



Institute for Plastination



BODY DONATION

for Plastination



Institute for Plastination

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PREFACE

Dear Readers,

Thank you for your interest in the possibility of donating your body for Plastination, a method that enables permanent preservation of natural anatomical specimens permanently for the purposes of research and instruction. The demand for this type of human specimen has remained constant. While, on the one hand, they are absolutely necessary for training physicians and for keeping physicians' skills up to date, they can, on the other hand, be used to educate the public on general medical issues.

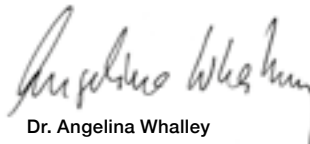
Plastinated specimens are permanently preserved and therefore normally will not be buried. The demand for specimens is why I initiated a dedicated Body Donation Program for Plastination at the Anatomical Institute of Heidelberg University in the early 1980s. For 20 years, I worked at the Anatomical Institute as a physician and anatomist, and it is also where I invented the Plastination process in 1977. This Body Donation Program was later transferred to the Institute for Plastination.

I founded the Institute for Plastination (IfP) in 1993 because I was not able to develop the Plastination process at the Heidelberg University further at that time. Today, I continue to serve as the Scientific Director of the Institute, while my wife, physician Dr. Angelina Whalley, serves as its Managing Director. In 2006, I also founded Gubener Plastinate GmbH with its associated PLASTINARIUM in Guben, Brandenburg, Germany. Most of our Plastination work today is carried out there.

This brochure contains important information that you will need to make an informed decision about donating your body for Plastination. In it, you will learn exactly what will happen to your body after your death. We will also explain to you the process of Plastination, which is based on the age-old tradition of preserving and producing anatomical specimens. In addition, we will discuss ethical and moral issues, as well as inform you about the tasks and objectives of the IfP and Gubener Plastinate GmbH. Finally, this brochure will also provide detailed instructions for donating your body for Plastination and will show you how to obtain additional information.



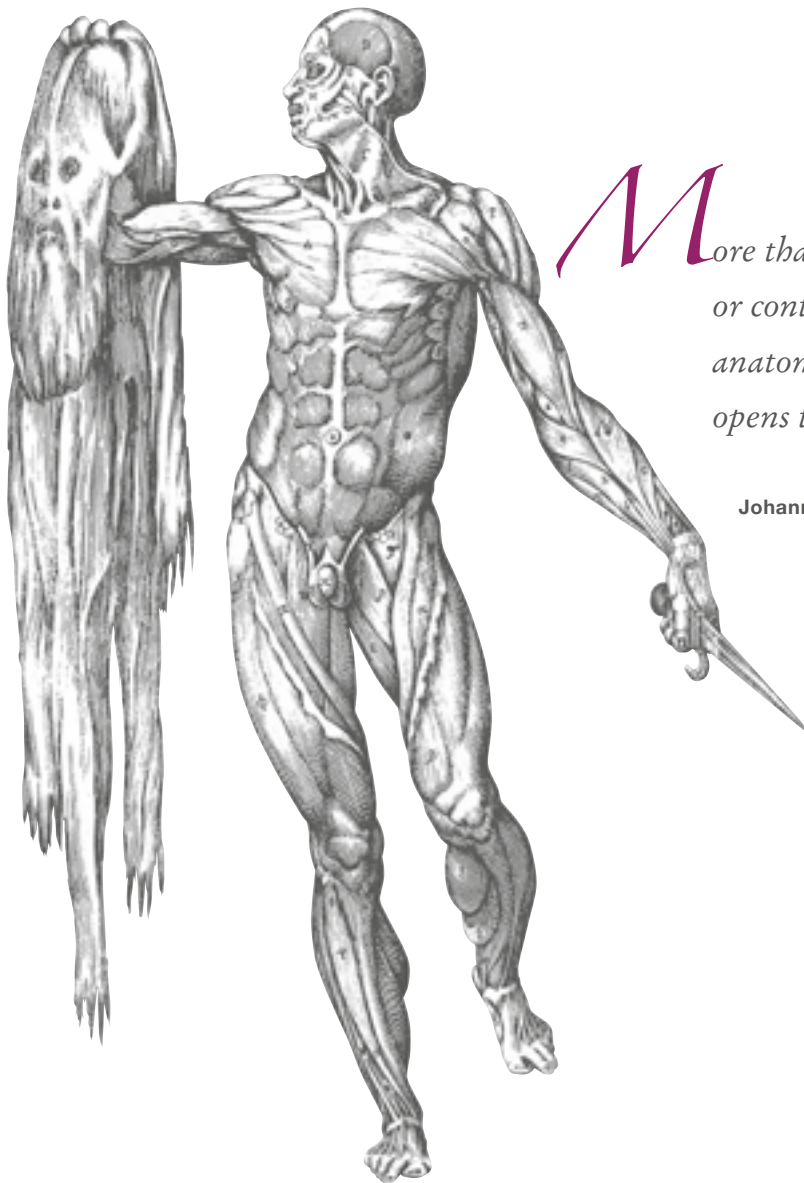
Dr. Gunther von Hagens
Scientific Director of the Institute for Plastination
and Gubener Plastinate GmbH



Dr. Angelina Whalley
Managing Director of the Institute for Plastination
and Curator of the BODY WORLDS exhibitions



Anatomy— Tradition and Future



*More than any other endeavor
or contemplation,
anatomical dissection
opens the depth of nature to us.*

Johann Wolfgang von Goethe (1749–1832)
German poet



Fasciolo de Medicina, *Depiction of an Anatomy Lecture*, 1493. Dissections of human bodies remained rare until the Middle Ages. During these dissections, the professor would read from the books of ancient physician Galen (131–201) while his assistants conducted the actual cutting of the corpse without paying much attention to the actual anatomical findings before them.



In the late Middle Ages, artists began studying human anatomy. This painting presumably shows Michelangelo dissecting a body.

Awe and Appreciation

Religion and ideology impeded the study of human anatomy for many centuries. Only animals were dissected, particularly dogs and monkeys, but attempting to extrapolate the results to humans resulted in many mistakes.

From a religious point of view, anatomical studies were simultaneously superfluous (because the truth about humans had been revealed in Christ) and dangerous (because restless scientific research might displace the study of God). For centuries, human curiosity was strictly reined in. Based on 1 John 2:16, which warns of the “lust of the eyes,” both viewing the interior of the human body and viewing the cosmos were to an extent rejected.

However, contrary to popular belief, the Church did not issue an official prohibition against anatomical studies in the Middle Ages. And yet, for more than a thousand years, both the Church and secular laws opposed the dissection of human bodies, hindering progress in anatomical research until the beginning of the modern age. The religious idea of the inviolability of the human body contradicted the practice of taking it apart. Two fathers of the Church, Tertullian (160–230) in his work *De anima* (On the Soul) and Augustine (354–430) in his work *De civitate Dei* (The City of God), clearly opposed the dissection of humans. Their critical position was followed by official church representatives in subsequent centuries.

Only the popes Sixtus IV (1471–1484) and Clement VII (1523–1534) explicitly allowed the anatomical study of human bodies.

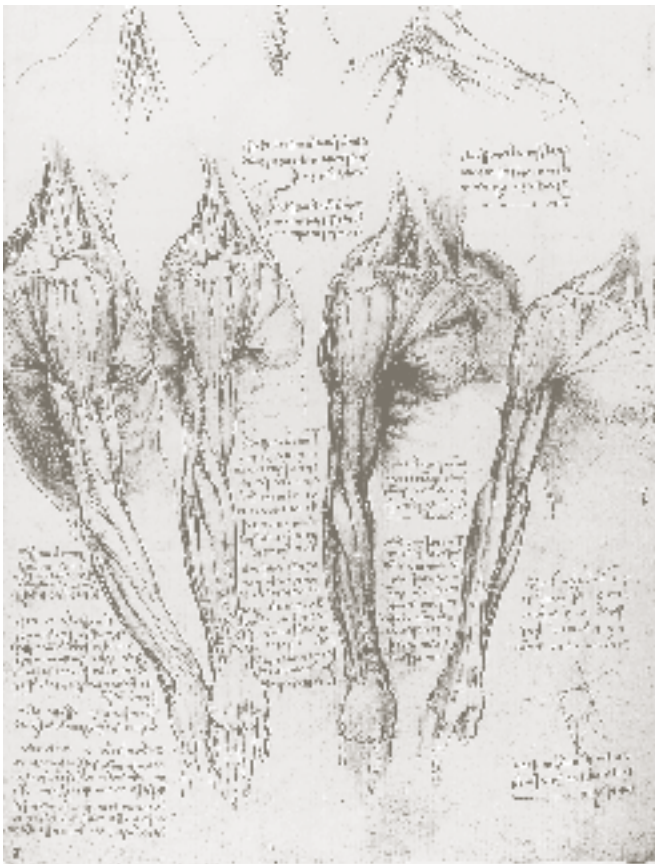
Taboos and Curiosity

At the end of the Middle Ages, anatomy became closely connected with the fine arts as well as religion. In addition to scientists and medical scholars, painters and sculptors were particularly interested in anatomy during the Renaissance. Leonardo da Vinci (1452–1519) and Michelangelo (1475–1564), for example, not only observed dissections conducted by medical scholars they were friends with, but they also pursued their anatomical studies to be able to depict humans even more realistically in their works of art. Although the details of their drawings were often wrong, they were still among the first people to realistically portray the body's interior in its natural proportions. Their work contributed greatly to public acceptance of the study of the human body.

A little later, famous anatomist Andreas Vesalius (1514–1564) was courageous enough to publically criticize the practice of limiting anatomical dissections to animals. Today, he is regarded as the founder of scientific anatomy. In his monu-

mental work, *De fabrica humani corporis* (The Fabric of the Human Body), he described human anatomy based on his experience and insights gained in public dissections in anatomical theaters that had been introduced in his time. The drawings created by his illustrator Kalkar were of unprecedented exactness. In addition, they also had a new aesthetically pleasing quality: they showed the dissected bodies in life-like poses, positioned in natural settings and adorned with everyday objects.

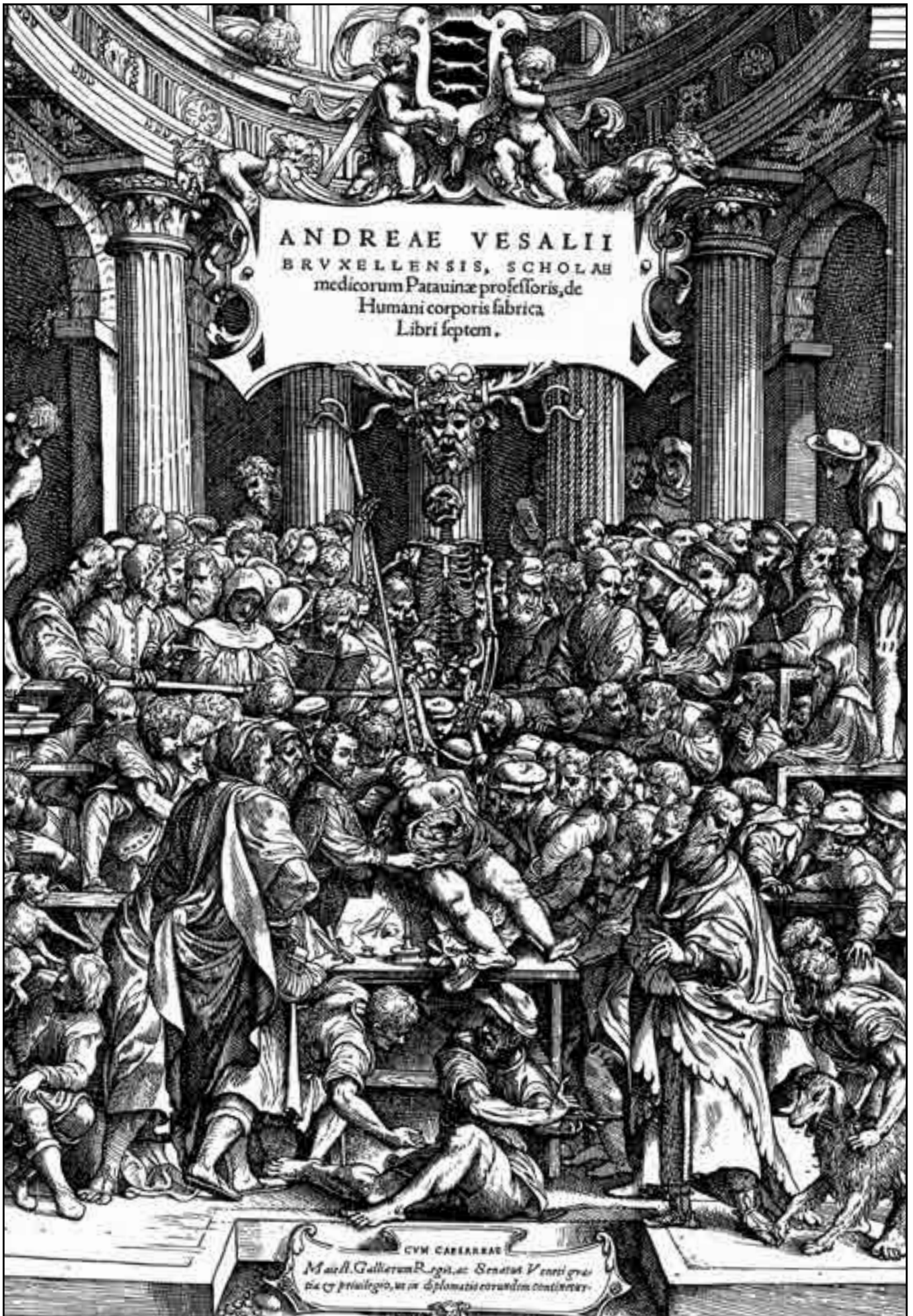
According to eyewitness accounts, Vesalius was also the first to assemble upright sculptures from real human bones, which he called skeletons, derived from the Greek “*ho skeletos*” meaning dried matter. This act was truly revolutionary because never before had anyone done this with the deceased. In a way, he brought the dead back from their graves, in order to return them to society.



