# *Moore v Regents of University of California*, 51 Cal.3d 120

*Panelli, J.* —

I. Introduction

[1] 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.

1. Facts

[2] Our only task in reviewing a ruling on a demurrer is to determine whether the complaint states a cause of action. Accordingly, we assume that the complaint’s properly pleaded material allegations are true and give the complaint a reasonable interpretation by reading it as a whole and all its parts in their context. We do not, however, assume the truth of contentions, deductions, or conclusions of fact or law. For these purposes we briefly summarize the pertinent factual allegations of the 50–page complaint.

[3] The plaintiff is John Moore (Moore), who underwent treatment for hairy-cell leukemia at the Medical Center of the University of California at Los Angeles (UCLA Medical Center). The five defendants are: (1) Dr. David W. Golde (Golde), a physician who attended Moore at UCLA Medical Center; (2) the Regents of the University of California (Regents), who own and operate the university; (3) Shirley G. Quan, a researcher employed by the Regents; (4) Genetics Institute, Inc. (Genetics Institute); and (5) Sandoz Pharmaceuticals Corporation and related entities (collectively Sandoz).

[4] Moore first visited UCLA Medical Center on October 5, 1976, shortly after he learned that he had hairy-cell leukemia. After hospitalizing Moore and “withdr[awing] extensive amounts of blood, bone marrow aspirate, and other bodily substances,” Golde confirmed that diagnosis. At this time all \*126 defendants, including Golde, were aware that “certain blood products and blood components were of great value in a number of commercial and scientific efforts” and that access to a patient whose blood contained these substances would provide “competitive, commercial, and scientific advantages.”

[5] On October 8, 1976, Golde recommended that Moore’s spleen be removed. Golde informed Moore “that he had reason to fear for his life, and that the proposed splenectomy operation … was necessary to slow down the progress of his disease.” Based upon Golde’s representations, Moore signed a written consent form authorizing the splenectomy.

[6] Before the operation, Golde and Quan “formed the intent and made arrangements to obtain portions of [Moore’s] spleen following its removal” and to take them to a separate research unit. Golde gave written instructions to this effect on October 18 and 19, 1976. These research activities “were not intended to have … any relation to [Moore’s] medical … care.” However, neither Golde nor Quan informed Moore of their plans to conduct this research or requested his permission. Surgeons at UCLA Medical Center, whom the complaint does not name as defendants, removed Moore’s spleen on October 20, 1976.

[7] Moore returned to the UCLA Medical Center several times between November 1976 and September 1983. He did so at Golde’s direction and based upon representations “that such visits were necessary and required for his health and well-being, and based upon the trust inherent in and by virtue of the physician-patient relationship….” On each of these visits Golde withdrew additional samples of “blood, blood serum, skin, bone marrow aspirate, and sperm.” On each occasion Moore travelled to the UCLA Medical Center from his home in Seattle because he had been told that the procedures were to be performed only there and only under Golde’s direction.

[8] “In fact, [however,] throughout the period of time that [Moore] was under [Golde’s] care and treatment, … the defendants were actively involved in a number of activities which they concealed from [Moore]….” Specifically, defendants were conducting research on Moore’s cells and planned to “benefit financially and competitively … [by exploiting the cells] and [their] exclusive access to [the cells] by virtue of [Golde’s] on-going physician-patient relationship….”

[9] Sometime before August 1979, Golde established a cell line from Moore’s T-lymphocytes. On January 30, 1981, the Regents applied for a patent on the cell line, listing Golde and Quan as inventors. “[B]y virtue of an established policy …, [the] Regents, Golde, and Quan would share in any royalties or profits … arising out of [the] patent.” The patent issued on March 20, 1984, naming Golde and Quan as the inventors of the cell line and the Regents as the assignee of the patent.

[10] The Regent’s patent also covers various methods for using the cell line to produce lymphokines. Moore admits in his complaint that “the true clinical potential of each of the lymphokines … [is] difficult to predict, [but] … competing commercial firms in these relevant fields have published reports in biotechnology industry periodicals predicting a potential market of approximately $3.01 Billion Dollars by the year 1990 for a whole range of [such lymphokines]….”

