledge that the judge and jury lack.”5 The use of scientific experts at trial has been steadily increasing since World War II due to the advancements in the biological sciences and other technologies. This, coupled with the increase of litigation in both civil and criminal law, has resulted in routine use of doctors and scientists to evaluate facts and present expert opinions at trial.

Expert testimony has been a trouble spot for courts dating as far back as the 14th century.6 Juries have a tendency to concentrate heavily on expert testimony concerning scientific evidence, while neglecting to focus on the actual issues being litigated. For this reason, the courts must take special care in protecting the defendant from expert testimony that may unduly influence the jury.

While there may be problems with expert testimony concerning forensic evidence, there has been a recognized need for the assistance of experts at trial. The United States Supreme Court in Ake v. Oklahoma7 recognized the due process right to expert assistance for indigent defendants. Justice Marshall delivered the opinion of the court, which held that:

When a defendant demonstrates to the trial judge that his sanity at the time of the offense is to be a significant factor at trial, the state must, at a minimum, assure the defendant access to a competent psychiatrist who will conduct an appropriate examination and assist in evaluation, preparation and presentation of the defense.8

A prosecutor or defense attorney will run into significant problems when they attempt to introduce expert testi-
mony based on a principle that has not received widespread scientific acceptance. If the court has not yet taken judicial notice of a particular test or principle, the attorney seeking to introduce that evidence must provide the court with sufficient proof of the test's reliability.

What standard the court will use in determining the admissibility of unproven or "novel" scientific evidence will depend on the jurisdiction and its standard of admissibility.

The first standard for admitting scientific evidence was probably the commercial marketplace test. The court would determine if the subject matter at issue was beyond the "range of knowledge of the average juror." If it was, a qualified expert would be permitted to testify. A person was considered a qualified expert if he could "make a living selling his knowledge in the marketplace." The reason being that those who prospered in their particular business presumably possessed expert knowledge of their profession.

By the twentieth century, attitudes toward science and experts had changed. The flaws in the commercial marketplace theory became apparent. The first flaw was that some fields of expertise had value only in the courtroom and lacked any utility in the commercial marketplace. The second flaw was that no one ever questioned whether a particular body of knowledge could be validated or tested separate from the expert who possessed it.

In 1923 the Court of Appeals of the District of Columbia dealt with these issues in Frye v. United States. The court had to rule on a single assignment of error: whether the trial court erred in refusing to allow a defense expert to testify concerning a systolic blood pressure deception test taken by the defendant. The court had to determine whether or not this test was admissible as evidence.

In finding that the test was inadmissible the court stated,

J ust when a scientific principle or discovery crosses the line between the experimental and demonstrable stages is difficult to define. Somewhere in this twilight zone the evidential force of the principle must be recognized, and while courts will go a long way in admitting expert testimony deduced from well-recognized scientific principles, the deduction made must be sufficiently established to have gained general acceptance in the particular field in which it belongs.

The "general acceptance" test of Frye finally separated the expertise from the particular expert and required a showing that others in the expert's particular field had tested and accepted his theories or ideas. Frye, however, was barely noticed by any other court until the 1970s, when scientific evidence became more important to criminal prosecutions in the wake of the Supreme Court rulings on new evidentiary standards concerning the admissibility of certain types of evidence obtained by the police. After that Frye became the accepted standard in at least forty-five states.

In 1975 the Federal Rules of Evidence became effective and caused much confusion concerning the appropriate standard of admissibility for novel scientific evidence. The Federal Rules allow testimony by experts when such "scientific, technical or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue...." In order for the testimony to be presented it must also be relevant and reliable.

Rule 402 of the Federal Rules of Evidence implicitly abolishes Frye for use in federal courts by stating,

All relevant evidence is admissible, except as otherwise provided by the Constitution of the United States, by act of Congress, by these rules, or by other rules proscribed by the Supreme Court pursuant to statutory authority.

The argument raged on, however, for almost twenty years until the Supreme Court addressed the issue in Daubert v. Merrell Dow Pharmaceuticals. In short, the court held that the Frye test was superceded by the adoption of the Federal Rules of Evidence, specifically by Rule 702, governing testimony by experts. The court stated,

The drafting history [of the Federal Rules] makes no mention of Frye, and a rigid "general acceptance" requirement would be at odds with the "liberal thrust" of the Federal Rules and their "general approach of relaxing the traditional barriers to 'opinion' testimony."

The court then went on to say that the displacement of the Frye test by the Federal Rules does not mean there are "no limits on the admissibility" of novel scientific evidence. To the contrary, the court held that the rules, "especially Rule 702, assign the trial judge the task of ensuring that an expert's testimony both rests on reliable foundation and is relevant to the task at hand."

Reactions to Daubert have varied. One critic of Daubert contended that the court was extremely vague "on what degree of scientific reliability the trial court should require before admitting the evidence under Federal Rule 702." But a supporter of Daubert found the decision to be "a good first step in the right direction" because it requires judges under 104(a) of the Federal Rules to examine the proffered science and be decided "by a preponderance of the evidence, that the scientific evidence is valid."

As for the state courts, those that have adopted the Federal Rules of Evidence, must adhere with Daubert because "the Supreme Court is the ultimate authority on its rules of evidence."

The Delaware Supreme Court held in Nelson v. State that the standard of admissibility of scientific evidence was subject to the requirements in Daubert, because the Delaware Rules of evidence were modeled after the Federal Rules. Other states, such as Pennsylvania, which have not adopted the Federal Rules, continue to use the Frye general acceptance test.