Anatomical studies by Leonardo da Vinci, dated 1510.



Andreas Vesalius (1514–1564), founder of scientific anatomy.



Cover of Andreas Vesalius' anatomy text, *De fabrica humani corporis*. It shows Vesalius at the dissection table inside an anatomical theater, surrounded by people of various social ranks.

Public Anatomy and Religion

For centuries, the body had been considered the “grave of the soul,” but in the Renaissance it was praised as the “temple of the mind”. Once the body was considered to be a beautiful expression of the human soul, anatomical studies became more of a public effort, as clearly demonstrated by the establishment of many anatomical theaters throughout Europe.

Initially, public dissections were conducted outdoors or inside dedicated temporary wooden constructions. These so-called “*temporaria theatra*” were set up and dismantled inside existing buildings as needed. Public dissections were even conducted inside empty churches and chapels, such as San Francesco in Bologna, Italy, or Jacob’s Chapel in Tuebingen, Germany. Later, more permanent anatomical theaters, “*theatra anatomica*,” were established: in 1530 in Montpellier, France; in 1594 in Padua, Italy; in 1595 in Bologna, Italy; in 1597 in Leiden, The Netherlands; in 1622 in Uppsala, Sweden; in 1643 in Copenhagen, Denmark; in 1694 in Paris, France; in 1720 in Berlin, Germany; and in 1727 in Halle, Germany, to name but a few. In the 18th century, almost every medical school had its own anatomical theater, and the church authorities never objected.



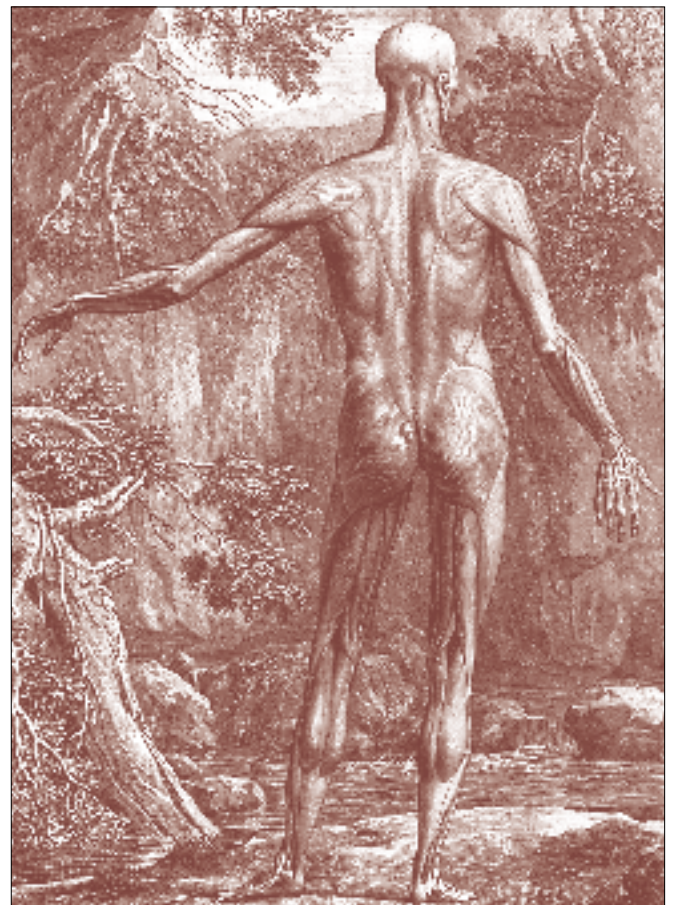
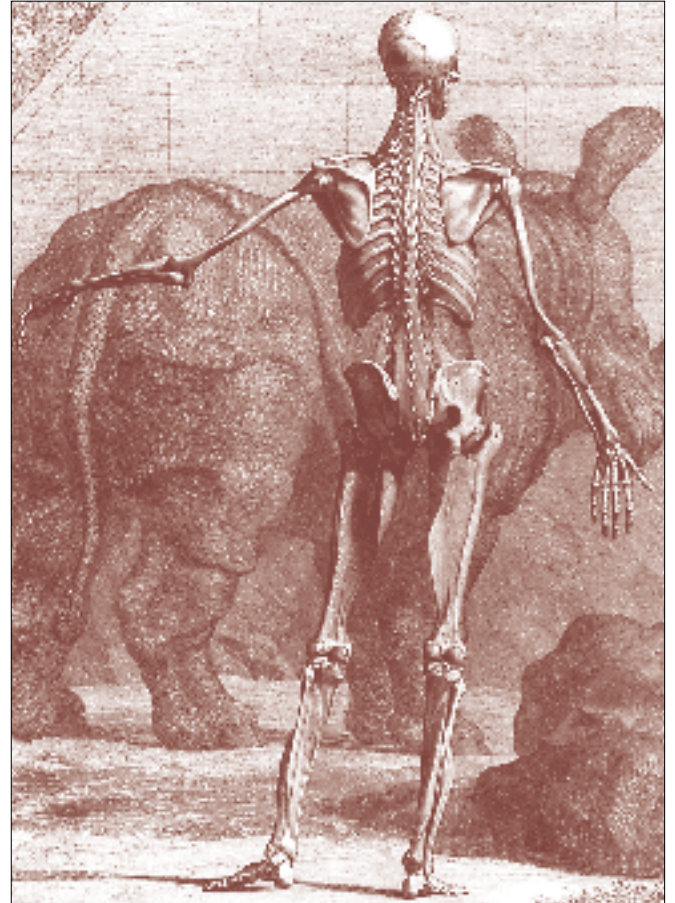
Drawing by the British physician William Cheselden, dated 1733. During the Renaissance, anatomy was also considered a glimpse into God’s creation.



Wooden anatomical theater in Padua, Italy (late 16th century).

Almost all dissections were carried out publicly, which made them accessible to a wider audience. Over time, this type of event evolved into social activities—a new, fashionable element of the social lives of sophisticated people. In addition to professors and students, burghers, aristocrats, priests, and monks were among the audiences. Furthermore, many artists, writers, and scholars, such as Johann Wolfgang von Goethe and the brothers Wilhelm and Alexander von Humboldt, were members of the interested lay and expert audiences.

Back then, deconstructing a human body was also the equivalent of making visible the interior of a divine creation. Numerous documents from the time of the anatomical theaters point out God’s inexplicable wisdom that was thought to be revealed in both anatomical and astronomical studies. Again and again, the human body in this context is described as a miracle, created by God’s own hands. It was thought that just like the close examination of the skies, dissection of the human body might prove the existence of God. In any case, both a clear starlit night as well as performances in the anatomical theaters were believed to serve as opportunities to admire the highest wisdom, as clearly revealed by the open cosmos as by the cut open human body. During the course of two centuries, numerous scholars repeatedly pointed to this aspect of public dissections, which they considered contributions to religious edification, or even productions of a naturalistic-theological proof of God’s existence. The Cathedral of Science, with a dissecting table at its center serving as its altar, was always a Temple of Religion, too.



Drawings by Dutch anatomist Bernhard Siegfried Albinus, dated 1747. During the Renaissance, the human body was seen as a divine miracle, which was manifest in its interior as well. The artfully dissected bodies were therefore presented beautifully in aesthetically pleasing ways and in life-like poses and often placed against the backdrop of a landscape.

Preservation and Teaching

Despite this progress, the study of human anatomy remained limited for a long time because of a lack of suitable preservation methods. A breakthrough only came in 1893, when formalin, an aqueous solution of formaldehyde, became available. This solution allowed, for the first time, the processes of decay to be halted. Immersed in formalin, soft tissue specimens and even entire bodies could be preserved with fairly good quality as “wet specimens.” To this day, fixing a body in formalin is a common way of preserving it for anatomical studies.

The first “dry specimens” became available when body tissues were soaked in paraffin, which was patented in 1914. During the 1950s, the paraffin method was replaced by a technique based on water-soluble polyethylene glycols and eventually by Plastination in the 1980s.



Horseman of the Apocalypse by anatomist Honoré Fragonard (1732–1799). Fragonard made his anatomical specimens into lasting pieces of art. He injected them with colored wax that hardened inside the blood vessels. The remaining tissues dried up and were treated with varnish. His works are still on display at the Ecole Nationale Vétérinaire d'Alfort near Paris, France.



A whole-body specimen with injected metals, about 200 years old, and still on display at the 'Anatomico di Napoli', Naples, Italy.

Academization and Retreat

Beginning in the early 19th century, anatomical studies increasingly excluded the public. They became confined behind university walls, and anatomy has been exclusively practiced as scientific discourse since then, without the participation of medical laypeople. This development was paralleled by a tendency to restrict insights into the interior of the human body to the gains in scientific expert knowledge. Religion-based perceptions of the body's interior were rejected as being unscientific. This shift happened during the same period that surgeons and dentists, who were formerly only manually skilled and trained, rose to the social class of acknowledged academics.

There are certainly several reasons for anatomy's retreat from the public view into tightly sealed-off rooms in which expert knowledge was exclusively passed on to students and colleagues. Without doubt, the increasingly academic, scholarly nature of the physician's profession was one of them. It contributed considerably to anatomical theaters being closed to

lay audiences. Major reforms in anatomical instruction also played a role. During the 18th century demonstration of human anatomy took place with medical expert teachers at its center. In the 19th century, however, the students themselves were handed the dissection tools to make the initial cuts in the

body. This transition from exclusively watching and listening to being directly involved in dissecting led to the establishment of special dissection rooms, which in turn displaced the anatomical theaters. The sense of touch took primacy over the formerly dominant sense of seeing.

