IDENTIFYING AN UNKNOWN BODY

Identifying an unknown body sometimes comes into play. The forensic pathologist might utilize medical information about illnesses or operations, for example, matching known scars from a missing person to scars evident on a "found" person.

On the team might be a forensic dentist or odontologist-forensic odontology is another term for the profession of forensic dentistry- who will use dental records to identify an unknown person.

And if a body has become little more than skeletal remains, the pathologist can call in a forensic anthropologist (see Chapter 5) or an image enhancement specialist to re-create a skull and face. Also on some forensic medical teams are forensic nurses who work with rape and assault victims and also help in death investigations.

FORENSIC MEDICINE

Pathology is defined as the study of disease, or any deviation from a healthy, normal condition. Pathologists examine the body at autopsy and study tissues removed during surgery. They also analyze fluids from the body, such as blood or urine, in the clinical pathology laboratory.

Forensic pathology is a specialization of pathology that applies the principles of pathology and of medicine in general, to the legal needs of society. In other words, forensic pathologists perform autopsies to determine what caused a person's death and how the person died.

Was it a natural death, accidental, suicide, homicide, or undetermined? If the death falls into the realm of criminal, then the information that a pathologist obtain from the autopsy can be used in a court of law.

Forensic pathologists often have other job titles, such as medical examiner, coroner, or medico legal death investigator. Forensic pathologists work mainly with violent deaths-deaths due to homicide, accident, or suicide. But they also perform autopsies in other cases, including:

- sudden death of a supposedly healthy person
- unattended death (someone who had never seen a doctor)
- death while the person is in police custody
- suspicious or unusual death
- death from medical malpractice
- death while in prison

Not all deaths must be reported to the medical examiner or coroner. The laws of each jurisdiction determine that.

The Duties of the Forensic Pathologist

The forensic pathologists work includes visiting where the subject died and gathering information about what happened at the time and place of the subject's death. The pathologist looks at what the person had been doing at the time and assesses the overall health of the person.

During the examination of the body the forensic pathologist will look closely at the person's clothing and at the exterior of the body and then will conduct an internal exam-the autopsy-concentrating on the organs in the body. The autopsy also may include the study of tissues under a microscope or through the use of x-rays.

Because various types of evidence may be collected, the forensic pathologist works in conjunction with other forensic scientists. Fingernail clippings and scrapings, swabs containing seminal fluid, hair samples, and fibers on the clothing and body are evidence in a case and are sent to crime laboratories for examination by a criminalist.
Other specimens obtained at autopsy might be sent for toxicology study. These could be stomach contents, blood, urine, bile, liver, kidney, lungs, brain, fingernail clippings, and hair. The toxicologist examines these specimens for the presence of alcohol, drugs, poisons, or other chemicals.

If bullets, shotgun pellets, or wadding are recovered at the autopsy, these are sent to the crime laboratory for examination by a ballistics expert.

During the examination of the body, the pathologist must determine which injuries were received when the victim was alive, which changes occurred after death, such as the rate of decomposition, and which injuries were received after death.

The pathologist must interpret and document patterns of change and injury. He or she must be able to state in a report, and perhaps as an expert witness, that death occurred because of bullet wounds, stab wounds, or blunt force injuries such as those that occur when beaten or when struck by a car. He or she must also determine if the blunt force injuries resulted from an accidental fall. The pattern of injuries also must be examined to rule out or confirm suspected child abuse.

The pathologist coordinates his or her findings with other available information and tries to determine if, for example, the subject died where found, or if the body was moved. The time of death is also ascertained.

The work the forensic pathologist does must be recorded through a written report and with photographs. The forensic pathologist's findings may lead to the conviction of a suspect, or it may acquit an innocent person.

Another role of the forensic pathologist is in areas of public health and safety and injury prevention. For example, a pathologist may discover that a child's death was caused by the faulty design of a crib, toy, or article of clothing. The pathologist also might learn that a vehicle's exhaust system was faulty, or the tires were defective. This information can help prevent further similar deaths or injuries.

Clinical forensic pathologists work with victims who survived certain injuries or conditions. Since these same injuries or conditions have been witnessed before through autopsies, the forensic pathologist is able to assist medical doctors in the emergency room, examine wounds, and interpret them for the attending physician and the police.

