11

The above quotation is frequently used by medical schools in their appeals to the public for body donations. The eye banks, kidney foundations, and other organizations that facilitate organ donations might say just as appropriately, "Let the dead heal the living."

All major religions approve of body and organ donations for medical and dental teaching, research, and transplants. According to public opinion polls, most people believe that such donations are desirable. Death provides many of us with a one-time-only chance to make a valuable gift to humanity.

If all of us followed through on our convictions, there would be no medical schools in need of cadavers. Those waiting for the gift of life through organ donation would have their needs met. Tragically, that is not the case.

Unfortunately, morticians tend to resent the loss of a big-ticket funeral, and some have been known to mislead the public about the need for body donation. Michigan funeral director Thomas Lynch was fearless enough to do so in print. In *The Undertaking* he wrote, "The supply of cadavers for medical and dental schools in this land of plenty was shamefully [why shamefully?] but abundantly provided for. . . ." How many has he plied with this lie so the business could enjoy yet another "good year"?¹ Truth of the matter: Of the three medical schools in Michigan, Wayne State and the University of Michigan in Ann Arbor have an "urgent need" of body donors. Michigan State University has a moderate need—"We can always use people."

Lynch is, of course, a brilliant writer whose charming way with words made *The Undertaking* a major best-seller. But a delightful writing style does not add truth to his assertions. The fact is that throughout the U.S. and Canada, body and organ donations are desperately needed.

¹ Lynch writes that once he talked his friend Russ out of body donation, Russ next suggested that he'd like to have his ashes flown aloft in a balloon. One has to wonder, then, why or how Russ ended up—shaved and embalmed—in a Batesville casket, as Lynch seemed so pleased to report.

Organ Donation

Many medical schools request that a Uniform Donor Card be filled out as part of the process of making a bequest. Such cards can also be obtained from many other sources including kidney foundations, eye banks, and funeral planning societies. The card is pictured here:

Of	0 111101 111 2 0 1101	r Card
In the hope I magift, if medicall words and mark I give: (a)		n or parts
(c)_	my body for anat	s or parts) research or education; comical study if needed.
Signed by the presence of each		wing two witnesses in the
presence of each		wing two witnesses in the Date of Birth
presence of each	h other:	
presence of each	h other:	Date of Birth

Line (a) identifies "any needed organs or parts." That is, if any organs or other body parts are needed by another living human being, organ donation is to be considered first even if line (c), total body donation, is also checked. It should be remembered that donation of a major organ may preclude body donation to a medical school. Line (b) has a space to identify "only the following organs or parts." This could be "eyes," for example, if donation "for anatomical study"—line (c)—is the primary intent of the donor.

84 ~ Caring for the Dead

Your signature, on the back, must be witnessed by two other people. The Uniform Donor Card incorporates language that is consistent with the Anatomical Gifts Acts adopted by nearly all states.

If there is only one medical school to which you are willing to entrust your body, you can say that. Medical schools and organizations that facilitate organ transplants are extremely conscious of the need to honor the wishes of the deceased. If there is any doubt, they will err on the side of not accepting the donation.

In most states, there is also a check-off on a driver's license to determine whether or not you are an "organ donor." States expect, however, that an additional card will be carried, establishing the specifics and restrictions regarding that offer.

Most organ donations are now handled with complete privacy, without identifying either the donor or the recipient to the other. Emotional excesses on the part of both donor families and those receiving an organ have made such anonymity necessary. For example, excessive gratitude caused one family to constantly foist itself on the bereaved father of the son whose kidney had been given to their son. The father became sorry that he had made the gesture. Donor families have also intruded into the lives of those now carrying a bit of "my son Johnny," unable to let go. In some unpleasant instances, money has apparently been requested. All hospitals now handle organ transplants discreetly.

At this writing, there is a particular need for corneas and kidneys. The numbers fluctuate, but there are thousands of people waiting for donations of those organs. For any of them, a donation can make the difference between sight and blindness, or life and death. But medical science is advancing. There are laboratory studies being done with the transplanting of the islets of Langerhans, the small cells in the pancreas that produce insulin. If islet transplants become the "cure" for diabetes, another million people would be added to the waiting list for organ donations.

