



### The JABSOM Willed Body Donation Program, a Unique Medical Educational Experience

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*Hic est locus ubi mors faudet succurso vitae: This is the place where death rejoices to come to the aid of life.*

#### Introduction

The Willed Body Donor Program (WBDP) at the John A. Burns School of Medicine (JABSOM) accepts body donations for use in medical education and research. To the ill informed, the Gross Anatomy dissection laboratory is a frightening place where students must overcome the feeling of disgust and repugnance; a moribund room where a young person must face the intrinsic fear of death, usually for the first time. To others who have entered this educational sanctum, it is where the living learn from the dead; not only the myriad features of the human body, but also a sense of compassion, morality and spirituality.

JABSOM began as a two-year medical school comprising classes of 25 students each in the autumn of 1967. The students were all able to perform human dissections even though the WBDP was not yet in place since the department had an arrangement with Dr. Paul Patek, Chair of the Department of Anatomy at the University of Southern California, to provide JABSOM with cadavers. The donations were derived from the USC program and made available at the cost of processing, \$200, including embalming and shipping from Los Angeles (compared to today's cost of \$1000- 1200 each based on the *American Association of Clinical Anatomists 2004 Survey*). It became clear that if JABSOM were to grow, a WBDP would be essential and the faculty set out to develop one.

With the successes in organ transplantation in the 1960s, a national committee was formed to begin to resolve the confusion arising from the diversity in procurement of organs in various states. This resulted in the drafting of the Uniform Anatomical Gift Act (UAGA), promulgated in 1968, and provided for the donation of organs or an entire body. The UAGA served to govern the process of donation and harmonized the law in the fifty states. This law governed the process of anatomical donation of a cadaver for the purpose of dissection. The law also provided the exact method of authorization and forbade the sale of body parts. It was revised in 1989 and stands today as the primary legal mechanism for body donation.

Hawaii adopted the UAGA in 1968. The legislative hearings were attended by many of the faculty who testified on behalf of the bill. The strongest endorsement came from Dr. George Goto on behalf of the Hawaii Medical Association and the Act passed. Following the legislature's action, the Department of Anatomy and Reproductive Biology began to notify the community that it was interested in receiving donations. The WBDP received its first donation in 1968.

Although the WBDP was in place, the response was initially slow. Since the number of medical students was relatively low, the

need was relatively small compared to other medical schools. The Department enlisted the cooperation of mortuaries in Honolulu to disseminate information about the program. Some of these mortuaries provided the personnel to embalm the bodies at the Medical School, using special fixatives and formulations. In addition, Oahu Cemetery provided a crematory facility enabling the proper disposition of the remains following dissection while Island Wide Mortuary Services, Inc. facilitated transportation of the donations to and from the medical school. The medical school enjoyed the magnanimous assistance from numerous community organizations that continues today.

Currently JABSOM is the sole organization that accepts body donations in Hawaii. This is done through the WBDP administered by the new Department of Biomedical Sciences. Its purpose is to assure fulfillment of the trust of both its donors and the public at large while achieving compliance with the legal statutes of Hawaii. The program is directly supervised by the Chairman of the Department who is responsible for its day-to-day operation and maintains control over all transfers and disposal of remains in a legal and ethical manner. In addition, the donor program maintains a secretary who oversees a written protocol for the donation process that occurs in advance of the use of bodies and parts. Finally, a trained anatomical preparator is responsible for processing donations as well as maintaining a safe morgue and teaching environment that conforms to OSHA standards.

The donation process is simple. An individual requests the appropriate forms from the Department or downloads them from the JABSOM website. The completed forms are returned to the Department at which time a donor card is issued to the registered donor. The donation becomes effective immediately upon death. There is no age restriction for the bequeathal, but a parent or guardian must sign for those under 18 years. Unlike other provisions of a Will that requires probate, a body donation does not. A written donation must be signed by the donor and witnessed by at least two other people, both of whom are at least 21 years of age. A dying patient may communicate his or her wish to an attending physician who will act as one of the two required witnesses. A gift can be revoked orally or in writing prior to the donor's passing and the WBDP can accommodate this change of plan.

If a dying person is unable to communicate and has not made his/her wishes known, a family member or guardian can make a gift of all or part of that person's body. There are statutorily prescribed categories of people who are authorized to make the gift. They are the spouse, an adult child, a parent, an adult sibling, or a guardian. There are occasions when a donation cannot be accepted even from a registered donor. For example, a donation cannot be accepted if it has experienced significant surgical intervention, if the Depart-

ment is notified beyond 72 hours following death if an autopsy was performed, if the donor suffered from a dangerous communicable disease, or, if in the rare situation, there is insufficient space in the morgue. Donors are urged to make alternate plans when registering with the WBDP. All fees for transportation, embalming and cremation are borne by JABSOM, if the donation arrives from Oahu.

Upon receipt of the donation the body is retained typically in the department for at least two years. Upon completion, remains are returned to the family. Alternately, remains are scattered at sea during a memorial service honoring all donors. The memorial service is organized and presented by the medical students every other year. Next-of-kin are invited. The memorial service has been presented since 1975 and offers a sense of closure for the medical students and families as well as reflecting the respect, appreciation, and critical importance that the students place on the donation. Relatives present and share photographs and information about the loved ones who donated their bodies. This enables the students to acknowledge the sacrifice made by the donor while also expressing their gratitude, consistent with memorial service emotions (Dixon et al., 1999).

### The Future of the WBDP at JABSOM

The WBDP will remain a priority in medical education. The new medical facility at Kaka'ako, scheduled to open in March, 2005, will house a new and expanded gross anatomy and morgue facility. A plastination laboratory is planned for the preservation process that incorporates silicates into the tissue so that students can use cadaveric material repeatedly (Doll et al., 2004). Holographic display systems will be introduced into the laboratory as supplemental learning systems for understanding three-dimensional reconstructions. Virtual reality initiatives will facilitate remote learning experiences (Doll and Lozanoff, 2003; Jacobs et al., 2003; Caudell et al., 2003; Lozanoff et al., 2003). Even with all of these added learning aids, human gross anatomy dissection will remain at the core of the educational experience during the first year of medical school at JABSOM. The rationale is that medical knowledge facilitates the relief of human suffering while anatomical dissection facilitates the acquisition of this knowledge in a unique fashion that cannot be duplicated by any other medium. Thus, human anatomical dissection is justified by the activity of dissection and this learning experience reflects a profoundly dignified use of the dead.

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# FIVE WAYS TO DIE ON THE GOLF COURSE:

1. Hit by a golf ball.
2. Run over by a golf cart.
3. Whacked by a golf club.
4. Struck by lightning.
5. Forgot your hat.

Surprisingly, one million new cases of skin cancer are detected every year. One person an hour in the U.S. dies from melanoma, the deadliest form of skin cancer. If you spend a lot of time in the sun, you should protect yourself. One out of five Americans develops skin cancer during their lifetime. Don't be one of them. Stay out of the midday sun. Cover up. Wear a hat. Seek shade. And use sunscreen. For more information on how to protect yourself from skin cancer, call 1-888-462-DERM or visit [www.aad.org](http://www.aad.org).



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