CHAPTER III

VALUES SUBJECT TO OWNERSHIP

What sorts of resources are eligible for claims of property rights? Clearly not every valued thing is or should be property. Human slavery was a system in which one human being claimed ownership of another. A Civil War was fought over this issue, and led to the adoption of the Thirteenth Amendment, which abolished all forms of slavery and involuntary servitude. This gives us one fixed point of reference as to what cannot be included in the system of property rights. Selling babies is also forbidden, although some economists have argued that this policy should be reconsidered. Other resources are thought to belong to the public at large—highways and waterways, and in the more intangible realm, ideas and perhaps the law itself. How do we determine the proper domain of the system of property rights? We start by considering several controversies about interests that may be thought to be too personal or private to be subject to private property rights—human bodies, body parts and fluids, and individuals' unique personality. We then consider certain academic perspectives that inform debates about the proper scope of the system of property rights. This is followed by a consideration of interests that may be thought to be too public to be subject to private property rights—like harbors and beaches. We end with sections that examine more closely two resources that seem to call for some mixture of public and private rights—water and electronic communications, including cyberspace.

A. PERSONHOOD

One issue that confronts any system of property rights is whether there are certain interests that are inappropriate for treatment as property because they are too closely connected to personhood. There is a universal consensus today that people are not a permissible subject of property rights. Not only is formal slavery abolished, but the Supreme Court has long invalidated schemes that would permit peonage—systems of servitude based on unpaid debts. See, e.g., Bailey v. Alabama, 219 U.S. 219 (1911). The usual justification for this understanding is that people, as autonomous moral agents, should not be regarded as objects or commodities to be bought and sold by other people. But how far does this anti-commodification principle extend? As the cases in this section clearly reveal, modern medical technology is rapidly generating controversial questions about the boundary between persons and property. There is every reason to believe that these issues will multiply and become ever more vexing in the near future. As things presently

stand, the law is deeply ambivalent about whether to apply the "property" template in resolving these issues. Controversy also exists about whether it should be possible to claim property an individual's unique personality or persona.

1. PROPERTY AND THE HUMAN BODY

Moore v. Regents of the University of California

Supreme Court of California, In Bank, 1990.
793 P.2d 479.

I. INTRODUCTION

■ PANELLI, JUSTICE. We granted review in this case to determine whether plaintiff has stated a cause of action against his physician and other defendants for using his cells in potentially lucrative medical research without his permission. Plaintiff alleges that his physician failed to disclose preexisting research and economic interests in the cells before obtaining consent to the medical procedures by which they were extracted. The superior court sustained all defendants' demurrers to the third amended complaint, and the Court of Appeal reversed. We hold that the complaint states a cause of action for breach of the physician's disclosure obligations, but not for conversion.

II. FACTS

[According to the complaint, John Moore, who lived in Seattle, was diagnosed as having hairy-cell leukemia. He traveled to Los Angeles to be treated by Dr. David Golde at the UCLA Medical Center. Golde recommended that Moore's spleen be removed in order to slow down the progress of the disease. Moore signed a written consent form authorizing the operation. Without informing Moore, Dr. Golde and his associates also developed plans to do research on certain white blood cells called T-lymphocytes taken from Moore's spleen. The objective was to produce certain lymphokines, or proteins that regulate the immune system. The genetic code for making these lymphokines is identical in all persons, but it is hard to locate the particular genes responsible for making each lymphokine. Because of his disease, the cells in Moore's spleen had overproduced certain lymphokines, making the process of identification easier.

In order to pursue this research, Dr. Golde and his associates established a new cell line from Moore's T-lymphocytes. They then sought on behalf of themselves and UCLA a patent on the new cell line. The patent was granted, and Golde negotiated a contract with Genetics Institute, Inc., granting the firm exclusive access to the materials and research based on the cell line, in return for $440,000 to be paid to Golde and the Regents over three years, as well as a consultant position and rights to shares of common stock for Golde. It was estimated that the total potential market for products based on lymphokines might eventually reach $3 billion per year.

When Moore learned the use to which his spleen cells had been put, he sued Dr. Golde, his associates, and UCLA. His complaint asserted a number of causes of action including conversion—the taking of property from someone without their consent and converting it to the use of the defendant. He also asserted a number of other causes of action, including lack of informed consent and unjust enrichment. The trial court held that the action for conversion could not be maintained because Moore had no property right in his spleen cells after they had been removed from his body, and that this defect meant that all the other asserted causes of action failed too. Moore appealed.]

III. DISCUSSION

A. Breach of Fiduciary Duty and Lack of Informed Consent

Moore repeatedly alleges that Golde failed to disclose the extent of his research and economic interests in Moore's cells before obtaining consent to the medical procedures by which the cells were extracted. These allegations, in our view, state a cause of action against Golde for invading a legally protected interest of his patient. This cause of action can properly be characterized either as the breach of a fiduciary duty to disclose facts material to the patient's consent or, alternatively, as the performance of medical procedures without first having obtained the patient's informed consent. * * *

Accordingly, we hold that a physician who is seeking a patient's consent for a medical procedure must, in order to satisfy his fiduciary duty and to obtain the patient's informed consent, disclose personal interests unrelated to the patient's health, whether research or economic, that may affect his medical judgment. * * *

B. Conversion

Moore also attempts to characterize the invasion of his rights as a conversion—a tort that protects against interference with possessory and ownership interests in personal property. He theorizes that he continued to own his cells following their removal from his body, at least for the purpose of directing their use, and that he never consented to their use in potentially lucrative medical research. Thus, to complete Moore's argument, defendants' unauthorized use of his cells constitutes a conversion. As a result of the alleged conversion, Moore claims a proprietary interest in each of the products that any of the defendants might ever create from his cells or the patented cell line.

No court, however, has ever in a reported decision imposed conversion liability for the use of human cells in medical research. While that fact does not end our inquiry, it raises a flag of caution. In effect, what Moore is asking us to do is to impose a tort duty on scientists to investigate the consensual pedigree of each human cell sample used in research. To impose such a duty, which would affect medical research of

importance to all of society, implicates policy concerns far removed from the traditional, two-party ownership disputes in which the law of conversion arose. Invoking a tort theory originally used to determine whether the loser or the finder of a horse had the better title, Moore claims ownership of the results of socially important medical research, including the genetic code for chemicals that regulate the functions of every human being's immune system.