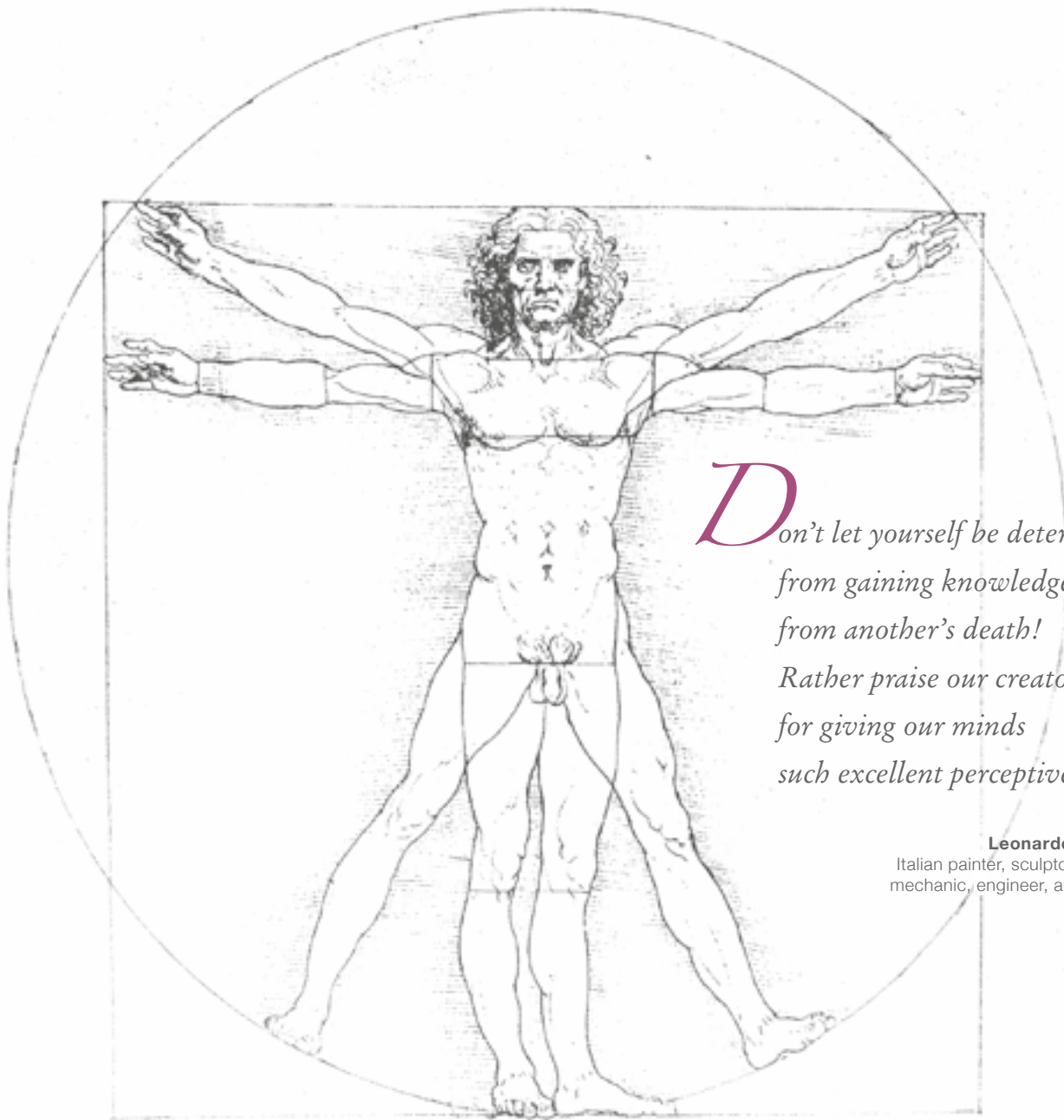
Notably, moral considerations did not play a significant role in this development. Anatomy was not removed from the public because of ethical concerns or religious objections, but rather because of changes in the way in which anatomy was taught and studied! Thus, until recently, most people have been oblivious to anatomy. Museums of medical history with their numerous wet and dry specimens—but without significant numbers of visitors—bear testament to this public indifference.

The BODY WORLDS exhibitions, thus rekindle a culture of public anatomy, while inspiring millions of people to take an interest in anatomy.



***The Runner**, one of the first whole-body plastinates created in a life-like pose by Gunther von Hagens for the BODY WORLDS exhibition. Created in 1997.*

Plastination— Principles and Method



*Don't let yourself be deterred
from gaining knowledge
from another's death!
Rather praise our creator
for giving our minds
such excellent perceptiveness!*

Leonardo da Vinci (1452–1519)
Italian painter, sculptor, architect, anatomist,
mechanic, engineer, and natural philosopher.



First, the body is fixed in formalin and anatomically dissected, before it is subjected to the Plastination process. A whole-body plastinate requires about 1500 hours of work and takes about one year to produce.

The Process of Plastination

To permanently preserve a specimen, it must be protected against decay. Decay is a natural process. It is initiated by enzymes released by the cells after death and is then continued by putrefactive bacteria and other microorganisms that colonize the dead body. The Plastination process prevents this colonization by removing the water and fat that bacteria thrive on from the tissues and replacing them with polymers. However, the exchange is not direct, because the body's own substances cannot be mixed with the polymers. To circumvent this, Gunther von Hagens developed an indirect approach: In a first exchange, water and tissue fluids (which make up about 70% of the human body) as well as tissue fat are replaced by acetone, a readily vaporized solvent. In a second step, the acetone is in turn replaced by a polymer solution.

This important second step in which liquid polymers enter every last cell of the specimen, is called forced vacuum impregnation. Just as a baby uses negative pressure to suck milk from the breast, acetone is pulled from the specimen by the negative pressure created under vacuum conditions. This creates negative pressure inside the specimen, allowing the polymer solution to diffuse into the specimen.

Overview of Plastination Process Steps

Embalming and Anatomical Dissection

The first step of the process involves halting decay by pumping formalin into the body through the arteries. Formalin kills all bacteria and chemically stops the decay of tissue. Using dissection tools, the skin, fatty and connective tissues are removed in order to prepare the individual anatomical structures.

The process of Plastination is based on two exchange processes:

Removal of Body Fat and Water

In the first step, the body water and soluble fats are dissolved from the body by placing it into a solvent bath (e.g., an acetone bath).

Formalin solution being injected into the body



Acetone bath



Courtesy of the DENVER POST

Gradually, the specimen fills with the polymer. Physically speaking, this process utilizes the difference in vapor pressure between the volatile acetone and a polymer solution with a high boiling point temperature. For thin body slices, this process is completed within a few days, but for whole-body specimens it requires several weeks. The specimen is left in the polymer bath until the vacuum has dropped to about one hundredth of normal pressure (< 5 mm Hg) and the remaining acetone bubbles escaping are few and far between. The specimen is then removed from the polymer bath and hardened.

With Plastination, the cells of the body and its original surface relief are preserved in their natural form, down to the microscopic level. The specimens are dry and odor-free, will remain unchanged for an unlimited period of time, and can be studied not only visually but also by touch.



Forced impregnation: Under vacuum conditions, acetone bubbles out of the specimen and is continuously removed, creating negative pressure inside the specimen and allowing the polymer solution to diffuse into it.



Forced Impregnation

This second exchange process is the central step in Plastination. During forced impregnation a reactive polymer, e.g. (silicone rubber) replaces the acetone. To achieve this, the specimen is immersed in a polymer solution and placed in a vacuum chamber. The vacuum removes the acetone from the specimen and helps the polymer to penetrate every last cell.

Positioning

After vacuum impregnation, the body is positioned as desired. Every single anatomical structure is properly aligned and fixed with the help of wires, needles, clamps, and foam blocks.

Curing (Hardening)

In the final step, the specimen is hardened. Depending on the polymer used, this is done with gas, light, or heat.





Gunther von Hagens and his team while posing the large plastinate Rearing Horse with Rider (2000).

Development and Dissemination of Plastination

In 1977, Gunther von Hagens invented the Plastination process at the Anatomical Institute of Heidelberg University, and he has since continued to develop and refine it.

The development of the Plastination process has always been linked to the development of suitable polymers because the mechanical and optical properties of the polymers determine the characteristics of the plastinated specimens.

Gunther von Hagens also continued to improve the technical aspects of the process. The development of the gas-curing step, which separates the hardening step from the impregnation step, was essential. Before that, manufacturing large specimens, including whole-body specimens, was not possible because premature hardening inside the impregnation bath was a problem. The first whole-body plastinate was created in 1992.

Gunther von Hagens' research, however, is not limited to the Plastination process. It also includes macroscopic anatomy studies because the polymers used in Plastination harden soft tissues to the extent that they can support the specimen, which is not possible with formalin-fixed specimens. This hardening allows for novel dissection and display options, including exhibiting organ structures in their topographic and functional contexts. Artificial gaps and interspaces can be created, exposing structures situated deep inside the body without having to remove superficial structures. The specimens are dissected in great detail. Because they will be indefinitely preserved, this effort is more justified than in traditional anatomy.

When he developed the slice Plastination method, Gunther von Hagens was for the first time able to manufacture thin preserved slices of the body. Slice plastinates are original body slices, 1 to 5 millimeters thick, that show the situational relationships between organs and other structures in microscopic detail. Depending on the polymer used, these slices are translucent or opaque. Additional staining methods, developed specifically for this purpose, can highlight individual tissues such as connective tissue or nerves. For brain slices, a special refractive polyester resin is used that permits an extraordinary differentiation between gray and white matter.

Slice plastinates are particularly well suited for scientific and clinical research, because serial slices permit an accurate three-dimensional analysis of the plastinate down to the finest structures. So far, complex issues such as the blood supply of the patella, the blood flow from the carpal bones, and the elucidation of the exact anatomical position of tiny muscles and nerves in the prostate region have been investigated by using such slices.



Silicone-impregnated specimens are cured using a special gas in an airtight chamber.

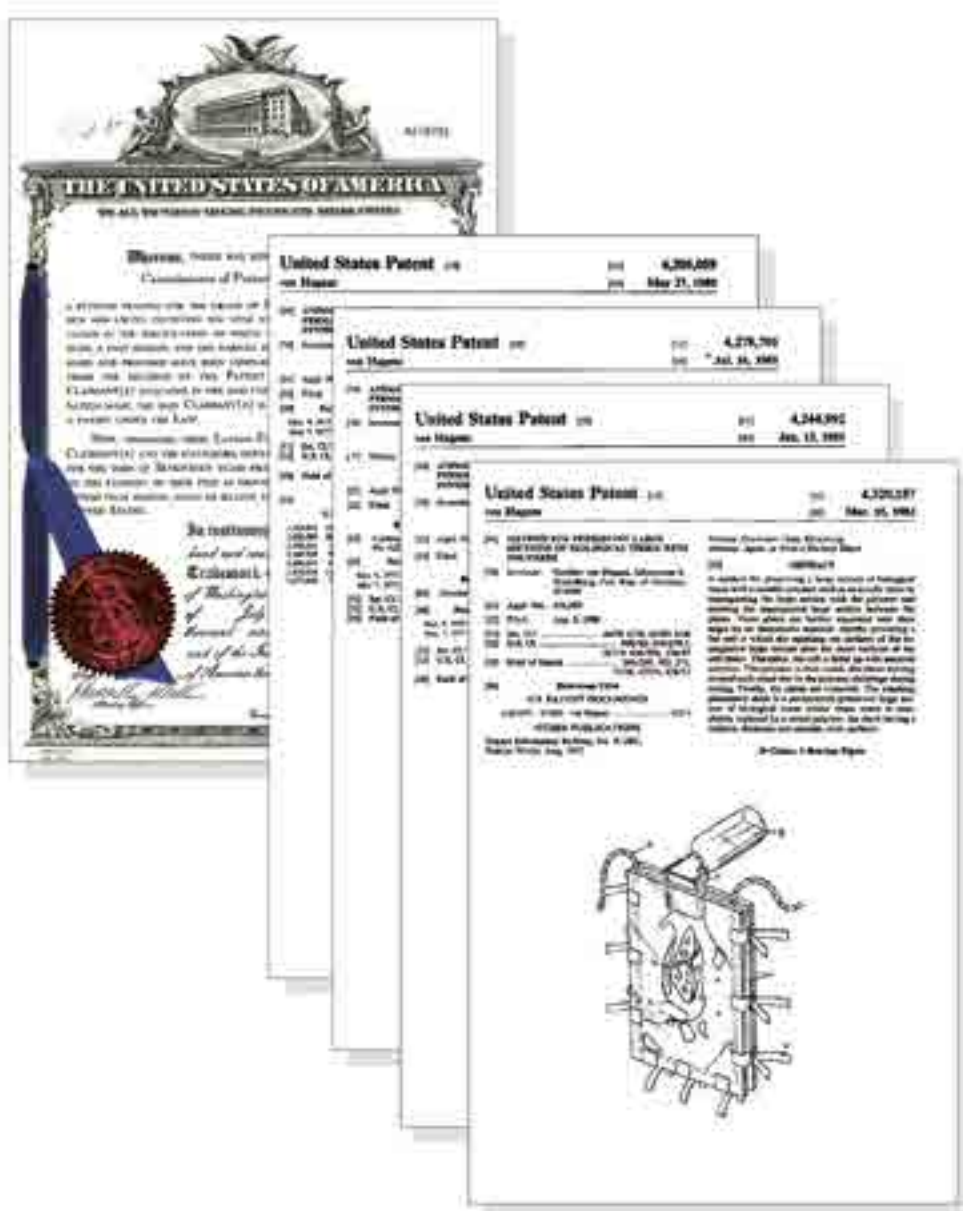
In slice Plastination, the body is frozen at -94°F (-70°C), embedded in polyurethane foam, and sectioned into thin slices.

Acetone-dehydrated body slices are submerged in an epoxy resin bath.



Plastination is now an internationally recognized, scientific process. Currently, more than 400 Plastination laboratories in 40 countries manufacture Plastination specimens for use in instruction and research. The main communication platforms for Plastination experts are the International Society for Plastina-

tion and its Journal of the International Society of Plastination (isp.plastination.org). Additionally, every two years an international conference on Plastination is held in varying locations around the world.



Patent Rights

Gunther von Hagens obtained intellectual property protection for the Plastination process via a number of patents, particularly in the United States. However, the non-commercial use of the process for manufacturing specimens for teaching purposes has never been restricted by these patents.

The Institute for Plastination (IfP) and the Gubener Plastinate GmbH



*M*an is nothing else
but that which he makes of himself.