**Training for Pathologists**

It's a long road of training for forensic pathologists. First and foremost a pathologist must be a medical doctor. It takes many years of education and training to become a physician: four years of undergraduate school, four years of medical school, and three to eight years of internship and residency, depending on the specialty selected. A few medical schools offer a combined undergraduate and medical school program that lasts six years instead of the customary eight.

Premedical students must complete undergraduate work in physics, biology, mathematics, English, and inorganic and organic chemistry. Students also take courses in the humanities and the social sciences.

Some students volunteer at local hospitals or clinics to gain practical experience in the health professions.

The minimum educational requirement for entry to a medical or osteopathic school is three years of college; most applicants, however, have at least a bachelor's degree, and many have advanced degrees.

There are 144 medical schools in the United States-125 teach allopathic medicine and award a Doctor of Medicine (M.D.) degree; 19 teach osteopathic medicine and award the Doctor of Osteopathic Medicine (D.O.) degree.

Acceptance to medical school is very competitive. Applicants must submit transcripts, scores from the Medical College Admission Test,
Acceptance to medical school is very competitive. Applicants must submit transcripts, scores from the Medical College Admission Test, and letters of recommendation. Schools also consider character, personality, leadership qualities, and participation in extracurricular activities. Most schools require an interview with members of the admissions committee.

Students spend most of the first two years of medical school in laboratories and classrooms taking courses such as anatomy, biochemistry, physiology, pharmacology, psychology, microbiology, pathology, medical ethics, and laws governing medicine. They also learn to take medical histories, examine patients, and diagnose illness.

During the last two years, students work with patients under the supervision of experienced physicians in hospitals and clinics to learn acute, chronic, preventive, and rehabilitative care. Through rotations in internal medicine, family practice, obstetrics and gynecology, pathology, pediatrics, psychiatry, and surgery, they gain experience in the diagnosis and treatment of illness.

Following medical school, almost all M.D.s enter a residency-graduate medical education in a specialty that takes the form of paid on-the-job training, usually in a hospital. Most D.O.s serve a twelvemonth rotating internship after graduation before entering a residency that may last two to six years.

Physicians may benefit from residencies in managed care settings by gaining experience with this increasingly common type of medical practice.

All states, the District of Columbia, and U.S. territories license physicians. To be licensed, physicians must graduate from an accredited medical school, pass a licensing examination, and complete one to seven years of graduate medical education. Although physicians licensed in one state can usually get a license to practice in another without further examination, some states limit reciprocity. Graduates of foreign medical schools can usually qualify for licensure after passing an examination and completing a U.S. residency.

M.D.s and D.O.s seeking board certification in a specialty may spend up to seven years-depending on the specialty-in residency training. A final examination immediately after residency, or after one or two years of practice, is also necessary for board certification by the American Board of Medical Specialists (ABMS) or the American Osteopathic Association (AOA). There are twenty-four specialty boards, ranging from allergy and immunology to pathology and urology.

For certification in a subspecialty, physicians usually need another one to two years of residency. Pathologists number only about 2.4 percent of all medical doctors, making this a wide-open field to enter.

To learn more about specific requirements, visit The American Board of Pathology website at www.abpath.org/.

The Cost of Training

A physician's training is expensive, and although education costs have increased, student financial assistance has not. Over 80 percent of medical students borrow money to cover their expenses. The high salaries doctors often command are offset the first few years in practice by the need to pay back hefty student loans.

Salaries

Physicians have among the highest earnings of any occupation. According to the American Medical Association, the average annual income for pathologists after expenses is $175,000. Income will vary widely according to number of years in practice, geographic region, hours worked, and skill, personality, and professional reputation. The sample jobs listed later in this chapter include salary ranges.

FORENSIC DENTISTRY AND ODONTOLOGY

Forensic odontology, also referred to as forensic dentistry, is part of forensic medicine and the general field of the forensic sciences.
There are four general areas for which a forensic dentist offers his or her services:

1. Identification of deceased people through dental remains.

2. Bite mark analysis; determining or ruling out possible suspects in crimes in which bite marks are left on a victim or other object.