We have recognized that, when the proposed application of a very general theory of liability in a new context raises important policy concerns, it is especially important to face those concerns and address them openly. * * * Moreover, we should be hesitant to "impose [new tort duties] when to do so would involve complex policy decisions" (Nally v. Grace Community Church, 763 P.2d 948, 960 (Cal. 1988)), especially when such decisions are more appropriately the subject of legislative deliberation and resolution. * * *

1. Moore's Claim Under Existing Law

"To establish a conversion, plaintiff must establish an actual interference with his *ownership* or *right of possession*. . . . Where plaintiff neither has title to the property alleged to have been converted, nor possession thereof, he cannot maintain an action for conversion." (Del E. Webb Corp. v. Structural Materials Co., 176 Cal. Rptr. 824, 833 (Cal. Ct. App. 1981), emphasis added.) * * *

Since Moore clearly did not expect to retain possession of his cells following their removal, to sue for their conversion he must have retained an ownership interest in them. But there are several reasons to doubt that he did retain any such interest. * * *

Neither the Court of Appeal's opinion, the parties' briefs, nor our research discloses a case holding that a person retains a sufficient interest in excised cells to support a cause of action for conversion. We do not find this surprising, since the laws governing such things as human tissues, transplantable organs,[22] blood,[23] fetuses, pituitary glands, corneal tissue,[26] and dead bodies deal with human biological materials as objects sui generis, regulating their disposition to achieve policy goals

[22] See the Uniform Anatomical Gift Act, Health and Safety Code section 7150 et seq. The act permits a competent adult to "give all or part of [his] body" for certain designated purposes, including "transplantation, therapy, medical or dental education, research, or advancement of medical or dental science." (Health & Saf.Code, §§ 7151, 7153.) The act does not, however, permit the donor to receive "valuable consideration" for the transfer. (Health & Saf.Code, § 7155.)

[23] See Health & Safety Code section 1601 et seq., which regulates the procurement, processing, and distribution of human blood. Health and Safety Code section 1606 declares that "[t]he procurement, processing, distribution, or use of whole blood, plasma, blood products, and blood derivatives for the purpose of injecting or transfusing the same . . . is declared to be, for all purposes whatsoever, the rendition of a service . . . and shall not be construed to be, and is declared not to be, a sale . . . for any purpose or purposes whatsoever."

[26] See Government Code section 27491.47: "The coroner may, in the course of an autopsy [and subject to specified conditions], remove . . . corneal eye tissue from a body . . ." (id., subd. (a)) for "transplant, therapeutic, or scientific purposes" (id., subd. (a)(5)).

rather than abandoning them to the general law of personal property. It is these specialized statutes, not the law of conversion, to which courts ordinarily should and do look for guidance on the disposition of human biological materials.

Lacking direct authority for importing the law of conversion into this context, Moore relies, as did the Court of Appeal, primarily on decisions addressing privacy rights. One line of cases involves unwanted publicity. (Lugosi v. Universal Pictures, 603 P.2d 425 (Cal. 1979); Motschenbacher v. R.J. Reynolds Tobacco Company, 498 F.2d 821 (9th Cir. 1974) [interpreting Cal. law].) These opinions hold that every person has a proprietary interest in his own likeness and that unauthorized, business use of a likeness is redressible as a tort. But in neither opinion did the authoring court expressly base its holding on property law. Each court stated, following Prosser, that it was "pointless" to debate the proper characterization of the proprietary interest in a likeness. For purposes of determining whether the tort of conversion lies, however, the characterization of the right in question is far from pointless. Only property can be converted.

Not only are the wrongful-publicity cases irrelevant to the issue of conversion, but the analogy to them seriously misconceives the nature of the genetic materials and research involved in this case. * * * [A]s the defendants' patent makes clear—and the complaint, too, if read with an understanding of the scientific terms which it has borrowed from the patent—the goal and result of defendants' efforts has been to manufacture lymphokines. Lymphokines, unlike a name or a face, have the same molecular structure in every human being and the same, important functions in every human being's immune system. Moreover, the particular genetic material which is responsible for the natural production of lymphokines, and which defendants use to manufacture lymphokines in the laboratory, is also the same in every person; it is no more unique to Moore than the number of vertebrae in the spine or the chemical formula of hemoglobin. * * *

* * * [T]he Court of Appeal in this case concluded that "[a] patient must have the ultimate power to control what becomes of his or her tissues. To hold otherwise would open the door to a massive invasion of human privacy and dignity in the name of medical progress." Yet one may earnestly wish to protect privacy and dignity without accepting the extremely problematic conclusion that interference with those interests amounts to a conversion of personal property. Nor is it necessary to force the round pegs of "privacy" and "dignity" into the square hole of "property" in order to protect the patient, since the fiduciary-duty and informed-consent theories protect these interests directly by requiring full disclosure.

The next consideration that makes Moore's claim of ownership problematic is California statutory law, which drastically limits a patient's control over excised cells. Pursuant to Health and Safety Code

section 7054.4, "[n]otwithstanding any other provision of law, recognizable anatomical parts, human tissues, anatomical human remains, or infectious waste following conclusion of scientific use shall be disposed of by interment, incineration, or any other method determined by the state department [of health services] to protect the public health and safety." Clearly the Legislature did not specifically intend this statute to resolve the question of whether a patient is entitled to compensation for the nonconsensual use of excised cells. A primary object of the statute is to ensure the safe handling of potentially hazardous biological waste materials. Yet one cannot escape the conclusion that the statute's practical effect is to limit, drastically, a patient's control over excised cells. By restricting how excised cells may be used and requiring their eventual destruction, the statute eliminates so many of the rights ordinarily attached to property that one cannot simply assume that what is left amounts to "property" or "ownership" for purposes of conversion law.

It may be that some limited right to control the use of excised cells does survive the operation of this statute. There is, for example, no need to read the statute to permit "scientific use" contrary to the patient's expressed wish. A fully informed patient may always withhold consent to treatment by a physician whose research plans the patient does not approve. That right, however, as already discussed, is protected by the fiduciary-duty and informed-consent theories.

Finally, the subject matter of the Regents' patent—the patented cell line and the products derived from it—cannot be Moore's property. This is because the patented cell line is both factually and legally distinct from the cells taken from Moore's body. Federal law permits the patenting of organisms that represent the product of "human ingenuity," but not naturally occurring organisms. (Diamond v. Chakrabarty, 447 U.S. 303, 309–310 (1980).) Human cell lines are patentable because "[l]ong-term adaptation and growth of human tissues and cells in culture is difficult—often considered an art . . .," and the probability of success is low. (U.S. Congress, Office of Technology Assessment, New Developments in Biotechnology: Ownership of Human Tissues and Cells (1987) at p. 33 (hereafter OTA Report).) It is this *inventive effort* that patent law rewards, not the discovery of naturally occurring raw materials. Thus, Moore's allegations that he owns the cell line and the products derived from it are inconsistent with the patent, which constitutes an authoritative determination that the cell line is the product of invention. * * *

2. Should Conversion Liability Be Extended?

* * * Of the relevant policy considerations, two are of overriding importance. The first is protection of a competent patient's right to make autonomous medical decisions. That right, as already discussed, is grounded in well-recognized and long-standing principles of fiduciary duty and informed consent. This policy weighs in favor of providing a

remedy to patients when physicians act with undisclosed motives that may affect their professional judgment. The second important policy consideration is that we not threaten with disabling civil liability innocent parties who are engaged in socially useful activities, such as researchers who have no reason to believe that their use of a particular cell sample is, or may be, against a donor's wishes. * * *

[A]n examination of the relevant policy considerations suggests an appropriate balance: Liability based upon existing disclosure obligations, rather than an unprecedented extension of the conversion theory, protects patients' rights of privacy and autonomy without unnecessarily hindering research.