[11] With the Regents’ assistance, Golde negotiated agreements for commercial development of the cell line and products to be derived from it. Under an agreement with Genetics Institute, Golde “became a paid consultant” and “acquired the rights to 75,000 shares of common stock.” Genetics Institute also agreed to pay Golde and the Regents “at least $330,000 over three years, including a pro-rata share of [Golde’s] salary and fringe benefits, in exchange for … exclusive access to the materials and research performed” on the cell line and products derived from it. On June 4, 1982, Sandoz “was added to the agreement,” and compensation payable to Golde and the Regents was increased by $110,000. “[T]hroughout this period, … Quan spent as much as 70 [percent] of her time working for [the] Regents on research” related to the cell line.

[12] Based upon these allegations, Moore attempted to state 13 causes of action. Each defendant demurred to each purported cause of action. The superior court, however, expressly considered the validity of only the first cause of action, conversion. Reasoning that the remaining causes of action incorporated the earlier, defective allegations, the superior court sustained a general demurrer to the entire complaint with leave to amend. In a subsequent proceeding, the superior court sustained Genetics Institute’s and Sandoz’s demurrers without leave to amend on the grounds that Moore had not stated a cause of action for conversion and that the complaint’s allegations about the entities’ secondary liability were too conclusory. In accordance with its earlier ruling that the defective allegations about conversion rendered the entire complaint insufficient, the superior court took the remaining demurrers off its calendar.

[13] With one justice dissenting, the Court of Appeal reversed, holding that the complaint did state a cause of action for conversion. The Court of Appeal agreed with the superior court that the allegations against Genetics Institute and Sandoz were insufficient, but directed the superior court to give Moore leave to amend. The Court of Appeal also directed the superior court to decide “the remaining causes of action, which [had] never been expressly ruled upon.”

1. Discussion

*A. Breach of Fiduciary Duty and Lack of Informed Consent*

[*The Court first discusses Moore’s claim that Dr. Golde breached his fiduciary duty to Moore because the doctor failed to disclose his economic interests in obtaining the cells. So, although Golde obtained Moore’s consent to conduct the medical procedures he underwent, he failed to obtain Moore’s informed consent. You should note this first cause of action, but you do not need to read this portion of the judgement on fiduciary duty — we will focus on Moore’s second claim in conversion.*]

[…]

*B. Conversion*

[35] 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.

[36] 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.

[37] 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. (Cf. *Nally v. Grace Community Church*, *supra*, 47 Cal.3d 278, 291–300, 253 Cal.Rptr. 97, 763 P.2d 948[declining to expand negligence law to encompass theory of “clergyman malpractice”];*Foley v. Interactive Data Corp.* (1988) 47 Cal.3d 654, 694–700, 254 Cal.Rptr. 211, 765 P.2d 373 [declining to apply tort remedies for breach of the covenant of good faith in the employment context];*Brown v. Superior Court*(1988) 44 Cal.3d 1049, 1061–1066, 245 Cal.Rptr. 412, 751 P.2d 470 [declining to apply strict products liability to pharmaceutical manufacturers].) Moreover, we should be hesitant to “impose [new tort duties] when to do so would involve complex policy decisions” (*Nally v. Grace Community Church*, *supra*, 47 Cal.3d at p. 299, 253 Cal.Rptr. 97, 763 P.2d 948), especially when such decisions are more appropriately the subject of legislative deliberation and resolution. (See *Foley v. Interactive Data Corp.*, *supra*, 47 Cal.3d at p. 694 & fn. 31, 254 Cal.Rptr. 211, 765 P.2d 373.) This certainly is not to say that the applicability of common law torts is limited to the historical or factual contexts of existing cases. But on occasions when we have opened or sanctioned new areas of tort liability, we “have noted that the ‘wrongs and injuries involved were both comprehensible and assessable within the existing judicial framework.’” (*Nally v. Grace Community Church*, *supra*, 47 Cal.3d at p. 298, 253 Cal.Rptr. 97, 763 P.2d 948, quoting *Peter W. v. San Francisco Unified Sch. Dist.* (1976) 60 Cal.App.3d 814, 824, 131 Cal.Rptr. 854.)

[38] Accordingly, we first consider whether the tort of conversion clearly gives Moore a cause of action under existing law. We do not believe it does. Because of the novelty of Moore’s claim to own the biological materials at issue, to apply the theory of conversion in this context would frankly have to be recognized as an extension of the theory. Therefore, we consider next whether it is advisable to extend the tort to this context.

1. Moore’s Claim Under Existing Law

[39] “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.* (1981) 123 Cal.App.3d 593, 610–611, 176 Cal.Rptr. 824, emphasis added. See also *General Motors A. Corp. v. Dallas* (1926) 198 Cal. 365, 370, 245 P. 184.)