3. Examination of oral-facial structures for determining patient/doctor disputes such as possible malpractice, or to prove or disprove insurance fraud.

4. Age estimation through dental features.

Most of a forensic dentist's workload revolves around the first item: identification of deceased people. A forensic dentist is asked to help identify unknown victims of accidents, homicides, or mass disasters such as floods, earthquakes, or airline crashes.

Identification of humans by means of teeth, dental work, and other oral characteristics has been used for centuries. Here are some fascinating examples:

- In 1066 in England, a story circulated that William the Conqueror made the official seal of England by biting into the wax. He was known to have an unusual malocclusion.

- In 1477 in France, the cadaver of Charles, Duke of Burgundy, was identified by the absence of some anterior teeth.

- In 1776 in Massachusetts, General Joseph Warren's body was dug up and identified by a piece of walrus tusk that had replaced a canine tooth.

- In 1850 in the United States, John White Webster was the first person convicted of murder based on dental evidence.

- In 1906 in England, two people were convicted of burglary using bite mark evidence. One took a bite out of a piece of cheese and left it behind.

- In 1925 in the United States, a chemist attempted to defraud his insurance company by setting fire to his lab leaving an unrecognizably charred corpse behind. His new "widow" identified it as the chemist by his two missing teeth. But upon closer inspection it was revealed that the teeth had only recently been removed - the cavities were not fully healed. The chemist had lost his two teeth years before.

- In 1948 in England, the Gorringe case was the first murder to be solved using bite mark evidence.

- In 1967 in England, Gordon Hay was convicted of murder with crucial bite mark evidence.

- In 1976 in the United States, computers were first used for dental identification in a mass disaster: 139 victims of the Big Thompson Canyon Flood.

- In 1979 in the United States, bite mark evidence was used in convicting serial killer Ted Bundy.

- In 1979 near Chicago, American Airlines Flight 191 crashed and 274 people lost their lives. Dental identification was performed by two teams of ten dentists.

- In 1979 in Guyana, computers helped with the dental identification of 913 victims of a mass cult suicide/murder led by James Jones in the People's Temple at Jonestown.
Forensic odontological identification is based upon comparing dental records made during the victim's lifetime with data collected after death. The ante mortem data are usually found in dental records, which consist of X-rays, charts, impressions, and study models of the teeth, jaws, and dentures.

A forensic dentist also may be called as an expert witness to give testimony concerning scientific investigation or to provide professional opinions about evidence introduced into a trial.

Training for Forensic Odontologists

Forensic odontologists must have special knowledge in certain areas, such as being familiar with the unique characteristics of the teeth and the resistance of teeth and tooth restorations under different kinds of environmental stresses. Forensic odontologists also should be aware of the special laws and regulations that govern professional activities. The prerequisites for this field include an educational background in dentistry-preferably a doctorate degree-in addition to a D.D.S. or D.M.D.

However, there are many others-dental hygienists and assistants, for example-who help to make up the forensic dental team. Those who work on the team and are not licensed and qualified dentists would be supervised by the team leader, a professional forensic odontologist.

A dental education provides the fundamentals required for the tasks encountered during forensic work. The skills required include the ability to recognize:

- each tooth in and out of the mouth,
- different tooth surfaces,
- types of filling materials,
- racial and sociological differences in dentition, and
- a knowledge of oral pathology and close-up photography.

In addition, specialized postgraduate training in the field of forensic dentistry should be pursued. There are currently several courses offered in North America and in Europe. Many of these courses teach the fundamentals of evidence collection and handling, charting systems, and autopsy protocol.

The following dental schools offer undergraduate and postgraduate training in forensic dentistry:

- Loma Linda University
- University of Texas Louisiana
- State University
- Northwestern University
- University of Louisville
- New York University
- University of Southern California

The Armed Forces Institute of Pathology (Washington, DC)

To practice dentistry, all dentists must be licensed. To qualify for a license in most states, a candidate must graduate from a dental school accredited by the American Dental Association's Commission on Dental Accreditation and pass written and practical examinations. Candidates may fulfill the written part of the state licensing requirements by passing the National Board Dental Examinations. Individual states or regional testing agencies give the written and/or practical examinations.