To be sure, the threat of liability for conversion might help to enforce patients' rights indirectly. This is because physicians might be able to avoid liability by obtaining patients' consent, in the broadest possible terms, to any conceivable subsequent research use of excised cells. Unfortunately, to extend the conversion theory would utterly sacrifice the other goal of protecting innocent parties. Since conversion is a strict liability tort,[38] it would impose liability on all those into whose hands the cells come, whether or not the particular defendant participated in, or knew of, the inadequate disclosures that violated the patient's right to make an informed decision. In contrast to the conversion theory, the fiduciary-duty and informed-consent theories protect the patient directly, without punishing innocent parties or creating disincentives to the conduct of socially beneficial research. * * *

[T]he theory of liability that Moore urges us to endorse threatens to destroy the economic incentive to conduct important medical research. If the use of cells in research is a conversion, then with every cell sample a researcher purchases a ticket in a litigation lottery. Because liability for conversion is predicated on a continuing ownership interest, "companies are unlikely to invest heavily in developing, manufacturing, or marketing a product when uncertainty about clear title exists." (OTA Rep., supra, at p. 27.) * * *[42]

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[38] " 'The foundation for the action for conversion rests neither in the knowledge nor the intent of the defendant. . . . [Instead,] "the tort consists in the breach of what may be called an absolute duty; the act itself . . . is unlawful and redressible as a tort.' " [Citation.]" (Byer v. Canadian Bank of Commerce, 65 P.2d 67, 68 (Cal. 1937), quoting Poggi v. Scott, 139 P. 815, 816 (Cal. 1914). See also City of Los Angeles v. Superior Court, 149 Cal.Rptr. 320, 323 (Cal. Ct. App. 1978) ["[c]onversion is a species of strict liability in which questions of good faith, lack of knowledge and motive are ordinarily immaterial."].)

[42] In order to make conversion liability seem less of a threat to research, the dissent argues that researchers could avoid liability by using only cell lines accompanied by documentation of the source's consent. (Dis. opn. of Mosk, J., post.) But consent forms do not come with guarantees of validity. As medical malpractice litigation shows, challenges to the validity and sufficiency of consent are not uncommon. Moreover, it is sheer fantasy to hope that waivers might be obtained for the thousands of cell lines and tissue samples presently in cell repositories and, for that reason, already in wide use among researchers. The cell line derived from Moore's T-lymphocytes, for example, has been available since 1984 to any researcher from the American Type Culture Collection. (American Type Culture Collection, Catalogue of Cell Lines and Hybridomas (6th ed. 1988) p. 176.) Other cell lines have been in wide use since as early as 1951. (OTA Rep., supra, at p. 34.)

* * * If the scientific users of human cells are to be held liable for failing to investigate the consensual pedigree of their raw materials, we believe the Legislature should make that decision. Complex policy choices affecting all society are involved, and "[l]egislatures, in making such policy decisions, have the ability to gather empirical evidence, solicit the advice of experts, and hold hearings at which all interested parties present evidence and express their views. . . ." (Foley v. Interactive Data Corp., 765 P.2d 373, 397, fn. 31 (Cal. 1988).) * * *

Finally, there is no pressing need to impose a judicially created rule of strict liability, since enforcement of physicians' disclosure obligations will protect patients against the very type of harm with which Moore was threatened. So long as a physician discloses research and economic interests that may affect his judgment, the patient is protected from conflicts of interest. Aware of any conflicts, the patient can make an informed decision to consent to treatment, or to withhold consent and look elsewhere for medical assistance. As already discussed, enforcement of physicians' disclosure obligations protects patients directly, without hindering the socially useful activities of innocent researchers.

For these reasons, we hold that the allegations of Moore's third amended complaint state a cause of action for breach of fiduciary duty or lack of informed consent, but not conversion. * * *

■ ARABIAN, JUSTICE, concurring. I join in the views cogently expounded by the majority. I write separately to give voice to a concern that I believe informs much of that opinion but finds little or no expression therein. I speak of the moral issue.

Plaintiff has asked us to recognize and enforce a right to sell one's own body tissue *for profit*. He entreats us to regard the human vessel—the single most venerated and protected subject in any civilized society—as equal with the basest commercial commodity. He urges us to commingle the sacred with the profane. He asks much. * * *

It is true, that this court has not often been deterred from deciding difficult legal issues simply because they require a choice between competing social or economic policies. The difference here, however, lies in the nature of the conflicting moral, philosophical and even religious values at stake, and in the profound implications of the position urged. The ramifications of recognizing and enforcing a property interest in body tissues are not known, but are greatly feared—the effect on human dignity of a marketplace in human body parts, the impact on research and development of competitive bidding for such materials, and the exposure of researchers to potentially limitless and uncharted tort liability.

Whether, as plaintiff urges, his cells should be treated as property susceptible to conversion is not, in my view, ours to decide. The question implicates choices which not only reflect, but which ultimately define our essence. A mark of wisdom for us as expositors of the law is the

recognition that we cannot cure every ill, mediate every dispute, resolve every conundrum. Sometimes, as Justice Brandeis said, "the most important thing we do, is not doing."[6]

Where then shall a complete resolution be found? Clearly the Legislature, as the majority opinion suggests, is the proper deliberative forum. Indeed, a legislative response creating a licensing scheme, which establishes a fixed rate of profit sharing between researcher and subject, has already been suggested. Such an arrangement would not only avoid the moral and philosophical objections to a free market operation in body tissue, but would also address stated concerns by eliminating the inherently coercive effect of a waiver system and by compensating donors regardless of temporal circumstances. * * *

■ BROUSSARD, JUSTICE, concurring and dissenting [omitted]. * * *

■ MOSK, JUSTICE, dissenting. * * *

The concepts of property and ownership in our law are extremely broad. (See Civ.Code, §§ 654, 655.) A leading decision of this court approved the following definition: " 'The term "property" is sufficiently comprehensive to include every species of estate, real and personal, and everything which one person can own and transfer to another. It extends to every species of right and interest capable of being enjoyed as such upon which it is practicable to place a money value.' " (Yuba River Power Co. v. Nevada Irr. Dist., 279 P. 128, 129 (Cal. 1929).)