[40] 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. First, no reported judicial decision supports Moore’s claim, either directly or by close analogy. Second, California statutory law drastically limits any continuing interest of a patient in excised cells. Third, the subject matters of the Regents’ patent—the patented cell line and the products derived from it—cannot be Moore’s property.

[41] 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, blood, fetuses, pituitary glands, corneal tissue, and dead bodies deal with human biological materials as objects sui generis, regulating their disposition to achieve policy goals 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.

[42] 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 un wanted publicity.(*Lugosi v. Universal Pictures* (1979) 25 Cal.3d 813, 160 Cal.Rptr. 323, 603 P.2d 425; *Motschenbacher v. R.J. Reynolds Tobacco Company* (9th Cir.1974) 498 F.2d 821 [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. (*Lugosi v. Universal Pictures*, *supra*, 25 Cal.3d at pp. 819, 823–826, 160 Cal.Rptr. 323, 603 P.2d 425; *Motschenbacher v. R.J. Reynolds Tobacco Company*, *supra*, 498 F.2d at pp. 825–826.) Each court stated, following Prosser, that it was “pointless” to debate the proper characterization of the proprietary interest in a likeness. (*Motschenbacher v. R.J. Reynolds Tobacco Company*, *supra*, 498 F.2d at p. 825, quoting Prosser, Law of Torts (4th ed. 1971) at p. 807; *Lugosi v. Universal Pictures*, *supra*, 25 Cal.3d at pp. 819, 824, 160 Cal.Rptr. 323, 603 P.2d 425.) 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.

[43] 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. Moore, adopting the analogy originally advanced by the Court of Appeal, argues that “[i]f the courts have found a sufficient proprietary interest in one’s persona, how could one not have a right in one’s own genetic material, something far more profoundly the essence of one’s human uniqueness than a name or a face?” However, as 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.

[44] Another privacy case offered by analogy to support Moore’s claim establishes only that patients have a right to refuse medical treatment. (*Bouvia v. Superior Court* (1986) 179 Cal.App.3d 1127, 225 Cal.Rptr. 297.) In this context the court in *Bouvia* wrote that “ ‘[e]very human being of adult years and sound mind has a right to determine what shall be done with his own body….’ ” (Id., at p. 1139, 225 Cal.Rptr. 297, quoting from *Schloendorff v. Society of New York Hospital*, *supra*, 211 N.Y. 125, 105 N.E. at p. 93.) Relying on this language to support the proposition that a patient has a continuing right to control the use of excised cells, the 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.

[45] 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.

[46] 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.

[47] 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* (1980) 447 U.S. 303, 309–310, 100 S.Ct. 2204, 2208, 65 L.Ed.2d 144.)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. (OTA Rep., *supra*, at p. 33; see fn. 2, ante.) 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. Since such allegations are nothing more than arguments or conclusions of law, they of course do not bind us.(*Daar v. Yellow Cab Co.*, *supra*, 67 Cal.2d at p. 713, 63 Cal.Rptr. 724, 433 P.2d 732.)

1. Should Conversion Liability Be Extended?

[48] As we have discussed, Moore’s novel claim to own the biological materials at issue in this case is problematic, at best. Accordingly, his attempt to apply the theory of conversion within this context must frankly be recognized as a request to extend that theory. While we do not purport to hold that excised cells can never be property for any purpose whatsoever, the novelty of Moore’s claim demands express consideration of the policies to be served by extending liability (cf. *Nally v. Grace Community Church*, *supra*, 47 Cal.3d at pp. 291–300, 253 Cal.Rptr. 97, 763 P.2d 948; *Foley v. Interactive Data Corp.*, *supra*, 47 Cal.3d at pp. 694–700, 254 Cal.Rptr. 211, 765 P.2d 373; *Brown v. Superior Court*, *supra*, 44 Cal.3d at pp. 1061–1066, 245 Cal.Rptr. 412, 751 P.2d 470) rather than blind deference to a complaint alleging as a legal conclusion the existence of a cause of action.

[49] There are three reasons why it is inappropriate to impose liability for conversion based upon the allegations of Moore’s complaint. First, a fair balancing of the relevant policy considerations counsels against extending the tort. Second, problems in this area are better suited to legislative resolution. Third, the tort of conversion is not necessary to protect patients’ rights. For these reasons, we conclude that the use of excised human cells in medical research does not amount to a conversion.

