From Privates to Presidents: Past and Present Memoirs from the Anatomical Collections[1]

by Lenore T. Barbian and Paul S. Sledzik

Human remains are all around us. We interact with them every day, but hardly ever notice them. We lose nearly 100 hairs a day, and about 50,000 skin cells each hour. We don't normally concern ourselves with these, until it's time to clean the bathroom.

But, when we think of corpses, skeletons, and other parts of the dead, our mindset changes. Our responses, even in this culture, are widely varied. Human remains are treated with respect and irreverence, horror and serenity, dignity and disgust. Think about how we, as a culture, respond to human remains:

- skeletal remains falling under NAGPRA
- the bones of a Catholic saint in a reliquary touring churches in the US
- fetuses in jars displayed at antiabortion rallies
- human remains used in advertising
- cross-sections of a 39-year old convicted murderer digitized in the Visible Human Project
- the recently identified skeletal remains of the Vietnam Unknown Soldier <link to

The Human Explorer computer interactive based on the data from the Visible Human Project. NCP 3816

http://www.nmhm.washingtondc.museum/exhibits/dna/dna.html>

- plastinated preparations of donated bodies exhibited in Japan, Germany, England, and now North America
- remains of victims killed in war atrocities, mass disasters, or terrorist attacks

Some of us focus on understanding the remains, others on the person, others on the human or ethical issues. Our responses are shaped by culture, religion, professional experience, and personal beliefs about death. Dealing with the dead is downright difficult, particularly in the early 21st century.

What are human remains? The word *remains* is derived from the Latin *remaneo* meaning to remain behind. The root, *maneo*, means to stay, last, or endure. Derived words from the root include permanence and remainder. Webster's defines it as "a remaining part or trace." When used in the plural, it refers to a dead body.

It is difficult to estimate the number of human remains in the world. Focusing just on recent medical specimens, the National Bioethics Advisory Council has estimated that, in the United States, there are nearly 265.5 million medical specimens representing more than 170 million individuals. These materials are housed in repositories, research laboratories, and hospitals. With the population of the world just surpassing 6 billion,

we can look forward to at least a few new human remains being added to the world in the next century.

Few people focus daily on human remains. In the Anatomical Collections, we have over 20 years of daily interactions in the museum with human remains of all sorts. Two things give these specimens real meaning: the feelings and thoughts the remains offer us as individuals and the requests and responses of people who inquire about the specimens. These thoughts and experiences offer a different way of thinking about human remains, a way that may not be evident at first glance.

Anthropologists work to identify the remains from a flooded cemetery in Hardin, Missouri. Hardin 208

The National Museum of Health and Medicine of the Armed Forces Institute of Pathology is one of the few publicly funded museums in America that collects and displays human remains. We have some unique insight into the value of anatomical specimens to both the public and professionals. The museum has completed a study examining the reactions of the museum visitor and focus groups to the display of human remains, and the results of that study are available on this website <link to http://www.nmhm.washingtondc.museum/collections/anatomical/articles/insidesout.html>. The current cautious nature of museums concerning this topic may be an overreaction. The reluctance to exhibit human remains may do more harm than good.

Interacting with Human Remains: Personal Experiences

At the NMHM, we interact daily with all types of human remains. We offer our experiences and recollections as suggestions of other possibilities in interacting with human remains. We have found that a person's reaction to human remains is as varied as humans themselves.

Each year the Anatomical Collections offers a week-long course in forensic anthropology during which students have the opportunity to interact with human remains.

The initial collecting efforts of the museum focused on medical case studies <link to: http://www.nmhm.washingtondc.museum/collections/anatomical/articles/brief_history.html>. As a result, a significant percentage of the specimens are from known individuals, a point that poses often interesting and ethically challenging issues. Do we allow

access to next of kin? Who is considered next of kin? Can we test remains from known historical individuals without consent of living relatives?
Our most interesting experiences involve working with the living relatives of the specimens we hold. Whether the specimens were collected by military directive or donated by the families, relatives regularly contact the museum to inquire about the status of their ancestors' remains. These inquires are mutually supportive—the museum provides access to the remains, photographs, and archival documentation, and the families express their continued support for the museum to house and preserve these remains.