Being broad, the concept of property is also abstract: rather than referring directly to a material object such as a parcel of land or the tractor that cultivates it, the concept of property is often said to refer to a "bundle of rights" that may be exercised with respect to that object—principally the rights to possess the property, to use the property, to exclude others from the property, and to dispose of the property by sale or by gift. "Ownership is not a single concrete entity but a bundle of rights and privileges as well as of obligations." (Union Oil Co. v. State Bd. of Equal., 386 P.2d 496, 500 (Cal. 1963).) But the same bundle of rights does not attach to all forms of property. For a variety of policy reasons, the law limits or even forbids the exercise of certain rights over certain forms of property. For example, both law and contract may limit the right of an owner of real property to use his parcel as he sees fit. Owners of various forms of personal property may likewise be subject to restrictions on the time, place, and manner of their use. Limitations on the disposition of real property, while less common, may also be imposed. Finally, some types of personal property may be sold but not given away,[9] while others

[6] Bickel, The Least Dangerous Branch (1962) page 71.

[9] A person contemplating bankruptcy may sell his property at its "reasonably equivalent value," but he may not make a gift of the same property. (See 11 U.S.C. § 548(a).)

may be given away but not sold,[10] and still others may neither be given away nor sold.[11]

In each of the foregoing instances, the limitation or prohibition diminishes the bundle of rights that would otherwise attach to the property, yet what remains is still deemed in law to be a protectible property interest. "Since property or title is a complex bundle of rights, duties, powers and immunities, the pruning away of some or a great many of these elements does not entirely destroy the title. . . ." (People v. Walker, 90 P.2d 854, 855 (Cal. Dist. Ct. App. 1939) [even the possessor of contraband has certain property rights in it against anyone other than the state].) The same rule applies to Moore's interest in his own body tissue: even if we assume that section 7054.4 limited the use and disposition of his excised tissue in the manner claimed by the majority, Moore nevertheless retained valuable rights in that tissue. Above all, at the time of its excision he at least had *the right to do with his own tissue whatever the defendants did with it:* i.e., he could have contracted with researchers and pharmaceutical companies to develop and exploit the vast commercial potential of his tissue and its products. Defendants certainly believe that *their* right to do the foregoing is not barred by section 7054.4 and is a significant property right, as they have demonstrated by their deliberate concealment from Moore of the true value of his tissue, their efforts to obtain a patent on the Mo cell line, their contractual agreements to exploit this material, their exclusion of Moore from any participation in the profits, and their vigorous defense of this lawsuit. The Court of Appeal summed up the point by observing that "Defendants' position that plaintiff cannot own his tissue, but that they can, is fraught with irony." It is also legally untenable. As noted above, the majority cite no case holding that an individual's right to develop and exploit the commercial potential of his own tissue is *not* a right of sufficient worth or dignity to be deemed a protectible property interest. In the absence of such authority—or of legislation to the same effect—the right falls within the traditionally broad concept of property in our law. * * *

[O]ur society acknowledges a profound ethical imperative to respect the human body as the physical and temporal expression of the unique human persona. One manifestation of that respect is our prohibition against direct abuse of the body by torture or other forms of cruel or unusual punishment. Another is our prohibition against indirect abuse of the body by its economic exploitation for the sole benefit of another person. The most abhorrent form of such exploitation, of course, was the institution of slavery. Lesser forms, such as indentured servitude or even debtor's prison, have also disappeared. Yet their specter haunts the

[10] A sportsman may give away wild fish or game that he has caught or killed pursuant to his license, but he may not sell it. (Fish & Game Code, §§ 3039, 7121.)

The transfer of human organs and blood is a special case that I discuss below (pt. 5).

[11] E.g., a license to practice a profession, or a prescription drug in the hands of the person for whom it is prescribed.

laboratories and boardrooms of today's biotechnological research-industrial complex. It arises wherever scientists or industrialists claim, as defendants claim here, the right to appropriate and exploit a patient's tissue for their sole economic benefit—the right, in other words, to freely mine or harvest valuable physical properties of the patient's body: "Research with human cells that results in significant economic gain for the researcher and no gain for the patient offends the traditional mores of our society in a manner impossible to quantify. Such research tends to treat the human body as a commodity—a means to a profitable end. The dignity and sanctity with which we regard the human whole, body as well as mind and soul, are absent when we allow researchers to further their own interests without the patient's participation by using a patient's cells as the basis for a marketable product." (Danforth, Cells, Sales, and Royalties: The Patient's Right to a Portion of the Profits, 6 Yale L. & Pol'y Rev. 179, 190 (1988).)

A second policy consideration adds notions of equity to those of ethics. Our society values fundamental fairness in dealings between its members, and condemns the unjust enrichment of any member at the expense of another. This is particularly true when, as here, the parties are not in equal bargaining positions. * * *

There will be * * * equitable sharing if the courts recognize that the patient has a legally protected property interest in his own body and its products: "property rights in one's own tissue would provide a morally acceptable result by giving effect to notions of fairness and preventing unjust enrichment. . . . [¶] Societal notions of equity and fairness demand recognition of property rights. There are bountiful benefits, monetary and otherwise, to be derived from human biologics. To deny the person contributing the raw material a fair share of these ample benefits is both unfair and morally wrong." (Note, Toward the Right of Commerciality: Recognizing Property Rights in the Commercial Value of Human Tissue, 34 UCLA L. Rev. 207, 229 (1986).) * * *

The inference I draw from the current statutory regulation of human biological materials, moreover, is the opposite of that drawn by the majority. By selective quotation of the statutes the majority seem to suggest that human organs and blood cannot legally be sold on the open market—thereby implying that if the Legislature were to act here it would impose a similar ban on monetary compensation for the use of human tissue in biotechnological research and development. But if that is the argument, the premise is unsound: contrary to popular misconception, it is not true that human organs and blood cannot legally be sold.

As to organs, the majority rely on the Uniform Anatomical Gift Act (Health & Saf.Code, § 7150 et seq., hereafter the UAGA) for the proposition that a competent adult may make a post mortem gift of any part of his body but may not receive "valuable consideration" for the transfer. But the prohibition of the UAGA against the sale of a body part

is much more limited than the majority recognize: by its terms (Health & Saf.Code, § 7155, subd. (a)) the prohibition applies only to sales for "transplantation" or "therapy." Yet a different section of the UAGA authorizes the transfer and receipt of body parts for such additional purposes as "medical or dental education, research, or advancement of medical or dental science." (Health & Saf.Code, § 7153, subd. (a)(1).) No section of the UAGA prohibits anyone from selling body parts for any of those additional purposes; by clear implication, therefore, such sales are legal.[23] Indeed, the fact that the UAGA prohibits *no* sales of organs other than sales for "transportation" or "therapy" raises a further implication that it is also legal for anyone to sell human tissue to a biotechnology company for research and development purposes. * * *

It follows that the statutes regulating the transfers of human organs and blood do not support the majority's refusal to recognize a conversion cause of action for commercial exploitation of human blood cells without consent. On the contrary, because such statutes treat both organs and blood as property that can legally be sold in a variety of circumstances, they impliedly support Moore's contention that his blood cells are likewise property for which he can and should receive compensation, and hence are protected by the law of conversion. * * *

NOTES AND QUESTIONS

1. What is the holding of this case? That body parts and fluids removed from a person's body are not property? That body parts and fluids removed from a person's body may not be sold in a commercial transaction, and hence cannot provide the foundation for an action for damages based on conversion? That medical researchers have a public-policy based immunity from liability for conversion for taking body parts and fluids from a person without their consent?