[50] 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.(See, e.g., *Cobbs v. Grant*, *supra*, 8 Cal.3d at pp. 242–246, 104 Cal.Rptr. 505, 502 P.2d 1;*Bowman v. McPheeters*, *supra*, 77 Cal.App.2d at p. 800, 176 P.2d 745.)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.

[51] To reach an appropriate balance of these policy considerations is extremely important. In its report to Congress (see fn. 2, ante), the Office of Technology Assessment emphasized that “[u]ncertainty about how courts will resolve disputes between specimen sources and specimen users could be detrimental to both academic researchers and the infant biotechnology industry, particularly when the rights are asserted long after the specimen was obtained. The assertion of rights by sources would affect not only the researcher who obtained the original specimen, but perhaps other researchers as well.

[52] “Biological materials are routinely distributed to other researchers for experimental purposes, and scientists who obtain cell lines or other specimen-derived products, such as gene clones, from the original researcher could also be sued under certain legal theories [such as conversion]. Furthermore, the uncertainty could affect product developments as well as research. Since inventions containing human tissues and cells may be patented and licensed for commercial use, 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.)

[53] Indeed, so significant is the potential obstacle to research stemming from uncertainty about legal title to biological materials that the Office of Technology Assessment reached this striking conclusion: “[R]egardless of the merit of claims by the different interested parties, resolving the current uncertainty may be more important to the future of biotechnology than resolving it in any particular way.”(OTA Rep., *supra*, at p. 27.)

[54] We need not, however, make an arbitrary choice between liability and nonliability. Instead, an 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.

[55] 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,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.

[56] Research on human cells plays a critical role in medical research. This is so because researchers are increasingly able to isolate naturally occurring, medically useful biological substances and to produce useful quantities of such substances through genetic engineering. These efforts are beginning to bear fruit. Products developed through biotechnology that have already been approved for marketing in this country include treatments and tests for leukemia, cancer, diabetes, dwarfism, hepatitis-B, kidney transplant rejection, emphysema, osteoporosis, ulcers, anemia, infertility, and gynecological tumors, to name but a few. (Note, *Source Compensation for Tissues and Cells Used in Biotechnical Research: Why a Source Shouldn’t Share in the Profits* (1989) 64 Notre Dame L.Rev. 628 & fn. 1 (hereafter Note, Source Compensation); see also OTA Rep., *supra*, at pp. 58–59.)

[57] The extension of conversion law into this area will hinder research by restricting access to the necessary raw materials. Thousands of human cell lines already exist in tissue repositories, such as the American Type Culture Collection and those operated by the National Institutes of Health and the American Cancer Society. These repositories respond to tens of thousands of requests for samples annually. Since the patent office requires the holders of patents on cell lines to make samples available to anyone, many patent holders place their cell lines in repositories to avoid the administrative burden of responding to requests. (OTA Rep., *supra*, at p. 53.) At present, human cell lines are routinely copied and distributed to other researchers for experimental purposes, usually free of charge.This exchange of scientific materials, which still is relatively free and efficient, will surely be compromised if each cell sample becomes the potential subject matter of a lawsuit.(OTA Rep., *supra*, at p. 52.)

[58] To expand liability by extending conversion law into this area would have a broad impact. The House Committee on Science and Technology of the United States Congress found that “49 percent of the researchers at medical institutions surveyed used human tissues or cells in their research.” Many receive grants from the National Institute of Health for this work. (OTA Rep., *supra*, at p. 52.) In addition, “there are nearly 350 commercial biotechnology firms in the United States actively engaged in biotechnology research and commercial product development and approximately 25 to 30 percent appear to be engaged in research to develop a human therapeutic or diagnostic reagent…. Most, but not all, of the human therapeutic products are derived from human tissues and cells, or human cell lines or cloned genes.”(Id., at p. 56.)

[59] In deciding whether to create new tort duties we have in the past considered the impact that expanded liability would have on activities that are important to society, such as research. For example, in *Brown v. Superior Court*, *supra*, 44 Cal.3d 1049, 245 Cal.Rptr. 412, 751 P.2d 470, the fear that strict product liability would frustrate pharmaceutical research led us to hold that a drug manufacturer’s liability should not be measured by those standards. We wrote that, “[i]f drug manufacturers were subject to strict liability, they might be reluctant to undertake research programs to develop some pharmaceuticals that would prove beneficial or to distribute others that are available to be marketed, because of the fear of large adverse monetary judgments.”(Id., at p. 1063, 245 Cal.Rptr. 412, 751 P.2d 470.)