In 1994 the Pennsylvania Supreme Court ruled on the admissibility of DNA evidence in Commonwealth v. Crews. In upholding the Frye test as the applicable standard in Pennsylvania, the court said, "[W]hen scientific advances produce new types of evidence, admissibility of such evidence depends on the test first laid down in Frye v. United States." The court then found that the trial court had properly admitted the DNA evidence because it had gained general acceptance in the scientific community. Perhaps the true test of Daubert will be whether state courts that have not adopted the Federal Rules of Evidence will abandon the Frye test for the Daubert Rule 702 test.
References

5 David L. Faigman et al., Check Your Crystal Ball at the Courthouse Door, Please: Exploring the Past, Understanding the Present, And Worrying About the Future of Scientific Evidence, 15 Cardozo L. Rev. 1799, 1801 (1994).
8 470 U.S. at 83.
10 David L. Faigman et al., Check Your Crystal Ball at the Courthouse Door, Please: Exploring the Past, Understanding the Present, And Worrying About the Future of Scientific Evidence, 15 Cardozo L. Rev. 1799, 1804 (1994).
11 Id. at 1803.
12 Id. at 1804.
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As long ago as the drafting of the U.S. Constitution, American legislators have recognized the need to develop and protect the ideas of inventors. Article I declares that Congress has the power "[t]o promote the Progress of Science and useful Arts, by securing for limited Times to...Inventors the exclusive Right to their respective...Discoveries."1 Pursuant to this grant of power, Thomas Jefferson penned the first patent legislation in 1793. When Congress recodified the various patent statutes in 1952, the drafters were careful to retain the expansive language of Jefferson's original enactment.2 In fact, the Committee reports accompanying the recodification indicated congressional intent to make patentable "anything under the sun that is made by man."3 Modern-day biotechnology challenges legislators and jurists to stand by that oft-cited maxim. Indeed, genetic manipulation raises questions previously posed only in the fantastic musings of science fiction writers and the intellectual hypotheticals of philosophers.

The founders recognized that a system whereby inventions and ideas were recognized and afforded property rights would serve as an economic incentive to expand the boundaries of technology.

Correspondingly, the subject matter for which a patent may be granted is very broad. Specifically, a patent may be granted for "any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof...."4 The three additional requirements of novelty, utility and nonobviousness must also be met before a patent will be issued; however, when the invention sought to be patented has a life of its own, the biggest roadblock to patentability is whether it meets the statutory subject matter criterion.5

The birth of intellectual property in animal life occurred in 1980 with the Supreme Court's landmark decision in Diamond v. Chakrabarty.6 The patent applicant in that case had combined the genetic components of four different naturally occurring bacterium to produce a single microorganism which could break down crude oil.7 The patent examiner rejected the patent claim to the genetically engineered bacteria on the grounds that microorganisms were "products of nature" and that as living things, they did not fall within statutory allowed subject matter.8 The case was eventually granted certiorari and presented to the Supreme Court.

The Commissioner of Patents and Trademarks, argued that living things were not patentable because the patenting of living things was unforeseen by Congress. Therefore, it was argued, the Court should wait until Congress has had a chance to address the issue before granting such a patent.9 The Commissioner urged that Congress was best able to evaluate the competing interests involved and should rightfully be the branch to decide whether living things should be patentable.10

Invoking the well-known mantra of Marbury v. Madison, the court intoned that "once Congress has spoken, it is the province and duty of the judicial department to say what the law is."11 Seizing no ambiguity in the language of the statute, the Court held "[b]road general language is not necessarily ambiguous
when congressional objectives require broad terms." Addressing the Commissioner's concerns that new inventions and principles not contemplated by Congress should not be afforded patent protection, Justice Burger chastised, "[a] rule that unanticipated inventions are without protection would conflict with the core concept of the patent law that anticipation undermines patentability." 18

In response to the charge that allowing patents on genetically altered living organisms would endanger human life as is currently known, the court noted that granting a patent or denying one would have very little effect on research already underway. The Court acknowledged that technology will march on, virtually oblivious to risk in some cases, and further, the patent system is a dike not high enough to check the rising tide that is the quest for knowledge.

Thus disposing of the Commissioner's subject matter challenges, the Court proceeded to the customary requirements for patentability. Since Chakrabarty's bacterium was significantly different than any found in nature and had "the potential for significant utility," the Court found the discovery patentable. 20 While Chakrabarty merely held a genetically altered bacterium was patentable, the sweeping language of the opinion opened the door for inventors of other genetically altered organisms to submit patent applications.

In 1987, the decision in *Ex parte Allen* expanded the significance of the earlier decision in *Chakrabarty*. 21 *Allen* questioned the patentability of genetically manipulated oysters. While the Court dismissed the claims on other grounds, it held genetically manipulated oysters were patentable subject matter under the statute. 22 This decision prompted the Commissioner of the Patent and Trademarks Office to issue a notice concerning the availability of patents for animals. The notice proclaimed, inter alia,

"The Patent and Trademark Office now considers non-naturally occurring non-human multicellular living organisms, including animals, to be patentable subject matter..." 23

In the wake of this official acquiescence to the patentability of genetically altered animals, Harvard University became the first patent holder of an animal patent in 1988. The 'Harvard Mouse' as it is called, was genetically engineered to develop cancer so researchers could study breast cancer with the aim of developing a cure for humans. 24

Throughout this evolutionary period for the patentability of genetically engineered higher organisms, the question of patentability of altered human life forms remained unanswered. The aforementioned statement issued by the Patent and Trademark Office preempted this question by further announcing,

[a] claim directed to or including within its scope a human being will not be considered patentable subject matter under 35 U.S.C. §101... 25

Perhaps paradoxically, patents on portions of the human genome itself have been issued. 26 Scientists have been able to identify sections of DNA which contain the recipe for certain bodily chemicals and the Patent and Trademark Office has declared that as long as the DNA sequence is isolated and purified, it is sufficiently removed from nature that it is patentable.

This "products of nature" doctrine was first applied in *Funk Brothers*. 27 The general idea is that when a patent applicant attempts to obtain a patent on a combination of bacterium, for example, a patent will not issue if the individual bacterium are unchanged from their natural state. 29 If the combination of naturally occurring items fails to rise to the level of patentability, it would seem that a purified and isolated version of a portion of a person's DNA severely strains the "products of nature" doctrine since isolation and purification are the only alterations to the DNA.

