

The legal and ethical framework governing Body Donation in Europe - A review of current practice and recommendations for good practice

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SUMMARY

Discussions at the inaugural meeting of a Trans-European Pedagogic Research Group for Anatomical Sciences highlighted the fact that there exist considerable variations in the legal and ethical frameworks throughout Europe concerning body bequests for anatomical examination. Such differences appear to reflect cultural and religious variations as well as dif-

ferent legal and constitutional frameworks. For example, there are different views concerning the "ownership" of cadavers and concerning the need (perceived by different societies and national politicians) for legislation specifically related to anatomical dissection. Furthermore, there are different views concerning the acceptability of using unclaimed bodies that have not given informed consent. Given that in Europe

there have been a series of controversial anatomical exhibitions and also a public (televised) dissection/autopsy, and given that the commercial sale or transport of anatomical material across national boundaries is strongly debated, it would seem appropriate to “harmonise” the situation (at least in the European Union). This paper summarises the legal situation in a variety of European countries and suggests examples of good practice. In particular, it recommends that all countries should adopt clear legal frameworks to regulate the acceptance of donations for medical education and research. It stresses the need for informed consent, with donors being given clear information upon which to base their decision, intentions to bequest being made by the donor before death and encourages donors to discuss their wishes to bequeath with relatives prior to death. Departments are encouraged, where they feel it appropriate, to hold Services of Thanksgiving and Commemoration for those who have donated their bodies. Finally, there needs to be legislation to regulate transport of bodies or body parts across national borders and a discouragement of any moves towards commercialisation in relation to bequests.

Key words: Body donation – European Community – Legal and ethical aspects

INTRODUCTION

Following discussions by the European Federation for Experimental Morphology (EFEM), it was agreed that there was a need to develop pedagogic research for the anatomical sciences to encourage quantitative investigations that had the rigour of laboratory-based studies. To this end, a Trans-European Pedagogic Research Group for the anatomical sciences was set up under the initial leadership of the immediate Past President of the EFEM, Professor Bernard Moxham. This group, consisting of teaching enthusiasts that spanned the anatomical associations within Europe, had its first meeting in Paris in March 2005. This inaugural meeting comprised talks relating to the legal and ethical positions relating to body bequests for anatomical examination in various European countries. The impetus for this came from the recent exhibitions of anatomical material by von Hagens and associates (Morris-Kay, 2002; Barilan, 2006) and from new legislation being enacted (or consid-

ered) in various parts of Europe as a result of public concern regarding the retention of parts/organs for pathological and/or anatomical purposes. The group recognised that while some information concerning the legal framework and practical concerns surrounding body bequests has been published in relation to some countries, (Spanish Anatomical Society, 1996; Torres and Couessurel, 2002) information about the situation Europe-wide was fragmentary. Reviews of some of the ethical issues surrounding body donation have been published recently by Jones (2002) and Barilan (2006). The present paper provides a summary of the talks summarising the legal frameworks for body bequests in countries of the participants at this meeting and provides examples of good practice recognised by the Group following further discussion at the meeting.

PERSPECTIVE FROM AUSTRIA (PROFESSOR E. BRENNER)

Austria is a federal state with frameworks of national and federal law. Consequently, both frameworks are seen to operate in relation to the regulation of bequests of bodies for anatomical education and research. First the national legal framework will be described. In Austria, the cadaver after death is regarded as an entity and it is inherited upon death by the principal heir. According to Austrian national law, scientific institutions (in general Institutes, Departments or Divisions of Medical Universities) are entitled to receive the body after death mainly by means of a specific legacy, which is a special form of last will and testament. Also the principal heir can offer the body to appropriate scientific institutions; nevertheless, these offers are rejected due to the policy of ethics, which demands informed consent. Other laws, which regulate the disposal of cadavers upon decease, include regulations concerning the disposal of cadavers of those who have died of notifiable infectious diseases, other post-mortem disposals, such as where to and how a cadaver may be transported, and relate to international treaties concerning the transportation issues.

It is federal state law that controls all procedures and processes that must take place following decease. These laws cover the examination of the cadaver by a Parish Physician, the issuing of a death certificate and the

arrangement for a funeral (when and where). However, there are nine Federal States and consequently nine separate sets of Laws regulating the details of these processes. It is not possible, within the confines of this short article, to summarise details of the different laws. Instead an example of how these Laws operate will be given by describing the procedures that occur in the State in which the author's own Department is located, the Tyrol.

Under Tyrolean Parish Sanitary Law, any unclaimed cadavers "have to be handed over to the Anatomischen Institut der Universität Innsbruck, now the Division of Clinical Functional Anatomy." All the costs of recovery and subsequent transport to Innsbruck are to be met by the department. Although this is current law, the division in general rejects these cadavers, for two reasons. The first reason is our ethical policy of informed consent. The other reason is the time-factor, as it can take several days to find out that there are no living relatives who might claim the body (after which time cadaver preservation is difficult). However, federal law also permits the donations of cadavers to the Institute via a special will or legacy. In Tyrolean law, all such legacies are regarded as originating from the person in life concerning their wish as to how their cadaver can be used after death and so cannot be overridden by relatives. Consequently, such a bequest can be cancelled at any time by the donor. Donations also can be rejected by the legatee who is under no obligation to provide any reason. Nevertheless, the division is aware of the fact that sometimes relatives do not inform the division of the death of a person who has made such a last will.

The process of making such a bequest usually begins with an interested person making an initial contact with the division. In response to any such request, the division will send out an information leaflet accompanied by two copies of a legacy form with the following wording: *The Division of clinical-functional Anatomy of the Department of Anatomy, Histology and Embryology at Innsbruck Medical University is very glad about the fact that you have decided to help the medical sciences with your body after your death. By this way you help with a good education of young doctors and make new advances for our science possible.*

We are striving to hold the formalities as low as possible and send you for this purpose two forms (bequests). Please sign both forms. One of the forms

please send back to us, the other one you should store with your papers. The enclosed cards should be carried along by you constantly. Furthermore it would be expedient if you inform your family doctor of your disposal.

Just in case we would like to inform you that the Division will carry the expenses of a possible overpass to Innsbruck of course. In the same manner, we carry the expenses for a simple, quiet burial in Innsbruck at the Pradler graveyard (honorary-burial-facilities of the Division). If your relatives would like to take part in this funeral, it will be possible, when they take over the additional costs.

If any obscurities should exist, do not hesitate to contact the Division.

The legacy form is an important document. Its text asks the potential donor to confirm that he or she is willing to leave their cadaver to the division for the purposes of teaching and research, that the relatives or his or her physician will inform the division immediately upon their decease, that he or she has received the information leaflet and agreed with the procedures set out for transfer to the department and subsequent disposal, and that the relatives agree to the donor's wishes. The potential donor then returns one signed copy of the legacy to the division and retains a copy for themselves. For a bequest to be received, donors must be registered with the division.

Once the division is notified of the death of a legatee, a physician on duty will decide whether it is possible to accept the bequest or whether it should be rejected. Rejection of the bequest can be made without providing reasons. Nevertheless, the main reasons are: a major delay in information being received (i.e. more than 72 hours after death), several known infectious diseases, or major destruction of the cadaver due to accidents. Once the decision to accept the bequest has been taken, the physician on duty will make the necessary arrangements for the transfer of the body to the division. Should there be any difficulty in arriving at a decision, for example if a death occurs abroad, then the physician on duty will refer the matter to the Director who will take the final decision. Once the cadaver is received into the division, the physician on duty ensures that the necessary registration procedures are carried out, checks the accompanying papers and inspects the cadaver. Once these initial administrative procedures are complete then the process of cadaveric preservation can be undertaken.

Within the division, the cadaveric remains are used for a variety of purposes. Prosected specimens are used for demonstration within lectures and other classes while undissected specimens are used by students in dissection classes. Several cadaveric remains are also used for scientific purposes, both basic and clinical scientific research. Finally, specimens are used for postgraduate, mostly hands-on, teaching and some individual work.

The division is keen to ensure that all bequests are handled appropriately and that donors can have absolute confidence in their procedures. Thus, no bequests are accepted without the donor having registered their legacy and been given appropriate information upon which to make a decision based upon informed consent. The division provides a chapel for the use of the relatives of the deceased and each year arranges a commemorative service of thanksgiving. This service is attended by relatives, students and members of the department. The division also encourages, though does not require, students to attend special ethics classes that explore the issues surrounding the donation of bodies.

The number of legacies that are registered with the division is considerable; a total of approximately 6,400 bequests are currently registered. The number of legacies is reasonably buoyant, though there have been some years in which the number received has declined sharply. The majority of donors registered are in an age range from 50-80. Each year, the division accepts approximately 150-200 cadavers. Currently, there is a 10 year gap between the registering of the legacy and death. This difference is of considerable significance for the division, given its high usage of bodies, because it means that any decline in bequests will be felt 10 years ahead and so there has to be a degree of forward planning to ensure a continuing supply of cadavers.

PERSPECTIVE FROM FRANCE (DOCTEUR O. PLAISANT, MAÎTRE M. CAILLAUD, E. LAFORÊT)

In France, as in many countries, there has been a history of receiving bodies for anatomical examination and research that can be traced back to the Middle Ages. However, it remains the case that the legal framework that regulates the receipt of bodies for anatomical purposes is still inadequate and insufficient for a rigorous regulation of the process. Tradition-

ally, anatomy departments have relied upon two main sources of bodies. One important source in France over the centuries, as elsewhere, came from abandoned bodies which departments of anatomy were allowed to use for anatomical examination. Up until the middle of the twentieth century, the other main source came from hospitals that received the poor for treatment. In cases where the individuals were unable to pay for treatment or funeral expenses, and where families did not collect the bodies of the deceased, hospitals regarded exemption from payment as sufficient compensation to use the bodies for anatomical research without the need for further formal consent. In neither case did these procedures have any groundings in law. However, during the first half of the twentieth century, the status of the body gradually evolved, leading in 1943 to a decree forbidding hospitals to permit autopsy for scientific purposes where it is opposed by the families of the deceased. In the second half of the twentieth century, body donation may only take place after explicit consent has been given. This practice respects and values the status assigned to the human body. The development of body donation centres to accept bodies has resulted in a progressive decrease in the number of bodies abandoned.