[60] As in *Brown*, the 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.) In our view, borrowing again from *Brown*, “[i]t is not unreasonable to conclude in these circumstances that the imposition of a harsher test for liability would not further the public interest in the development and availability of these important products.”(*Brown v. Superior Court*, *supra*, 44 Cal.3d at p. 1065, 245 Cal.Rptr. 412, 751 P.2d 470.)

[61] Indeed, this is a far more compelling case for limiting the expansion of tort liability than *Brown*. In *Brown*, eliminating strict liability made it more difficult for plaintiffs to recover actual damages for serious physical injuries resulting from their mothers’ prenatal use of the drug diethylstilbestrol (DES). (*Brown v. Superior Court*, *supra*, 44 Cal.3d at pp. 1054–1055, 245 Cal.Rptr. 412, 751 P.2d 470.) In this case, by comparison, limiting the expansion of liability under a conversion theory will only make it more difficult for Moore to recover a highly theoretical windfall. Any injury to his right to make an informed decision remains actionable through the fiduciary-duty and informed-consent theories.

[62] 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.*, *supra*, 47 Cal.3d at p. 694, fn. 31, 254 Cal.Rptr. 211, 765 P.2d 373.) Legislative competence to act in this area is demonstrated by the existing statutes governing the use and disposition of human biological materials. Legislative interest is demonstrated by the extensive study recently commissioned by the United States Congress. (OTA Rep., *supra*.) Commentators are also recommending legislative solutions.(See Danforth, *Cells, Sales, and Royalties: The Patient’s Right to a Portion of the Profits* (1988) 6 Yale L. & Pol’y Rev. 179, 198–201; Note, Source Compensation, *supra*, 64 Notre Dame L.Rev. at pp. 643–645.)

[63] 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.

[64] 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.

1. Disposition

[65] The decision of the Court of Appeal is affirmed in part and reversed in part. The case is remanded to the Court of Appeal, which shall direct the superior court to: (1) overrule Golde’s demurrers to the causes of action for breach of fiduciary duty and lack of informed consent; (2) sustain, with leave to amend, the demurrers of the Regents, Quan, Sandoz, and Genetics Institute to the purported causes of action for breach of fiduciary duty and lack of informed consent; (3) sustain, without leave to amend, all defendants’ demurrers to the purported cause of action for conversion; and (4) hear and determine all defendants’ remaining demurrers.

[*You do not need to read these concurring reasons — skip right to Justice Mosk’s decision in dissent.*]

[…]

**Mosk, J.**, dissenting —

[100] I dissent.

[101] Contrary to the principal holding of the Court of Appeal, the majority conclude that the complaint does not—in fact cannot—state a cause of action for conversion. I disagree with this conclusion for all the reasons stated by the Court of Appeal, and for additional reasons that I shall explain. For convenience I shall discuss the six premises of the majority’s conclusion in the order in which they appear.

[102] The majority first take the position that Moore has no cause of action for conversion under existing law because he retained no “ownership interest” in his cells after they were removed from his body. (Maj. opn., *ante*, p. 156 of 271 Cal.Rptr., p. 489 of 793 P.2d.) To state a conversion cause of action a plaintiff must allege his “ownership or right to possession of the property at the time of the conversion” (*Baldwin v. Marina City Properties, Inc.* (1978) 79 Cal.App.3d 393, 410, 145 Cal.Rptr. 406). Here the complaint defines Moore’s “Blood and Bodily Substances” to include inter alia his blood, his bodily tissues, his cells, and the cell lines derived therefrom. Moore thereafter alleges that “he is the owner of his Blood and Bodily Substances and of the by-products produced therefrom….” And he further alleges that such blood and bodily substances “are his tangible personal property, and the activities of the defendants as set forth herein constitute a substantial interference with plaintiff’s possession or right thereto, as well as defendants’ wrongful exercise of dominion over plaintiff’s personal property rights in his Blood and Bodily Substances.”

[103] The majority impliedly hold these allegations insufficient as a matter of law, finding three “reasons to doubt” that Moore retained a sufficient ownership interest in his cells, after their excision, to support a conversion cause of action. (Maj. opn., *ante*, p. 156 of 271 Cal.Rptr., p. 489 of 793 P.2d.) In my view the majority’s three reasons, taken singly or together, are inadequate to the task.