Perhaps in response to this criticism, there are now several cases in which the Court has expressed its willingness to issue a patent for a genetic sequence that exists in nature where the sequence is isolated and purified. The one further requirement is that there must be some advantage over the sequence in its natural state. 30

Given the concurrent advancement of the patentability of genetically altered animal life forms and the availability of patents for isolated and purified sections of human DNA, what lies in the way of patent rights in people themselves? An additional portion of the aforementioned 1987 PTO notice stipulates

[The grant of a limited, but exclusive property right in a human being is prohibited by the Constitution...]

Although the Patent and Trademark Office lacks the authority to rule on Constitutional issues, the PTO's statement probably refers to the 13th Amendment. 32 The 13th Amendment reads, in pertinent part,

"Neither slavery nor involuntary servitude... shall exist within the United States...[and further] Congress shall have power to enforce this article by appropriate legislation." 33

While this amendment gives Congress wide latitude in passing legislation to enforce the amendment, that power has been extended in modern day jurisprudence to encompass state and private actions that amount to "badges of slavery." 34 At least one commentator has pointed out that, to the extent the knowledge that a person possesses a patented genetic make-up takes away from his notion of himself as an individual, his personal freedom may be offended. This, in turn, may be seen as a restriction upon his 13th Amendment constitutional rights because it is a "badge of slavery." 35

Another potential constitutional problem that could arise if patents were granted on genetically altered human beings arises from the rights a patent inherently affords. Patent holders have the right to exclude others from manufacturing the patented object. They may, in fact, bring suit for damages if infringement occurs. What happens if a genetically manipulated person who has a patent upon their gene sequence decides to have children? Could it be seriously argued that patent rights have precedence over reproductive rights?

Patent rights are economic in nature. A person having a property interest in the manufacture of a particular
sequence of DNA would not have the right to lock a person up in his basement just because that person happened to benefit from the genetic alteration. The intellectual property owner would merely have the right to preclude another from "manufacturing" that alteration. The patent holder's rights could be limited to a particular technique (depending on the patent) or could be as broad as keeping others from producing the patented alteration by a substantially similar method. Natural reproduction, however, would definitely not classify as a 'substantially similar method.' Finally, it should be noted that patents do not confer an eternal property interest in the subject matter; they are only valid for a limited time—currently twenty years from the date of filing.37

While patents have been issued for increasingly complex animal life forms, the PTO has declared that patents on genetically altered human beings are unconstitutional. Seemingly in contradiction with this philosophy, the PTO has recently granted patents on purified, naturally occurring, man-made life: Genetically Engineered Human Beings: Should They be Patentable?1

The issue of human patentability has yet to come before the Supreme Court; however, it is only a matter of time. The building blocks exist to greatly improve the human experience. To blind ourselves to the possibilities, even if we could, would be the greatest injustice of all.

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members of Pennsylvania's congressional delegation were weighing a tough decision in 1990: Should they protect the environment? Or should they protect jobs?

When the gavel finally fell on wide-reaching amendments to the Clean Air Restoration and Standards Attainment Act, the environment clearly won, especially in Pennsylvania.

President Bush subsequently signed the Clean Air Act amendments into law, and the price of doing business in Pennsylvania jumped significantly. Six years later, those charged with attracting business to Western Pennsylvania complain loudly that the Clean Air Act is a huge roadblock to economic growth in the region.

"There are companies out there that look at our region but don't seriously consider Pennsylvania because the [pollution] restrictions are too hard," says Harold Miller, director of the Southwestern Pennsylvania Growth Alliance, which promotes economic growth in the region.

"There are other companies out there that we don't even know about because they don't even look here from the beginning," Miller says.

The air quality in Western Pennsylvania has gradually improved since the collapse of the steel industry. Nevertheless, the Clean Air Act remains intact, requiring companies that emit certain pollutants to purchase what are known as "emission credits." Some manufacturers, because of increased efficiency or plant shutdowns, possess more credits than they need, so they are willing to sell them to a company like Sony that needs credits to move ahead with a project.

To make a long story short, companies in Pennsylvania have to pay to pollute. And the excessive costs push both new and existing companies to Ohio or West Virginia, where the federal pollution restrictions under the Clean Air Act are less stringent. Companies don't have to pay to pollute in Ohio and West Virginia, so it's cheaper to do business.

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Gasping for Breath

Some Say the Clean Air Act is Suffocating Pennsylvania Businesses and Choking Economic Development.

Jim Urban Looks at the Controversial Law.
The Vote

Some say 1990 was a time when taking steps to preserve the environment was one way politicians survived the next election. Pennsylvania politicians did nothing to dispel that theory.

All but one Pennsylvania congressman voted in favor of the Clean Air Act amendments, despite what corporate heads in Pittsburgh said was obvious: The ramifications of such a bill on Pennsylvania business would be felt for years. The lone dissenter was Republican U.S. Rep. Bud Shuster of Altoona, who shouted "Nay" when the House voted on the bill. The rest—including then-U.S. Rep. Tom Ridge of Erie—voted affirmatively. In defense of Ridge and his Pennsylvania colleagues, they weren’t the only legislators who fell in line behind the bill, which eventually breezed through both the House and Senate. In the House, the vote was lopsided at 401-25. The Senate vote was 90-0.8

Ridge and many other lawmakers acknowledged the impact on business, estimating the amendments would take about $22 billion annually from the economy. Ridge, in fact, was among many legislators who criticized the Clean Air Act amendments for the negative effect they would have on business.

Three months before Congress sent the bill to the White House, Ridge took the House floor in Washington, D.C., on May 23, 1990, and predicted dire consequences for big business.10

"We know that people are going to lose their jobs as a direct result of this legislation, and, oh, indeed what a bitter irony that is," Ridge told his House colleagues from the podium. "The good news for the people is that they are going to have cleaner air to breathe. The bad news is...they are going to be out of work...."