The first legal reference to body donation in France may be found in a law of 1887, which was passed to allow individuals the right to determine their own funeral arrangements. This was the first legal reference suggesting the possibility that individuals could decide the fate of their body after death. In the preliminary debates that surrounded the passing of this law, reference can be found to "bequeathing one's body or parts of one's body to public institutions or learned societies". Though this never became enshrined in the law, despite these debates, this law may be held to provide the first legal foundation governing body donation in France.

It was not until the 1980s that the issues surrounding donation of bodies was raised again in any serious way. This followed an extended period of debate that was begun in the immediate period following the Second World War and was stimulated by a desire to ensure that human dignity could be maintained in the face of scientific advances. In 1991, a report was published by Noelle Lenoir (*Ethique et Droit* décembre 1991). As the result of this report and work in the State Council,

Parliament concluded that it was necessary to formulate the overriding principle of “indivisibility of the human body, its respect, its non-commerciality, the need for informed consent of every donor and the protection of genetic patrimony”. The status of the body was then written into the Civil Code and guaranteed by the Penal Code and these principles were subsequently confirmed by a decision of the Constitutional Council in 1994. But this decision essentially concerned organ donation and did not take body donation into account; as the intention of the law was to protect the rights of people making organ donation. These decisions enshrined in Law that “safeguarding the human person’s dignity against every form of degradation and subservience is a principle of constitutional value”. Articles within this Civil Code establish important principles that set out in more detail the ways in which body donation should be regarded. They establish that everyone has the right to respect for his/her body, that their body should be regarded as inviolable and that their bodies are not the subject of patrimonial rights. Inviolability can only be overridden in cases of medical necessity per se or in the interests of the person themselves in situations where they are unable to give consent. Even in this latter case, the consent of others involved (for example relatives) should be sought. The Civil Code also sets out a principle of complete anonymity. Neither the donor nor the receiver may know the identity of one another. Finally, the Civil Code renders null and void any agreements that assign value to the human body, its elements or any products derived from it.

This latter provision of the Civil Code regarding patrimoniality has led to a debate surrounding the issue of donation for, if the principle is laid down that people do not own their bodies, this would seem to run counter to the notion of any kind of bequest being possible. On one side of the argument, it has been stated that people are able to decide what is done to their bodies with the important exclusion that commercial exploitation of a body or its parts is not permissible. Others would assert that, though one does not own one’s body, one does have the right to decide what its fate is after death.

Though these provisions of the Civil Code are clearly of importance and are relevant to any debate surrounding the donation of bodies for medical education and research, they have

been taken to refer solely to the governance of organ donation where the bequest is therapeutic in nature and not for scientific, research or educational purposes. In the preparatory debates that surrounded the confirmation of the Civil Code provisions in 1994, there were ethical discussions raising the possibility of organ removal for scientific purposes. Loi n° 2004-800 du 6 août 2004 officially accepted, for the first time, that organs could be removed for scientific, and not just therapeutic, purposes. However, this law has been regarded as referring solely to organ donation. Thus, a legal framework regulating specifically body donation for anatomical purposes has still to be formulated and enacted.

The only directly applicable legal framework that may be taken as applying specifically to body donation for anatomical purposes is that of Article R2213-13 of the CGCT (Code General des Collectivités Territoriales). Part of a larger chapter, it regulates the special police authority in funeral matters. This Article permits health and research establishments to accept bodies from donors. In order for an establishment to accept donation of bodies, the donor in life must have completed a handwritten, dated and signed statement executed by them confirming their wish to donate their body. Once the establishment has received, such a declaration it then issues to the potential donor a donor card. This donor card must be carried by the donor and has to be produced after death for a donation to proceed. Establishments cannot refuse donations nor can the wishes of the donor be overridden by their families after death. Following decease, the Registrar in the district in which the death occurred must receive a copy of the declaration confirming the wishes of the donor from the establishment where it has been deposited. Provided there are no medico-legal grounds for retaining the body, it is released and transported to the receiving establishment. The Article states that this must occur within 24-48hr of decease (24hr hours in general and 48hr if the establishment, whether private or public health, has the equipment to allow good conservation of the bodies).

Though donations are free, and the establishment is required to meet all cremation expenses, establishments are permitted to request a contribution from the donor to help meet the costs of the running of the donation service. However, it should be stressed that it is only for that purpose and not as a payment

for acceptance of bodies. Though all centres operate in a broadly similar manner under the provisions of the CGCT Code, the precise details of how the centres manage their activities can vary. One example of how these centres operate is afforded by the Centre for Body Donation in Paris (established in 1953 by Professor André Delmas) which, in 1981, became part of the Université René Descartes. Prior to its establishment, the only bodies that were used for teaching and research were those from within the Paris region that were otherwise unclaimed.

According to the provisions of R.2213-13 CGCT, the Centre for Body Donation in Paris, in common with others can only accept bodies from donors if they have given consent during life. Additionally, a certificate is also required to confirm that the donor was free of known infections prior to death. Furthermore, and since 1995, a precautionary blood test is undertaken. As the result of these medical precautions, approximately 10% of bodies cannot be used for anatomical purposes and are immediately cremated. In 2004, 651 bodies were received by the Anatomical Laboratory of Paris, which is the most important of the 27 centres in France. Since 1998, cremation has been required for all anatomical material on health grounds and this is explained to donors at the time that their declaration is made to the Centre for Body Donation in Paris and has to be acceptable to them. The ashes of the cremated are buried in Thiais Cemetery where a headstone has been erected over a grave that acknowledges the generosity of the donors.

In conclusion, a legal framework for the specific regulation of body donation exists but remains incomplete. Work is in progress aimed at the creation of an ethical Charter for body donation centres grounded on the principles laid down in the Civil Code concerning the respect, dignity and confidentiality that should surround body donation. Though body donations are regulated by the CGCT Code and, in particular, the wishes of the donor are paramount and must be expressed specifically in writing prior to death, such additional regulation is still felt to be necessary. This will ensure that ethical principles governing body donation will be enshrined in the Civil Code and applied with uniformity at all scientific establishments.

PERSPECTIVE FROM GERMANY (PROFESSOR F. PAULSEN)

Body donations to anatomy departments have recently become a major topic of discussion in the “Anatomische Gesellschaft” (Anatomical Society) in Germany. This is due to the fact that the death benefit (1050 €) paid by the health insurance companies to subsidize the relatives for the cost of burial etc. was abolished at the end of 2003. Previously, this sum had been available to the anatomy departments to pay for the costs of the donation programme. This short review will outline the donation procedures in Germany for receiving anatomical bequests and then describe the steps being taken to fund these programmes consequent upon the changes in payment of death benefits.

Normally, the first contact of a potential donor is with a department of anatomy in the university nearest to where they live. He/she is then supplied with an information brochure about the donation as well as a testamentary disposition.

Funerals are regulated in Germany by State (Länder) and not Federal law. The donation is also regulated by State law. The donor must make a testamentary disposition, whereby choices regarding the disposal of their body after death can be stipulated (for example funeral at sea). Should a donor wish to donate their body for anatomical examination, the signed form has to be retained in the department of anatomy. The donor is then issued with a donor card which should be kept with their personal documents to signify their intentions following death. In contrast to the situation in the United Kingdom, upon death there is no need for further notification to a higher authority.

At the moment, the University of Halle (a town with 240,000 inhabitants) has some 2000 registered donors. However, the number of donors registered with a department depends on the size of the medical faculty (i.e. how many students are being taught) as well as on the size of the town. Thus, the donors registered vary considerably between medical faculties in Germany from 500 to around 6000 donors.

After death, the body is transported (at most German universities by undertakers) to the department. Throughout Germany, a variety of embalming methods are used, in most cases a traditional method based on a formalin

formula or mainly alcohol or a phenol formula. In addition, the Thiel technique for fixation is used at some universities for operation courses for clinicians. Once adequately embalmed, the body is usually stored at 4°C or in 70% alcohol until needed. The majority of bodies are used in the dissection course, some in operation courses for clinicians, and less frequently as demonstration objects in courses or for anatomical collections. Once the dissection course has been completed, the remains have to be cremated and the ashes interred at a local cemetery (or according to the donor's wishes). In most cases, the universities have a special burial plot at the local cemetery where urns with the ashes of donors are buried anonymously.

Normally, at each university one or two services a year are held, organized by the departments of anatomy with the help of clergy of the two main Christian faiths (Lutheran and Roman Catholic). The students who dissected the bodies are involved in these services (for example by contributing words or music or bringing the urns from the place of ceremony to the burial plot). At some universities, the relatives of the donors are invited to these services.

An important issue that has had to be tackled in Germany in the last two years is how to cover the cost of the donor programme. Until 2003, the health insurance companies had contributed 1050 € in the form of a death benefit. This payment was abolished following a cost explosion in the German Health System from 2000 to 2003. From then on, departments of anatomy and/or universities were required to meet the considerable costs involved. This has had a major impact on departmental and university budgets. In turn, this prompted us to undertake a major survey to determine the likely effects on donation programmes.