2. Does the California Supreme Court's decision in fact deny persons compensation for taking their body parts or fluids? A fully informed patient could condition the doctors' right to perform the operation on sharing the fruits of the spleen cells with him. If the UCLA doctors refuse, could Moore shop his proposal to USC and other hospitals? Or should this be illegal? If so, why? Does the right to refuse consent mean that a patient has some right to determine the use of the severed body part? Would that make it property?

3. Why hasn't Moore abandoned any interest in his spleen cells? If you go to a salon to get a haircut, isn't the usual assumption that you have abandoned your hair cuttings, and the salon can dispose of them as it sees fit? What happens if you learn later that your hair is commercially valuable?

[23] "By their terms . . . the statutes in question forbid only sales for transplantation and therapy. In light of the rather clear authorization for donation for research and education, one could conclude that sales for these non-therapeutic purposes are permitted. Scientists in practice have been buying and selling human tissues for research apparently without interference from these statutes." (Note, "She's Got Bette Davis['s] Eyes": Assessing the Nonconsensual Removal of Cadaver Organs Under the Takings and Due Process Clauses, 90 Colum.L.Rev. 528, 544, fn. 75. (1990).)

Consider the threat by Neil Armstrong, the first man to walk on the moon, to sue his barber for gathering some of Armstrong's hair off the shop floor and selling it for $3,000. (In case you're wondering, the buyer was a Connecticut collector listed by Guinness World Records as having the world's largest collection of celebrity hair.) Terry Kinney, Neil Armstrong Threatens To Sue Barber Who Sold Hair, Akron Beacon J., June 1, 2005, at B1. Or is hair less personal than other body parts? Incidentally, if Armstrong claimed a violation of his right of publicity, see infra, how would he likely fare? How should he?

4. One concern motivating both the majority opinion and some of the dissents relates to the in rem aspect of property. If Moore has property in his cells and can sue for conversion, the set of duty bearers is not limited to the doctors who operated on him. This is beneficial to Moore, but it puts scientists at risk of violating rights about which they may have difficulty informing themselves. Would a registry of cell lines with provenances help here? What about existing cell lines?

5. The concern about imposing liability for conversion on remote researchers is made vivid by the story of Henrietta Lacks, as recounted in Rebecca Skloot, The Immortal Life of Henrietta Lacks (2010). Lacks was diagnosed with cervical cancer in 1951, and cancer cells taken from her body by physicians at Johns Hopkins Hospital in Baltimore eventually became an "immortal" cell line known as HeLa cells. Today, it is believed that scientists have grown 20 tons of cells from the HeLa line, which has been used in research generating some 11,000 patents. Lacks died shortly after the cells were removed, almost certainly without being informed of the fact. Her family had no clue that her cells had become an important tool of scientific research until many decades later. If her cells were private property (contrary to *Moore*), would any claim by her descendants for conversion now be barred by adverse possession? Or would the clock not start running until they knew or should have known that the cells were taken, or they had made a demand for their return? (See Chapter II supra.)

6. As the majority points out, patent law is clear about who is and is not a joint inventor and hence the initial owner of a patent. But the patenting of living organisms has been controversial. Section 101 of the Patent Act, echoing language of Thomas Jefferson in the 1793 Patent Act, provides that "[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title." 35 U.S.C. § 101. In the case of *Diamond v. Chakrabarty*, 447 U.S. 303, 309 (1980), mentioned in the *Moore* opinion, the Supreme Court held that patentable subject matter "include[s] everything under the sun that is made by man," a phrase used by the drafters in the legislative history of the 1952 Act. Ideas and laws of nature are still not patentable subject matter, see Bilski v. Kappos, 561 U.S. 593, 603, 610–11 (2010), but this exception has fluctuated in scope over time. To be patentable, a living organism should be altered from any naturally existing form; merely being distilled in a way not occurring in nature is not enough, Association for Molecular Pathology v. Myriad Genetics, 133 S. Ct. 2107 (2013). Does this

exhaust concerns one might have? How if at all is patenting a gene sequence different from patenting a life-saving pharmaceutical?

7. How would Moore fare under the law of accession? (See Chapter II.D.) Could one say that the good doctors combined their labor with Moore's spleen cells to create a new asset? But didn't they do so in "bad faith"? Should the court have considered whether Moore was entitled to an award of restitution? Could the court have awarded restitution without determining that Moore had a property right in his spleen cells?

BODY PARTS AFTER *MOORE*

Subsequent decisions applying California law have tended to read *Moore* narrowly. In one decision, *Hecht v. Superior Court*, 20 Cal. Rptr. 2d 275, 283 (Cal. Ct. App. 1993), the court held that frozen sperm cells left in a commercial cryogenic laboratory by a man who committed suicide were subject to the jurisdiction and control of the probate court. The decedent's children wanted the sperm destroyed; his girlfriend wanted to take custody of the sperm for possible future use in bearing a child with the decedent's genetic material. The court clearly perceived that some orderly basis for resolving the dispute was required, which meant giving the probate court jurisdiction over the sperm cells. Under California law, however, the power of the probate court extends only to the "property" of a deceased person. So the sperm cells were deemed to be property, at least for these purposes. The court distinguished *Moore* on the ground that it did not involve "gametic" material that can be used for human reproduction, something in which persons from whom the material is taken have a particularly strong interest. Does the decision mean that if Moore had died during the operation, and his heirs had sued to recover the spleen cells, the dispute would have been subject to the jurisdiction of the probate court? Does this mean body parts must be regarded as "property" at least for these purposes? See also In re Estate of Kievernagel, 83 Cal.Rptr.3d 311 (Cal. Ct. App. 2008) (proper disposition of gametic material depends on intent of donor); Yearworth v. North Bristol NHS Trust, [2009] EWCA (Civ) 37 (appeal taken from Eng.) (English Court of Appeal decision concluding that gametic material is common law property).

In another decision, *Newman v. Sathyavaglswaran*, 287 F.3d 786 (9th Cir. 2002), the court was confronted with a constitutional challenge to a California statute that allowed coroners to remove corneas from bodies being autopsied, in order to make them available to persons who need corneal transplants. Parents whose deceased children had had their corneas removed without parental notice sued, claiming they had been deprived of property without due process of law. The court agreed that the parents had a property right in their deceased children's bodies, and hence in corneas taken from their bodies, sufficient to trigger due process protection. It reasoned from California and common law authorities imposing a duty on the next of kin to make arrangements for the burial

or other disposal of human bodies (with an accompanying "quasi-property" right of the next of kin in the body of the deceased). *Moore* was not mentioned. Does the decision mean that if Moore had died during the operation and the doctors had then taken his spleen cells for research purposes, Moore's relatives could have sued the doctors for a "taking" of their property? Does it make sense that body parts and fluids removed from a dead body are property, but if they are removed from a live one they are not?