Currently, about fifteen states require dentists to obtain a specialty license before practicing as a specialist. Requirements include two to four years of postgraduate education and, in some cases, completion of a special state examination. Most state licenses permit dentists to
Dentists who want to teach or do researches usually spend an additional two to five years in advanced dental training in programs operated by dental schools or hospitals. Dental schools require a minimum of two years of college-level pre-dental education. However, most dental students have at least a bachelor's degree. Pre-dental education includes courses in both the sciences and humanities.

All dental schools require applicants to take the Dental Admissions Test (DAT). Dental school usually takes four years. Most dental schools award the degree of Doctor of Dental Surgery (D.D.S). The rest award an equivalent degree, Doctor of Dental Medicine (D.M.D.).

To become certified by the American Board of Forensic Odontology (ABFO), a reasonable amount of hands-on experience must be documented to demonstrate qualifications. There is also a two-day written examination. Recertification occurs every five years, and active participation in forensic dentistry must be demonstrated to the ABFO through submission of cases.

Training for Dental Assistants

Most assistants are trained on-the-job, though many graduate from dental assisting programs offered by community colleges, trade schools, and technical institutes. Training programs include classroom, laboratory, and preclinical instruction in dental assisting skills and related theory. Students also gain practical experience in dental schools, clinics, or dental offices. Most programs take one year or less to complete and lead to a certificate or diploma. Two-year programs through community colleges offer an associate's degree. Certification is available through the Dental Assisting National Board but is not required for employment.

Training for Dental Hygienists

A dental hygienist must be licensed by the state in which he or she chooses to practice. To receive a license, a hygienist first must graduate from an accredited school and pass both a written and clinical exam.

Most programs lead to an associate's degree, though some offer a bachelor's. A few lead to a master's degree. The associate's degree is sufficient for practice in a dental office. A higher degree is usually required for research, teaching, or clinical practice in public or school health programs.

Forensic Odontology Work Settings

Work settings include employment at a dental school or on an individual contract basis with a law enforcement agency. For those working at a dental school, the opportunity exists to teach forensic dentistry and to conduct research projects, in addition to involvement in actual casework.

Most forensic dentists today work in private practice, however. They are usually associated with the law enforcement agencies of the county in which they live or work, and they provide forensic services on a contractual basis.

The work is sporadic and unpredictable. A forensic dental consultant never knows when he or she will be called upon to help. As a result, most have other work that provides a primary income, such as a dental practice or a teaching position.

Salaries

According to the U.S. Bureau of Labor Statistics, median annual earnings of salaried dentists are $110,160. Earnings vary according to number of years in practice, location, hours worked, and specialty. Self-employed dentists in private practice tend to earn more than salaried dentists.

Median hourly earnings of dental hygienists are about $22.00. The middle 50 percent earn between $17.28 and $29.28 an hour. The
Median hourly earnings of dental hygienists are about $22.00. The middle 50 percent earn between $17.28 and $29.28 an hour. The lowest 10 percent earn less than $12.37, and the highest 10 percent earn more than $38.81 an hour.

Earnings vary by geographic location, employment setting, and years of experience. Dental hygienists who work in private dental offices may be paid on an hourly, daily, salary, or commission basis.

Benefits vary substantially by practice setting and may be contingent upon full-time employment. Dental hygienists who work for school systems, public health agencies, the federal government, or state agencies usually have substantial benefits.

Median earnings of dental assistants are about $10.00 per hour. The middle 50 percent earn between $8.94 and $13.11 an hour. The lowest 10 percent earn less than $7.06, and the highest 10 percent earn more than $15.71 an hour.

Hygienists and assistants assisting on a forensics team would be paid either by the hour or as part of the contract fee-for-service arrangement.

**FORENSIC NURSING**

Forensic nursing is a fast growing specialty in nursing. The International Association of Forensic Nurses (IAFN) hosts a website at www.forensicnurse.org/ that provides information on this new field. Currently, IAFN is the only membership organization directly serving the educational and professional needs of forensic nurses everywhere.

The definition of forensic nursing is the application of nursing science or skills to legal proceedings. Forensic nurses are registered nurses with additional training. They work with the scientific and legal investigation and treatment of trauma and/or death of victims of abuse, violence, criminal activity, and traumatic accidents.