Jean-Paul Sartre (1905–1980)
French philosopher

The Institute for Plastination

In 1993, Gunther von Hagens founded his first private company to further his work: the Institute for Plastination (IfP). This step had become necessary because the space and technical facilities available at Heidelberg University were no longer adequate for the growing demands of Plastination. The objective of the IfP has always been to further develop the Plastination techniques and to improve anatomical instruction by manufacturing high-quality, didactically useful specimens for institutes of higher education. In particular, the techniques for preparing whole-body plastinates and transparent slices of whole bodies were perfected by the IfP. The complexity and work involved in preparing these specimens far exceeds the capacity of most interested institutes.

The foundation for this work has been the IfP's Body Donation Program that Gunther von Hagens began at Heidelberg University and transferred, with the consent of the registered body donors, to the IfP. The IfP continues to be responsible for this unique Body Donation Program to this day.

The IfP later began curating and organizing the BODY WORLDS exhibitions. The design and worldwide coordination of these exhibitions has by now become one of the institute's main tasks, and these activities are led by Dr. Angelina Whalley. She has been the IfP's Managing Director since 1997, and Gunther von Hagens continues to serve as its Scientific Director.



*Gunther von Hagens and the just completed whole-body plastinate **The Ponderer**, 2005.*

In 2006, the Gubener Plastinate GmbH and the publicly accessible PLASTINARIUM were founded in a former cloth factory near the German-Polish border.




The Gubener Plastinate GmbH and its Associated PLASTINARIUM

In 2006, when the IfP itself began to face space limitations, Gunther von Hagens established Gubener Plastinate GmbH, the world's largest Plastination center, in Guben, Brandenburg. Both institutions have always closely collaborated. Today, most of our Plastination work is carried out in Guben. Thus, most of IfP's body donors are transported to Guben, either directly or via Heidelberg.

The Guben site is also home to the publicly accessible PLASTINARIUM, where visitors can watch employees as they dissect and plastinate specimens, following along as plastinates are created. In addition, the PLASTINARIUM houses a large collection of anatomical specimens and a teaching workshop, where students, health care practitioners, and others interested in anatomy can further their knowledge by using plastinates, models, posters, computers, and textbooks. Even students from abroad (e.g., from the United States) regularly use these facilities now. For more information on the PLASTINARIUM, please visit www.plastinarium.de.

Owing to his progressive Parkinson's disease, Gunther von Hagens recently began to withdraw from the operations of Gubener Plastinate GmbH, leaving them instead to his son, Rurik von Hagens. This move grants him the freedom to pursue his own research projects.



In the publicly accessible PLASTINARIUM, visitors can watch employees at work while they plastinate specimens.

The PLASTINARIUM also hosts workshops; the photo shows students during an anatomy class.



Tasks and Objectives

Both the Institute for Plastination and Gubener Plastinate GmbH pursue the same goals:

- **Improving overall anatomical instruction**
by producing high-quality educational specimens for anatomical instruction at universities and other teaching institutions.
- **Improving awareness of medical issues, particularly among the general public** by producing exhibition specimens and designing and coordinating public anatomical exhibitions.
- **Continuously refining both the Plastination method and the anatomical dissection techniques**, sometimes with the help of visiting scholars and grant recipients from domestic and international universities.

The vital basis for this work is the **Body Donation Program** and the willingness of its registered body donors to leave their bodies for the purpose of educating physicians and interested laypeople.

How are the Institute for Plastination (IfP) and Gubener Plastinate GmbH funded?

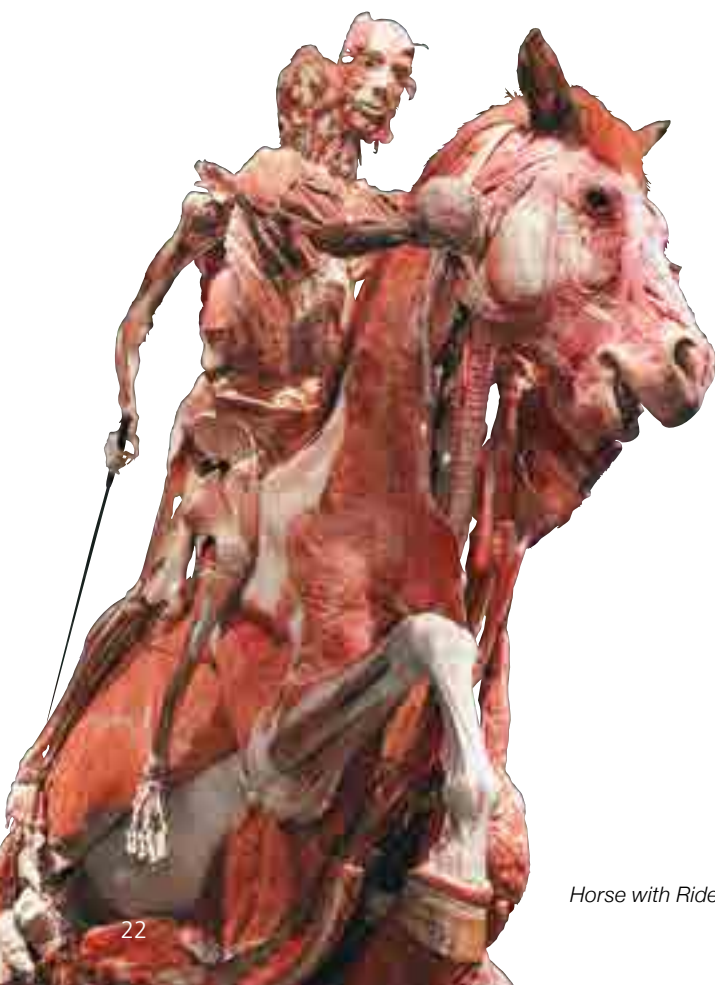
The IfP and Gubener Plastinate GmbH with its associated PLASTINARIUM are privately held research institutions and do not receive any public funding or research grants. Their funding comes mostly from the revenues of the BODY WORLDS exhibitions and the sale of specimens to institutions of higher education. In rare cases, the IfP receives donations from the estates of body donors who have no living heirs.

Specimen Sales to Third Parties

We manufacture human specimens solely for teaching, research, and information purposes and sell them exclusively to so-called qualified users. We do not sell them to nonprofessional individuals. Qualified users, as defined by the IfP and the Gubener Plastinate GmbH, are legal or natural persons who will use human plastinates only for research, teaching, medical, diagnostic, or therapeutic purposes. They must provide proof of these purposes. Qualified users include institutions of higher education, hospitals, schools, and museums, as well as physicians, professors, and similarly trained persons involved in relevant research.

Specifically, we offer the following services:

- Manufacture of anatomical specimens sold to institutes of anatomy, pathology, or forensic medicine at universities worldwide.
- Manufacture and sale of anatomical specimens for the purpose of surgical training, such as temporal bone specimens for the training of ENT physicians.
- Provision of bodies for teaching and research activities at medical research institutions and medical device companies.
- Manufacture and sale of traditional formalin-fixed anatomical specimens, of plastinates, skeletons, and blood vessel configurations for student training.
- Manufacture and sale of anatomical specimens to established science museums.



Horse with Rider

Costs and Fees

Anatomical dissection and Plastination processes are extremely labor intensive and costly. In all, a properly dissected whole-body plastinate requires 1000 to 1500 working hours, and some more complex anatomical dissections take even longer to complete. Because of the high costs of development and manufacturing, specimens can only be provided for a sufficient fee. The revenue from their sale covers current costs for preservation, dissection, and Plastination, as well as support further research and development of the Plastination process.

We agree that no one should benefit from the sale of human bodies, and therefore we use only donated bodies for Plastination. In their declaration on body donation, donors explicitly state that they are donating their bodies for medical teaching and information purposes and that they agree to the sale of specimens manufactured from their bodies.

Qualified users who purchase specimens from the Body Donation Program are charged only for the services provided during the preservation or Plastination process, but not for the specimens themselves. This condition is made clear on all our invoices. They contain a statement to the effect that “The specimens listed here are only available thanks to a donation made to the IfP’s Program of Body Donation for Plastination. We thank all our donors for their donation. Therefore, there is no charge for the specimens themselves, only for the cost of preparation.”

Gubener Plastinate GmbH hosts a web site at www.vonhagens-plastination.com to present their services to interested institutes in Germany and abroad. Specimens cannot be ordered directly through this web site; it is for contact purposes only. This personal contact is our way of ensuring that human plastinates will only be provided to qualified users.

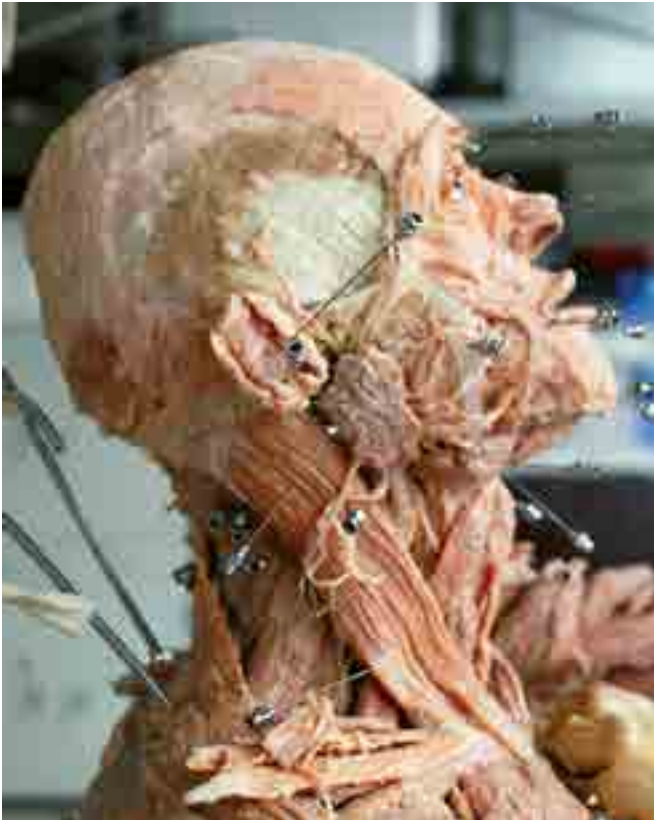
Origins of Specimens

For our work, we almost exclusively use bodies from domestic and international donors through our own Body Donation Program. In rare cases, we receive individual specimens from established institutes of anatomy or pathology, or we may buy old anatomical collections from established institutes or museums. These specimens originate either from the institutes’ existing collections or from bodies that have been donated for anatomical purposes according to local regulations. These are not corpses in the sense of the German burial law, but rather “permanent anatomical specimens” that may be subject to dissection regulations. They are distinguished from corpses as defined in burial laws because they have been preserved in a durable fashion; they are intended for the purposes of anatomical studies, instruction, and education. In addition, they remain anonymous.

The problematic definition of what constitutes a corpse is addressed in detail in Gunther von Hagens’ work entitled “On Gruesome Corpses, Gestalt Plastinates and Mandatory Interment”, which can be found online at www.bodyworlds.com/en/downloads.

Within 3,000 square meters, the PLASTINARIUM provides comprehensive insights into human and animal anatomy, the processes of Plastination, and various dissection techniques.





Before a plastinate can be cured, all its anatomical structures have to be posed and temporarily fixated with needles, wires, and clamps.

Donations to Support Plastination and Other Estates

We have repeatedly been asked by individual body donors with no living heirs whether it would be possible to leave their remaining estates to the IfP. Others wish to support the further development of Plastination by donating money to the institute.

Monetary donations and testamentary dispositions can be made to the *Deutsche Gesellschaft zur Förderung der Plastination e.V.* (German Society for the Furtherance of Plastination). This is a registered nonprofit association, and its funds are directed exclusively towards the support and further development of Plastination.