The main findings of this survey were that, while some departments were receiving support from their faculty or occasionally from local government (all but one of the medical faculties are state universities), nearly one third of the departments had to pay the costs from their own research or teaching budgets. This resulted in significant moves to reduce costs and minimise the impact on the donation programme. Among the measures adopted were: negotiating more favourable contracts with the crematoria and undertakers, rejecting some bequests, adopting any-

mous burial and establishing a donation account. More radical measures under consideration included cremation and burial outside Germany (in one faculty) or omitting a funeral service altogether.

There have also been attempts to look for contributions from other sources. A few departments decided to ask students for contributions ranging from 30 to 100 € per term. A larger number of departments planned to seek contributions from donors. Some departments encouraged earmarked single donations or asked for some participation in "travel" costs if the donor lived and/or died more than 100 km from the department. Another approach has been to ask donors to take out a special insurance policy to cover the complete costs (1,200-1,500 €) or part of the cost of their donation, either as prepayment to a special departmental account or as personal insurance. At present, more than one third of faculties have experience in trying this approach. It is noteworthy that 1,200 € only covers the costs outside the medical faculty: transport of the cadaver to the department, transport of the remains to the crematorium and burial. The costs for personnel, preservation fluid and other consumables are not included. Cost sharing is largely accepted by the donors because the amount is much lower in total than what the donor (or their next of kin) would otherwise expect to pay for burial. Experience shows that these changes have hardly affected the number of bequests made to departments provided the donors are informed of the reasons for cost sharing. Some problems arose in cases where donors who had already signed testamentary contracts years ago were now asked to share costs. Despite this new situation, there is a constant number of people from areas not even in the neighbourhood of a medical faculty who wish to commit themselves despite the costs.

Although significant changes in funding the donor programme have taken place, the effects on the education of students have been minor. Only three departments have indicated that they are planning to change the way in which they intend to educate their students - e.g. two groups of students would work simultaneously on a single cadaver, making greater use of already prepared or plastinated specimens and demonstration material, and a reduction in the length of the dissection course.

In conclusion, there is an active programme of body donation on a large scale in Germany but changes in funding the programme have necessitated a review of how departments should manage the costs and may possibly require a wider review of teaching methods. Cost sharing with body donors is becoming the norm throughout Germany to compensate the loss of the death benefit and to maintain the advantages of dissection for students.

PERSPECTIVE FROM ITALY
(PROFESSOR G. MAZZOTTI)

Bologna is one of the oldest anatomy departments in the world and the first medical school to undertake dissection as a means to study anatomy and yet the last few decades have been difficult ones for both the department and the school. This difficult period stems from a decision taken by the Italian Government in 1970 to allow free access to medical school admissions for applicants in their first year. The effect of this policy was that there was a substantial increase in entrants to medical schools and, at Bologna University, this resulted in some 2000 students per year being enrolled to study medicine. This huge increase in student numbers meant a radical overhaul of teaching. The most serious consequence, from the point of view of anatomy teaching, was the closure of the dissecting room facility to allow the building of a larger lecture theatre to accommodate the additional student numbers. This meant that it was no longer possible to undertake gross anatomy in the conventional way using prosected human remains. This decision has caused considerable damage to the ability of the department to teach gross anatomy, not the least of which has been a progressive loss of staff able to teach gross anatomy on the human cadaver. The consequences of this free admission policy have now been recognised and, since this policy was reversed recruitment to the first year of the medical course at Bologna has declined to a more manageable number of 300 and the relationship between students and staff in respect to their teaching has now been re-established. The department is only now contemplating a recovery in its gross anatomy teaching programme but the process of restoring teaching using the human cadaver will require a significant input of effort and resource.

At present, in Italy there is no specific law allowing the dissection of human cadavers for anatomical purposes. The present position is that unclaimed bodies may be used by departments but, since any unclaimed body may be claimed by a single religious association, the supply of cadavers in practice is quite limited. Consequently, although Bologna is now in a position to restart its gross anatomy teaching programme, progress is being hampered by the fact that as few as one cadaver per year might be admitted to the school. The anatomy department is attempting to mitigate these problems in a variety of ways. It makes use of plastinated specimens, some organs obtained post-mortem and some specimens from obtained from animals and also undertakes surface anatomy teaching and body painting techniques. These techniques are common for all the medical schools in Italy.

However, the Italian Society of Anatomy and Histology and the Italian College of Anatomists want to restore a more complete gross anatomy teaching programme that utilises cadaveric teaching alongside these other techniques. Italian anatomists and surgeons believe that surgical training in particular needs to involve study of anatomy, including that of the cadaver, as part of the preparation for specialist surgical training. At present, medically-qualified trainee surgeons wishing to undertake specialist postgraduate training are forced to look elsewhere in Europe and the USA for suitable courses employing cadaveric teaching. The consequence of this has been that a number do not return to Italy once their training is complete. Changes in Italian law are anticipated that will enable a more extensive programme of teaching to take place and remedy this problem. In 2004, the Italian parliament presented a specific law concerning the donation of bodies for anatomical education and research and will create regional centres where such bodies can be prepared and studied. The law, if passed, will permit potential donors to express in life a wish to donate their bodies after death for anatomical education and research. Such bequests can only be made by the donor in life and relatives will not be allowed to consent to donation after death. Bodies will be allowed to be retained for no more than one year after which they must be disposed of.

The presentation of this law highlights some serious problems for departments of anatomy as they contemplate restoring cadav-

eric teaching. There is now a shortage of individuals suitably-trained to undertake such teaching because of the long period of time during which cadaveric teaching has not been possible. There is also a severe shortage of bodies. Consequently, departments are looking to the possibility of importing human cadavers into Italy to overcome this shortage. They are also looking to train students in departments in Europe so that they can return to Italy to develop teaching programme anew.

The law presented in 2004 has been discussed but not yet approved. Currently, there is a political will for its approval and the new Government re-applied a similar law in June the 8th 2007 entitled “ A Proposal for Body donation for Study and Research” and approval should be given in the near future.

The experience from Italy highlights the importance of continuing to ensure the provision of cadaveric teaching for the re-establishment of programmes previously abandoned. This is a difficult and challenging process.

PERSPECTIVE FROM THE NETHERLANDS (PROFESSOR H. VAN MAMEREN)

The notes below describe the present situation concerning the donation of bodies for medical education and research. They should be read in conjunction with the recommendations formulated by the Trans-European Pedagogic Research that are listed at the end of this review. Consequently, only areas where current practice in Maastricht or the Netherlands differ from these recommendations are highlighted. It is also necessary to state at the outset that, in the Netherlands, the term «donor» used preferentially for organ transplantation and is not used in relation to persons who wish to offer their bodies after death to departments of anatomy for anatomical examination.

In the Netherlands, all donations are regulated by a Law on the Disposal of the Dead (LDD). This law regulates the disposal of bodies or body parts after death whatever their ultimate destination. It recognizes three equivalent final destinations of the body: burial, cremation and medical science (teaching and/or research). In the latter case, it is one of the eight universities with a department of anatomy that formally acts as the authority accepting the bequest. In practice, the primary responsibility rests completely with the relevant department of anatomy in the univer-

sity concerned. Once one of the three destinations listed above is chosen, the other two are excluded.

Those wishing to bequeath their body for medical education and research must complete two copies of a so-called codicil. These identical hand-written documents express the final wish of the legatee and are congruent with recommendation four at the end of this paper. Both documents are part of a comprehensive prospectus that describes the procedure and its legal and financial implications fulfilling the function both of an expression of intent and information leaflet (as suggested in recommendation nine). These prospectuses are sent by post to anybody interested in making a bequest whenever a request is received. Requests for prospectuses can be made by telephone or letter but, whenever possible, interested persons are encouraged to write to, or call, the department of anatomy to ensure that any remaining questions can be answered. Frequently, the general practitioner or a hospital doctor at an advice centre or nursing home acts as intermediary. Sometimes, if the legatee is not able to write by him or herself, a notary can be called upon to assist and, if that is the case, any charges incurred are paid by the department of anatomy. One handwritten codicil must be returned to the department of anatomy and then checked for completeness. The other must be retained by the donor and kept with the other personal papers of the codicil bearer (as suggested by recommendation ten). It is important to state that expressing a wish in this way under the LDD, including the expression of informed consent, is completely without any financial implications for the legatee.

In addition to the codicil as called for by the LDD, the legatee has the option of producing two further documents that can be attached to the codicil itself. These are:

A. a declaration to be given by next of kin that he/she/they is/are aware of the final wish of the legatee (in conformity with recommendation five):

B. a form specifying any extra costs that the surviving relatives agree to take responsibility for in relation to the final disposal of the body; these could include quality of the coffin to be used, the nature of any religious services, any special wishes of surviving relatives during the final cremation or incidentally burial after dissection.

The comprehensive prospectus sent to the legatee is careful to state clearly that donations may be rejected by the department of anatomy and pays full attention to the often painful feelings that may result from any rejection. In this situation, it is the relatives and not the department who are required to make arrangements for disposal of the body and pay all associated costs. There are several possible causes for rejection of a potential bequest

A. possible virological, microbiological or other complications:

B. in situations where the body may not be intact (such as following an accident or after recent surgery). A special example of this would be where organs or tissues have been removed for transplantation purposes. In this situation, the department of anatomy will not accept the legacy:

C. factors interfering with proper preservation of the body such as extreme or morbid obesity or cachexia:

D. in some universities, when there is no further capacity to store additional bequests. We, in Maastricht, will not accept the legacy under such circumstances, though it is perhaps not by accident that the two religiously-founded universities (Free University Amsterdam, Protestant, and Radboud University Nijmegen, Roman Catholic) accept bequests unconditionally. At Maastricht, we try to discourage the relatives of codicil bearers, in cases where we are unable to accept a body for reasons of a lack of storage, to approach other departments to accept a bequest where first choices are unable to accept. Consultations between the eight anatomy chair persons in the Netherlands take place in cases either of a shortage or surplus of bodies.