—Tom Ridge, 1990

In a nutshell, the law marked the first overhaul of the federal clean air law in 13 years. It required new pollution controls on automobiles, factories, thousands of businesses and coal-burning power plants.14

Specific to Pennsylvania, the amendments designated Allegheny, Armstrong, Beaver, Butler, Fayette, Washington and Westmoreland counties as a "moderate nonattainment" area for ground-level ozone. That designation was based upon high ozone levels the region experienced during the drought of 1988. With such non-attainment designation comes the stringent and more costly pollution requirements.15

Even worse: The amended Clean Air Act placed the region in the Ozone Transport Region, another black list. So even if southwestern Pennsylvania’s air quality improves to the point where the region is redesignated as an attainment area under the law, businesses here will continue to face stringent pollution regulations because they are located within the transport region.16

Consider these requirements:
- Outside businesses locating here, or existing ones looking to expand, must pay to pollute. They purchase emission credits from other companies that have more than they need. The buyer must obtain enough credits to cover 115 percent of their own emissions.17
- An existing business in southwestern Pennsylvania is required to install reasonable available control technology, or RACT, on top of other emission controls. The estimated cost is $1,500 per ton of emissions.18

One Company’s Story

Perhaps no company knows the economic effect of the Clean Air Act on Western Pennsylvania better than Sony. The electronics giant spent about $3 million acquiring emissions credits so it could build a glass plant across the street from its existing facility near New Stanton, Westmoreland County.19 The glass facility will open next year and employ about 600 people, producing the glass Sony uses in its picture tubes.20

But the glass facility project almost didn’t happen. Sony executives admitted that they had set a price limit for procuring the emissions credits. The company liked the region’s skilled workforce and its infrastructure, but had costs exceeded the limit, the project wouldn’t have moved forward in western Pennsylvania.21

Procuring the credits wasn’t easy. The search lasted about one year and included a trip to U.S. Bankruptcy Court for an auction of emissions credits held by the former General Glass Co. of Jeannette, Westmoreland County. At the auction, another bidder with considerably deep pockets—General Electric—showed up and bid up the price.22
Sony did end up with the General Glass emissions credits and bought the remainder of what it needed from Sharon Steel Corp., which had more credits than it needed. So Sony moved ahead with the project. But while Sony’s story definitely is one of success, it also illustrates the burden the Clean Air Act places on companies that do business in Pennsylvania. Moreover, it illustrates why many companies won’t consider southwestern Pennsylvania as a place to locate a manufacturing facility. Just look at the $3 million Sony spent to comply with the Clean Air Act.

Today

Ridge, ironically, in his current capacity as Governor of Pennsylvania has launched several attacks against the same measures he voted for in 1990. Late last year, for example, Ridge petitioned the Environmental Protection Agency to remove 37 Western Pennsylvania counties from the Northeast Ozone Transport Region, an area covering 12 northeastern and mid-Atlantic states that is subject to stringent and costly pollution control requirements.24

The region’s air today is not good, but it’s not bad. In fact, had it not been for unseasonably hot, humid periods during some recent summers, the region’s air would probably meet the ground-level ozone requirements set by the Clean Air Act.25 So some hold out hope that the region can soon gain attainment classification.

But there’s also the distinct possibility that the region’s nonattainment classification could be downgraded to “serious nonattainment.” During last summer’s unrelenting heat, the level of ozone recorded at one monitoring station in the region was the highest it has been since 1988, according to the Allegheny County Health Department.26

If a downgrade occurs, the 115 percent capacity requirement on new or expanded plants would jump to 120 percent. And regulations that now apply to businesses that produce 100 tons of emissions annually would apply to businesses that produce 50 tons annually.27

Then there is the issue of the Ozone Transport Region. Even if the region wins attainment status, it still would be subject to stringent emission standards as part of the Ozone Transport Region. As previously mentioned, Ohio and West Virginia are not in the region, even though power plants in the Ohio Valley are a source of the pollutants blowing east.28

Even some environmentalists agree that Pennsylvania got a raw deal from the Clean Air Act amendments.29

One solution would be pushing the border of the transport region west and south, leveling the playing field by subjecting Ohio and West Virginia to similar requirements. But don’t expect cooperation from Congressional delegations in Ohio and West Virginia. They know they have an advantage.

In the meantime, Sony deserves credit for actually going through with the Westmoreland County project instead of locating the plant in Wheeling or elsewhere to avoid the aforementioned costs or hassles. Conversely, Sony at the same time is a benchmark for other manufacturers that might consider locating in the region despite the Clean Air Act.

Sony found advantages to locating in Westmoreland County and decided to eat the Clean Air Act costs. Until this region gets out from underneath stringent pollution requirements, we can only hope other manufacturers will weigh the benefits and costs, as Sony did, and reach a similar conclusion.

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Dave Kaleda Examines the Predicament Many Health Care Facilities Face When Employees Test Positive for HIV.

Precaution or Discrimination?

In the wake of the Fourth Circuit Court of Appeals decision in Doe v. University of Maryland Medical System Corporation, the attention of the legal and health care communities is again drawn to the AIDS crisis and the possibility that a treating physician, nurse, or other health care worker who is infected with the human immunodeficiency virus (HIV) will transmit the virus to a patient. Subsequently, the issue raised before our nation’s federal courts is whether hospitals and health care facilities can restrict the duties of a health care worker (HCW) or even terminate his employment if his infection with the HIV virus poses a threat to the health and safety of his patients.

The Doe court and others have established that a HCW infected with the HIV virus, or with AIDS, is not “otherwise qualified” to perform certain types of procedures due to their disability under both the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 (ADA). Subsequently, an employer can restrict or terminate an HIV-infected HCW’s practice or patient-care responsibilities under limited circumstances.