Funeral directors are being trained to enucleate eyes, but the conditions necessary for organ donation—removal of the organ shortly after death in a sterile environment—can be met for the most part only if death occurs in a hospital. Next-of-kin should be aware of the desire for donation or bequest. Family members should be sure the intent is known to medical personnel as well, and that it is included on the patient's hospital chart. Without the advance directive, hospital staff may approach the family with such an inquiry. In his excellent book *Death Notification*,

¹ International Cemetery and Funeral Association (ICFA) is working on an "organ donor awareness" program to help with "efforts of preneed marketing." While the goal of improving public awareness is laudable, consumers should not be lulled into purchasing funeral arrangements as a result.

Moroni Leash gives a sample dialog for staff who are placed in the awkward situation of seeking permission from families for organ donation in an unexpected death. A thoughtful family facing a "what if" situation will suggest this first.

When death occurs at home and the family will be handling all funeral arrangements, the area Eye Bank can send a technician to remove the corneas. This is not a disfiguring procedure and will hardly be noticed by those who might wish to see the body afterward.

Medical and Dental Schools

To satisfy the increased needs for research and education, body donations are in demand in all states. Many people do not realize that even dental schools use entire cadavers in their required anatomy courses.

Some medical schools, either routinely or with permission, will share donations with other schools. Others do not. In many schools—especially the osteopathic and chiropractic schools—over-enrollment of body donors has never occurred.

All schools and state boards of anatomy prefer to receive an enrolled donor—a person who had filed a "bequest" during his or her lifetime. In some states, a bequest can legally take precedence over the wishes of surviving family members, but few medical schools are willing to accept a body if there are objections. For that reason, most bequests must be witnessed, preferably by family members. A bequest may be cancelled at any time.

The body-donor information I surveyed ranged widely in quality of presentation and depth of information. One New England medical school sent a single mimeographed information sheet that covered only the most basic of facts, plus a body-donation form. From a Midwestern medical college I received a many-paged, purple-covered folder in a plastic case. This attractive pamphlet listed, as other schools have, the "Frequently Asked Questions About Body Donation." Almost all medical schools are grateful for such a gift, and assure the donor that the body will be treated with respect.

Most schools issue a donor card that can be carried in a wallet, although a few I saw were too large for a wallet, and several failed to include the necessary telephone numbers or information regarding the procedure to follow at the time of death. It also occurs to me that a conspicuous failing on all such cards is the lack of a place to indicate whether donation may be to the nearest medical school at the time of death or whether a bequest to a specific medical college must be honored (with transportation costs borne by the estate even if a person died in Europe, for example).

86 ~ Caring for the Dead

In some situations, the next-of-kin may donate a body without prior enrollment, but policies on this vary greatly. Schools that are beginning to receive sufficient donors often restrict donation to those previously enrolled or in "ideal" condition, but a check of other nearby schools—especially the chiropractic and osteopathic—will usually reveal a need.

Almost all medical schools also receive bodies from the state—persons who have died in institutions or alone with no known relatives.

There is no remuneration for body donation. No medical school buys bodies. Some medical schools may pay for all or part of the body transportation at the time of death. Most pay for body preservation, and almost all pay for final disposition. In short, body donation is likely to alleviate, but not completely eliminate, the cost to the family.

Medical schools that pay for transportation may have a contract with a certain transport service or funeral establishment, and many funeral directors will accept less than the usual rate as a commitment to the public good. These practices are not always clear, however. One friend, dealing with the imminent death of her grandfather, contacted a particular medical school about body donation at the suggestion of a neighbor who was also a funeral director. She was told by the school that it would handle all transportation costs. When her grandfather died, she called the same funeral director again. He moved the body from the hospital to his establishment two-and-a-half miles away and filed the death certificate. In the meantime, she notified the medical school. As a result, there were some quick changes in arrangements. The first funeral director was not willing to complete the trip for the rate the medical school normally paid, so another funeral director was sent to pick up the body. My friend later received a bill of \$175 from the first funeral director. As can be seen from this example, it is important to ask not only what costs the medical school covers but also how those costs are handled.

A health history is often requested by a medical school, as well as death-certificate information if the medical school is to complete the filing. Families may not request a report of medical findings from the school's examination of the body.