Whether *Newman* will be followed in the future is unclear. In *Conroy v. Regents of the University of California*, 203 P.3d 1127 (Cal. 2009), the California Supreme Court rejected the claim that institutions receiving bodies through donations have a duty to dispose of the remains in a manner that would not shock the sensibilities of family members. A lower court decision involving a coroner's disposal of body parts which had disagreed with *Newman* was vacated and remanded for further consideration in light of this decision. See Perryman v. County of Los Angeles, 63 Cal. Rptr. 3d 732 (Cal. Ct. App. 2007), vacated, 208 P.3d 622 (Cal. 2009). More generally, courts have generally rejected claims based on alleged mishandling of dead bodies by the government, concluding that the next of kin have insufficient property rights in the body of the deceased to support such actions. See, e.g., Albrecht v. Treon, 889 N.E.2d 120, 129 (Ohio 2008); Evanston Ins. Co. v. Legacy of life, Inc., 370 S.W. 3d 377, 385 (Tex. 2012) (noting that "next of kin have no right to exclude, other than to seek damages in certain circumstances for acts done beyond their consent"); Shelley v. San Joaquin, 996 F. Supp. 2d 921 (E.D. Cal. 2014) (applying California law and relying in part on *Moore*).

NOTES AND QUESTIONS

1. In light of these further precedents, how would you characterize the status of the *Moore* decision today? Is it tenable to say that body parts and fluids removed from a person's body are "not property"?

2. Another source of controversy, analogous to the dispute in *Hecht* over frozen sperm, concerns frozen embryos. In *Davis v. Davis*, 842 S.W.2d 588 (Tenn. 1992), a married couple attempting to have children using in vitro fertilization techniques produced a number of fertilized embryos which were then cryogenically frozen. Before the embryos were implanted, the couple divorced. The wife remarried, but the parties could not agree on the disposition of the frozen embryos. The wife wanted them donated for use by childless couples; the husband wanted them destroyed. The Tennessee Supreme Court, after balancing the interests of the parties, ruled for the husband. Would the same result follow if the wife wanted the embryos to attempt a pregnancy herself? Might a husband in a bitter divorce wish to see frozen embryos destroyed knowing that this would be the wife's last chance (but not his) to be a biological parent? If there is any theme in the embryo cases, it is that either party can back out and veto the use of the embryos at any time before implantation. Is this equality? In light of all this, is the embryo property? What if both biological contributors agree to sell the frozen

embryos? For an overview of the extensive literature, see Shirley Darby Howell, The Frozen Embryo: Scholarly Theories, Case Law, and Propose State Regulation, 14 DePaul J. Health Care L. 407 (2013).

3. James E. Penner, whom we encountered in Chapter I, has also advanced what he calls the "separation thesis": Only items that are thought of as separate from their owners can be "things" and hence objects of property—the right to a thing. Thus, if someone cuts a lock of your hair while you are sleeping, this would be a violation of your person—a battery. But if someone took a lock of your hair after you had cut it off, this would be a theft. Does this accord with the treatment in the decided cases involving body parts and fluids? With your intuitions? See J.E. Penner, The Idea of Property in Law 111–27 (1997). Consider the case of *R. v. Bentham*, [2005] UKHL 18, in which the House of Lords overturned a conviction for possessing an imitation firearm in the course of a robbery, where the defendant had used his hand to puff out a zipped up jacket to give the impression of a gun. Relying on the premise that "[o]ne cannot possess something which is not separate and distinct from oneself," the court found that, although the defendant's behavior was "reprehensible" (and subject to other criminal liability), the defendant's unsevered finger or hand could not be "possessed." Does this make sense?

Flynn v. Holder

U.S. Court of Appeals, Ninth Circuit, 2012.
684 F.3d 852.

■ KLEINFELD, SENIOR CIRCUIT JUDGE: * * * The complaint challenges the constitutionality of the ban on compensation for human organs in the National Organ Transplant Act [42 U.S.C. § 274e], as applied to bone marrow transplants. * * * [Plaintiffs include parents of sick children, physicians, and parents of mixed race children and African Americans for whom no perfect blood marrow matches have been donated. Plaintiffs also include] a California nonprofit corporation that seeks to operate a program incentivizing bone marrow donations. The corporation proposes to offer $3,000 awards in the form of scholarships, housing allowances, or gifts to charities selected by donors, initially to minority and mixed race donors of bone marrow cells, who are likely to have the rarest marrow type. The corporation, MoreMarrowDonors.org, alleges that it cannot launch this program because the National Organ Transplant Act criminalizes payment of compensation for organs, and classifies bone marrow as an organ.

We generally use the word "marrow" to refer to the soft, fatty material in the central cavities of big bones, what some people suck out of beef bones. Bone marrow is the body's blood manufacturing factory. Bone marrow transplants enable sick patients, whose own blood cells need to be killed to save their lives, to produce new blood cells. For example, patients with leukemia, which is cancer of the blood or bone marrow, may need chemotherapy or radiation to kill the cancer cells in their blood. The treatments kill the white blood cells essential to their immune systems. The patients will die if the killed cells are not quickly replaced with healthy cells. And they cannot be replaced without the stem cells, which we describe below, that can mature into white blood cells. These stem cells can only be obtained through bone marrow transplants.

Until about twenty years ago, bone marrow was extracted from donors' bones by "aspiration." Long needles, thick enough to suck out the soft, fatty marrow, were inserted into the cavities of the anesthetized donor's hip bones. These are large bones with big central cavities full of marrow. Aspiration is a painful, unpleasant procedure for the donor. It requires hospitalization and general or local anesthesia, and involves commensurate risks.

The complaint explains that a new technology has superseded this technique during the last twenty years, after enactment of the National Organ Transplant Act. With this new technique, now used for at least two-thirds of bone marrow transplants, none of the soft, fatty marrow is actually donated. Patients who need bone marrow transplants do not need everything that the soft, fatty substance from bone cavities contains, just some of the marrow's "hematopoietic stem cells." These stem cells are seeds from which white blood cells, red blood cells, and platelets grow. These are not the embryonic stem cells often the subject of controversy. Those stem cells, taken from human embryos, are "pluripotent," that is, they can turn into any kind of cell—brain, blood, retina, toenail, whatever. The stem cells at issue in this case are "hematopoietic stem cells." "Hema" refers to blood, and "poietic" means "pertaining to production." Hematopoietic stem cells turn into blood cells and nothing else. Humans and other large mammals produce these blood stem cells constantly in vast numbers, because our blood cells die within a few months and need continual replacement. The dead blood cells are flushed out in the spleen, the body's garbage disposal for used-up blood cells, and new ones are made in the bone marrow, as long as we live.