At Maastricht, the remains of the cadavers are sent to a regional crematorium for disposal after the dissection. However, it should be understood that this is not a cremation in any formal sense. One might even question the lawfulness of this procedure given the fact that the only activity permitted in a crematorium is a real cremation. The procedure has been discussed with the appropriate legal authorities and has been approved as a means of disposal. We consider this provides a good legal framework for our current practice. Other departments in the Netherlands make use of the hospital incinerator instead. In view of the position of disposal of the dead in Netherlands

legislation, thanksgiving ceremonies are not held (as suggested by recommendations eleven and twelve).

Though recommendations 6, 7, 8, 12, 13, 14, 15 and 16 do not form part of our current practice we could accept them *grosso modo*, though we would not be inclined to employ lectures as the best means to explore the ethical issues surrounding body donation for anatomical examination.

PERSPECTIVE FROM PORTUGAL (PROFESSOR D. PAIS)

The legal regulation of anatomical bequests in Portugal has been a relatively recent event. Before 1999, there was an almost complete absence of any legislative framework for the regulation of donations of human bodies for anatomical education and research. The only law dating from before this time was from 1913. The law permitted the obtaining by medical schools of the bodies of those dying in hospitals, asylums and public assistance houses provided that they had not been otherwise claimed within a 24hr period. The consequence of this legal vacuum was that the number of bodies being donated to medical schools was very small and the teaching of anatomy by dissection was difficult.

Prior to 1999, there were very few laws regulating human body donation. In 1993, a law was passed regulating the donation of organs for transplantation. However, despite the absence of specific regulations of anatomical bequests, no opportunity was taken to extend this law to include the regulation of anatomical bequests. A particular feature of the 1993 Transplantation Law was that it deemed everyone who died in Portugal to be registered as a potential organ donor unless they had previously registered a specific wish not to donate their organs in this way. People not wishing to donate their organs for transplantation could apply to the Portuguese Ministry of Health to have their names placed on a register called REENDA (Registo Nacional de Não Dadores, or Non-Donors National Record) which would record their wish. This list has to be consulted before organs can be legally removed. In drawing up the 1999 law relating to anatomical bequests, legislators took the opportunity to harmonise the two laws and incorporate some of the best features found in the 1993 Transplantation Laws into the 1999

decree laws on anatomical bequests. In particular, in preparing a legal diploma that would regulate the use of human bodies or body parts, the legislators decided to maximise the resources created for transplantation by sharing them with the processes surrounding anatomical bequests. It was also decided that the registration of non-donors in REENDA, which in 1993 had been deemed not to apply anatomical bequests, would after 1999 be extended to include anatomical bequests. Consequently, after 1999 compulsory consultation of the REENDA record was required of anatomy departments in Portugal before any dissection could be undertaken. Thus, acceptance for anatomical examination of the bodies of people who had registered with REENDA became a criminal offence.

In order to monitor this process, following the passage of the decree law of 1999 departments of anatomy were also required to maintain adequate records and, in the case of bodies of unidentified donors, to keep photographic and genetic records to permit later identification should it be requested. Departments were also required to pay all necessary costs associated with bequests (e.g. transportation and disposal). Finally, exploitation of human bodies for commercial exploitation was expressly, and strictly, prohibited.

The Portuguese Government, by passing in 1999 the Decree-Law (nr. 274/99 July 22nd), set out clearly the legal framework governing the use of human bodies and body parts for anatomical education and research. Thus the previously uncertain legal framework was clarified and this, combined with a careful campaign by the Portuguese Anatomical Society to encourage body donation, had a dramatic effect on the rate of anatomical bequests with consequent benefits for anatomical education in Portugal.

The Decree-Law of 1999 consists of 22 separate articles and it is outside the scope of this article to summarise all the aspects of this law. However, some of its key provisions will be described. The law covers the dissection of all bodies and body parts both for Portuguese citizens and people from other countries who are resident in Portugal and who die in Portugal. One very important aspect of this law is that it establishes the principle that anatomical bequests can be made by donors during their life. Following the confirmation of death by a medical practitioner, the anatomical examination of bodies may be undertaken by medical

schools, forensic institutes and departments of pathology. The Decree-Law of 1999 allows dissection of a body or body parts only if the donor, in life, has expressed a wish to donate his or her body for this purpose. However, if such a wish has not been expressed in life, donation of the body is still permissible provided the donor has not placed their name on REENDA or if the body remains unclaimed after 24 hr. Should a body that has not been claimed and has been taken for anatomical examination be subsequently claimed, then the body can still be retained by a Department until the scientific examination is complete.

The Decree-Law of 1999 makes several other important provisions. It requires that adequate records must be maintained, including a record of what examinations were made on the cadaver. It requires that these records be held securely and that they must remain confidential (except for the purposes of legal or police enquiry). Departments are expected to pay all the associated costs of a bequest and are deemed to be responsible for disposal by burial or cremation. During the time that the body is retained within a department adequate preservation measures must be employed to ensure that the human remains are treated with respect. As with the transplantation law of 1993, any commercial exploitation of bequests is strictly forbidden. Finally, the law places upon medical schools a duty to ensure that the students who use the cadavers receive instruction so that they develop respect for the cadavers upon which they receive such instruction.

Shortly after the enactment of the Decree Law of 1999, the Portuguese Anatomical Society (Sociedade Anatómica Portuguesa, SAP) undertook the production and broad distribution of a leaflet called *Doar É Humano* (Donating is Human). This leaflet encouraged the donation of bodies for anatomical examination and was widely-distributed to hospitals and health centres and combined with a publicity campaign on television and radio. The effect upon the rate of donation has been dramatic. In the department of anatomy in the New University of Lisbon, donations have risen sharply in numbers from 73 in the entire period from 1984 to 1999 to 354 in the five years following 1999 (with 191 of those donations being made in 2004 alone).

The vigorous campaign of Portuguese Anatomists for a proper legal framework to govern bequests for anatomical education and

research has been of major benefit to anatomical education in Portugal. It is now possible to provide medical students with a more fully-grounded education based upon the teaching of cadaveric anatomy and providing them with a fuller preparation, in terms of their understanding of anatomy, for their subsequent medical careers.

PERSPECTIVE FROM ROMANIA (PROFESSOR A.R.M. CHIRCULESCU)

In Romania, at present the use of bodies for anatomical education and research is not governed by any special laws. In my opinion, a single unifying legislative framework is required to cover all donations and manipulations of human tissues (including material for medical education, pathology and research). Section VI of the new “Law regarding the reformation of the health care system” of the 29th of March 2006, and which comprises six chapters (articles 141 to 164, each with 2-12 paragraphs), substitutes the Law n.2/1998 on the removal and transplantation of human tissues and organs and the Law no. 104/3rd of April 2003 on manipulation of human cadavers, and on the donation and removing of organs and tissues from cadavers, but itself refers only to organ and tissue transplantation. That section of the law was considered by the two Chambers of the Romanian Parliament, when they validated the law, to be in conformity with Directive 23/2004/EC of the European Parliament and the Recommendation of the European Council from 31st of March 2004, which lays down quality and safety standards for the donation, testing, processing, preservation, storage and distribution of human tissues and cells (as highlighted in the last paragraph of chapter VI of that law). Within the laws so far passed, Romanian Legislators have indicated their willingness to move towards a harmonization of Romanian legislation with that of Europe in all other related fields. However, thus far, specific regulations on body donation and use for medical education and scientific research, regarding pathology, anatomy, embryology, fertility materials and cloning are still lacking. There is also no Code of Practice to regulate the activities of anatomy and anatomists, nor a Code concerning the respect, dignity and confidentiality that should surround bodies used for medical education.

In the absence of specific laws regulating the donation of bodies for anatomical examination, anatomy departments are permitted to claim the otherwise unclaimed bodies of patients dying in hospitals, workhouses and other health care institutions. The claiming of such bodies by anatomy departments is presently under police control. The consequence of this arrangement is, therefore, that no consent is needed to be given in life for one's body to be used for anatomical examination following decease. The current arrangements are regarded as a form of donation from the health care institution concerned to the department of anatomy, on the basis of direct bilateral agreements (see below).

There is no legal or official involvement of the Romanian Anatomical Society, of the Romanian Academy of Medical Sciences, or of a special Officer or Commission of the Government or other State authority in establishing rules for either research on human body parts or tissue supply, manipulation, storage, use and disposal of cadavers for anatomical education or in supervising such activities. However, the Board of the Anatomical Society does wish to become more actively involved. Thus far, its attempts to take an initiative in this direction have not been successful, though a workshop on body donation was organized during the VIth National Congress of Anatomy, in Iassy (June, 2002).

Despite the lack of a true national legal framework regulating the donation of bodies for anatomical examination, anatomy departments within the medical schools in Romania do observe several general principles in the acquisition and use of bodies for anatomical education and research.

All Romanian medical schools have agreed to provide medical students with an anatomical education based upon the teaching of cadaveric anatomy. Therefore, each of them, whether public or state medical schools, has developed its own way of acquiring cadavers for the education of medical students and research. This applies equally to what might be termed the older, and more traditional, schools in Bucharest, Cluj, Iassy, Timisoara, Targu Mures, Craiova add the newer schools founded during the last 16 years, Constantza, Brasov, Sibiu, Oradea, Galatzi and the two private schools in Bucharest and Arad, listed in order of their foundation. At present, it is true to say that practically no rule is applied with uniformity at all scientific establish-

ments and the details of accepting and registering the body after death vary between different departments of anatomy. However, the same general approach is adopted throughout once a decision is taken whether or not to accept the body for anatomical examination.