The Remains of Presidents

The morning after Abraham Lincoln's death, three Army Medical Museum pathologists entered the White House to perform an autopsy on Lincoln's body. Overseen by U.S. Army Surgeon General J.K. Barnes and conducted by Colonel Joseph Woodward and Major Edward Curtis, the autopsy began at 11 a.m. on April 15, 1865. Woodward's lengthy account gives no hint of the seriousness and poignancy of their work. His report appears in the *Medical and Surgical History*, where the case is examined as one of several such gunshot wounds to the skull. Curtis is more emotive. As he removed Lincoln's brain from the cranial vault "…suddenly, from out a cruel vent that traverses it from end to end, through these very fingers there slips a something hard—slips and falls with a metal's mocking clatter into a basin set beneath. The search is satisfied; a little pellet of lead."[2] Later, Curtis remarks, "I was surprised to find that the great man's brain weighed no more than that of an ordinary mortal."[3]

Cuffs stained with Lincoln's blood from the shirt of Edward Curtis who assisted in the autopsy. M-762 09601

The bone fragments removed at autopsy, several locks of hair, and Curtis' shirt cuffs, stained with Lincoln's blood, compose the biological specimens still maintained by the museum. These specimens are cultural icons. Viewing the physical remains of Abraham Lincoln is a pilgrimage for some visitors. A few years ago, the museum declined a request to test these materials for DNA and the gene for Marfan's syndrome, a hereditary disease that some medical historians claim Lincoln suffered from. The main reason was ethical: Should these materials be destroyed in order to answer a question of minimal historical importance? Since then, we are contacted regularly by private collectors and museums who want copies of our "Lincoln DNA" in order to authenticate their pillowcase, dress, scarf, or sheet purportedly stained with Lincoln's blood.

Our presidential material begins with Lincoln. We have remains from Presidents Grant, Garfield, Cleveland, and Eisenhower. Among the remains of presidential assassins, we

have the vertebrae of Lincoln's assassin John Wilkes Booth and most of the skeleton, the brain, and the spleen of Charles Guiteau, Garfield's assassin.

Why do we have these materials? The museum was responsible for obtaining the medical specimens of disease and trauma. The injury of Lincoln, and his tragic death, was another in several thousand of cases of gunshot injuries documented by the museum. But, as the remarks of Curtis attest, the gravity of case was not lost. The remains still carry great power. When the bone fragments were measured and weighed several years ago, the remains were handled in great reverence and palpable silence.

Case Studies: General Daniel Sickles and Civil War Soldiers

As Washington politicians go, Dan Sickles was a man ahead of his time. After killing the son of Francis Scott Key (Key was having an affair with Sickles wife), he pleaded temporary insanity, the first successful use of this defense in the United States. In today's Washington, this might be enough to banish one from politics, but Sickles went on to command the Third Army Corps of the Army of the Potomac in the Civil War. It was the events at Gettysburg that melded the AMM and Sickles.

Astride his horse at a skirmish in the Peach Orchard, Sickles directed his troops to return the fire of Longstreet's Corps. As he turned to ride back down his line, a 12-pound cannonball collided with Sickles' right lower leg, creating a wound of shredded tissue and fragmented bone. Sickles quieted his horse, rode to the back of the line, and called for his surgeon. Today, a monument stands on the field of Gettysburg to mark the location where Sickles lost his leg.

Image of Sickles visiting his amputated leg published in a late nineteenth century newspaper. NCP 1727

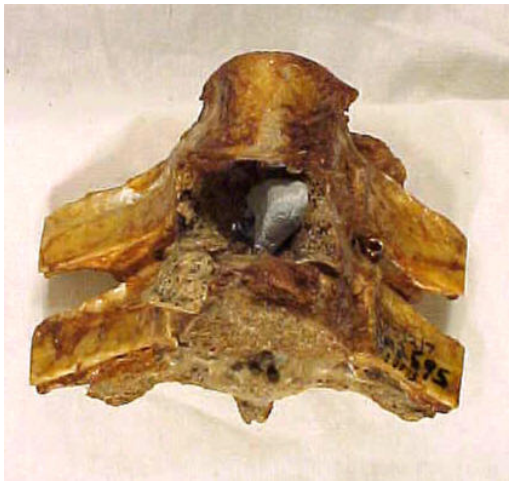
Sickles survived his wound; only about 1/3 of Civil War amputations were fatal. Upon returning to Washington for convalescence, Sickles sent his leg to the museum in a small box, reputedly shaped like a small coffin. Attached to the leg was a card reading, "With compliments of Major General DES." Sickles often visited his leg in the museum, accompanied by a small entourage. Some say his visits fell on the anniversary of his loss; we don't know for sure.

The case of Sickles is an interesting one, in more ways than one. Although Sickles himself chose to donate his leg to the museum and his subsequent visits are a testament to his pride in its final resting place, others have determined that they know better than Sickles where his leg should lie.