Forensic nurses work directly with individual patients-victims and/or perpetrators-providing care, but also taking specimens for a rape kit, for example.

They provide consultation to other nursing or medical departments and to law enforcement agencies. And, as most forensics experts do, they provide court testimony in areas dealing with trauma, evidence collection, preservation, and analysis; and/or questioned-death investigative processes.

Although forensic nursing is a fairly new subspecialty, in reality, nurses have been forensic practitioners for years.

In addition to the areas mentioned above, forensic nurses also make a significant contribution in forensic psychiatric practice and in the treatment of incarcerated patients. (See Chapter 6.)

**Training for Forensic Nurses**

Currently, there are not many actual bachelor's-level programs in forensic nursing in the United States, although there are a few abroad.

The best route for now is to pursue a B.S.N, in nursing, then take additional course work or go on for a master's degree in forensic nursing.

In all states, nursing students must graduate from a nursing program and pass a national licensing examination to obtain a nursing license. Nurses may be licensed in more than one state, either by examination or endorsement of a license issued by another state. Licenses must be periodically renewed. Some states require continuing education for licensure renewal.

Currently, there are more than twenty-two hundred entry-level R.N. programs. There are three major educational paths to nursing:

- Associate degree in nursing (A.D.N.)
Associate degree in nursing (A.D.N.)

Bachelor of science degree in nursing (B.S.N.)

Nursing diploma

A.D.N. programs, offered by community and junior colleges, take about two years to complete. About half of all R.N. programs are at the A.D.N. level.

B.S.N. programs, offered by colleges and universities, take four or five years to complete. About one-fourth of all programs offer degrees at the bachelor's level.

Diploma programs, given in hospitals, last two to three years. Only a small number of programs, about 4 percent, offer diploma-level degrees. Generally, licensed graduates of any of the three program types qualify for entry-level positions as staff nurses.

There have been attempts to raise the educational requirements for an R.N. license to a bachelor's degree. These changes, should they occur, will probably be made state by state, through legislation or regulation. Changes in licensure requirements would not affect currently licensed R.N.s, who would be "grandfathered" in, no matter what their educational preparation.

Individuals considering forensic nursing should carefully consider taking the B.S.N. route, since advancement opportunities would be broader. In fact, many career paths are open only to nurses with bachelor's or advanced degrees. A bachelor's degree is usually necessary for administrative positions and is a prerequisite for admission to graduate nursing programs in forensics, research, consulting, teaching, or the different clinical specializations.

Many A.D.N. and diploma-trained nurses enter bachelor's programs to prepare for a broader scope of nursing practice. They often can find a hospital position and then take advantage of tuition reimbursement programs to work toward a B.S.N. Forensic nursing programs or courses are provided in Appendix D.

Salaries

According to the U.S. Bureau of Labor Statistics, median earnings of registered nurses are about $40,690 a year. The middle 50 percent earn between $34,430 and $49,070 a year. The lowest 10 percent earn less than $29,480, and the highest 10 percent earn more than $69,300 a year.

Median annual earnings in the industries employing the largest numbers of registered nurses are as follows:

Personnel supply services $43,000
Hospitals $39,900
Home health care services $39,200
Offices and clinics of medical doctors $36,500
Nursing and personal care facilities $36,300

Many employers offer flexible work schedules, child care, educational benefits, and bonuses.

SAMPLE JOBS Forensic Pathologist/Assistant Medical Examiner

Medical Examiner's Office is seeking applicants for the position of Forensic Pathologist/Assistant Medical Examiner. Qualifications include being board certified in AP/CP and board certified, or eligible, in FP. Applicant must be a team player and interested in working in a
friendly and exciting environment. Interest in education is a plus.

Responsibilities include performing approximately 250 forensic and nonforensic autopsies per year, acting as assistant medical examiner, and providing education and training to students and residents in forensic pathology. Salary: $65,000-$89,000.

Forensic Pathologist

University medical branch, Department of Pathology is seeking applicants for the position of Forensic Pathologist with academic qualifications appropriate for appointment at the rank of Assistant Professor. The candidate must be board certified in forensic pathology and will serve as Deputy Medical Examiner for the county.