Most blood stem cells stay in the bone marrow cavity and grow into mature blood cells there, before passing into the blood vessels. But some blood stem cells flow into and circulate in the bloodstream before they mature. These are called "peripheral" blood stem cells, "peripheral" meaning outside the central area of the body. The new bone marrow donation technique, developed during the past twenty years, is called "peripheral blood stem cell apheresis." "Apheresis" means the removal or separation of something. This procedure begins with five days of injections of a medication called a "granulocyte colony-stimulating factor" into the donor's blood. The medication accelerates blood stem cell production in the marrow, so that more stem cells go into the bloodstream. Then, with no need for sedatives or anesthesia, a needle is inserted into the donor's vein. Blood is withdrawn from the vein and filtered through an apheresis machine to extract the blood stem cells. The

remaining components of the blood are returned to the donor's vein. The blood stem cells extracted in the apheresis method are replaced by the donor's bone marrow in three to six weeks. Complications for the donor are exceedingly rare.

The main difference between an ordinary blood donation and apheresis is that instead of just filling up a plastic bag with whole blood, the donor sits for some hours in a recliner while the blood passes through the apheresis machine. This same apheresis technique is sometimes used for purposes other than bone marrow donations, such as when the machine is set up to collect plasma or platelets, rather than stem cells, from a donor's blood. When it is used for these other purposes, the identical technique is called a "blood donation" or "blood plasma donation." When used to separate out and collect hematopoietic stem cells from the donor's bloodstream, apheresis is called "peripheral blood stem cell apheresis" or a "bone marrow donation."

Though the new process makes bone marrow donations much like ordinary blood donations, the matching problem remains. Deep genetic compatibility is critical in bone marrow transplants, because our bodies are xenophobic: white blood cells produced from a donor's imperfectly matched blood stem cells treat the recipient patient's body as foreign, attacking it. This is graft-versus-host disease, which can be fatal or can result in lifelong medical problems for the transplant recipient. All donations from another person, except for one's identical twin, produce at least some graft-versus-host disease in the recipient, but the closer the genetic match, the less disease. Matching is easy in ordinary blood transfusions, because there are only four basic blood types. But there are millions of marrow cell types, so good matches are hard to find. The more diverse the patient's genetic heritage, the rarer the match. For example, African-Americans have especially great difficulty finding a compatible unrelated donor, as they tend to have a mix of African, Caucasian, and Native-American genes, and fewer potential donors are registered in the national civilian registry. * * *

The plaintiff nonprofit proposes to mitigate this matching problem by using a financial incentive. The idea is that the financial incentive will induce more potential donors to sign up, stay in touch so that they can be located when necessary, and go through with the donations. The nonprofit plans to focus its attention initially on minority and mixed race donors, because their marrow cell types are rarer. The financial incentives would be $3,000 in scholarships, housing allowances, or gifts to charities of the donor's choice, which the nonprofit acknowledges would be "valuable consideration" under the statutory prohibition.

Plaintiffs argue that the National Organ Transplant Act, as applied to the MoreMarrowDonors.org's planned pilot program, violates the Equal Protection Clause. They claim that blood stem cell harvesting is not materially different from blood, sperm, and egg harvesting, which are not included under the statutory or regulatory definitions of "human

organ." Like donors of blood and sperm, a bone marrow donor undergoing apheresis suffers no permanent harm, experiences no significant risk, and quickly regenerates what is donated. Plaintiffs also argue that any rational basis that Congress had when it passed the statute no longer exists with respect to the pilot program, because of the subsequent development of the apheresis method. Plaintiffs seek declaratory and injunctive relief so that MoreMarrowDonors.org can proceed with the initiative. * * *

As for whether the distinction between the organs or other body substances for which compensation is permitted and those for which it is prohibited has a rational basis, there are two classes of rational basis here: policy concerns and philosophical concerns. The policy concerns are obvious. Some are mentioned in the legislative history, though they need not be. Congress may have been concerned that if donors could be paid, rich patients or the medical industry might induce poor people to sell their organs, even when the transplant would create excessive medical risk, pain, or disability for the donor. Or, looking from the other end, Congress might have been concerned that every last cent could be extracted from sick patients needful of transplants, by well-matched potential donors making "your money or your life" offers. The existing commerce in organs extracted by force or fraud by organ thieves might be stimulated by paying for donations. Compensation to donors might also degrade the quality of the organ supply, by inducing potential donors to lie about their medical histories in order to make their organs marketable. Plaintiffs argue that a $3,000 housing subsidy, scholarship, or charitable donation is too small an amount to create a risk of any of these evils, but for a lot of people that could amount to three to six months' rent.

Congress may have had philosophical as well as policy reasons for prohibiting compensation. People tend to have an instinctive revulsion at denial of bodily integrity, particularly removal of flesh from a human being for use by another, and most particularly "commodification" of such conduct, that is, the sale of one's bodily tissue. While there is reportedly a large international market for the buying and selling of human organs, in the United States, such a market is criminal and the commerce is generally seen as revolting. Leon Kass examines the philosophical issue of commodification[.] * * * To account for why most of us are revolted by the notion of a poor person selling a kidney to feed his family, Kass cites the taboos we have against cannibalism, defilement of corpses, and necrophilia. Kass points to the idea of "psychophysical unity, a position that regards a human being as largely, if not wholly, self-identical with his enlivened body," so that, as Kant put it, to " 'dispose of oneself as a mere means to some end of one's own liking is to degrade the humanity in one's person.' " In this view, "organ transplantation . . . is—once we strip away the trappings of the sterile operating rooms and their astonishing technologies—simply a noble form of cannibalism."

These reasons are in some respects vague, in some speculative, and in some arguably misplaced. There are strong arguments for contrary views. But these policy and philosophical choices are for Congress to make, not us. The distinctions made by Congress must have a rational basis, but do not need to fit perfectly with that rational basis, and the basis need merely be rational, not persuasive to all. Here, Congress made a distinction between body material that is compensable and body material that is not. The distinction has a rational basis, so the prohibition on compensation for bone marrow donations by the aspiration method does not violate the Equal Protection Clause.

The focus, though, of plaintiffs' arguments is compensation for "bone marrow donations" by the peripheral blood stem cell apheresis method. For this, we need not answer any constitutional question, because the statute contains no prohibition. Such donations of cells drawn from blood flowing through the veins may sometimes anachronistically be called "bone marrow donations," but none of the soft, fatty marrow is donated, just cells found outside the marrow, outside the bones, flowing through the veins.

Congress could not have had an intent to address the apheresis method when it passed the statute, because the method did not exist at that time. We must construe the words of the statute to see what they imply about extraction of hematopoietic stem cells by this method. This issue has not been addressed by any of our sister circuits.

Since payment for blood donations has long been common, the silence in the National Organ Transplant Act on compensating blood donors is loud. "Blood" is omitted from the list of examples of "human organs" in the statute and the regulation. The statute says "human organ" is defined as a human "kidney, liver, heart, lung, pancreas, bone marrow, cornea, eye, bone, and skin or any subpart thereof and any other human organ ... specified by the Secretary of Health and Human Services by regulation." 42 U.S.C. § 274e(c)(1). The regulation adds intestines and the rest of the gastrointestinal tract to the list: "kidney, liver, heart, lung, pancreas, bone marrow, cornea, eye, bone, skin, and intestine, including the esophagus, stomach, small and/or large intestine, or any portion of the gastrointestinal tract." 42 C.F.R. § 121.13 (2010). Neither the statute nor the regulation defines "human organ" to include "blood." The government concedes that the common practice of compensating blood donors is not prohibited by the statute.