Within the confines of this brief review, it is not possible to detail the diverse arrangements that exist in so many different schools. Instead, this review will confine itself to a description of the procedures currently in use in Bucharest. The faculty in Bucharest is the oldest (1857) and largest (about 400-1,000 students a year) in Romania. The building housing the department of anatomy with its five dissection rooms and the museum of anatomy has been in use since 1901.

In Bucharest, the head of the department (or a deputy nominated by him) has good contacts established with the managers of the hospitals, workhouses and other public health care institutions from Bucharest and the area surrounding it within a radius of about 100 km. The head of the department asks them to supply the dead bodies of individuals otherwise unclaimed. The arrangement is that the hospital administration will contact the chief technician of the departmental mortuary unit ("service of cadavers") if they have an unclaimed cadaver, usually 24 hrs after death. The necessary legal documents are completed in the hospital and sent together with the body. Bodies are transported to the department by the university administration in a vehicle specially-designated for the purpose and by agreement with the police.

Under normal circumstances, no offer of a cadaver is refused and there is no limit on the number of acceptances that can be made. Selection of suitable cadavers is carried out within the departmental mortuary based on direct examination of the body. Those considered not suitable for dissection are either immediately cremated (if very badly damaged) or used for the preparation of individual bones.

At present, no precautionary blood tests are undertaken. However, it is considered that precautions do need to be extended towards the possible hazards posed to staff of newly-emerging diseases that may survive the embalming process, such as Jacob-Creutzfeldt disease and its variants.

Full records of acceptances are kept locally, in the department, by the chief technician of the departmental mortuary unit under the

supervision of a member of the teaching staff. There is no central authority to control this activity. These records are held securely and remain confidential, except when required for the purposes of legal or police enquiry. Departmental records are supervised by the police and subject to checks randomly or when needed.

The number of cadavers collected varies from 17 to 25 per year, ranging in age from 50 to 80, from which about 2-3 are not used due to their condition. Cadavers are fixed by a conventional traditional method based on a salted formalin and phenol formula. Once adequately embalmed, the bodies are usually stored until needed in tanks filled with the same fluid. No alcohol and/or glycerol mixture is used. The so-called natural method of embalming (Thiel technique or other softer methods) is not in use in Bucharest.

The cadavers accepted into the anatomy department are used for a variety of purposes. Most are used for teaching in the dissection course. Prosected specimens are used for demonstrations, while undissected bodies are used by students in the dissection classes, which are part of their anatomical studies. Each group of about 100 students uses 2-3 cadavers a semester. A number of bodies are used for a variety of postgraduate surgical training courses. Less frequently, parts of cadavers are used as demonstration specimens in courses or in anatomical collections. The use of material can also extend to providing specimens for basic and clinical research and for surgical training. There is normally no exchange of cadavers and body parts between anatomy units.

There is no specific regulation for the use of body parts for research. Instead, such decisions are left to the discretion of each anatomy department. In Bucharest, graduate students, researchers and clinicians are allowed, and encouraged, to develop their research. This can be contrasted to the strictly regulated procedures in pathology departments, where any research project using organs or body parts first needs approval from the Ethical Commission of the Medical Faculty.

Anatomical specimens may be retained as long as needed. As there is no legal time limit, the storage and use of cadavers or parts of cadavers will largely depend on their individual condition. In the case of well-preserved material, it may be retained for two-three years or more.

Upon completion of the anatomical examination, the cadaveric remains are disposed of by cremation. Cremation has been required for all anatomical material on health grounds. The ashes of the cremated are not buried. All the associated costs of disposal are covered by the university.

The medical school is not required to ensure that the students who use the cadavers receive special instruction in developing respect for the cadavers they use. The department neither encourages nor requires students to attend special ethics classes to explore the issues surrounding the donation of bodies.

There are no legal restrictions, requirements for special licensing, or measures to control the public display of anatomical material; images of the material in the dissecting room can be also taken, (usually) and only the consent of the head of the department is required.

Romania is a diverse country from the point of view of religious observance and this does raise sensitive issues surrounding the opportunities that there might be for a form of religious Service of Thanksgiving for the donors. The staff and students who dissected the bodies are not involved in any sort of special event, either religious or secular. There was an attempt to organize such activities some 15 years ago, under the auspices of the Society of Medical Students from Bucharest, but it has not become a regular event in the years that have followed.

In summary, there is no national framework of legal regulation for the acceptance of bodies within Romania. Instead, individual departments follow locally-determined procedures, though many aspects of these local procedures are broadly similar between different medical schools.

PERSPECTIVE FROM SERBIA (PROFESSOR G. TEOFILOVSKI-PARAPID)

The Institute of Anatomy of the School of Medicine at the University of Belgrade (SMUB) is the oldest anatomy department in Serbia and Montenegro, which is understandable when it is remembered that the School of Medicine at the University of Belgrade has been the parent school for all other medical schools in Serbia and Montenegro (i.e. School of Medicine in Novi Sad, Nis, Pristina, Kragujevac and Podgorica).

The first written signs of medicine in Serbia can be traced back to the XII century – the first Serbian hospital was organized in 1199 in the monastery of Hilandar (Mount Athos, now in Greece) and, in 1208, in the monastery of Studenica (now in Serbia). The first initiative to establish the University Medical School was recorded only in 1876, and the first University law was passed in 1905, by which the Great School of Belgrade was transformed into the University of Belgrade, and the School of Medicine was officially founded as one of its 5 constituent Schools. Due to the poor economic and security situation (The Balkan war in 1912, and the First World War) the School of Medicine at the University of Belgrade enrolled its first class students only in 1920. The first lecture in the newly opened school was an anatomy lecture given by Prof. Niko Miljanic on December 9, 1920. The Institute of Anatomy was organized as a copy of “Ecole pratique de la Faculté de Médecine” and “Ecole de Clamart” in Paris, and first body remains used in the teaching of anatomy were the 6 skeletons brought from Paris by Prof. Miljanic. In the same year, the King signed a special legal act permitting and regulating the procedures for collecting the remains of abandoned persons deceased in hospitals all over Serbia. The campaign launched by the School of Medicine was so successful that, by the spring of 1921, the institute had a total of 99 cadavers, enabling the beginning of student anatomical dissections in May of the same year.

Between 1921 and the end of the Second World War, body collection for medical studies was strictly regulated by the aforementioned legal act. Consequently, the remains from those who died in hospitals with no family or relatives to claim the body were sent to the Institute of Anatomy at SMUB. After World War II, the communist regime suspended all legal acts and among them the one related to body bequests. After that time, in answer to numerous school requests, some partial legal acts would be enacted allowing the donation of unclaimed bodies, but body bequests were not forthcoming because none of these partial acts compelled hospitals, municipal offices or other institutions to inform the departments of anatomy of the existence of an identified deceased individual whose body might be suitable for teaching purposes in a medical school. Hence, in 2003 there was only one article (article 84a of the

Health Protection Law) referring specifically to the collection, by departments of anatomy, of the unclaimed bodies of individuals with no family members for the study of anatomy at medical and dental schools. In 2004, in response to this lack of a suitable legal framework, the Institute of Anatomy at SMUB launched a campaign for body donation. This had the effect of increasing the number of donations, but not substantially that of cadavers. Fortunately, in 2006, the new Health Protection Law was passed in the parliament of Serbia (the relevant articles of the draft were presented at the meeting of the TEPARG held in Paris in March 2005). It contains more articles related to the issues surrounding body donation but also makes reference to other issues, including organ donation for transplantation and fertility treatments. It is the following articles, i.e. articles 225 through 233, reproduced below that regulate very precisely the activities associated with the process of collecting human body remains for the teaching of anatomy:

X Harvesting, Organ and Body Parts' Transplantation

Article 224. Organs, tissues and cells – as parts of the human body – can be harvested and transplanted only if medically indicated, i.e. if it is the most adequate procedure for treatment and if the laws regulating it are fully complied with.

Procedures and conditions for cellular, tissue and organ harvesting and transplant for fertility treatments via assisted reproduction and conception will be regulated by a separate law.

XI The Recovery of Dead Bodies for the Purposes of Practical Teaching

Article 225. Schools of medicine and other medical vocational schools can recover the bodies of dead and identified persons for the purposes of practical teaching:

1. if the deceased has specifically, in written form, donated his body for practical teaching purposes
2. if the body of the deceased is not claimed by any family members and has not, prior to his or her death, specifically refused body donation
3. if the family gives consent, providing the deceased has not, prior to his or her death, specifically refused body donation

(Item 1 constitutes a Body Donation Consent and it has to include the name of the executor of the person's will and must have been legally verified in Court.)

Article 226. The following persons are considered as family: spouse (married or live-in), children born within or out of wedlock, adopted or adoptees, legal guardians, parents, relatives in second lineage regardless of the consanguinity, as well as lateral relatives, including the third lineage of the consanguinity.

Article 227. Within the 12h of a potential body donor's death, the following are compelled to report it to the local Municipal Office: medical institutions, correctional facilities, welfare institutions, local Courts, local Police Departments or citizens in possession of knowledge of a recent death of the aforementioned.

The decision concerning the acceptance of a donated body will be made by the Ethics Board for Anatomy of the medical school concerned.

The school can accept a body for practical teaching purposes only if the death certificate is signed by the local Coroner and in situations where no mandatory autopsy is required.