In 1975, Ethan Bishop contacted the museum, requesting that the leg be turned over for burial at Gettysburg National Park. Bishop stated that Sickles, who was instrumental in establishing the battlefield as a national park, was reputed to have requested burial at the park. According to Bishop, interment of the leg at Gettysburg would have been Sickles' wish. We asserted that Sickles'

intentional donation and subsequent visits are more than adequate testimony that his wishes are being carried out at the museum today. The leg remains on display, accompanied by text explaining his accomplishments, for all to see.

Of course, our Civil War collection is compromised of people who are famous only to their loved ones. The shattered limbs of privates, corporals, and sergeants continue to be our most accessed and asked about collections. Although researchers interested in military medicine or military history often use the collection, the most intriguing requests come from families with stories about great-grandpa's leg in Washington. Sometimes these family oral histories are correct, and we are able to locate the specimen of their relative in the collection. This has always been met with universal joy and pleasure. Oftentimes families offer us information and photographs of the soldier, providing continuity of the original purpose of the museum.



The vertebrae of Francis Fox. 1001217

Families take great pride that their relative is part of this unique collection. We have never received a request for the specimen to be returned to the family. A recent case illustrates this. Colonel Barnes, a retired Army officer, was receiving treatment at the Walter Reed Hospital when, on a whim, he and his wife visited the museum. While researching the family genealogy, Mrs. Barnes was struck by Francis Fox, a southerner and a member of the famous Mosby's Rangers. He had been injured at Sandy Hook and taken prisoner. Mrs. Barnes had run across information that his "arm" had been sent to Washington. Could it possibility be here at the museum? A database search revealed, oddly, a vertebral specimen from a Frank Fox, Confederate. Fox had been shot in the arm, but the bullet had never exited. He lived for 15 days before succumbing to pneumonia and secondary hemorrhage. An autopsy performed by Assistant Surgeon Younglove revealed that the bullet had passed down through Fox's arm and into his chest, lodging in the body of the fifth thoracic vertebra. Younglove contributed the specimen to the AMM since it represented an injury unsuspected by external examination of the patient. Mrs. Barnes was delighted with this information and received a photograph of the specimen. In return, Mrs. Barnes provided us with information of Fox's military career, a reproduction of a photograph of him in uniform, and bibliographic references.

Case Study: The Lyon Quintuplets

On April 29, 1896 in Mayfield, Kentucky, five boys were born to Oscar and Elizabeth Lyon. They were to first male quintuplets born in the United States. Although the first was died after two days and the last died after eleven days, like multiple births today, these quintuplets caused a media sensation. President Cleveland asked for the privilege of naming them. Circuses offered large sums of money to exhibit the children.

People flocked to see the infants; some were even accused of crawling through the windows of the family's home to see the quints. Eventually, the family decided to have the bodies preserved and exhibited at carnivals and fairs across the country.

The Lyon Quints. 43411

When the family stopped touring, they locked the bodies in the vault of the doctor who attended the birth. After the doctor's death, the Lyons' hid the casket in their home, fearful of grave robbers. Mrs. Lyon's requested that the quints were to be buried with her, but she withdrew this request as the rumors of body snatchers continued. In 1915, she wrote to President Woodrow Wilson stating that, although she had been approached many times to sell the quintuplets, she wanted the government to have them. She cited their safety and their potential for scientific and educational use as her reasoning. Mrs. Lyon's letter eventually arrived at the Army Medical Museum. After negotiating the details of the transaction, the museum purchased the mummified bodies in 1916.

This case demonstrates the cooperation between the museum and the family, both working to make the quintuplets an important part of the collections. Mrs. Lyon supplied information about the birth including birth weights, number of placentas and cords, how the bodies were preserved, and the family history of multiple births. In return, the museum fulfilled Mrs. Lyon's wishes for safety of the bodies and their contribution to education and medical science. Mrs. Lyon contributed substantially to our accession records, and correspondence continued after the acquisition of the quintuplets. Mrs. Lyon inquired if the President of the United States had seen the quintuplets on exhibit. This supportive relationship was continued by the sister of the quintuplets, Mrs. Manie Lyon Tilford who in 1950 reviewed for accuracy the exhibit text accompanying the quintuplets and shared with the museum additional documentation about the quints. She requested that her father be acknowledged in the label and asked for a "photograph of my brothers to see for my self [sic] the little bodies…."