In Doe v. University of Maryland Medical System Corporation (UMMSC), Dr. Doe, a former resident of neurosurgery at UMMSC, brought claims against his employer UMMSC, under the Rehabilitation Act and Title II of the Americans with Disabilities Act (ADA) when his surgical privileges were revoked due to his testing positive for HIV. When he refused to accept alternative residences in a nonsurgical field, UMMSC fired Doe.

On appeal, Doe argued that the district court erred when it granted the hospital’s motion for summary judgment on the grounds that there was no genuine issue of material fact present proving that Doe was not “otherwise qualified” under the Rehabilitation Act and the ADA to practice in the surgical setting.

Pursuant to the Rehabilitation Act and the ADA, an employer cannot discriminate against an “otherwise qualified” individual with a disability. In order for a health care worker to prove a prima facie case that either of these statutes has been violated, he must prove: (1) that he does in fact have a disability, (2) that he is “otherwise qualified” to engage in the employment despite the disability and (3) that he was “excluded from employment” based solely on the disability.

A health care worker is not “otherwise qualified” pursuant to either statute if he poses a significant risk to the health or safety of others by virtue of the disability that cannot be eliminated by “reasonable accommodation.”

The Supreme Court has stated that the following factors should be considered in determining whether a health care worker or other employee with an infectious disease poses a significant risk to the health and safety of his or her patients: “(a) the nature of the risk (how the disease is transmitted), (b) the duration of the risk (how long is the carrier infectious), (c) the severity of the risk (what is the potential harm to the third parties) and (d) the probabilities the disease will be transmitted and cause varying degrees of harm.”

Because both parties agreed that HIV infection was a disability under the Rehabilitation Act and ADA and this condition was the reason for Dr. Doe’s termination, the Doe court focused its analysis on the second requirement, whether a health care worker infected with the HIV virus is “otherwise qualified” to perform in his employment despite his disability.

In determining whether a neurosurgeon who was diagnosed as HIV positive posed a significant health risk to his patients despite efforts at reasonable accommodation, the court relied on the guidelines published by the Center for Disease Control and the U.S. Department of Health and Human Services entitled Recommendations for Preventing Transmission of the Human Immunodeficiency Virus and Hepatitis B Virus to Patients During Exposure-Prone Invasive Procedures.

This report has proven to be the document most heavily relied on by the courts when determining whether an HIV positive HCW presents a significant health and safety risk to his patients which cannot be eliminated by reasonable accommodation.

In this report, the CDC acknowledged little is known about the HIV virus and all of the methods by which it is transmitted. However, the medical community has widely recognized that the virus can be transmitted through the exchange of blood or through the virus’s contact with the mucous membranes. Because the disease can be transmitted in such a manner, the CDC stated that there was a possibility that an HIV-infected surgeon could transmit the virus
Such a wound would include a laceration from a scalpel, a needle stick from a hypodermic needle or probe, or some other surgical accident.

The CDC also concluded that the risk was extremely slight. The estimated risk of a patient contracting HIV from a needle stick was between .0024%, or 1 in 42,000, and .00024%, or 1 in 417,000. However, the “accumulated risk” of transmission during a surgeon’s career is substantially higher, from .8%–8.1%.

Although the CDC recognized there was a slight chance that HIV could be transmitted through a surgical or medical accident, the CDC also distinguished between invasive procedures and “exposure-prone” invasive procedures in determining whether a health care worker’s patient-care activities should be limited or terminated due to the risk of HIV transmission. Invasive procedures include a wide range of activities which require a health care professional to enter the body cavity. For example, placing an intravenous needle into a patient’s vein or the vaginal delivery of a child would constitute an invasive procedure. Due to the nature of these procedures, there is little possibility of an exchange of blood or contact of the virus with a mucous membrane.

An “exposure-prone” invasive procedure, on the other hand, poses a much greater risk of percutaneous, or skin piercing, injury to the health care worker.

These “exposure-prone” procedures are found in the surgical setting where a surgeon or assistant is required to place his or her hands in the body cavity simultaneously with needles, scalpels or other sharp surgical instruments. Many of these operations are performed in areas where there is little visibility and little space, so the surgical instrument and the hands are in close proximity. Because the possibility of a percutaneous injury is greater under these conditions, the risk of HIV transmission increases due to the possibility that the HCW’s blood will come in contact with that of the patient’s, or the virus will in some other way contact the mucous membranes of the patient’s.

Based on its distinction between invasive procedures and “exposure-prone” invasive procedures, the CDC made the following recommendations. The CDC concluded that there was no scientific or medical basis for restricting an HIV-positive HCW’s participation in procedures, whether non-invasive or invasive in nature, as long as he strictly followed the following guidelines: (1) application of the universal precautions against infection, which include the washing of hands, use of barriers such as gloves, masks and eye protection, and the proper disposal of needles and other instruments; (2) adherence to accepted surgical or dental technique; and (3) application of the CDC’s current recommendations for instrument sterilization.

On the other hand, because participation in “exposure-prone” invasive procedures involved a greater likelihood of surgical accident, the CDC recommended that each health care facility determine which invasive procedures it conducts are exposure prone and how the HIV positive HCW’s role should be restricted or eliminated in such procedures.

In light of the CDC’s report on the prevention of HIV transmission in the health care setting, the court affirmed the district court’s entry of summary judgment and concluded that Dr. Doe was not “otherwise qualified” pursuant to the Rehabilitation Act and the ADA because he “posed a significant risk to the health and safety of his patients that cannot be eliminated by reasonable accommodation.” In so holding, the court rejected Dr. Doe’s argument that the risk of his transmitting HIV to one of his patient’s during surgery was so “infinitesimal” that the risk was insignificant under the Rehabilitation Act and ADA.