The government argues that hematopoietic stem cells in the veins should be treated as "bone marrow" because "bone marrow" is a statutory organ, and the statute prohibits compensation not only for donation of an organ, but also "any subpart thereof." Hematopoietic stem cells are formed in the bone marrow, and most are found there because they generally mature into blood cells and platelets in the marrow. Therefore, the government argues, they should be viewed as "subparts" of the bone marrow, even when these stem cells are obtained through apheresis, which is to say, from blood flowing through veins.

We reject this argument, because it proves too much, and because it construes words to mean something different from ordinary usage. If the government's argument that what comes from the marrow is a subpart of the marrow were correct, then the statute would prohibit compensating blood donors. The red and white blood cells that flow through the veins come from the bone marrow, just like hematopoietic stem cells. But the government implicitly concedes that these red and white blood cells are not "subparts" of bone marrow under the statute, because it explicitly concedes that the statute does not prohibit compensation for blood donations.

As for ordinary usage, the bloodstream consists of plasma containing red cells, white cells, platelets, stem cells that will mature into one of these, and other material. We call this liquid as a whole "blood." No one calls it "bone marrow," even though these cells come from the marrow. There is no reason to think that Congress intended "bone marrow" to mean something so different from ordinary usage. Also, the blood contains not only blood cells and stem cells, but also other substances that come from elsewhere in the body. For example, the blood contains vitamin B12, which enters the bloodstream after binding with intrinsic factor and being absorbed from the small intestine. The government's argument would treat vitamin B12 as a "subpart" of the intestines, and the regulation prohibits paying donors for their intestines or subparts thereof. But every blood draw contains some vitamin B12, and we still call the red liquid "blood," not "guts."

Likewise, every blood draw includes some hematopoietic stem cells. All that differentiates the blood drawn in peripheral blood stem cell apheresis from the blood drawn from a compensated blood donor, other than the filtration process, is the medicine given to donors in the days before the blood draw to increase hematopoietic stem cell secretion. Once the stem cells are in the bloodstream, they are a "subpart" of the blood, not the bone marrow. The word "subpart" refers to the organ from which the material is taken, not the organ in which it was created. Taking part of the liver for a liver donation would violate the statute because of the "subpart thereof" language. But taking something from the blood that is created in the marrow takes only a subpart of the blood. * * *

We construe "bone marrow" to mean the soft, fatty substance in bone cavities, as opposed to blood, which means the red liquid that flows through the blood vessels. The statute does not prohibit compensation for donations of blood and the substances in it, which include peripheral blood stem cells. The Secretary of Health and Human Services has not exercised regulatory authority to define blood or peripheral blood stem cells as organs. We therefore need not decide whether prohibiting compensation for such donations would be unconstitutional.

It may be that "bone marrow transplant" is an anachronism that will soon fade away, as peripheral blood stem cell apheresis replaces aspiration as the transplant technique, much as "dial the phone" is fading away now that telephones do not have dials. Or it may live on, as "brief" does, even though "briefs" are now lengthy arguments rather than, as they used to be, brief summaries of authorities. Either way, when the "peripheral blood stem cell apheresis" method of "bone marrow transplantation" is used, it is not a transfer of a "human organ" or a "subpart thereof" as defined by the statute and regulation, so the statute does not criminalize compensating the donor.

REVERSED.

NOTES AND QUESTIONS

1. Why is it rational for Congress to decide that compensation can be paid for the transfer of blood, sperm, and eggs, but not bone marrow, when the effect of this is to condemn significant numbers of persons to premature death? Does the speculation that many persons find organ sales to be similar to cannibalism provide the kind of argument that should be sufficient to sustain such a distinction?

2. If blood, sperm, and eggs can be sold, but other body organs and fluids can only be donated (gifted), does this mean that blood, sperm and eggs are "property," whereas other body parts and fluids are not? Or is it more accurate to say that any body part or fluid that can be transferred, by sale or gift, is property, with the possibility of sale going only to the details of what one can do with this property? If Mr. Moore could donate his spleen cells, why are they not his property? For that matter, what is the court doing when it construes the term "subpart"? Is there a requirement here that thinghood is required for there to be property and that we need to know which thing is which? Could Congress redefine terms like "part" and "subpart" in any fashion it chooses?

3. Given that racial minorities and mixed race persons have more difficulty obtaining donated bone marrow, because of the rarity of the composition of their bone marrow type, should the prohibition on paying compensation for bone marrow be subject to more than "rational basis" scrutiny under the Equal Protection Clause? Note that the Supreme Court has held that disparities in the treatment of persons based on race are subject to heightened scrutiny under the Equal Protection Clause only if they are "intentional." Washington v. Davis, 426 U.S. 229 (1976). In contrast, employment restrictions and housing policies are prohibited by the Civil Rights Acts if they have a "disparate impact" on racial minorities. Should something more than the most minimal scrutiny be required under the Equal Protection Clause when statutes are shown to have a disparate impact on minorities, especially if that disparity can mean the difference between life and death?

4. Thousands of persons in the United States die each year waiting for a kidney transplant. Kidneys, under the statute, can only be donated; it is unlawful to pay compensation to a person for giving up a kidney to be used for transplant purposes, even though there is comparatively little risk to a healthy person in giving up one of their two kidneys for these purposes. Apparently the only country in which there is currently no shortage of kidneys for transplant is the Iran, which provides for a system of donor compensation by the public and (predominantly) the recipient. Tina Rosenberg, Need A Kidney? Not Iranian? You'll Wait, N.Y. Times (July 31, 2015), available at http://opinionator.blogs.nytimes.com/2015/07/31/need-a-kidney-not-iranian-youll-wait/?_r=0.

5. By construing the statute to apply only to the traditional form of bone marrow aspiration, but not to peripheral blood stem cell apheresis, has the court in effect given a near-complete victory to the plaintiffs? As the court indicates, few if any donors would choose the painful form of needle extraction over the newer method, which is more like a prolonged blood donation. Given the policy concerns and the philosophical concerns that the court attributes to Congress, should the court give the plaintiffs a complete victory by statutory interpretation when it is unwilling to do the same by constitutional interpretation? Or is this in fact a desirable way to proceed, given that the statutory interpretation route can be overridden by Congress?

6. For a variety of perspectives on the shortage of organs for transplantation and suggestions for reform, see Organs and Inducements, 77 Law & Contemp. Probs. No. 3 (2014); see also Julia D. Mahoney, Altruism, Markets, and Organ Procurement, 72 Law & Contemp. Probs. 17 (Summer 2009).