Article 228. The school is not allowed to use the bodies of deceased individuals where no family members have come forward to claim the body until 6 months have elapsed after the body has been accepted.

The school will not accept the body of a person who has died due to infectious disease or those who present with postmortem changes that will prevent embalming of the body to occur.

The school takes responsibility to treat the body with proper respect, to use it only for practical teaching purposes and to bury it on completion of teaching.

The school will agree to carry out the donor's last wishes regarding burial, cremation, and the type of religious ceremony and any other clearly stated wishes.

The school may use the bones of the donated body to prepare an osteologic set (skeleton) which will be used for practical teaching in anatomy, providing the donor has expressed their consent in life.

Article 229. The school can accept bodies under the conditions laid out in Art. 225 (2) previously mentioned only after the local Municipal Office has given consent.

The Municipal Office is bound to inform the school of the existence of an identified deceased individual whose body can be used for teaching purposes in schools of Medical Vocation regulated by this law.

Article 230. In cases where a family member unknown at time of death submits a request to the school claiming a body previously unidentified within the specified six month period, the school must return the body to the family.

Article 231. The school is bound to keep as a permanent record all the data and documents regarding the bodies of deceased individual that have been accepted for practical teaching purposes.

These data include: the last and first name of the deceased, their date of birth, place and date of demise, the cause of death and number (matching the number on the marker supplied with the body of the deceased).

The aforementioned documents include: the Coroner's report, death certificate, ID, health certificate and a written statement confirming the donation.

Article 232. Bodies donated for the purposes of practical teaching in anatomy may be used by the undergraduate students and postgraduate students and residents of the school, but only under the supervision of the teaching staff.

Article 233. Bodies no longer required for anatomy practical teaching will be buried.

The burial is announced in the appropriate obituary section, while present at the ceremony members of the School teaching staff and students of the school. An appropriate religious ceremony will be held if that forms part of the last wishes of the donor.

In conclusion, it can be said that the detailed legal framework that is provided by the Health Protection Law on one the hand, alongside the intensive campaign launched by each medical school in Serbia on the other, will certainly help in the acquisition of bodies donated for anatomical examination in the numbers necessary for an ongoing medical education of high quality.

PERSPECTIVE FROM SPAIN (PROFESSORS J.R. SAÑUDO, J.L. BUENO-LÓPEZ, F. DOÑATE-OLIVER)

Current Spanish legal regulation on use of cadavers for scientific teaching and research

encompasses a body of subsidiary laws dating back to 1932, when an "Orden del Ministerio de la Gobernación", of October 31, was published. This Order, made by the Spanish Ministry of Interior Government, regulates the storage of human bodies for use in medical schools. This 1932 Order has since been developed by means of a number of orders and decrees made subsequently. Of these orders, only two important procedures will be focused upon in the brief review that follows. These are:

"Decreto #2263/74 del Ministerio de la Gobernación" of July 20, 1974. This Decree regulates the Mortuary Sanitary Policy and particularly the rules applying to the transfer of cadavers to cemeteries and, in addition, the use of human bodies and remnants in medical schools.

"Decreto #106/1996" of June 11, 1996. This Decree of the Department of Health, Social Welfare and Work is an updating of the general Mortuary Sanitary Policy regulated by the Decree just quoted above.

However, it is important to understand that Spain is now a quasi-federal (and in some legal aspects a truly federal) Kingdom. Hence, the jurisdiction regarding these Sanitary and Mortuary Policies, among many others, has been transferred from the Spanish Government to the regional Governments of the so-called Autonomous Communities of the Kingdom of Spain. Common Sanitary and Mortuary Policies have consequently developed, since 1980, into regional branches of legal regulation in the Autonomous Communities. Where these regional forms of legal regulation exist, the Common Law will then still apply but in a subsidiary mode and only in circumstances where the particular regulation of any Autonomous Community is shown to be void or subject to ambiguous interpretation. As a result, the regulation across Spain is broadly similar, though understandably variations from one Autonomous Community to the next will occur. As a way of illustrating these regional regulations, a translation of Chapter V of the Rules for Mortuary Policy of the Andalusian Community is given below.

Chapter V. On the use of human bodies and other human remains for research and teaching

Article 25. Human bodies and remains encompassed within Group 2 of Article 4 of the present Rules

may be used for scientific research and teaching provided that the following conditions have been complied with:

a) Donors must have expressly stated their intention in life to donate their body for anatomical teaching and research after death.

b) Identified persons who have not been reclaimed by their relatives within the first 24 hours after death. In addition, the cause of the death must be adequately certified, no legal case should be in process, and no opposition to such use of the cadaver should be expressly made by the deceased prior to death or by relatives of the deceased.

Article 26. Transfer of human bodies and remnants.

Human bodies to be used for scientific teaching or research must be transferred in individual coffins to storerooms that medical schools must have available for this purpose. Similarly, the transfer of embalmed human bodies between schools of medicine must be also be made in individual coffins.

Article 27. Storage of human bodies and remnants.

The storerooms for human bodies in the schools of medicine will be organised and regulated in accordance with the particular requirements for teaching and research of each school. The storerooms will then be under the sanitary regulation of the Service of Labour Health of the university of which the medical school is a part.

Article 28. Transfer to final placement of human bodies and remnants.

After completion of anatomical examination teaching and research, the embalmed human bodies, or their remains, can be transferred into a common coffin for final disposal that should be in manner that is in agreement to the said Article 5 of the present rules.

Article 29. Human bones.

Human bones obtained from cemeteries will have no sanitary status in law if they are to be kept in teaching museums or other teaching premises.

In conclusion, the end result of the Spanish regulation for the use of cadavers for scientific teaching and research is, in our opinion, sufficiently detailed to ensure standardization of practice across Spain yet at the same time broad enough in scope to allow for unambiguous interpretation in all eventualities.

Having examined the legal framework regulating body donation in Spain, it is now possible to describe some of the detailed procedures that occur between a donor registering their intention to bequeath their body for anatomical teaching and research and eventual disposal once the examination is complete.

The intention to donate has to be made by an individual in person during their life. The donor is required to sign a bequest form (which in some cases must be witnessed by two people whose signatures accompany that of the donor on the bequest form). One copy of the bequest form is retained by the relevant department of anatomy and the other by the donor, together with a Donor Identity Card. There is no notification made to a legal authority at the time that the donor registers their intention to donate their body after death.

Only the department, but not the teachers nor the students who eventually dissect the body, may know the identity of a donor. Upon death, the mortuary is informed, a judge is asked for permission for a transfer to be made to the department of anatomy, and then the mortuary transfers the body to the department (at no cost to the relatives) within the 4/48 hours following death. Families do not have a legal right to stop the process. Bodies can be transferred to a department different to the one to which the donation was originally made. This is no longer as expensive a procedure as it once was. In the past, each county and municipality across which the body was to pass had to grant legal permission for the transfer to be made and a tax was levied on each transfer. This is no longer the case.

Once the cadaver has been received by the department concerned, a series of legal issues arise during the time that the body is retained. The legal position in Spain regarding the ownership of the cadaver is somewhat different from that of many other European countries. In Spain, nobody owns a cadaver or cadaveric remains after death. However, there is a responsibility for its safekeeping placed upon the department that receives it, the person who is ultimately charged with the duty of ensuring that responsibility is carried out being the head of department, dean of the faculty or vice-chancellor of the university. Throughout the time that the body is retained by the department, the appropriate health and safety regulations must be adhered to ensure the safety of all staff and students who may come into contact with the cadaver or cadaveric remains.

The disposal of the remains after dissection, or following any other use, (e.g., surgical courses) is by burial or cremation. In recent times, some universities (e.g., those of the Basque Country and Murcia) have built monuments to the memory of the donors.

Thus, in Spain body donation is a very different procedure when compared with organ donation, which is regulated by another body of law and acts coming from the “Ley General de Sanidad 14/1987”. According to those laws, every Spanish citizen is a potential organ donor, (unless they state otherwise during life), which is in sharp contrast with the need for explicit consent that must be given in relation to anatomical bequests.

In summary, donations are to be made with fully informed consent. Donors are required to fill in and sign a document confirming their wish to donate their body for anatomical education and research. No payments are made to donors or to their relatives, and departments do not guarantee that donations made in life will be accepted after death. Some conditions that may result in rejection of the body are: a previous autopsy, a transplant donor (except eye donors), the amputation of limbs, morbid obesity, cachexia, a history of tuberculosis, hepatitis C, gangrene, Alzheimer’s disease and HIV.

A more comprehensive summary of these issues and others relating to the running of dissecting rooms has been published by the Spanish Anatomical Society in a document called “Acta de Barcelona” which can be viewed and downloaded from the Spanish Anatomical Society website (Spanish Anatomical Society, 1996).

PERSPECTIVE FROM SWITZERLAND (PD DR B.M. RIEDERER, PROF. P. SPRUMONT)

Switzerland is a federal country with the individual Cantons having autonomy over many administrative matters, including health and education. Thus, though there are Federal laws that regulate a range of issues that touch on anatomical bequests there is no national regulation of anatomical bequests themselves, for this is a matter of local Cantonal law. However, Federal laws deal with such matters as transplantation medicine, data protection (including privacy and confidentiality rights), genetic analysis and production of therapeutic products. Clearly, all the regulations governing these important issues will overlap in places with any laws on anatomical bequests. Nevertheless, the six Swiss anatomy units remain regulated solely by the laws of the Canton in which they are situated. Though there is no national framework, of

regulation the forthcoming law on Research on the Human Being may have provisions that might be held to apply to anatomical donation and the Swiss Academy of Medical Sciences has issued several directives (on experimental research on the human being; on the definition and diagnosis of death, and on ethical problems relative to intensive care) that bear indirectly on this matter.