Despite the fact that the risk of transmission by surgical accident is small and that no known case of HIV transmission by a surgeon to one of his patients has never been reported, the court held that the mere risk of transmission is sufficient to establish the surgeon poses a significant threat to the health and safety of his patients. The court, in rendering its decision, focused on the grave consequences which may result from the transmission of the HIV virus, namely, the development of the deadly AIDS disease. Moreover, based on the CDC report and the hospital’s conclusion that all procedures provided by Dr. Doe were exposure-prone, the court held the risk of percutaneous injury could never be eliminated through reasonable accommodation. Subsequently, the district court’s entry of summary judgment in favor of UMMSC was affirmed.
the door has been opened for hospitals and health care facilities to restrict and even terminate the employment duties of a HCW infected with the HIV virus...

The courts have upheld actions similar to those taken by UMMSC in Doe. In Bradley v. University of Texas M.D. Anderson Cancer Center, the appellant, a surgical technician who was diagnosed as HIV-positive, brought an action against his employer, the Cancer Center, under the Rehabilitation Act of 1973 in response to his reassignment to the purchasing department after his public announcement that he was HIV-positive.

Bradley claimed that despite his disability, he was "otherwise qualified" to continue his employment as a technician and that his employer had refused to make "reasonable accommodation" by changing his job description so that he would not be required to place his hands within a patient's body cavity during surgery.

In reviewing the district court's entry of summary judgment, the Fifth Circuit Court of Appeals concluded that under the Rehabilitation Act Bradley was not "otherwise qualified" under the Rehabilitation Act to continue his employment as a surgical technician because he could not perform the "essential functions" of his job.

Relying on the CDC's report on the prevention of transmitting the HIV virus during exposure-prone procedures, the court concluded the risk of transmission was small but "not so low as to nullify the catastrophic consequences of an accident." Moreover, the risk of such an accident could not be eliminated by "reasonable accommodation" because his entry into the body cavity was an "essential function." The very reason for a surgical technician's presence in the operational field, to reach into the body cavity during surgery, subsequently exposes him to the risk of percutaneous injury. Thus, as the court found in Doe, the possibility of percutaneous injury could not be eliminated through "reasonable accommodation."

The Fifth Circuit also rejected Bradley's argument that he should have been reassigned to a position which involved patient contact. The court held that under the Rehabilitation Act an employer is not required to find an employee a particular job and that its only duty is to find "him alternative employment opportunities reasonably available under the employer's existing policies."

The Fourth and Fifth Circuit Courts' decisions were most recently followed by the U.S. District Court for the Western District of Michigan in Mauro v. Borgess Medical Center, the district court granted the hospital's motion for summary judgment on the grounds that the plaintiff, a surgical technician who was diagnosed as HIV-positive, presented no genuine issue of material fact proving he was "otherwise qualified" to perform the "essential functions" of his employment.

The court held the plaintiff's condition presented a "direct threat or significant risk to the health and safety of others." Moreover, the court was not convinced by the plaintiff's argument that his direct contact with a patient's incision was not an "essential function" of his employment as a surgical technician, but merely a "marginal function of the position." Although the need for a technician to come in direct contact with a patient's incision was infrequent, the court concluded that "the need for such assistance was foreseeable and is essential to the success of a surgical procedure."

In conclusion, as reflected by Doe, Bradley, and Mauro, a HCW that participates in "exposure-prone" invasive procedures is not "otherwise qualified" under the Rehabilitation Act and the ADA to perform these procedures due to the risk of HIV transmission to a patient.

Subsequently, the door has been opened for hospitals and health care facilities to restrict or even terminate the employment duties of a HCW infected with the HIV virus if the "essential function" of his employment includes participation in procedures which involve both direct contact with a patient's body cavity or mucous membranes and the possibility of a needle stick, laceration, or other surgical accident. Of course, the question remains unanswered whether a HIV-infected HCW participating in nonexposure-prone invasive procedures or non-invasive procedures is "otherwise qualified" because the risk of transmission during these procedures may be nonexistent or eliminated through "reasonable accommodation."

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Professor Bruce Ledewitz Tells How He and Students Survived a Summer Course that Mixed Law and Science Fiction

Asimov Goes to Law School

This past summer, I was able to teach a course entitled “Law and Science Fiction” in Duquesne University Law School’s summer program.

What is a “Law and Science Fiction” course about? There are obvious comparative law aspects to any species of “law and utopia” course, which “Science Fiction” clearly is. In addition, the course was meant to be a lark—a piece of summer fun.

But I had another purpose as well. As a fan, I have read a good deal of science fiction. In most of these readings, lawyers are absent. Lawyers do not go into space; nor does law play much of a role in solving the future problems of humankind.

For me, this state of affairs was not a minor matter. It suggested that law was regarded as irrelevant and possibly malignant to the basic concerns of people. Since the writers of science fiction are sensitive and insightful, this characterization of law was disturbing to me. I thought to examine the phenomenon close up. For me, that meant teaching a course.

Law Today

In the first part of the first class, I introduced the students to the current connection between law and advanced technology. This included the law of outer space and issues surrounding the patenting of non-naturally occurring life.

The discussion of the latter topic, for which the students read Diamond v. Chakrabarty, changed my attitude—and I think their attitudes—about the course and the relationship between law and technology. The United States Supreme Court held in Chakrabarty that a live, human-made microorganism is patentable subject matter under the statute. The students and I were already aware science fiction takes the dangers and consequences of such activity very seriously. So did Chief Justice Burger’s majority opinion. But the opinion discounted the danger by questioning the role of law in regulating the risks inherent in scientific advance: “[L]egislative or judicial fiat as to patentability will not deter the scientific mind from probing into the unknown...”

In a world that is new—such as the world of man-made life—the forms of law may also have to be new. If regulation is not to be done by courts and legislators, what ordinary processes are possible—and desirable—to oversee the ordering of scientific endeavor?

Or, is no ordering to be done? We were all sobered by Chakrabarty.