The donor's family is encouraged to consider a memorial service (a service without the physical presence of the body) so that the body can be removed for preservation as soon after death as possible. In some cases, if embalming is done under the direction of the anatomy department, body delivery can be delayed, but this must be arranged in advance with the medical school

Medical schools do not assume the responsibility of filing an obituary.

Medical Embalming

Medical embalming procedures are considerably different from and far more complex than those used in the funeral industry. Each school of anatomy has developed its own system according to the interests and specialties of the school and staff involved. The thorough embalming needed for long-term preservation requires stronger chemicals and can take as long as three days to complete.

It is important that the methods be as nondisruptive to the body as possible. Blood is not routinely drained from the body since only the arterial system is injected with preserving fluid, allowing the blood to "pool" on the venous side of the system. Any swelling is minimal and not a cosmetic consideration for medical study. Through the arterial system, all capillary beds can still be reached. Organs that would not be affected by the arterial system alone—including the brain—must be separately and carefully perfused with preservatives with a great deal of attention paid to detail. It is necessary to maintain the integrity of the body as a whole, and of entire systems within it. For instance, the circulatory routes can be filled with dyed latex as a marker, but this is not attempted until body preservation is complete. Some medical schools use refrigeration in addition to embalming for preservation.

Most bodies are used within a two-year period. Many medical schools cremate the remains when study is finished and offer a simple memorial service, interring or scattering cremains in a plot reserved for this purpose. If the school is notified at the time of body donation or delivery, remains or cremains can be returned to the family, although this option is not available at all schools. A family member expecting remains should notify the school if there is a change of address.

Enrolled body donors should make alternative disposition plans because bodies may be rejected for a variety of reasons. The University of South Alabama, the State Anatomy Board of Maryland, and Southwestern Medical School in Texas will dispose of all enrolled donors regardless of condition, in fulfillment of their contract with a donor. All other schools, however, reserve the right to refuse a donation.

Although some schools share their donors with other schools, usually within the same state, over-enrollment may become a reason for body rejection if donations become more numerous. Skin and eye donations may be considered and are encouraged by most schools, but other organ donations make a body unacceptable for all but a few medical schools. In addition to autopsy, other common reasons for body rejection include:

- missing body parts extremities, thoracic organs
- age 76 is too old at one school; below 21, 18, 15, infant or fetal are too young at others
- severe burn victim preservation is not readily accomplished if there is extreme tissue damage

88 ~ Caring for the Dead

- decomposition
- emaciation
- trauma or mutilation
- surgery at or near the time of death
- obesity not only difficult to preserve but difficult to handle and use
- size over six feet tall (only a few schools) because of limitations in storage facilities
- contagious or diseased sepsis, TB, hepatitis, AIDS, meningitis, Creutzfeldt-Jacob, Alzheimer's, systemic cancer, and others at the discretion of the institution.

In Case of Death Abroad

The need in some foreign countries is even greater than in the U.S. In Argentina, for example, 200 medical students must share one cadaver. Because international shipping of scientific cadavers is not allowed (although a private body may be), anatomy classes from an Italian medical school have travelled to Israel for study. If death were to occur abroad, perhaps inquiry about local needs would fulfill the intent of someone who has made an anatomical bequest, either for organs or whole body donation. The tragic death of a child while travelling with his parents in Italy turned into an international diplomacy coup when his parents gave permission for the donation of his life-saving organs.



Dr. William Worden, director of a Harvard study of terminal illness and suicide, wrote in *Personal Death Awareness* of the depression of those whose lives will quickly end when no medical intervention is in sight. In one of the examples he cites, a young man—father of two—waiting for a third kidney transplant "began to sit in the hospital hallway and watch the elevator in the hope that an anonymous donor would appear. . . . Finally he realized the donor would never arrive." In making his final preparations for death, the young man's poignant remark was: "I want you to be sure my eyes are donated to people who need them. I lived a little longer because of two kidney transplants, and I want some other people to have the same break I did."

Organ and Body Donation ~ 89

Alabama 88
Batesville 82
cadaver 88
casket 82
cemetery 84
embalming 87
funeral 82-87
ICFA 84
Lynch 82
marker 87
Maryland 88
memorial service 87
Michigan 82
preneed 84
shipping 88
Texas 88