Her request was echoed more than forty-five years later when Mrs. Kaufman, a cousin of the quintuplets, inquired about the infants. We informed her that the quints were no longer on display but were still in the collections and offered her a picture of them. She was thrilled with this offer and requested several copies to share with other family members. Mrs. Kaufman was planning a visit to Washington, and we promised her time at the museum to see the quintuplets herself. Unfortunately, Mrs. Kaufman died before she could make the visit. Her husband, however, fulfilled her wish visiting on June 3, 1999. Many pictures were taken of him with the five babies. As he departed, he

remarked that his wife would have loved to see them. This visit was as much in his wife's memory as it was to see the Lyon quintuplets.

Despite the long and mutually supportive relationship with the Lyon family, others not related to the babies have argued for their return to Kentucky. Their motive? Profit. In 1975, Avery Courtney, president and founder of United Charity of Mayfield, Kentucky, mounted a campaign to have the quintuplets placed in his care. He took his case to then President Gerald Ford, the U.S. Surgeon General, and the Congress. Ignoring all documentation, he claimed that Mrs. Lyon never intended for the babies to remain in Washington. She was, he claimed, poorly educated and not of sound mind, living with the delusion that "she was a miraculous person, perhaps, like the Virgin Mary." Courtney stated that such a person was unable to make such an important decision as to the final deposition of her children's bodies. Mr. Courtney claimed that the most suitable place for the quints was Mayfield, under the watch of United Charity, so that the community could "benefit from the bodies. Washington has had the bodies on display since 1916 and have received many great and important benefits." The benefit of which Mr. Courtney spoke was "the income from the bodies."

The request was duly considered by the Museum and their legal counsel. The decision was made to keep the quintuplets, consistent with the agreement made with Mrs. Lyon and reflective of her wishes. Although Mr. Courtney may have been correct that some inhabitants of Mayfield could profit from the quintuplets, there seems to be no way to misinterpret Mrs. Lyon's statement that she would "much rather for the Government to have them than any one else."

Case Study: The Vietnam War Unknown Soldier

War of 1812 American soldiers recovered from the Snake Hill military cemetery, Ontario,

The United States puts a high price on the remains of its war dead. Millions of dollars are spent in the search for and identification of soldiers who remain missing in action. In 1991, the Armed Forces DNA Identification Laboratory (AFDIL) was created within the AFIP to identify the skeletal remains of U.S. service members. But how was AFDIL to do this? In 1991, DNA extraction from bone was still new. Extraction and amplification of bone DNA damaged by environmental insults, bacteria, fungi, and decay was rarely successful. AFDIL needed to devise techniques to overcome these problems in order to successfully use this powerful tool.

AFDIL turned to the collections of the NMHM. Could and should bone specimens from Civil War soldiers be destroyed to perfect a technique that would help identify servicemen from World War II, Korea, and Vietnam? The decision for destructive analysis is never an easy one for any museum. Upon reflection, the museum's accession committee supported the analysis, citing the potential importance of the technology. Bone fragments from eight specimens were selected. AFDIL's studies using our collections

made an important contribution to the successful extraction of mitochondrial DNA from ancient bone. True to the original reason for collecting them, these Civil War specimens contributed to AFDIL's efforts to identify missing servicemen from World War II, Korea, and Vietnam.

The most famous of these missing servicemen is probably Michael Joseph Blassie who for more than 10 years was interred in the Tomb of the Unknowns. His mother and sister visited the museum to see an exhibit on the identification of Michael. In seeing the collections, they questioned how some of the collection came into our hands. But, they expressed gratitude for the contribution the museum's collection made to allow Michael's remains to be interred in his hometown under his own name. <link to http://www.nmhm.washingtondc.museum/exhibits/dna/dna.html>

Thomas Lynch, the undertaker/poet, has remarked on this case, "The bodies of the [war] dead are not "just" [a shell]. If not entirely icon or essence, they also are neither remnants or debris. They are changelings, incubates—relics of a new reality that bear names and dates, the image and likeness of people who are loved and grieved, longed for, searched after." [4]

Urban Legends

The unique and powerful nature of many of the specimens has lead to legends concerning the museum's holdings, including the erroneous belief that the museum holds specimens from John F. Kennedy, Albert Einstein and John Dillinger. We do hold an autopsy report prepared by Pierre Finck, an AFIP pathologists who assisted in Kennedy's autopsy, but no anatomical specimens. We do not have Einstein's brain. It's in Kansas. Parts have been sent to researchers for analysis, who have determined that the portion of Einstein's brain associated with mathematics was 15% larger than normal. Then there's John Dillinger, or his manhood, to be exact. The legend is that Dillinger was quite a man, in the anatomical sense, and that his penis was removed at autopsy and sent to the museum. We have many penises, and have examined them all, but Dillinger's is not among them.