The second part of the first class had a more traditional law and literature focus: images of the law and lawyers in science fiction. We watched the most famous lawyer scene in recent movie history—the lawyer being eaten in Jurassic Park—and read two treatments of the law in “Star Trek: The Next Generation.”

Science fiction is attuned to current popular disquiet about law and lawyers. But the literature goes further, raising the questions, what does society need law for, and what kind of law. I asked the students about the lawsuits to come in Jurassic Park and whether this specter undermines—or justifies—Chief Justice Burger’s legal skepticism in Chakrabarty.

Modern Science Fiction

In this class, we took a wide-ranging look at common themes of modern science fiction. We noted five themes: regulating human-like life forms and the nature of technological disaster—for which we looked at portions of the movies “Blade Runner” and “The Andromeda Strain”—the computer that wakes up—The Moon is a Harsh Mistress—future domination by foreign corporations, and one theme that would be emphasized later in the course—the alteration of human consciousness.

The author and an otherworldly friend.
In terms of technological disasters, we returned to the first-class theme of the regulative role of law. We discussed the following quote from *Hot Sky at Midnight*, a novel set in a future of disastrous environmental degradation. Paul Carpenter, an employee of Samurai Industries, is trying to decide whether to issue a weather warning for a possibly oncoming toxic cloud. A warning could save lives.

"On the other hand, the toxic cloud could still turn around at any minute and go away without doing any harm. Broadcasting premature warning of an oncoming peril that wasn't actually coming could lead to needless factory closings and panic among the civilians; very likely a massive flight of people from the area, which would choke the highways and have environmental consequences of its own. After which would come a bunch of lawsuits demanding damages because the threatened disaster had failed to materialize. People would want to be paid for emotional stress, unnecessary expenses incurred, interruption of trade, any damned thing. Samurai Industries hated being entangled in lawsuits. They had pretty much the deepest pockets around, and everyone knew it."7

This quote reflects an important flaw in the judicial component of the legal system. As the environment worsened over time, there was no one to sue—and perhaps no one with standing to sue—to address the situation. But later, with catastrophe a fact, efforts to deal with it could be hindered by that same "impotent" legal system. We considered how Chief Justice Burger would respond.

Criminal Law

My major interest in the summer course was the model of criminal law in a context in which all facts could be known. Often in science fiction, devices allow all lies to be known or the past to be replayed. What, if anything, is left for law to do in such a world? The Rodney King episode emerged as a marvelous counterpoint to science fiction.

The theme of first contact with alien life raised issues of colonialism on the one hand and human independence on the other. We watched the wonderful opening of *The Day The Earth Stood Still*, in which humankind’s first response to alien contact is a military one. The short stories we read on this theme raised a number of issues along the lines of "us and them" and the place of the other-rich issues for law.

Economic and Religious Life

In this class, the students were able to speculate about what the future might be like. In terms of economics, modern science fiction tends to suggest either the all-powerful State or the decline of the nation-state and the rise of government by corporations. One short story we read, Bruce Sterling’s "We See Things Differently," described an Earth of competing religious-economic blocks. *The Moon is a Harsh Mistress* outlines the possibility of small scale, free market social and economic arrangements.

Science fiction treats religion either sympathetically or with hostility. For hostility we looked at a part of the movie version of "The Handmaid’s Tale." For a more sympathetic view, we looked at a science-fiction-like portion of Walker Percy’s book, *Lost in the Cosmos.*8 The question that emerged was whether religion represents a violent relic of a superstitious past, which we would do well to discourage in the future, or does religion represent one of the few forces that could shelter humanity from the inhumane forces of science and capitalism.

Long-Term Space Travel

The possibilities of long-term space travel made my students into the social engineers that lawyers were once thought to be.

There are four ways to solve the problem of unimaginable distances in science fiction: 1) an invention that transcends some of the laws of the universe—"worm holes" or "warp drive," 2) some form of dormancy for the crew, as in the movie "Alien," 3) inter-generational voyages and 4) the effect of time dilation from near speed-of-light travel (which only tempers the problem).

One part of the class concentrated on some of the practical aspects of sleep and inter-generational space flight. Who would go? What mix of males and females? And how would a sleeping crew later cope with unexpectedly changed circumstances?

In some ways my favorite part of the course concerned directives that might be given to the crew of an inter-generational flight. We looked at a range of material in which a later generation considers changing the mission of such a flight.

How does a society prevent such changes or at least retard them? Here we argued the same questions that people ask about amending the Constitution. Should the crew be given a text and a means for amendment? Or, is everything properly the later generation’s decision anyway?

No one perspective emerged in discussions of science fiction’s views of nature. Nature can be the avenger of environmental degradation, as in *Hot Sky at Midnight*. Or, nature can be the repository of great wisdom, beyond the power of humankind to penetrate.

The original Star Trek series sees nature as the context for the id—the irrational forces contained in humans. We watched the Star Trek episode "By Any Other Name" in which an invading alien species is thwarted because they were forced to occupy human bodies and suffered from sensory-stimulation-overload.

Government in the Galaxy

This class was the most law related. The major topic was government structures in the galaxy. We developed four basic models: colonial, "Federation," empire, and "cold war." We also examined some subsidiary topics dur-
ing Class 6: The Law of War, basic legal paradigms governing interplanetary relations and the principle of non-interference.

On the level of comparable cultures, the principle of non-interference in internal affairs is a common principle of international relations on Earth. In this regard, we watched a portion of the “Star Trek: The Next Generation” episode “Redemption,” in which the Federation conducts complex military/diplomatic activities in the midst of a Klingon civil war.

On the level of cultures of vastly different development, the principle of non-interference is an anthropological commitment to prevent cultural contamination. We discussed whether such a principle was wise and whether it applied when the Federation itself came into contact with more technologically advanced civilizations.

Who or What is a Person?