[104] The majority’s first reason is that “no reported judicial decision supports Moore’s claim, either directly or by close analogy.” (Maj. opn., *ante*, p. 156 of 271 Cal.Rptr., p. 489 of 793 P.2d.) Neither, however, is there any reported decision rejecting such a claim. The issue is as new as its source—the recent explosive growth in the commercialization of biotechnology.

[105] The majority next cite several statutes regulating aspects of the commerce in or disposition of certain parts of the human body, and conclude in effect that in the present case we should also “look for guidance” to the Legislature rather than to the law of conversion. (*Id.* at p. 156 of 271 Cal.Rptr., at p. 489 of 793 P.2d.) Surely this argument is out of place in an opinion of the highest court of this state. As the majority acknowledge, the law of conversion is a creature of the common law. “ ‘The inherent capacity of the common law for growth and change is its most significant feature. Its development has been determined by the social needs of the community which it serves. It is constantly expanding and developing in keeping with advancing civilization and the new conditions and progress of society, and adapting itself to the gradual change of trade, commerce, arts, inventions, and the needs of the country.’

[106] In short, as the United States Supreme Court has aptly said, ‘This flexibility and capacity for growth and adaptation is the peculiar boast and excellence of the common law.’ … Although the Legislature may of course speak to the subject, in the common law system the primary instruments of this evolution are the courts, adjudicating on a regular basis the rich variety of individual cases brought before them.”(*Rodriguez v. Bethlehem Steel Corp.* (1974) 12 Cal.3d 382, 394, 115 Cal.Rptr. 765, 525 P.2d 669.)

[107] Especially is this true in the field of torts. I need not review the many instances in which this court has broken fresh ground by announcing new rules of tort law: time and again when a new rule was needed we did not stay our hand merely because the matter was one of first impression. For example, in *Sindell v. Abbott Laboratories* (1980) 26 Cal.3d 588, 163 Cal.Rptr. 132, 607 P.2d 924, we adopted a “market share” theory of liability for injury resulting from administration of a prescription drug and suffered by a plaintiff who without fault cannot trace the particular manufacturer of the drug that caused the harm. Like the opinion in the case at bar, the dissent in *Sindell* objected that market share liability was “a wholly new theory” and an “unprecedented extension of liability” (id. at pp. 614, 615, 163 Cal.Rptr. 132, 607 P.2d 924), and urged that in view of the economic, social, and medical effects of this new rule the decision to adopt it should rest with the Legislature (*id.* at p. 621, 163 Cal.Rptr. 132, 607 P.2d 924). We nevertheless declared the new rule for sound policy reasons, explaining that “In our contemporary complex industrialized society, advances in science and technology create fungible goods which may harm consumers and which cannot be traced to any specific producer. The response of the courts can be either to adhere rigidly to prior doctrine, denying recovery to those injured by such products, or to fashion remedies to meet these changing needs.” (*Id.* at p. 610, 163 Cal.Rptr. 132, 607 P.2d 924.) We took the latter course.

[108] The case at bar, of course, does not involve a drug-induced injury. Yet it does present a claim arising, like Sindell’s, from “advances in science and technology” that could not have been foreseen when traditional tort doctrine here, the law of conversion—was formulated. My point is that if the cause of action for conversion is otherwise an appropriate remedy on these facts, we should not refrain from fashioning it simply because another court has not yet so held or because the Legislature has not yet addressed the question. We need not wait on either event, because neither is a precondition to an exercise of our long-standing “power to insure the just and rational development of the common law in our state” (*Rodriguez v. Bethlehem Steel Corp.*, *supra*, 12 Cal.3d 382, 394, 115 Cal.Rptr. 765, 525 P.2d 669).

[109] The majority’s second reason for doubting that Moore retained an ownership interest in his cells after their excision is that “California statutory law … drastically limits a patient’s control over excised cells.” (Maj. opn., *ante*, p. 158 of 271 Cal.Rptr., p. 491 of 793 P.2d.) For this proposition the majority rely on Health and Safety Code section 7054.4 (hereafter section 7054.4),set forth in the margin.The majority concede that the statute was not meant to directly resolve the question whether a person in Moore’s position has a cause of action for conversion, but reason that it indirectly resolves the question by limiting the patient’s control over the fate of his 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.” (Maj. opn., *ante*, pp. 158–159 of 271 Cal.Rptr., pp. 491–492 of 793 P.2d.) As will appear, I do not believe section 7054.4 supports the just quoted conclusion of the majority.