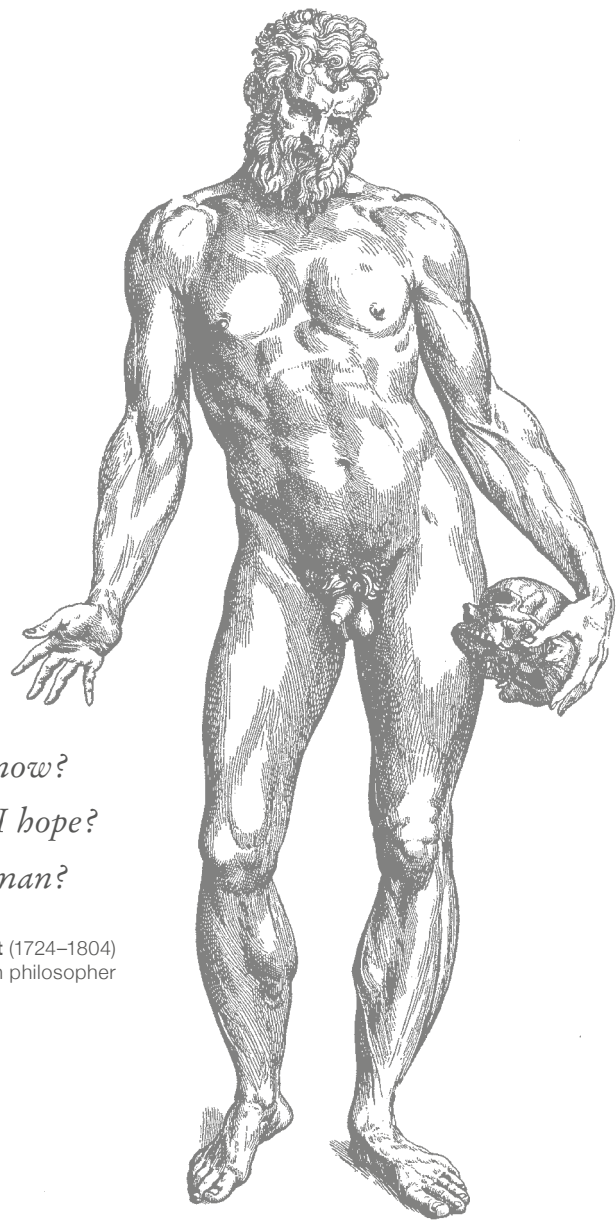
Deutsche Gesellschaft zur Förderung der Plastination e.V.

Dr. Gunther von Hagens (Chairman)
Rathausstrasse 18 · 69126 Heidelberg, Germany

BODY WORLDS and Menschen Museum (MeMu)

*W*hat can I know?
What may I hope?
What is human?

Immanuel Kant (1724–1804)
German philosopher





The Skin Man

What is **BODY WORLDS**?

The BODY WORLDS traveling exhibitions have been presenting plastinated anatomical specimens to the public since 1995. The exhibitions aim to inform a wide audience of laypersons about the body's interior and functions and to illustrate the consequences of an unhealthy lifestyle. At the same time, they strive to intensify the awareness of being alive by

- Strengthening health consciousness
- Showing the possibilities and limitations of the body
- Stimulating questions to be pondered about the importance of being human.

What is shown at **BODY WORLDS**?

Every BODY WORLDS exhibition contains up to 200 real human specimens, including whole body plastinates, as well as individual organs, blood vessel configurations, and transparent longitudinal and cross-sectional body slices. These specimens enable a comprehensive insight into the human body's anatomy and physiology. The plastinates illustrate organ function and common diseases, often by comparing healthy and diseased organs in an easily understandable way. Long-term outcomes of disorders, and substance abuse are illustrated in the same way, as are the mechanics of artificial hip and knee joints.

The purpose of BODY WORLDS is to educate and inform, giving laypersons an opportunity to better understand the human body and its functions. The exhibitions aim to make their audiences more aware of the natural body and the individual variations and anatomical beauty of the body's interior.

Currently, seven different BODY WORLDS exhibitions are touring the world. Some of them focus on different topics such as aging (The Cycle of Life/The Mirror of Time), the heart (The Story of the Heart), and the acceleration of modern life (PULSE).



The **Menschen Museum** is located in the heart of Berlin, at the base of the TV tower on Alexanderplatz.



Menschen Museum

Facets of Life

In addition, since January 2015, one of the BODY WORLDS exhibitions has had a permanent home in the first *Menschen Museum* (Museum of Humans, MeMu), at the base of the TV tower on Alexanderplatz in Berlin, Germany. This exhibition is also based on a selection of real, permanently preserved anatomical specimens. The museum will also address a range of special issues, enriching the visitor experience and illuminating yet more aspects of human life.

With this museum, Angelina Whalley and Gunther von Hagens (pictured here with his son Rurik) made an old dream of theirs come true: A permanent, museum-quality exhibition about the human body.





Entrance of the Tokyo National Science Museum, where BODY WORLDS was shown for the first time in 1995. Long lines often formed at the entrance because of the huge interest in the exhibition.

Importance of BODY WORLDS

Never before has an exhibition moved its audience and changed the public perception of the human body as sustainably as Gunther von Hagens' BODY WORLDS exhibitions has. The aesthetically pleasing presentation of real dissected bodies in the exhibitions turns death into a source of clear knowledge about human life, making it a deeply moving encounter with the interior of the viewer's own body.

The fact that the plastinates are real is essential to this experience, making it more intense and personal. The beautiful plastinate, striking its pose between death and decay, touches viewers at an emotional level, providing them an entirely novel sensory experience. Visitors look inside somebody else's body and discover their own bodies anew in the process. In some sense, it is like looking at yourself without a mirror. No plastic model could provide this depth of experience, just as a copy of an artistic piece can never replace the original, and a coffee table book with beautiful photographs of nature can never substitute for a hike along the trails.

Since the first exhibition, held in Japan in 1995, more than 40 million visitors have viewed the BODY WORLDS exhibitions in more than 100 cities all across Europe, America, Asia, and South Africa. The exhibitions are considered to be among the most successful special exhibitions ever. According to surveys, on average 90% of visitors will rate the BODY WORLDS exhibitions as "very good" or "good." No other current exhibition receives that much approval.

Nevertheless, controversy has occurred, particularly in the early years of BODY WORLDS. In Germany, this controversy is still occasionally heard, and criticism here has been voiced louder than in any other country. Most of the debate has been triggered by the lifelike poses of the whole-body plastinates. Critics frequently suggested that Gunther von Hagens was trying to make art rather than science, and they considered the "Fall of Man" as simultaneously offending good taste, piety, and science. One of the main points the critics made was that presenting the whole-body plastinates in an aesthetically pleasing manner robs them of their educational purpose—they instead become simple sensationalist objects without any informative value. What the critics do not seem to realize is that any whole-body specimen has to show the body in a specific pose. Making the pose aesthetically pleasing seems to be a natural choice, particularly given that the exhibitions are primarily about life, not about dead bodies. In addition, the exhibitions are mainly intended for laypersons who come from various backgrounds, bringing with them different needs and, in some cases, very personal fears. As visitor surveys have shown again and again, the lifelike, aesthetic poses help laypersons overcome their trepidation, encouraging them to recognize the similarities between their bodies and the plastinates.



As early as during the Renaissance, a connection has existed between anatomy and the visual arts. From the very beginning of his work, Gunther von Hagens has been following this tradition.

It goes without saying that the bodies of the deceased deserve respectful treatment. And they are treated respectfully in the exhibitions. Visitors are notably quiet, serious, and disciplined throughout their visits, showing a behavior rather unusual in today's societies. This respectful behavior is not surprising given that the exhibitions provide individuals with a unique and moving view of their own lives. The exhibitions are educational places, but the reverential contemplation of the visitors also makes them virtually sacred sites with a very special aura.

In past years, the BODY WORLDS exhibitions have been hosted by some of the most respected science museums in the world, including the Franklin Institute, Philadelphia, PA, USA; the Museum of Science and Industry, Chicago, IL, USA; the Museum of Science, Boston, MA, USA; the Ontario Science Centre, Toronto, Ontario, Canada; the *Naturhistorisches Museum* (Museum of Natural History), Vienna, Austria; and the Mada Tech, Haifa, Israel. The exhibitions have received official support from the ministries or departments of science and education in some countries. In addition, the BODY WORLDS exhibitions have won awards for their pedagogical value.

For example, in 2013, the Association of Science Technology Centers (ASTC), an association of 650 science museums and science centers from almost 50 countries honored Dr. Gunther von Hagens as the inventor of Plastination and the creator of the BODY WORLDS exhibitions for his life's work and his extraordinary contribution to science communication to laypersons.



Exhibition visitors in Japan

Where do Exhibition Specimens Originate?

All of the specimens shown in BODY WORLDS exhibitions are real. They are from individuals who donated their bodies to the IfP, decreeing that they would be permanently preserved and would be used in exhibitions for the education of future generations. These individuals have stated a variety of reasons for their decision to donate. What they all have in common is the desire to further public medical and health education. The BODY WORLDS exhibitions would not be possible without their generosity.

The identity, age at death, and cause of death of the body donors are never stated in the exhibitions because they are about the miracle of the human body, not about individual, private fates.

A few of the plastinates in the exhibitions originate in old anatomical collections, which is particularly true of the embryos shown.

*There are not many events
which change how we look at ourselves so strongly...
I will never take my body for granted again.*

From a guest book at one of the BODY WORLDS exhibitions.

Visitor Feedback

Aiming to provide some facts in the public debate surrounding the BODY WORLDS exhibitions, Dr. Ernst-D. Lantermann, professor of personality and social psychology at the University of Kassel, developed an extensive representative survey of visitors, which was conducted at many exhibitions. This approach was intended to create an objective snapshot of the visitors' expectations and impressions of the exhibition, their motivations for visiting it, and how they planned to behave in the future as a result of seeing BODY WORLDS.

The survey showed that hardly any other exhibition has been met with such approval. A total of 69% of the people who visited an exhibition stated that the authenticity of the specimens on display had a strong impact on their understanding of the body, and half of them said that they found the specimens aesthetically stimulating. Only a minority (6% on average) said that they felt that showing such specimens of people's bodies violated human dignity. After the exhibition, 83% of the visitors said that they knew more about the human body, and more than 60% of them felt "more pensive about life and death." Altogether, 77% expressed "immense respect for the miracle of the human body," and 56% said that they were motivated to lead healthier lives in the future. Furthermore, one third of those surveyed stated that they appreciated their bodies more after having attended the exhibition.



Overall, the largely positive expectations that people had before seeing BODY WORLDS were universally upheld, and only a small minority felt that their negative expectations and fears were confirmed. The exhibition also convinced 20% of the visitors to see the act of organ donation in a more positive light. Of those attending the exhibition, 19% could imagine donating their bodies for Plastination after death, and 21% indicated that they would now be more willing than before to “permit an autopsy to determine the cause of death more precisely.” In terms of the impact on changing visitors’ attitudes, the BODY WORLDS exhibition has had a lasting and—in our opinion—extremely positive effect on those who have seen it.

Three quarters of the visitors said that they wanted to spend more time thinking about the insights and impressions that they formed while attending the exhibition. To determine the extent to which visitors have acted on their resolutions after seeing BODY WORLDS, a follow up survey was conducted in

Vienna six months after the exhibition ended. Of those who saw BODY WORLDS in Vienna and participated in the survey (more than 30%), 9% said that they had smoked less and had consumed less alcohol after the exhibition. Almost 33% had begun to eat more healthily, 25% exercised more, and 14% paid more attention to their physical well-being.



Showing direct comparisons of healthy and diseased organs is a vital part of the BODY WORLDS concept. Here you see healthy lungs next to the lungs of a smoker.

No matter the country in which the BODY WORLDS exhibitions were shown, visitors always had similar reactions: They were deeply touched because their views of themselves changed as they studied the plastinated specimens on display.





The plastinated body from the London autopsy.

Other Publicity Measures

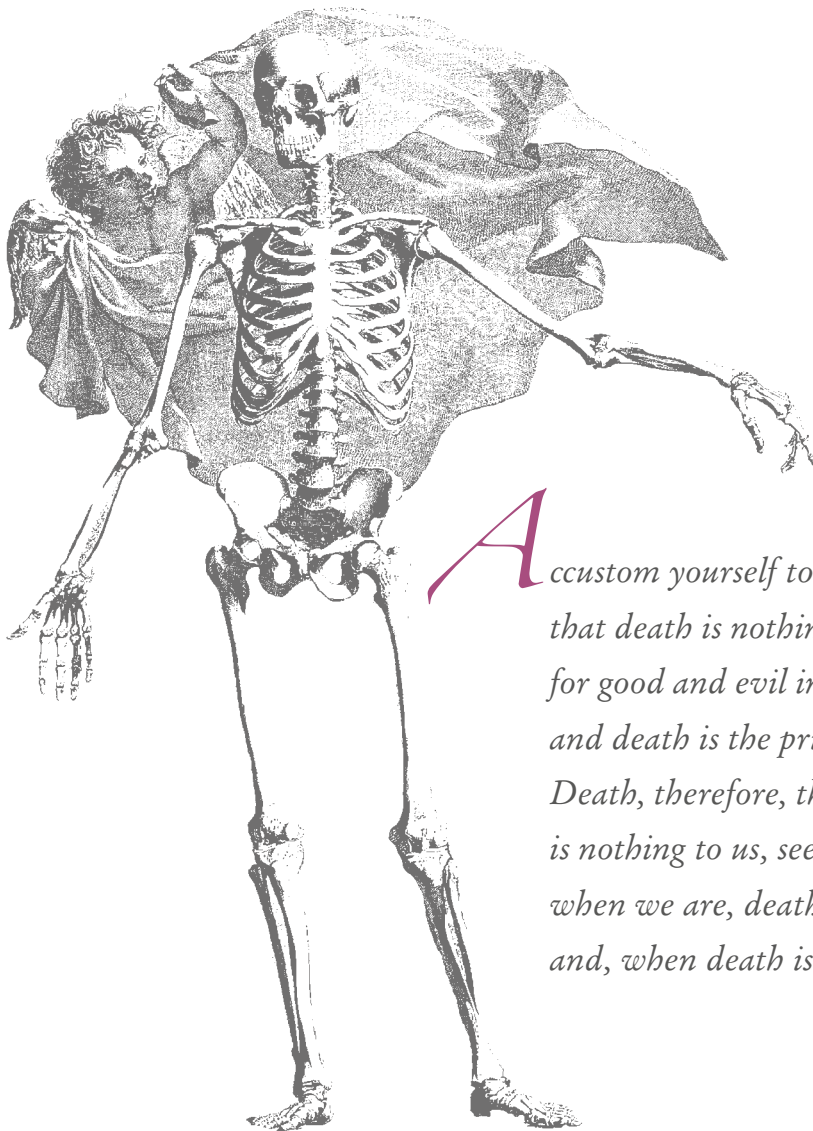
As part of his constant efforts to democratize the field of anatomy, Gunther von Hagens also utilizes posed plastinates at public events to create points of reference to everyday life. This effort includes placing the figures in public places or juxtaposing them with living persons (which is also one of the events held in conjunction with BODY WORLDS).