Despite the lack of a true national legal framework, there are some principles that could be said to apply to all donations of bodies for anatomical education and research in the six Swiss anatomy units. These are: donations should be made with fully informed consent; all donors are required to complete and sign a document confirming their wish to donate their body for anatomical education and research; no payments are made to donors or to their relatives; departments do not guarantee that donations made in life will be accepted after death. Under these local laws, a total of approximately 195 cadavers were accepted for embalming by Swiss anatomy units in 2006; 135 of these were fixed by conventional procedures (Jores or similar technique) and 60 by new, so-called, natural methods (Thiel technique).

In order to ensure that potential donors are fully informed about the process of donation, anatomy units in Switzerland produce information leaflets that are sent to donors at their request. These vary in their detail but not in the basic information they provide. At their most straightforward, they simply provide information about the conditions under which bequests can be accepted. At the time of donation, potential donors are required to complete a donation form to register their wish to donate their body for medical education and research. This form has to bear their signature and must be witnessed. Donors also sign to agree their assent to the conditions under which donations are accepted, including the fact that there is no guarantee that an anatomy unit will accept a donation upon decease. Some 800 bequest forms are actually filed in the anatomy unit of Fribourg. Less than 2 % of the cadavers brought to the unit are rejected.

The bodies that are accepted into the anatomy units are used for a variety of purposes. Many are used for teaching. In all but one of the anatomy units, students are required to undertake dissection as part of their anatomical studies. This is compulsory for students in their first three years of training in most med-

ical schools and optional for students in their last three years of training in half the medical schools. In addition, a number of bodies are used for a variety of postgraduate surgical training courses. The majority of these cadavers are embalmed by the softer, and more natural techniques, that are better suited for this purpose.

Some bodies are also used for investigation purposes (mostly in surgical research) and there are also requests for body parts and cadavers for a variety of other therapeutic procedures. Medical institutions, both public (e.g. hospitals) and private (e.g. training centres in orthopaedics), increasingly request body parts, as well as whole cadavers, for clinical research purposes. There is also an increasing trend towards carrying out various tests for therapeutic devices on body parts imported into Switzerland from other countries.

Upon completion of the anatomical examination, the cadaveric remains are disposed of by cremation. In most cases, they are cremated and interred together, but they may also be interred separately. In either case, they are buried in a reserved and marked area of one of the local cemeteries. However, should the family request so, the remains of an individual body can be returned to the family for committal.

In recent years, it has been possible to identify a number of trends amongst the Swiss anatomy units relating to practices surrounding the management of the process of anatomical bequests and the subsequent handling of human remains. These changes may necessitate some rethinking about the way in which bequests are accepted and subsequently how human remains are cared for. Three main areas are worthy of mention here. (1) There has been a process leading towards harmonisation of information and the development of a national system of handling bequests. (2) There is an increasing tendency toward the exchange of cadavers and body parts between anatomy units according their special needs. (3) Units are looking ever more carefully at an evaluation of the costs of various anatomical procedures and at the impact this may have on future patterns of anatomical bequests. As the result of these trends, there need to be some developments in the procedures surrounding the donation of bodies for anatomical purposes.

The use of body parts for research needs a much stricter form of regulation. At the present time it is left to the discretion of each

anatomy department to obtain the necessary information from research groups concerning the purposes for which body parts are to be used. It also depends on the institutional directives, as donors have formally agreed to the use of body parts for teaching and research purposes by signing the donation forms. This is in contrast to the strictly-regulated procedures in pathology departments where any research project using organs or body parts needs first to be approved by the ethical commission of the medical faculty.

With the development of new techniques in body preservation (e.g. plastination), body parts and well prepared specimens last much longer and are ideal tools for teaching human anatomy. Therefore, it is not surprising that institutions that use these techniques receive many requests asking whether they will sell human body parts. In Switzerland, the sale of body parts is forbidden by law and donor forms also stipulate that donated parts will not be sold. Furthermore, any commercial use of plastinated human body parts is unethical. However, plastinated body parts may be lent for a defined time to neighbouring medical institutions for clinical or anatomical teaching, as already outlined above.

In addition to the necessary further developments of the law in Switzerland, there needs to be regulation of transport of human parts across national borders in order to ensure that public confidence in the process of bequesting their bodies remains high. There also needs to be more research into the possible hazards posed to staff by newly-emerging diseases that may survive the embalming process (e.g. Jacob-Creutzfeldt disease and its variants). Finally, there needs to be more public information to ensure adequate understanding of the importance of anatomy to medical practice in order to encourage future donors to come forward and bequest their bodies for anatomical education.

PERSPECTIVE FROM THE UNITED KINGDOM (PROFESSOR B.J. MOXHAM AND PROFESSOR S. MCHANWELL)

The bequest of bodies for anatomical education and research has been governed by laws contained in a series of Acts of Parliament, the Anatomy Acts of 1832, 1871 and, more recently, 1984. The early history and the reasons for the introduction of the Anatomy Acts

of 1832 and 1871 has been described in detail by Ruth Richardson (2001) and so do not be repeated here in detail. The 1832 Act was ostensibly introduced in response to the public outcry following the prosecution and conviction of Burke and Hare and the subsequent execution of Burke in Edinburgh (Hare was reprieved in return for his co-operation in solving the case). However, Richardson (2001) argues persuasively that the principal purpose of the Act, through the permitting of the unclaimed bodies of paupers dying in workhouses to be claimed by anatomy departments, was to make those same workhouses places to be feared. The willingness of some departments to claim pauper's bodies rather too quickly, before relatives had been given adequate time to claim them, resulted in a series of public scandals. Nevertheless, it was another fifty years before the Act of 1832 was replaced by the Anatomy Act of 1871, the principal purpose of which makes provision for consent to be given in life for one's body to be used for anatomical examination following decease. Thus, the intention of the Act of 1871, in allowing donation by consent, was very much in keeping with the public spirit of the times. This Act served its purpose well for over one hundred years, with just some minor amendments being added to make the 1984 Anatomy Act. In 2004, however, these Acts were replaced by the Human Tissues Act. In respect of the regulation of anatomical bequests, the Human Tissues Act built upon the practice of the earlier Acts. Consequently, in order to understand how the new Act operates, it is necessary to understand what preceded it. This knowledge is also a prerequisite for understanding the ways in which the new Act differs from its predecessors.

The Anatomy Acts of 1871 and 1984 regulated two major aspects of practice in relation to the bequest of cadavers for anatomical examination. The Acts licensed premises in which the bodies are to be stored, maintained and examined and they also licensed individuals who were then responsible for ensuring that the provisions of the Anatomy Acts are conducted within the licensed premises. The operation of the Act was overseen by Her Majesty's Inspector of Anatomy.

Licensed premises for the storage of human bequests had to be secure and suitable for maintenance of bodies in a good condition suitable for examination. Access to the premises had to be controlled and restricted to

teachers of anatomy and *bona fide* students. The operation of the licensed premises was under the direction of a "Licensed Teacher (or Teachers of Anatomy)". Licensed Teachers had to be of 'good standing'. Their appointments were approved by a magistrate. Licensed Teachers had many responsibilities under the Anatomy Acts. They were responsible for ensuring that proper consent for bequest was obtained prior to death. Once the body was received after death, Licensed Teachers were required to inform the Inspector of Anatomy of the receipt of the body. Licensed Teachers had to ensure that proper records were kept locally of all donations received and also that records were held centrally by the UK Government's Department of Health. Licensed Teachers had also to make the licensed premises available for annual inspection by the Inspector of Anatomy. Licensed Teachers were responsible for the proper conduct of premises in which the bodies were held. This included restricting access only to teachers of anatomy and *bona fide* students, not allowing human material to leave licensed premises without official approval, ensuring human material was used only for anatomical examination and not surgical practice, and not allowing photography that might permit recognition of the donor.

The operation of the Anatomy Act was monitored within the United Kingdom by HM's Inspector of Anatomy. He/she functioned across the United Kingdom to ensure compliance with the Anatomy Act and to disseminate good practice. The duties of the Inspector of Anatomy were several. He/she made the recommendation to approve the licensing of premises for anatomical examination and the licensing of teachers themselves. He/she maintained records of licensed premises and teachers and of the bodies within the premises and of their disposal. He/she visited premises annually to ensure they were properly maintained and continued to be suitable and to ensure that proper records were kept and that the anatomical specimens and cadavers were maintained in a good state, that parts were retained in accordance with the law and that proper arrangements for consent were in place.

Arrangements for communicating with potential donors wishing to donate their bodies, registering donations and accepting the body after death varied in detail between different departments of anatomy, but the same

general approach was adopted throughout. At Cardiff, the response to an initial enquiry was to send out a note explaining the process to donors, describing the uses to which the body would be put, and the length of time up to which the body would be retained. Donors were informed that the department did not guarantee to accept bequests. Donors were also asked to discuss their wishes with their next of kin and place a written statement of intent with their papers (e.g. legal will and testament). Donors were also advised that costs of transport to the department upon decease would only be paid if the place of death was less than 50 miles from Cardiff and that the School would meet the costs of disposal. While, under the Anatomy Act, donors were not required to sign any legally binding form, they were asked to complete a form and return it to the department signifying their intentions. Upon decease, when the department had been informed, information was sought from the doctor and a decision taken whether or not to accept the body. Refusal to accept a body could be based upon health and safety considerations (e.g. history of dementia or certain other neurological pathologies, infections such as MRSA, and hepatitis) or because the history of disease rendered the use of the body impractical (e.g. autopsy, transplantations, cachexia, major surgical interventions) or because the body was not suitable for use in the dissecting room (e.g. over or under weight bodies; numbers surplus to requirements). If the decision was to accept the donation then the undertakers were informed and given a form that the relatives had to complete confirming the intentions of the deceased and signing a statement about whether or not the deceased would have wished any parts to be retained. Once the Medical Certificate of Death was also received then the body could be accepted. At this point, the Inspector of Anatomy was also notified. At the end of the period during which the body was retained, the department made arrangements for disposal by cremation (or sometimes burial). The relatives were informed. Parts of the body could only be retained beyond this time by express consent of the donor. Relatives were invited to the committal service, although in practice few chose to attend. However, as for most other departments in the United Kingdom, an annual “memorial service of thanksgiving” was conducted to thank the donors for the gift of their bodies for teaching and

research. For this event, relatives of the donors and staff and students were invited to attend.