It was not difficult to draw analogies between the treatment of this topic in law and its treatment in science fiction. We began discussion with three examples of this issue arising in law: Justice Blackmun’s conclusion in the Roe v. Wade majority opinion that a fetus is not a “person” within the language and meaning of the Fourteenth Amendment, a proposal by the American Medical Association’s Council on Ethical and Judicial Affairs that parents of anencephalic babies be permitted to donate organs from these babies before they die and Larry Grant Lonchar’s attempt to prevent his electrocution so that he could donate his organs.

We compared all of this with the plight of Data, the android whose purported status as property was litigated in the “Star Trek: The Next Generation” episode “The Measure of a Man.” Of course, we looked at other materials along these lines as well, including Isaac Asimov’s classic story, “The Bicentennial Man.”

It was this class that showed me the power of a course like law and science fiction. Classes about abortion in law school are almost always dissatisfying. The students often refuse to discuss such a controversial and emotional topic and the discussions that do occur are usually painful and angry.

“Science Fiction” was the first time I saw students talk freely about what it means to define membership in a group. Students really did move from fetuses to handicapped persons to robots to animals and tried to take account of differences and similarities.

Social Hierarchy

It turns out that science fiction, or at least that portion of it that I know, is rather weak on issues of race and class. The closest one comes to critique is unconscious racism. For example, in Hot Sky At Midnight, Paul Carpenter notes that his immediate supervisor will never rise in the Japanese corporation because of a racial breach of convention. This Japanese bashing, which is common in science fiction, points both to the racism of the Japanese and to that of the Americans who write this way.

One of the high points of the class was the wealth of excellent materials concerning gender.

The students, especially the male students, were shocked by the depth of bitterness against men exhibited in a number of stories written by women. This bitterness was not combined with an appeal to a powerful sisterhood. Indeed, the stories were neither reformist nor revolutionary. Obviously, the dominant male hierarchy was viewed as unjust, but that did not mean that it would change. Individual acts of heroism were possible but no appeal was made to the possibility of social transformation.

The words of Mrs. Parsons in James Tiptree Jr.’s story (the pen name of Alice Sheldon), “The Women Men Don’t See” not only captures this tone of deep hostility but even foreshadows the coming reaction against feminism. (The story was published in 1973.)

Women have no rights, Don, except when men allow us. Men are more aggressive and powerful, and they run the world. When the next real crisis upsets them, our so-called rights will vanish like—like that smoke. We’ll be back where we always were: property.”
Pennsylvania Professionals for the Arts (Pro-Arts), a new nonprofit organization, has found its way into Pittsburgh's cultural life, combining the capacities and forces of Business Volunteers for the Arts/Western Pennsylvania (BVA) and Pittsburgh Area Volunteer Lawyers for the Arts (PAVLA).

ProArts was the brainchild of enthusiasts who valued the importance of the arts in the Pittsburgh community, and also recognized the need for an organization that would coordinate and bind the loosely linked arts organizations, businesses and lawyers interested in the arts and their development.

The goal is to benefit the arts community in Pittsburgh through the legal and business pro bono assistance that its members would provide. Its mission is to strengthen and support Western Pennsylvania's diverse arts community by cultivating a new generation of lay leadership for Pittsburgh's cultural sector and to foster cooperation and partnership among cultural organizations, businesses and law firms.

A study done by the Pennsylvania Economy League in 1989 showed that the total impact of the 36 major local arts organizations on the local economy exceeds $120 million annually. The study also showed a support and funding pattern by corporations and governmental entities that benefited larger, widely known arts organizations at the expense of smaller, unknown organizations trying to establish their artistic reputation and financial independence.

These small, newly formed organizations needed assistance, legal services and business advice to remain afloat, but they could not afford it. "These organizations operate on a shoestring budget. Without assistance some of them would not be able to survive," says Marc Sternberger, a Duquesne University Law School alumnus and one of the founders of ProArts. "Our goal is to protect and nourish these small and medium arts organizations when they are most vulnerable," adds Ann Cahouet, a board member of ProArts and coordinator of Reed Smith Shaw & McClay's legal pro bono program.

"These organizations operate on a shoestring budget. Without assistance some of them would not be able to survive."

Sternberger and some other attorneys on the Allegheny County Bar Association Arts and the Law Committee started exploring the possibilities with the Allegheny County Bar Association. At the same time Business Volunteers for the Arts (BVA) came into existence under the aegis of the Greater Pittsburgh Chamber of Commerce. Finally, in 1994 the two organizations joined forces under the umbrella of ProArts, which became the licensed BVA affiliate.

In less than 18 months from its inception ProArts has grown both structurally and functionally. It matches needey artists and arts organizations with its volunteer lawyers and business people. It provides educational programs for the Arts community, members of ProArts and local arts boards including workshops, continuing legal education seminars (in cooperation with the ACBA) and cultural leadership forums.

Arts related legal services and advice include, but are not limited to, copyright, trademark and intellectual property matters and formation of nonprofit organizations. Individual artists whose annual incomes are $20,000 or less and arts organizations with annual operating budgets of $100,000 or less are generally eligible for pro bono services.

Most of the ProArts endeavors have been very successful. Advertising in the Cultural Trust Newsletter and on WQED has brought name recognition and a sharp increase in the number of requests for legal or managerial assistance from arts organizations. ProArts is trying to attract more professional members to its organization. Increased fundraising is another goal for ProArts, since it now operates on a very limited budget.

Other projects underway include a series of publications covering legal topics of interest to arts organizations and expansion of the databank of legal forms is in the process of expansion. Also, a computer program quantifying the dollar value of the legal and business services to arts organizations will be installed.

"It is a win-win situation, because preserving the diversity and vitality of our region's cultural life spins off economic benefits to our community," Sternberger observes. That makes a difference, does it not?

If you are interested in ProArts, please contact Marilyn Coleman at ProArts, P.O. Box 19388, Pittsburgh, PA 15213-5388; Telephone: 412-268-8437 Fax 412-268-8620 E-mail: proarts@cmu.edu

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