

## **Informed Consent for Willed-body use in Research, Education, Training, and Outreach in WCU's Forensic Anthropology Program**

Forensic anthropology involves the examination of human remains in order to identify unknown individuals and to contribute to the determination of cause and manner of death.

WCU's forensic anthropology program has a willed-body program which supports its human decomposition facility, The Forensic Osteology Research Station (FOREST), as well as a documented human skeletal collection representing the skeletal remains from its donated individuals. WCU's forensic anthropology program is unique in that not only does it serve its enrolled students' educational needs, but it works closely with a wide variety of partners and stakeholders to provide research, education, training, and outreach to support various students and professionals in their education, careers, and professionalization.

WCU's forensic anthropology program partners include:

- WCU's Forensic Science program, which largely uses applied biology and chemistry to address questions related to forensic investigations.
- WCU's Human Remains Detection Cadaver Dog Training Program, which trains both handlers and canines in human remains search and detection methods.
- Various external agencies including local, regional, and federal law enforcement and death investigation personnel.
- Various external researchers, who may submit requests to visit WCU's forensic anthropology facilities to collect data for use in various research projects.
- The American Board of Forensic Anthropology, who often use skeletal remains from WCU's collections as part of their annual certification exams.

### **Use of donated human remains in forensic anthropology:**

WCU's forensic anthropology program takes a humanist approach to working with our donors, their Next-of-Kin, and their families, as well as our students, partners, and stakeholders. Above all, we emphasize the ethical principles of Respect for Persons, Right to Privacy, and Informed Consent. The purpose of this document is to inform our donors how their anatomical gifts may be used and to emphasize that even in death and after skeletonization, WCU's forensic anthropology program continues to use, honor, and respect the remains of our donors, as the physical remains of human beings which require respect, care, and privacy.

#### *Typical use of human remains*

In the FOREST, donor remains are primarily used for research through the routine collection of data, to include daily photographs to document the rate of decomposition. Additionally, within this context, donors provide education and training experiences in the process of, and factors that affect, human decomposition; this includes how various scavengers may interact with the remains.

In the classroom, donor remains are primarily used for education and training experiences, through the use of images, or hands-on activities. Because forensic anthropology is such an active, engaged

discipline, most of the methods we use and teach require the observation and/or measurement of bones themselves.

In the laboratory, donor remains are primarily used for research experiences, by WCU students, faculty, and staff, or by visiting researchers who come to collect various data from our skeletonized donors as part of approved research projects.

#### *Destructive testing*

While uncommon, there are certain types of analyses which require small amounts of modification to the remains, such as histological analysis, elemental analysis, genetic/DNA analysis, etc. These analyses may be performed as they are minorly invasive and may generate important contributes to research, education, training, and outreach experiences. Note: we will not perform genetic testing on remains without express consent as documented in the donor's donation paperwork, and WCU will not sell or share any genetic information publicly.

#### *Unique uses of human remains*

As noted above and in our donation paperwork, in addition to the traditional research, education, training, and outreach uses of willed bodies here at WCU, there are unique types of experiences which donors may opt out of: intentional research on skeletal modification and/or genetic research. While these experiences can provide highly unique and important research experiences, we recognize that not everyone may be interested in such activities and thus anyone is welcome to opt out of these types of experiences in their donor paperwork.

#### **Handling and curation of remains**

WCU's forensic anthropology program handles remains with care and respect. We emphasize the treatment of, and care for, donor remains as if they were members of our own family by anyone that may use these remains for research, education, training, or outreach.

#### *Location of remains*

Once a body has been received by WCU's forensic anthropology program, the remains are kept on campus, either at the FOREST, while decomposing, or in the John A. Williams Human Skeletal Collection (JAW Collection). Once remains are collected from the FOREST, they are kept together as a single individual (i.e., each donor gets their own box labeled with their own identification number). Remains may at times be removed from the JAW Collection for use in classroom or other off campus activities, however in such cases, their use and temporary location are documented they are always returned after use.

While rare, WCU's forensic anthropology may temporarily loan human remains to another institution in need for research, education, training, or outreach. In such instances, documentation of the terms of the loan will be kept on file, including the reason for the loan and the temporary transfer of any remains involved. All remains are always returned after use.

Unless an individual specifically consents to intentional studies of skeletal modification, WCU's forensic anthropology program will not intentionally make significant modifications to the remains. However,

while at the FOREST, the body is exposed to the natural environment which often results in organs, tissues, or parts of the body being damaged or separated from the body during the decomposition process. Skeletal elements separated from a body that cannot be immediately reassociated are retained and eventually put back with the rest of the remains through our laboratory reassociation process.

*Use and reproduction of images, likeness, etc.*

In order to support various research, education, training, and outreach opportunities, WCU's forensic anthropology program and its partners and stakeholders reserve the right to create and share/distribute representations such as photographic, video, radiologic, digital reconstructions, extended reality renderings, and/or other multimedia of a donor *in ways that are deidentified*. We will not share/distribute representations of donors where they could be recognized/identified.

Typically, such images, etc., are used in presentations, published textbooks and/or articles, journalism, or in anonymized research databases. Note that the generation and sharing of three dimensional (3D) digital models of bones, and the use of 3D replicas, such as casts or 3D prints from digital models is becoming more commonplace and is a likely use of donors in our collection in the future.

**Generation of funding from donated remains**

Most activities in which donor remains are used, provide no additional funding or support for WCU and its forensic anthropology program. However, continuing education courses and other activities may generate some additional funding. In these cases, the funding is used in support of WCU's forensic anthropology program, typically to support student research and/or donor families that may need financial assistance with transportation costs. Under no circumstances are remains ever sold or permanently removed from WCU.