Another public event held by Gunther von Hagens was a public autopsy performed in London in November 2002—the first public dissection in almost 180 years. His aim was to revive the tradition of an anatomical theater and provide insight into the everyday work of a pathologist. The public autopsy of a German body donor was conducted with the same solemnity and following the same medical procedures as it would have if it had been performed behind closed doors. The audience also followed the event with proper respect and great interest. The autopsied body was later turned into a whole-body plastinate.

Gunther von Hagens, public dissection, London, UK, 2002



Body Donation



*A*ccustom yourself to believing
that death is nothing to us,
for good and evil imply the capacity for sensation,
and death is the privation of all sentience.
Death, therefore, the most awful of evils,
is nothing to us, seeing that,
when we are, death is not come,
and, when death is come, we are not.

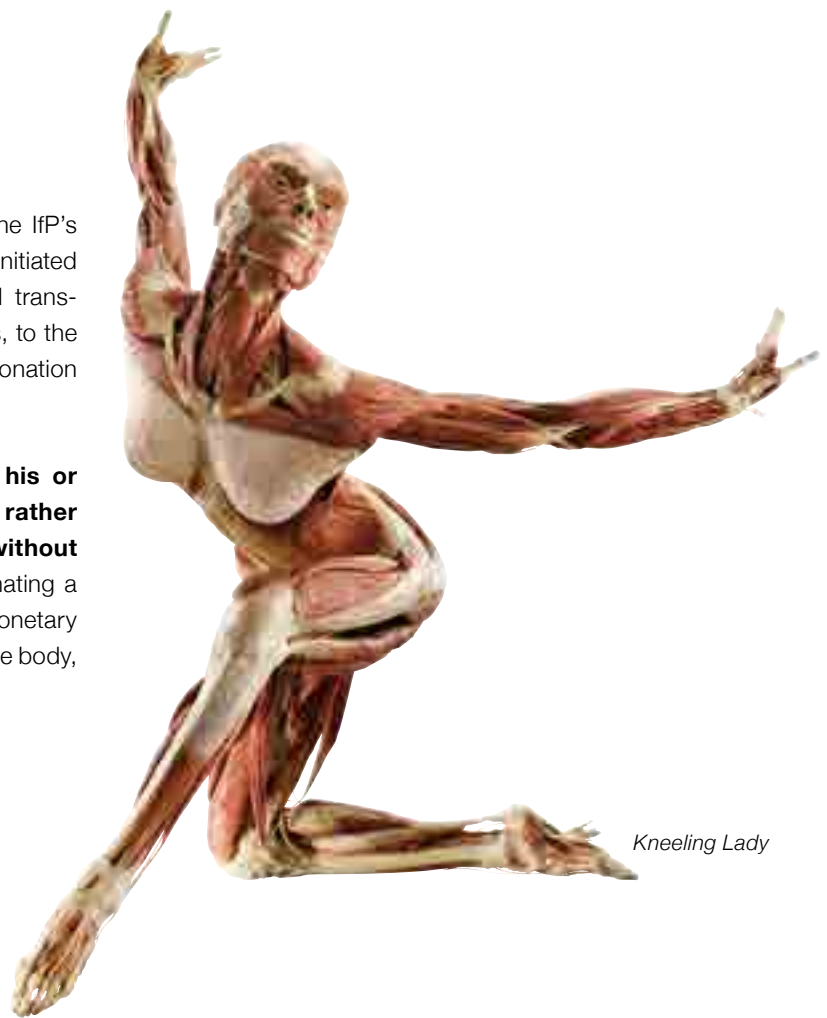
Epicurus (342–271 BCE)
Greek philosopher

The IfP's Body Donation Program

The main basis for our Plastination work has been the IfP's Body Donation Program that Gunther von Hagens initiated during the early 1980s at Heidelberg University and transferred, with the consent of the registered body donors, to the IfP. The IfP continues to be responsible for this Body Donation Program to this day.

The donor's last will and testament, donating his or her body for Plastination, is not a contract, but rather a living will that can be revoked by either party, without giving any reasons. There are no fees paid for donating a body, nor do donors or their survivors receive any monetary compensation. The IfP does not have a legal claim to the body, nor is the Institute required to accept the body.

How can I become a body donor for Plastination?



Kneeling Lady

Please note that some of the following instructions and information (pages 34–37) are specifically intended for residents of Germany. The majority of donors to the Institute for Plastination are German,

however if you reside outside of Germany, please contact our Institute for specific information regarding procedures in your area.

To become a body donor for Plastination, you will have to take the following steps:

1. CONSENT FORM FOR BODY DONATION

Complete the Form “Donating Your Body for Plastination—Donor’s Consent” in duplicate, signing it **in all the required places** (five signatures in total). Return both copies to us.

Once we receive your documents, we will register you as a body donor in our database. Your personal information will be stored in our electronic database. All your information will be treated confidentially; appropriate organizational and technical provisions according to the German privacy law (Bundesdatenschutzgesetz) have been made.

We will then countersign one of the copies of your consent form and send it to you to confirm registration. Please keep this form with your personal documents or give it to your likely survivors. You will also receive a body donor identification card that you should carry along with your personal identification. If your relatives do not agree with your decision to donate your body for Plastination, you should have your signatures on both copies of your consent form notarized.

2. AUTHORIZATION FORMS

Our information package for body donors also includes two authorization forms.

The **Authorization for Transportation** authorizes us to transport your body after your death to the IfP’s laboratory or to Gubener Plastinate GmbH. Within Germany, this transportation will either be by the Institute’s **Bodymobile** or by a funeral home hired by the IfP at the Institute’s cost. Please sign this authorization and return it to us with your consent forms.

The second authorization form will authorize us—with your permission—to access your patient records after your death. Both the preservation outcome as well as teaching and research purposes may benefit from the IfP being aware of the details of any diseases you may have had. If you agree to the Institute reviewing your patient records, please sign and return the **Medical History Release Authorization** form as well.

Are there any other things to be aware of?

You should make sure that a trusted person close to you is aware of your decision to become a body donor for Plastination. You should ask this person to contact the IfP as soon as possible after your death. This trusted person might be, for example, a family member, a close friend, or your primary care physician.

After your death, this trusted person should immediately:

- Notify the Institute for Plastination
- Make the necessary arrangements for transportation of your body

You also need to be aware that your body can only be transported once your death has been documented and certified according to local legal requirements. The steps your trusted person will have to take to ensure this, and which documents are required, for German residents, are detailed to the right. This information is also clearly summarized in your “Guide for Survivors,” which comes with our information package for body donors.

It is your responsibility to ensure that your trusted person has access to the following documents after your death:

- A certified copy of your birth certificate
- A certified copy of your marriage and/or divorce certificate(s)
- A statement authorizing him or her to file for a death certificate (required if your trusted person is not a family member)

If you do not have a family member or a trusted person who can file for a death certificate, the IfP will take on this task. In that case you will have to fill out the appropriate authorization form, which you can request from IfP as necessary. You should also send certified copies of your birth, marriage, and/or divorce certificate(s) to IfP while you are still alive.

Will there be any cost to me or my survivors?

The IfP does not charge any administrative fees. For the foreseeable future, the IfP will also assume all costs of transportation inside Germany. There will be no burial cost, nor will there be the cost of maintaining a gravesite.

Your survivors will have to bear the costs of issuing the attestation of death and the death certificate; for refrigerating the body until pick-up; for transporting the body from outside Germany if necessary; and, if so desired, for holding a memorial service. You may be able to take out insurance to cover these costs.

Are there any conditions for donating my body?

A few conditions must be met to enable the IfP to accept your donated body after your death:

- (1) The body donor must have died of natural causes; that is, the death must not have been caused by acts of violence.
- (2) The written consent of the body donor (Donating Your Body for Plastination—Donor’s Consent) must be available. This consent includes a burial waiver.
- (3) The body must be largely intact; that is, it cannot have been subjected to a postmortem examination for pathological or forensic reasons.

The IfP is also unable to accept bodies that have been severely disfigured as the result of an accident because serious internal injuries that preclude Plastination will likely be present. If a fatal accident does occur and parts of the body are severed as a result, the body will have to undergo a postmortem examination. This action is usually necessary to clarify issues relating to liability and/or insurance claims.

The presence of a disease is not generally detrimental to donating your body; after all, medical students must learn to recognize these conditions. The differences between organs from one body to the next are essential for proper anatomical training, and this is where genuine, permanent specimens truly have an advantage over artificial models.

Old age or amputated limbs also do not necessarily represent an obstacle to becoming a body donor. Every single body is a valuable anatomical treasure to us. However, if you have an infectious disease (e.g., HIV infection, viral hepatitis), the IfP has to be notified about it before transportation.

It is also possible to be a regular organ donor in addition to donating your body for Plastination. Donating an organ can save lives and is therefore always given priority over donating a body. Even after organs have been removed for donation, the body will still be suitable for Plastination as long as it is transported to the IfP immediately after the organs have been harvested.

If a highly contagious disease or other unforeseeable difficulties are present, the IfP will decide on a case-by-case basis whether it can accept the donated body. This approach is also used in case of severe obesity or advance decomposition.

We are under no legal obligation to accept a body.

What will happen in the event of my death?

Once we learn of your death, we will arrange for transportation of your body to the nearest Plastination laboratory, which will either be our site in Heidelberg or the PLASTINARIUM of Gubener Plastinate GmbH in Guben, Germany, with which the IfP closely collaborates. Within Germany, the IfP has arranged for free transportation for its body donors. The IfP will either transport the body itself, or it will, at the Institute's cost, hire a funeral home to do so.

We intend to offer this free transportation service in the long term, but we cannot guarantee that it will be available forever.

Please be aware that the IfP cannot accept the cost of transportation from **countries other than Germany**. Outside Germany, a donor's survivors will have to hire a funeral home for this purpose and also assume the cost of transportation.

What will my survivors have to consider and take care of in the event of my death?

Immediately after death has occurred, a physician such as your primary care physician or an emergency doctor must be called. This physician will issue an attestation of death. If the death occurred at a hospital or a care facility, the institution in question will take care of this task.

In addition, the body donation department of the IfP has to be notified by telephone as soon as possible. The institute's employees are experienced in dealing with deaths and the accompanying formal issues, and they will help if necessary.

We are available on weekdays
from **9 a.m.** to **4 p.m.**

+49 (0)6221-331150

Outside our office hours we can be reached via our
cell phone +49 (0)160-7455188

The IfP will arrange for transportation as soon as possible. The body has to be kept as cool as possible until it can be collected. In practical terms, that means the following:

- **Avoid direct exposure to sunlight**
- **Do not cover the body with warm blankets; use a sheet instead**
- **Turn off any sources of heat**
- **Open windows** (if it is cool or cold outside).

If collection of the body is delayed for more than a day, we recommend we recommend temporary transport to a local mortuary. A funeral home will have to be hired and paid to do so.

During the warm months, transportation should not be delayed by more than two to three days after the time of death. During colder months or if the body is stored in a cold mortuary, transportation to the IfP should take place no later than six to eight days after the time of death.



The Ponderer

Formal Procedures and Transportation

The IfP will undertake transportation with its own **Bodymobile** or it will employ a funeral home at its own cost. Transportation can only occur after the death has been documented and registered according to all legal requirements. For this, the following steps and documents are required:

The **attestation** of death, which is issued by the physician attesting to the death. In most German states, the form consists of a confidential and a nonconfidential part. Hospitals in general will not give the attestation of death to the deceased person's survivors but instead will send it directly to the appropriate authorities.