Responsibilities include performing approximately 700 autopsies per year, certifying an additional 300 causes of death, teaching at the Medical School in the Department of Pathology, and participating in the supervision of residents and the academic autopsy service. Interested applicants should submit a curriculum vitae, a statement of personal and academic goals, and the names of three references. Salary: $95,000-$120,000.

Deputy Medical Examiner

County Coroner's Office is seeking applicants for the position of Deputy Medical Examiner. Qualifications include a license to practice medicine in the state; certification by the American Board of Pathology in anatomic pathology and certified or board-eligible in forensic pathology at time of hire; and five years of professional physician's experience in a coroner's or medical examiner's office. Special consideration will be given for pediatric pathology experience. Salary: $94,527-$146,515.

Forensic Pathologist

County Forensic Science Center is seeking applicants for the position of Forensic Pathologist. Qualifications include graduation from an accredited school of medicine, completion of a residency in anatomic pathology, one year of experience performing medico-legal autopsies, and a valid license to practice medicine. Certification in forensic pathology by the American Board of Pathology will be required at the time of appointment, or within three years, as a condition of employment. Responsibilities include performing medico-legal autopsies, testifying in court, and taking death scene calls. This is a new appointment created due to an increased caseload of the office per year. Weekend call will be once every fifth weekend. Salary: $93,000-$100,000.

Forensic Pathologist

A private forensic consultants group is seeking applicants for the position of Forensic Pathologist. Qualifications include Board Certification in Anatomic, Clinical, and Forensic Pathology and a state license.

Responsibilities include participating in a moderately active Sheriff-Coroner autopsy service in two counties. This position will join three forensic pathologists in a private group who serve the public sector. Salary: $120,000-$150,000.

Associate Medical Examiner

Medical Examiner's Office is seeking applicants for the position of Associate Medical Examiner. Qualifications include graduation from an accredited school of medicine, completion of a residency in anatomic pathology, fellowship in forensic pathology, and a valid license to practice medicine in the state. Certification of the American Board of Pathology will be required at time of appointment and Forensic Pathology within two years of employment.

Responsibilities include performing medico-legal autopsies; completing records; testifying in court; consulting with attorneys, physicians, and investigators; attending death scene calls; and approving cremations. Salary: $70,000-$90,000.
Senior Histologist

County Medical Examiner's Office is seeking applicants for the position of Senior Histologist. Qualifications include a high school diploma or G.E.D. Must be a graduate of a National Accredited Agency of Clinical Laboratory Scientist (NAACLS) accredited Histo-technology Program/Histology certification by the American Society of Clinical Pathologists, and must have a minimum of two years of full-time work experience in a histology laboratory. Practical knowledge of operation and maintenance of microtome, automatic stainer, automatic slide, cover-slider, and tissue processor is desired, as well as knowledge of laboratory safety rules, regulations, and procedures.

Responsibilities include procuring, preparing, and staining tissue sections to assist the pathologist in making microscopic diagnoses; allocating casework to the Histology Technician of the section depending on relative abilities and experiences; monitoring analytical standards to ensure consistency and high quality are maintained at all times; maintaining safe and orderly work areas according to the Medical Examiner's policies, methods manual, safety and QA/QC procedures; participating in the training and competency testing of new analysts and interns according to sectional protocols; responding to proficiency testing requirements and following all protocols; and assisting the Laboratory Director as needed.

This person will be exposed to microbiological infections present in case samples, normal laboratory chemicals, and instruments. Some heavy lifting is required. Employment is contingent upon passing a criminal background check. Salary: $22,992-$39,000.

Forensic Dentist

Forensic dentist needed to join our team of medical experts. Must be board certified and actively practicing. We are a physician-managed professional organization whose purpose is to assist attorneys in the evaluation of potential medical malpractice, personal injury, toxic tort and product liability cases.

You will be responsible for reviewing documented material (medical records, depositions, etc.) and then rendering a nonbiased, objective opinion about the merits (or lack of merit) of the case. If supportable, you will then agree to be available for review of additional records, telephone conferences, and testimony in depositions and trial appearances until the case is concluded. The annual caseload per specialist will vary. Consultation is provided on a fixed hourly fee basis.