Although the Anatomy Act had been in force, and had worked well, for over 100 years, in 2004 a new Act was passed in the UK called the Human Tissues Act. The introduction of this Act was prompted by a series of issues relating to the retention of pathological material and, while anatomy departments had continued to operate well under existing legislation, it was felt by Government and its Civil Service that a single unifying legislative framework was required. This view was opposed by anatomists who would have preferred to retain the Anatomy Act. At the present time, the operation of the Human Tissue Act is being overseen by a Human Tissues Authority who has drafted a Code of Practice to regulate activities of anatomy and anatomists under the Human Tissues Act. The Human Tissues Authority also manages an Inspectorate. Many operational details are being resolved, but it is not possible to give a full account of the new arrangements at this stage.

Nevertheless, important differences between the Anatomy Acts and the Human Tissue Act are discernible:

1. The Human Tissues Act covers all donations of human tissues (including material for transplantation and pathology and tissues banks) – it therefore regards anatomy as a smallish part of its remit which is of low risk because of the history of inspections under longstanding legal frameworks. It is likely that the contribution of anatomists to the activities of the Human Tissues Authority will be further diminished when that authority is merged in the near future with the Human Embryology and Fertility Authority.
2. There will not be a specific individual like the HM Inspector of Anatomy but an Inspectorate that will have duties relating to all aspects of the Human Tissues Act (i.e. inspection of tissue banks and pathological collections etc).
3. Consent is now explicit within the Human Tissues Act and forms the cardinal principle of the Act. Indeed, this consent must be informed consent (so detailed information for potential donors must now be provided to enable them to come to their decisions) and the consent must always be witnessed.

4. Each area under the auspices of the Human Tissue Act has its own “Code of Practice” and there is one specifically for anatomical examination, storage, and disposal. Overall, there has been a major increase in paperwork and bureaucracy and the online application for licensing is demanding.
5. The electronic forms used to record the receipt of anatomical bequests are now more uniform across the sector in the United Kingdom.
6. Standard operating procedures (SOPs) are now required for all activities relating to anatomy.
7. Export and import of anatomical material is possible but with defined controlling measures.
8. Public display of anatomical material is possible but requires special licensing and controlling measures and images of the material in the dissecting room can only be taken with consent of the donor before death.
9. It is now possible to extend the use of cadavers from simple anatomical examination to the use of material for research and for surgical training.
10. Anatomical specimens may (with appropriate consent) be kept beyond the 3 year limitation previously set as the norm under the Anatomy Act.
11. The “Licensed Teacher of Anatomy” in the Anatomy Act has been replaced by a “Designated Individual” and this need not necessarily be an anatomist.
12. Committees such as a Governance Committee must be set up within anatomy departments to regulate and manage the activities associated with anatomy.
13. Costs of licensing have risen markedly.

It should finally be noted that, at the time of writing (July 2007), the Republic of Ireland is considering implementing a Human Tissue Act that is in line with that existing in the United Kingdom. However, discussions are at a very early stage and there are some worries about some of the provisions of the UK Act, particularly in relation to issues around the “inspectorate”.

SUMMARY AND CONCLUSIONS

The purpose of this paper has been to review practices relating to the donation of

bodies for medical education and research and it stemmed from a meeting of the Trans-European Pedagogic Research Group for the anatomical sciences which is a special interest group of the European Federation of Experimental Morphologists. While we would not claim to have carried out a complete survey of practices in all European countries, we do believe that we have surveyed a sufficient breadth of practice to be confident that most procedures in current use are represented. As the result of this survey, we feel in a position to be able to propose a series of recommendations of good practice in relation to the acceptance, storage and handling and subsequent disposal donated bodies for anatomical examination.

Therefore, the following points are offered as a summary of good practice highlighted by the participants in the meeting relating to the practical procedures for accepting donations of bodies and tissues, how those tissues are stored and handled with departments of anatomy, the arrangements made for disposal, together with arrangements for communicating with donors as from the initial expression and their relatives within their own countries. It should be emphasised that no one department or school currently carries out all the recommendations detailed below. However, this summary is offered in the hope that all these recommendations will be progressively adopted by anatomy departments throughout Europe.

The examination of human cadaveric remains has always been one of the foundations of anatomical knowledge and education. The importance of this foundation must not be overlooked amongst the wealth of other techniques that have been crucial in understanding human structure. However, the Trans-European Pedagogic Research Group for the anatomical sciences remains firmly of the opinion that the examination of the dissected human cadaver should be retained as a cornerstone of anatomical education and offers these recommendations to ensure that donors will continue to display their courage and generosity in donating their bodies for medical education and research after their death. If such donations are to continue to be received in the numbers that they traditionally have been, then donors need to have absolute confidence in the departments accepting bequests. These recommendations are compiled to assist in ensuring that departments of anatomy continue to maintain the very highest standards

of conduct that they have demonstrated in the recent past. We all need to be mindful of the fact that anatomy is a fragile discipline that would be difficult to reconstitute if damaged or destroyed by any unethical practice as presently perceived by European society.

RECOMMENDATIONS OF GOOD PRACTICE FOR THE DONATION OF HUMAN BODIES AND TISSUES FOR ANATOMICAL EXAMINATION

1. A clear and rigorous legal framework should be established that sets out the procedures to be followed in accepting bequests of human remains for anatomical examination, the safe care and storage of human remains within departments, and their disposal once the anatomical examination is complete and they are no longer required for anatomical education and research. This legal framework should also detail who is responsible for bequested human remains once the donation has been accepted and should specify the length of time for which such remains will be retained by the department or school that accepts them. Any legal framework should make specific reference to the particular issues that relate to the bequest of human remains for anatomical education and research. A good legal framework will ensure that donors have full confidence in the procedures, and so is likely to increase donations.

2. Informed consent from donors should be obtained before any bequest can be accepted.

3. Donors who have bequeathed their bodies for the purposes of anatomical teaching and research should be encouraged, wherever possible, to discuss their intentions with their relatives to ensure both that their relatives are clear about their wishes and that their relatives can carry out those wishes expressed in life, after death.

4. All bequests from donors should be made in writing, with copies retained both by the donor and by the department for whom the bequest is intended.

5. Donors and their relatives need to be clear about the possible costs, if any, that might be incurred in making a bequest and those costs that they can expect to be met by the department accepting the bequest.

6. There needs to be transparency of procedures relating to how bequests from potential donors will be registered, the procedures to be

followed after death (including under what circumstances a bequest might be declined), and the procedures relating to disposal of the human remains. Sufficient grounds for rejection could include, but need not be limited to, the physical condition of the body, the virological or microbiological status of the donor in life, the existence of other diseases, (for example neurological pathology) that might expose staff or students handling the body to unacceptable risks, or the possible over-supply of donations at a department at that particular moment.

7. There needs to be clarity about the purposes for which cadavers accepted by departments are being used.

8. Good conservation procedures should be employed throughout the entire period during which the human remains are retained within departments to ensure that the most effective use is made of any bequest received.

9. Donor anonymity should be preserved throughout the period for which remains are retained within departments, though there should be adequate record keeping to ensure any parts can be identified as originating from a specific donor.

10. There needs to be openness with the donors at every stage from the receipt of an initial enquiry to the final disposal of the remains once they are no longer required by the department.

11. Departments of anatomy, or the medical schools of which they are a part, should produce an information leaflet for potential donors and their relatives that sets out clearly the procedures for bequeathing bodies for anatomical teaching and the purposes for which such bequests are accepted as outlined in points 2-8 above.

12. Donors should be issued with donor cards once the initial intention to bequeath has been recorded and they should be encouraged to carry these cards with them at all times so that their intentions expressed in life can be confirmed after death.

13. Medical schools or anatomy departments should be encouraged to hold Services of Thanksgiving or Commemoration for those who have donated their bodies for medical education and research to which can be invited, relatives of the deceased, staff and students.

14. Relatives of the deceased should be informed well in advance of the date of committal of the body of the deceased and invited to that committal service.

15. There needs to be an urgent move towards the establishment of international treaties to regulate the transport of human bodies, or body parts, across national or international borders.

16. Special lectures in ethics relating to the bequest of human remains should be offered to all students studying anatomy to encourage the development of appropriate sensitivities in relation to the conduct and respect that is expected in relation to handling human remains used for purposes of professional anatomical education.

17. There should be no commercialisation in relation to bequests of human remains for anatomical education and research.

18. Limits need to be placed on the extent to which images, or other artefacts produced from donations are placed in the public domain, both to respect the privacy of the donor (and their surviving relative) and to prevent arousing morbid curiosity.

19. A pre-donation leaflet that sets out the procedures to be followed should be produced as one way of publicising anatomical bequests and increasing the supply of donors. Anatomists should thus be prepared to adver-

tise and advocate the importance of body donation for the advancement of the subject and of medicine and related disciplines.

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