A **death certificate** has to be requested from the appropriate authorities. Multiple copies will be needed because other entities may be requiring them as well, such as insurance companies and the social security administration. In order to obtain a death certificate, the following documents will need to be presented:

- The **attestation of death**
(unless it has already been forwarded by the hospital)
- A copy or certified copy of the deceased's **birth certificate**
- A copy or certified copy
of the deceased's **marriage and/or divorce certificate(s)**



Bodymobile

If the person requesting the death certificate is not related to the deceased, an authorization issued before death by the deceased may be needed. If this is not available, the requester will need to contact the local authorities (e.g., the municipal public order office). If your survivors are not able to complete these tasks themselves, they may employ a local funeral home at their own cost.

The original death certificate (copies will not be accepted) will have to be handed over to the IfP or the funeral home when they collect the body. It will accompany the body to its destination, as required by law. The death certificate will remain with the IfP permanently. If the local authorities are unable to produce a death certificate before transportation, a provisional certificate may be issued and will suffice. In Germany, this would be a "*Bescheinigung über die Zurückstellung der Beurkundung eines Sterbefalles.*" If a provisional certificate is used, the final death certificate will have to be presented to the IfP as soon as possible.

In addition, it is advantageous for the IfP to have a copy of the attestation of death (including both the confidential part and the nonconfidential part). The confidential part of the attestation contains not only personal information about the deceased, but also indicates the cause of death, which is helpful for the IfP team.

CHECKLIST

- **Call a physician who will pronounce the deceased dead and issue a death report.**
- **Notify the Institute for Plastination (IfP) by phone.**
- **Keep the body as cool as possible until the time of pick-up.**
- **In case of delays, have the body taken to the nearest mortuary.**
- **Obtain a death certificate from the appropriate registry office or office of vital records.**

What will happen to my dead body at the Plastination laboratory?

When a body reaches the IfP, the first step is to stop the decomposition process, either by deep-freezing the body or by injecting a fixing agent (formalin) into the blood vessels. Ideally, the next stage is to consult the deceased's medical records for guidance on how to proceed. A decision is reached on how the organs, parts of the body, or even the whole body will be plastinated, bearing in mind any medical conditions, cause of death, and the directions given by the deceased in the donation consent form.

We will try to accommodate individual requests (e.g., for a specific pose), but we cannot guarantee that we will be able to do so and ask for your understanding. The available Plastination options depend on many factors that cannot be realistically assessed at the time you declare your intent to donate. These factors include the age and physical condition of the body at the time of death, any diseases, the cause of death, as well as the amount of time elapsed between the time of death and arrival at the Plastination laboratory (i.e., the extent to which decomposition has progressed).

Once our laboratory is free to work on the body, processing will begin. The first step is usually anatomical dissection, that is, the preparation of anatomical structures using scalpels, scissors, and tweezers. Only then will the actual Plastination process occur, as described elsewhere in this brochure.

Immediately after arrival, the body is fixed with formalin to halt the process of decay. Dissection is started as soon as laboratory space becomes available.



In principle, the whole body can be used for Plastination because all the organs and parts of the body, whether healthy or diseased, are important for medical training. The remains that are not required such as connective tissue, parts of the skin, and bits of bone are incinerated in the same way as surgical waste and amputated body parts. This means that virtually nothing is left behind.

The IfP's scientific postmortem examinations deal with the normal anatomy of the human body. Diseases and causes of death are only investigated with respect to their significance for medical training. As a result, when it comes to issues such as the cause of death, the IfP cannot provide conclusive and complete information similar to the information determined in an autopsy.

Third Party Audits of the IfP's Body Donation Program

All deaths are subject to an annual assessment of facts and are reported to the municipal authorities of the city of Heidelberg, Germany. This process includes verifying that the information on all death certificates from the year in question corresponds to the associated consent forms. This process is also notarized. All deaths resulting in a body being delivered to the IfP are thus documented and notarized.

In addition, the IfP's Body Donation Program has been independently audited several times in the past in conjunction with the BODY WORLDS exhibitions. Numerous museums, in particular those located in the United States, consulted independent ethics committees before hosting an exhibition. They asked the ethics committees to investigate both the ethical justification of the exhibitions in general and its suitability for the specific museum. The origin of the plastinated specimens has usually been a decisive factor in these investigations, and either ethicists or legal experts have been sent to Heidelberg to review documents associated with the Body Donation Program at our offices. Without fail, all auditors and reviewers concluded that the IfP's Body Donation Program meets all ethical standards and in some parts even exceeds the standards followed by some anatomical institutes. All these ethics committees also found the exhibitions to be justifiable and suitable for the museums in question. The ethical review document commissioned by the California Science Center in Los Angeles is available from our web site with the center's friendly permission: www.bodyworlds.com/en/downloads.

Where can I find additional information regarding body donation?

Institute for Plastination

The employees of the IfP Office of Body Donation are available to answer your questions by phone, at +49 6221-331150 on weekdays from 9 a.m. to 4 p.m. You are also welcome to schedule a personal consultation at our Heidelberg offices.

Body donor meetings

The IfP occasionally hosts informational meetings for all body donors for Plastination. These meetings give you an opportunity to see specimens, learn about the latest developments in Plastination, and to discuss related issues. All registered body donors are invited and will be notified of any upcoming meetings in writing.

PLASTINARIUM in Guben

The PLASTINARIUM's staff is also available to answer questions. The PLASTINARIUM's hours are from 10 a.m. to 6 p.m. on Fridays, Saturdays, and Sundays (last admission at 4 p.m.).
ADDRESS: Uferstraße 27, 01735 Guben, Germany,
Phone: +49 (0)3561-5474382.
See www.PLASTINARIUM.de for more information.

Admission is free to body donors. Please present your Body Donor Card at the entrance.

BODY WORLDS and Menschen Museum

Up-to-date information on the traveling exhibitions is available at www.bodyworlds.com.

The **Menschen Museum** is located in the base of the TV tower at Alexanderplatz, Berlin, Germany.

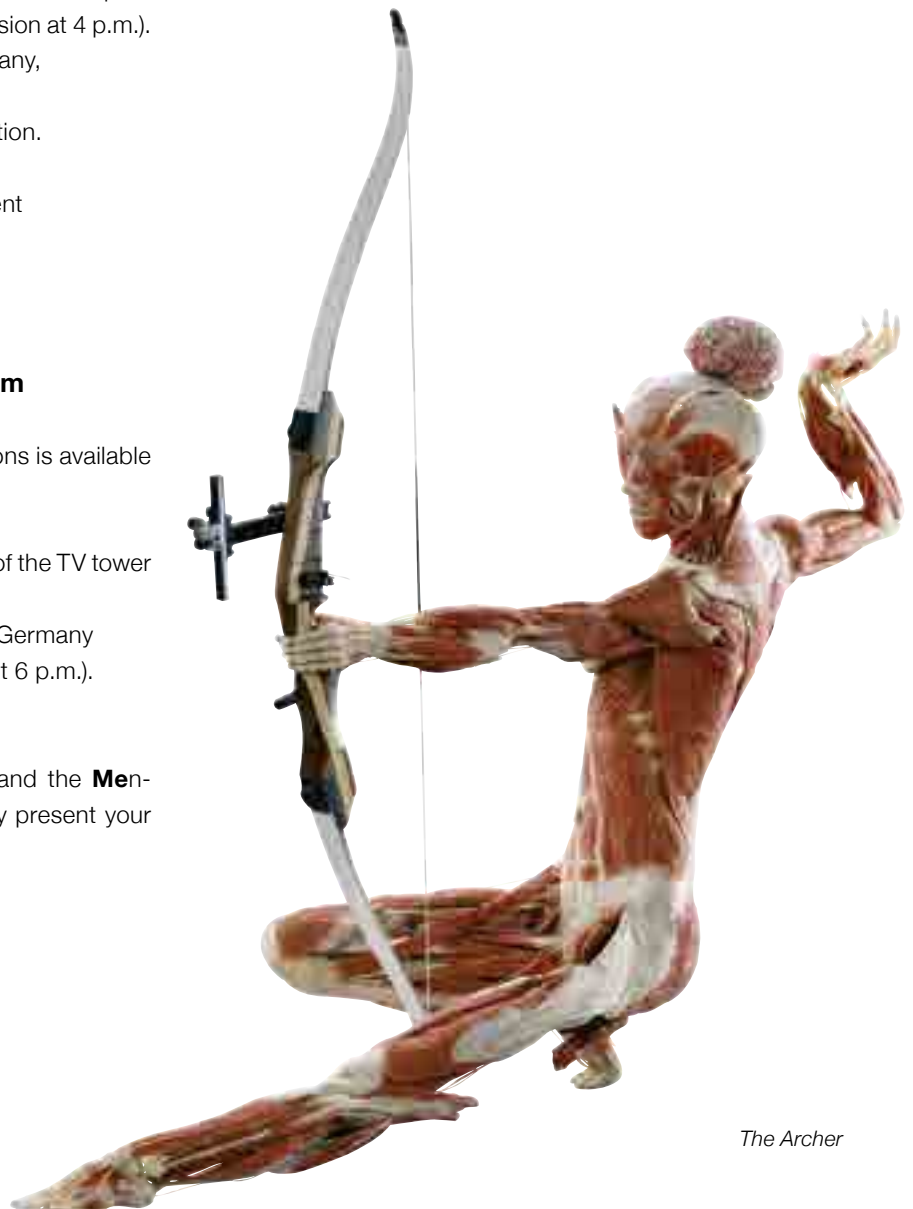
ADDRESS: Panoramastraße 1a, 10178 Berlin, Germany
Hours: 10 a.m. to 7 p.m. Daily (last admission at 6 p.m.).
See www.memu.berlin for more information.

Admission to all BODY WORLDS exhibitions and the **Menschen Museum** is free for body donors; simply present your IfP Body Donor Card.

Bundesverband der Körperspender e. V. (BDK)

The Bundesverband der Körperspender e. V. (BDK) [German Federal Association of Body Donors] is a nonprofit association, independent of the IfP, that was founded in 1999. The association maintains a web site containing information on Plastination and body donation, and it publishes an annual newsletter (in German only). You may contact the bdk with questions regarding body donation or the association itself via e-mail or by phone.

CONTACT: Bundesverband der Körperspender e. V. (BDK)
c/o Andreas Mühlenbernd (Chairman), Schwalbengrund 49,
44807 Bochum, Germany, Phone: +49 (0)700-95509550,
Fax: +49 (0)234-9505033, Muehlenbernd@koerperspender.de
blog.koerperspender.de



The Archer

Motivation and Reasoning of Body Donors

People want to be plastinated after their death for a number of reasons. The predominant desire is to serve medical research and education. The following is a small selection of quotations about becoming a body donor for Plastination:

“Once my soul leaves my physical body, it is just a physical configuration of atoms, no different than a canvas or painting, and no longer housing my soul. As a scientist, I understand the importance of discovery, investigation and understanding. As an artist, too, I also understand creativity, ingenuity and vision. Plastination combines all of this to create works of art that also act as tools to be used to teach people about our physical bodies. It also, philosophically, helps to demonstrate the huge divide between materialism and mentalism. It shows the body as just that, it’s bare material, raw constituents with only the soul that the artist has newly given to it, not the one that was originally given to it upon its creation.”

“Medical science has given me a second life, and I want to give back some of that. I detest the idea of rotting away uselessly in the ground. No matter whether as a whole-body plastinate or as individual pieces, once plastinated, I will still serve a purpose, namely medical research and training. At the same time, I will be given my third life, eternal life in my eyes. I will become part of medical history, if a tiny one, and that makes me proud. Serving a higher purpose, without benefit to myself, even after death, will be fulfillment of my life.”

“While visiting the exhibition I found myself for a while in a timeless space. As if everything stood still. All mental reservations vanished and one studied oneself. I wish for others that they may experience this feeling as well.”

“My mother died a few months ago. When she was still alive, she decided to be plastinated. When the time had come, we, her loved ones, were glad that we were able to surrender her body to an aesthetically pleasing and useful use, rather than lowering it into a hole in the ground. The administrative dealings with the institute were not complicated. We don’t miss having a graveside, for there are many more suitable places than a graveyard, where we feel connected to her in our memories, and those places have no closing times and are not violated. For me it is clear: This is what I want for myself too.”

“I lived a very careless lifestyle, smoking cigarettes and other chemicals, drinking heavily (which I now abstain from) and IV drug use. The last, I believe, if I’m not mistaken, makes me ineligible for transplantation. On future licenses I am not going to elect to be an organ donor. I thought that they may use

parts in science labs and/or medical schools for research, but chop me up and split me apart so that my body could be used as a map for the “‘don’t-do-drugs’” campaign. If my donation helps just one person to not smoke or use drugs, then my donation won’t be made in vain.”