FIRSTHAND ACCOUNT

Patricia Speck, Forensic Nurse

Patricia Speck coordinates the forensic nursing activity for the City of Memphis, Division of Public Services and Neighborhoods, Sexual Assault Resource Center (SARC). She earned her B.S.N, in 1982 and her M.S.N, in 1985, both from the University of Tennessee, College of Nursing, Memphis. She has been working in the field for more than a dozen years.

GETTING STARTED

"In 1983 I met Dr. David Muram, a physician who started the first child sexual abuse clinic in Memphis at the local children's hospital. I worked at the same hospital, but in a different department.

"While matriculating through graduate school, I needed a research thesis topic, and the Rape Crisis Center (RCC) was publicly controversial in the early 1980s. Swirling amid and above the controversy was a group of nurses who evaluated victims and collected evidence in a community-based clinic. Since I was looking for an independent nursing role that utilized my nurse practitioner skills, I was attracted to this position. In addition, the nursing staff was supportive, rebellious, and challenging.

"While completing my graduate thesis (1982-85) and employed full-time as a family nurse practitioner at the county health department
While completing my graduate thesis (1982-85) and employed full-time as a family nurse practitioner at the county health department (1984-1988), I volunteered at the center and implemented my graduate research. I was then hired as a ‘nurse clinician’ in 1984 to see patients on a part-time basis and to train the other staff in care of the pediatric victim (since my expertise was pediatrics).

"Following several years of volunteering and conducting research at the agency, developing policies and procedures, making recommendations to the non-nursing management, and being on-call with the pool of part-time nurses, the manager decided a nurse was needed at the agency on a full-time basis and asked me to write the job description for the nursing coordinator.

"In 1988 Dr. David Muram, the medical director of the RCC, encouraged me to take the job. I took the job but recognized the role would be solitary and without parallel. As a backup, I kept my public health position as a nurse practitioner, just in case it didn't work out. I left the public health position in 1993 because this one worked out."

WHAT THE WORK IS LIKE

"I coordinate the registered forensic nurses employed by the City of Memphis Sexual Assault Resource Center (SARC). The nurses are advanced practice R.N.s who have additional training in the identification and management of victims and offenders of IPV-Interpersonal Violence.

"I'm on-call as supervisor 24/7. Although that may seem demanding, in reality I receive few calls from the police or the newer nurses."

"In a typical day I might field a call from the police dispatch, wanting to assemble the sexual assault response team (SART) because there's been an assault reported. The SART is a response team made up of a forensic nurse, a member of the law enforcement agency, and a patient advocate, who join together to create a multidisciplinary approach to the plight of the rape victim. The R.N. is the only licensed professional in the group. The police are the investigators who must determine if a crime has been committed. The advocate is the bridge between the health care response and the criminal justice system. In my agency, we now call our advocates law enforcement liaisons.

"Law enforcement may initiate the team, but any member can initiate the response. For instance, if a victim walks into the clinic and wants to report, the team is assembled. If they do not want to report a crime, the team is not assembled because the case will not move forward in the criminal justice system and there is no need for law enforcement or advocacy. The nurse examiner will provide therapeutic care and follow-up instructions to the patient and will refer her to the appropriate mental health and medical providers.

"As part of my duties, I might talk to the patient, and then talk to district attorneys about evidence and court testimony in that or other upcoming trials.

"I also hire and train new nurses and students. I deal with test results of the lab work the patients undergo. I also order supplies- medical, as well as office supplies. We use a lot of camera film to document presentations, physical and growth development, and injury, especially if the video recording equipment is not functioning properly.

"I discuss cases with the nurses; I also debrief them after dealing with an assault case. Debriefing is a process of defining an event. I debrief students and staff to prevent burnout and to help model appropriate internalization of the event.

"On any given day, I may be working on a policy or procedure, schedules, or preparing payroll. If it is a Thursday morning, I will be in staffing with the rest of the professionals. Staffing occurs weekly and provides a complete review of the cases of the previous week. In our city, it may number fifteen to forty a week.