Anatomical preparation, circa late 19th century. 398110

Some Thoughts on Human Remains

In his book *First Cut: A Season in the Human Anatomy Lab* Albert Carter describes the phases medical students go through when they first encounter their anatomical cadaver for dissection. Initially, there is disgust and aversion. This is soon replaced with reducing the cadaver to a biological exhibit to be draped, cut, reflected, and carefully examined. Finally, as Carter puts it "the cadaver itself seems to break through these attempts at reduction to reassert its own humanity, by presenting oddities, intricacies, and variations… the irrepressible individuality of each body becomes clear

anyway, as a particular body of a particular sex that belonged to an actual person with a human history."[5]

Perhaps we should consider human remains this way. Think beyond the disgust and aversion to the inner meaning of the both the beauty and complexity of the human body and the person who left it for us to examine. Anatomical dissection teaches the medical student humanity as well as anatomy. It was only when the early anatomists went beyond the fear and disgust of the dead human body that the foundations of modern medicine were cast.

Related to this "disgust" factor may be the separation from death and dying that permeates modern American society. Human dissections were public events in the 17th and 18th century Europe. As Gonzalez-Crussi explains,

> "…past generations were able to establish a certain communion with the dead, a certain intimate commerce that seems no longer possible…. Death was not, as in our days, a spectral, terrifying image whose presence must not be evoked in polite conversation. It was a harrowing, but concrete, everyday reality. Consequently, the realm of the dead and the ambiance of the living were not cleft from each other as they are now, but closely adjoined to each other."[6]

Some medical students who take gross anatomy are taught a course in death and dying after their lab work. The course introduces the student to the psychological, emotional, and spiritual aspects of death. It puts in perspective their work on the dead as it applies to their career healing the living. Perhaps, as anthropologists and archeologists who deal with the dead, we have fallen too easily into intellectualizing our responses or into reinforcing our cultural responses to death. Maybe a course in death and dying would give some perspective to our work. We also recommend the works of authors who have contemplated our human responses to death and human remains: Richard Selzer, Frank Gonzalez-Crussi, Philippe Aries, Thomas Lynch, Leslie Feidler, and Rosemarie Garland Thomson.

Conclusion

Human Body, Human Being exhibition floor.

Museums, as the stewards of history, have a commitment to maintain biological materials. Denying the visitor access to these materials denies them knowledge of themselves. If museums rid themselves of these materials in a feel-good purging and bury or sell them, they may end up in private collections. There are human remains collectors of mummies, skulls, and babies in bottles. Michael Jackson's attempt to purchase the skeleton of the Joseph Merrick, the Elephant Man, is one, well-publicized case. Most collectors take great care to document their materials, but the security and long-term preservation provided by museums are not part of their

focus. Most collectors, understandably, avoid public attention so the opportunity for the public to view these is restricted.

It is not just the archaeologists, the forensic anthropologists, and the biological anthropologists that need to understand our relationship with the dead. Human remains show us the fragility of the human body. The more time we spend with human remains, the deeper our respect for them. We see our own mortality. What archeologist has not thought of their own death as they gaze into the newly excavated grave? Human remains are what are left after death. But, what do the remains leave in us?

---

[1] The following is based on a presentation given at a conference exploring issues related to human remains held at Colonial Williamsburg, Va. November 1999. The proceedings of this conference have been published: *Human Remains: Conservation, Retrieval and Analysis. Proceedings of a Conference held in Williamsburg, Va., Nov 7-11, 1999*, ed. Emily Williams (Oxford, England: Archaeopress, 2001).

[2] Curtis, Edward. "Last Professional Service of the War." In *Personal Recollections of the War of the Rebellion: Addresses Delivered before the Commandery of the State of New York Military Order of the Loyal Legion of the United States*, edited by A. Noel Blakeman. Unknown publisher, 1912. Quoted in Robert Henry, *The Armed Forces Institute of Pathology: It's First Century: 1862-1962* (Washington: Government Printing Office, 1967), 44.

[3] Quoted in Lattimer, John K. *Kennedy and Lincoln: Medical and Ballistic Comparisons of their Assassinations.* New York: Harcourt Brace Jovanovitch, 1980, 38.

[4] Lynch, Thomas. "Why We Must Know." *Washington Post,* 14 May 1998. Sec. A, p. 23.

[5] Carter, Albert H. *First Cut: A Season in the Human Anatomy Lab.* New York: Picador, 1997, p. 105.

[6] Gonzalez-Crussi, Frank. *Suspended Animation: Six Essays on the Preservation of Bodily Parts*. New York: Harcourt Brace, 1995, p. 86.