“Thank you for the work you do. I have had many humbling experiences in my 36+ years of life, involving near death experiences. Enjoying the BODY WORLDS exhibit for the first time, I realized the awesomeness of God’s work of art, my body. It made me realize all of the quick fixes I have used on symptoms have been telling my body that it is not as amazing as it is. I have been inspired to maximize its potential.”

“Mindfulness is about caring for others. What better way to care for others than allow others for better understanding human life. Through the exploration of my body, it is my wish that other people will gain understanding of how precious each breath on this planet is.”

“I am a funeral director/embalmer, I see funerals every day. I still think funerals are special and a matter of rite. But, I think my body is better off for education and fascination than cremation or 6 feet under. Move me, form me, shape me. I love the science and artistry of Plastination.”

“What better is there to do after death?”

“I believe this is a great way form to give back to the world in an unselfish way. I’m a humanitarian at heart and this can be my last gift to the world.”

“Visiting BODY WORLDS moved me so powerfully spiritually that I decided to help provide others with the same experience I got by being drawn closer to God through a fuller worldview.”

“The incredible genius in developing this method to preserve, educate, and give brought tears to my eyes, relaxation and calm to my mind, and rekindled my appreciation for life, people, and physicians. During my visit, each individual I bumped into, due to the crowded nature of the exhibit, said ‘Excuse me.’ Rarely do we experience such sensitivity, compassion, and self-awareness anymore. To encourage this in others is the most beautiful contribution I can imagine—it is an honor to ask to participate. Thank you so much.”



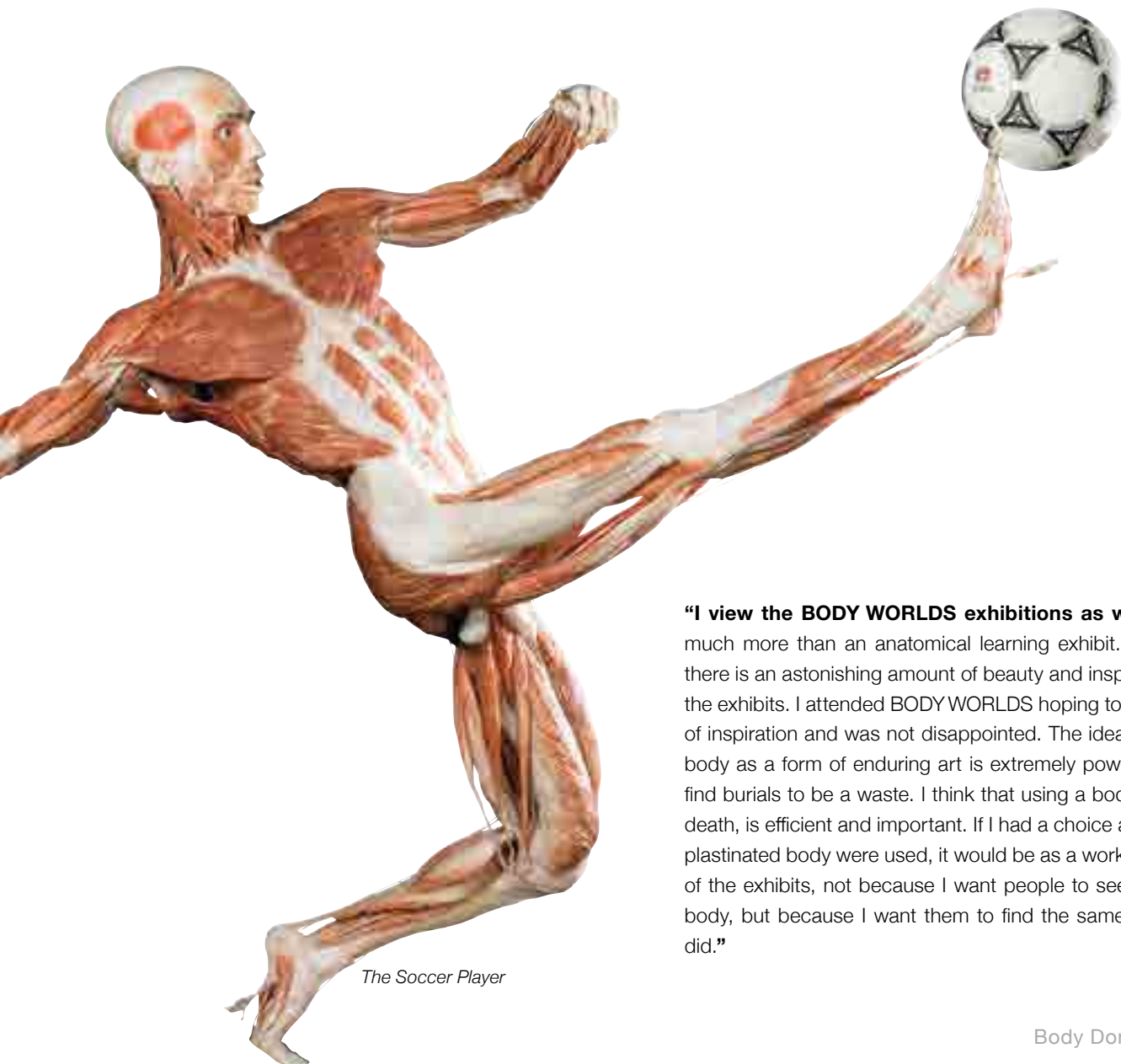
“Two years ago I saw your exhibition and I still get goosebumps thinking about it! Never before had the universe of human creation presented itself to me in a more realistic manner!”

“I truly believe Plastination is a gift to the world. Until now, only doctors and surgeons have been able to see the human body in all its complexity. Everybody knows that the body is a complex machine. But you can never appreciate how deeply complex it is, until you’ve seen it in the way Plastination makes possible. The average lay person can see pictures and diagrams of the body, and think they know how complex it is. But until you’ve seen a BODY WORLDS exhibit, you’ve never truly seen it.”

“It is not death that a man should fear but he should fear never beginning to live”—Marcus Aurelius. Having tried to live my life fully and quite thoroughly enjoying it, I wish to freely share my body in the spirit of education as well as freeing our society from ancient taboos surrounding death. Perhaps encouraging to accept death as a part of life’s journey.”

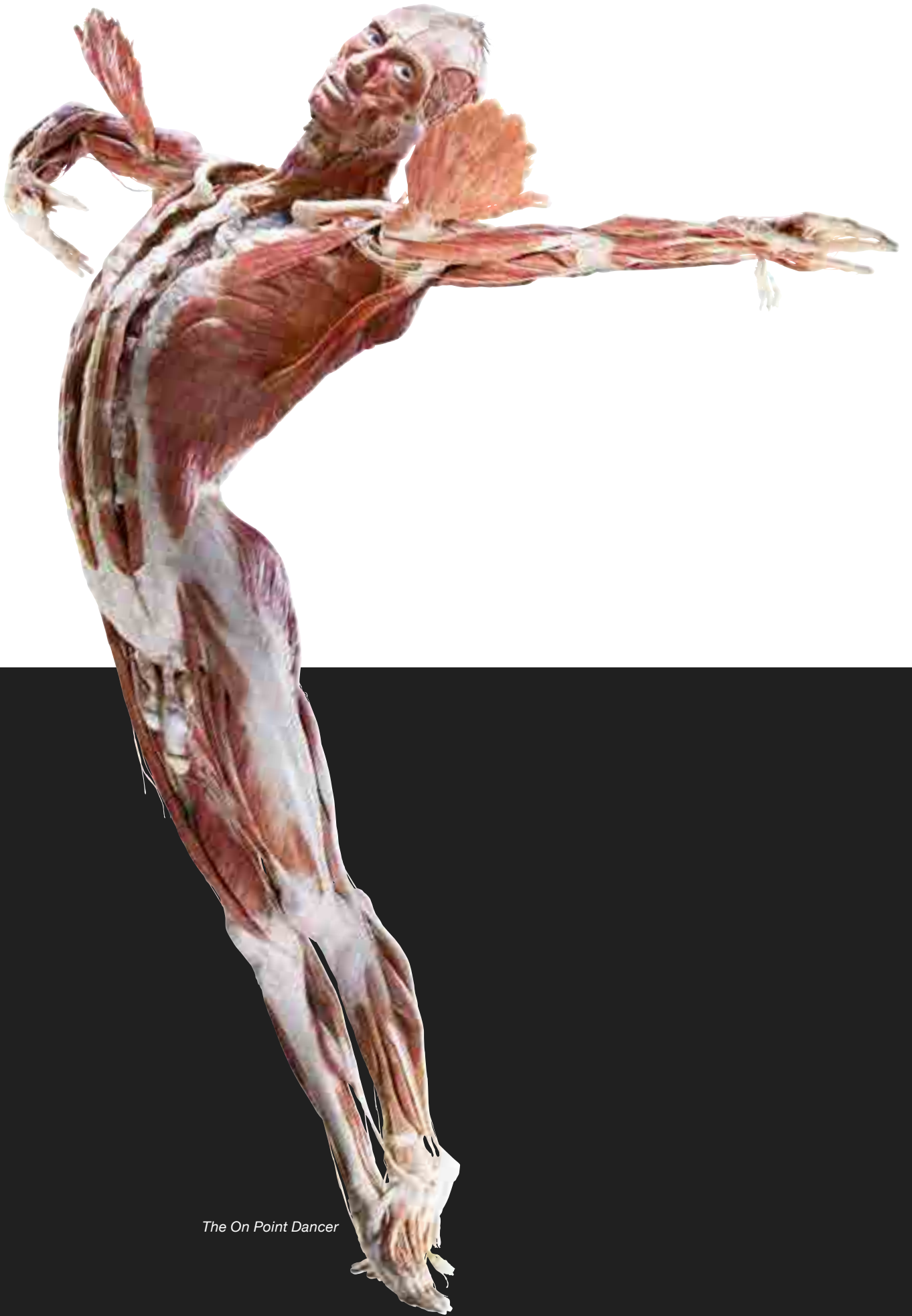
“In an age of artificial and industrial environments, modern humans become divorced from the natural world. The human body, our most immediate experience of the natural world, becomes merely another mechanism. Superstitions and dogma further encourage us in the ill-founded belief that our bodies are evil or sinful. Von Hagens and his Plastination methods offer us a healthy and scientific alternative. They encourage us to celebrate the wonder of the human body. They simultaneously revere and demystify the human organism.”

“I’m a believer and convinced of a life after death. For me, death, so to speak, is only a physical/material event. That which determines our life happens in an energetic dimension that we may refer to as the spirit or soul, and it is immortal. As we know, energy cannot be destroyed but merely transformed, and this is true as well for our living energy. After long consideration I feel good about serving future generations with my body (‘hardware’) being preserved for a good cause.”



The Soccer Player

“I view the BODY WORLDS exhibitions as works of art much more than an anatomical learning exhibit. I found that there is an astonishing amount of beauty and inspiration within the exhibits. I attended BODY WORLDS hoping to find this sort of inspiration and was not disappointed. The idea of using my body as a form of enduring art is extremely powerful to me. I find burials to be a waste. I think that using a body, even after death, is efficient and important. If I had a choice as to how my plastinated body were used, it would be as a work of art in one of the exhibits, not because I want people to see my specific body, but because I want them to find the same inspiration I did.”



The On Point Dancer

On the Continuity of IfP's Body Donation Program A Postscript by Gunther von Hagens

Like anatomy lessons at universities, Plastination depends on people who are willing to donate their bodies after death. By donating your body for Plastination, you can make a very special contribution both to the training of future physicians and other medical professionals and to the education of the general public because the specimens will not only be available for a short period. They will be used for educational purposes on a long-term basis. Medical professionals take care of our health throughout our lives.

By donating your body, you will not be adding your voice to the chorus of complaints that doctors are poorly trained. Instead, you will be doing everything possible as a layperson to improve their level of training. By donating your body to Plastination, you will be passing on the medical care given to you, which started even before your birth with the prenatal care provided to your mother, to future generations.

The donor program is designed to survive long term. However, since not everything can be predicted in advance and nothing lasts forever, it cannot be stated with certainty that every donation can always be accepted at every point in time in the future.

I will continue to make every effort to further develop the IfP and the Gubener Plastinate GmbH into successful, internationally recognized institutions from which interested medical training centers can buy anatomical specimens without ethical reservations.

At the same time, I will continue to further develop and perfect the Plastination process. I assure you that I will do everything in my power to make certain that each and every body donated is used to its greatest potential to enhance knowledge about the healthy and diseased anatomy of the human body among laypersons, students, and medical professionals and to foster medical research. The scientific work of the IfP and of Gubener Plastinate GmbH will in any case continue after the end of my career and after my death.

Finally, I would like to thank you for your interest in donating your body for Plastination. I would be happy to welcome you among the circle of donors, which includes many members of my family and myself.



GvH

Gunther von Hagens

Inventor of Plastination &
Founder of the BODY WORLDS exhibitions



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