"In the event a nurse is unable to cover a shift and I cannot find a replacement, I will take the call. Another part of my job is professional training and consultation, and I teach physicians, nurses, attorneys, and judges about the forensic nurse's role and competency. Recently, I provided education through the Department of Health for beginning nurse examiners in our state.

(1984-1988), I volunteered at the center and implemented my graduate research. I was then hired as a 'nurse clinician’ in 1984 to see patients on a part-time basis and to train the other staff in care of the pediatric victim (since my expertise was pediatrics)."
"I am also responsible for coordinating forensic and nursing education for Memphis Sexual Assault Resource Center (MSARC) forensic nurses, and that usually occurs during staff meetings bimonthly.

"Quality assurance is a component, and feedback is solicited not only from the students and training nurses about existing nursing practice, but from the patients as well.

"In addition, I am on citywide committees. I am the OSHA educator for the agency annually and periodically provide TB screening for the staff."

SAMPLE CASES

"A table dancer was lured to a vehicle in the parking lot of her place of employment early one morning. Three unknown males beat her with their fists and raped her. When she was released, she called law enforcement to report it. Police paged the forensic nurse, who met them at the clinic. The forensic nurse called the patient advocate. The nurse provided support and crisis intervention, physically evaluated the victim's injuries, made recommendations for referral, collected evidence (physical and verbal), and treated the victim with medications to prevent infection and pregnancy.

The forensic nurse transferred the information to law enforcement professionals and placed the evidence into a secured location, waiting for transport by law enforcement.

The fact that the victim was a table dancer might have adversely affected the prosecution of this case, but the photographic documentation persuaded the prosecutor to move forward. However, because there were no visible injuries to the face and head, the charges were reduced to simple assault and the offenders pleaded guilty and served no jail time.

"In another case, a grandmother was undressing her four-year-old granddaughter for a bath and discovered bruises around both nipples. She was distressed because another child in her family had died from a cancer whose first symptoms were bruising on the chest, so she took the child to the local emergency department.

The physician in the emergency department recognized the patterned injury (bite mark) and called the police, who paged the forensic nurse to come to the hospital.

The nurse paged the advocate and they arrived at the hospital with law enforcement. The nurse collaborated with the physician before and during the evaluation. Then the nurse provided support and crisis intervention, physically evaluated the child from head to toe, collected evidence (physical and verbal), and made recommendations for referral and follow-up to the grandmother and the physician. The evidence was transported to a secured location awaiting transport by law enforcement officials.

"This patient's grandmother called the next day to tell us that the child had disclosed who had bitten her, and the police arrested the offender.

"Another forensic nurse was called to draw the suspect's blood for DNA analysis. As it turned out, I did not have to testify because DNA evidence from the saliva left on the breast matched the DNA of the offender and the offender pleaded guilty."

11 UPSIDES AND DOWNSIDES

"I am an adrenaline junkie and thrive in busy environments. It is never boring, but the work sometimes can be emotionally traumatic—for instance, the discovery of a permanent, incurable, sexually transmitted disease in a child, or facilitating in the removal of a teenager from his or her home. On the other hand, the patient population is generally very needy, and interventions provide opportunities for patients to thrive in spite of their traumas."
Another rewarding part of my job is training and empowering new nurses who are choosing to enter this field. The most challenging part of my job is maintaining an open and accepting mind about patients and providers—accepting that the patient may have seedy and secret activities and criminal motives that supersede their victim status. Also, challenging is keeping an open mind with other professionals who verbalize their bias either for or against the victim. Lastly, I dislike non-nursing professionals who step into my practice without the proper education or licensure and tell me what should be done during the nursing evaluation and intervention with the patient.

**SALARIES**

"My salary in 2000 was $58,000 a year with benefits, up from $30,000 in 1988. Salary is dependent on the community market and the value placed on forensic nurses."

**ADVICE FROM PATRICIA SPECK**

"To become a forensic nurse provider, go to nursing school where there is a forensic nursing center to visit and observe. To become a leader, go to an accredited school of nursing that supports forensic nursing education at all levels—B.S.N., M.S.N., and Ph.D./D.N.S.

"For credibility in court, add nurse practitioner education and experience on the way. To create a comprehensive educational experience, get the forensic studies for credit while matriculating through family, community, maternal child, or psych/mental health nursing programs."