[110] First, in my view the statute does not authorize the principal use that defendants claim the right to make of Moore’s tissue, i.e., its commercial exploitation. In construing section 7054.4, of course, “we look first to the words of the statute themselves” (*Long Beach Police Officers Assn. v. City of Long Beach* (1988) 46 Cal.3d 736, 741, 250 Cal.Rptr. 869, 759 P.2d 504), and give those words their usual and ordinary meaning (*California Teachers Assn. v. San Diego Community College Dist.* (1981) 28 Cal.3d 692, 698, 170 Cal.Rptr. 817, 621 P.2d 856).

[111] By its terms, section 7054.4 permits only “scientific use” of excised body parts and tissue before they must be destroyed. We must therefore determine the usual and ordinary meaning of that phrase. I would agree that “scientific use” at least includes routine postoperative examination of excised tissue conducted by a pathologist for diagnostic or prognostic reasons (e.g., to verify preoperative diagnosis or to assist in determining postoperative treatment). I might further agree that “scientific use” could be extended to include purely scientific study of the tissue by a disinterested researcher for the purpose of advancing medical knowledge—provided of course that the patient gave timely and informed consent to that use. It would stretch the English language beyond recognition, however, to say that commercial exploitation of the kind and degree alleged here is also a usual and ordinary meaning of the phrase “scientific use.”

[112] The majority dismiss this difficulty by asserting that I read the statute to define “scientific use” as “not-for-profit scientific use,” and by finding “no reason to believe that the Legislature intended to make such a distinction.” (Maj. opn., *ante*, p. 159, fn. 34 of 271 Cal.Rptr., p. 492, fn. 34 of 793 P.2d.) The objection misses my point. I do not stress the concept of profit, but the concept of science: the distinction I draw is not between nonprofit scientific use and scientific use that happens to lead to a marketable by-product; it is between a truly *scientific* use and the blatant *commercial* exploitation of Moore’s tissue that the present complaint alleges. Under those allegations, defendants Dr. David W. Golde and Shirley G. Quan were not only scientists, they were also full-fledged entrepreneurs: the complaint repeatedly declares that they appropriated Moore’s tissue in order “to further defendants’ independent research and commercial activities and promote their economic, financial and competitive interests.” The complaint also alleges that defendant Regents of the University of California (hereafter Regents) actively assisted the individual defendants in applying for patent rights and in negotiating with bioengineering and pharmaceutical companies to exploit the commercial potential of Moore’s tissue. Finally, the complaint alleges in detail the contractual arrangements between the foregoing defendants and defendants Genetics Institute, Inc., and Sandoz Pharmaceuticals Corporation, giving the latter companies exclusive rights to exploit that commercial potential while providing substantial financial benefits to the individual defendants in the form of cash, stock options, consulting fees, and fringe benefits. To exclude such traditionally commercial activities from the phrase “scientific use,” as I do here, does not give it a restrictive definition; rather, it gives the phrase its usual and ordinary meaning, as settled law requires.

[113] Secondly, even if section 7054.4 does permit defendants’ commercial exploitation of Moore’s tissue under the guise of “scientific use,” it does not follow that—as the majority conclude—the statute “eliminates so many of the rights ordinarily attached to property” that what remains does not amount to “property” or “ownership” for purposes of the law of conversion. (Maj. opn., *ante*, p. 159 of 271 Cal.Rptr., p. 492 of 793 P.2d.)

[114] 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.* (1929) 207 Cal. 521, 523, 279 P. 128.)

[115] 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.* (1963) 60 Cal.2d 441, 447, 34 Cal.Rptr. 872, 386 P.2d 496.) 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, while others may be given away but not sold, and still others may neither be given away nor sold.

[116] 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 protectable 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* (1939) 33 Cal.App.2d 18, 20, 90 P.2d 854 [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 protectable 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.

[117] The majority’s third and last reason for their conclusion that Moore has no cause of action for conversion under existing law is that “the subject matter of the Regents’ patent—the patented cell line and the products derived from it—cannot be Moore’s property.” (Maj. opn., *ante*, p. 159 of 271 Cal.Rptr., p. 492 of 793 P.2d.) The majority then offer a dual explanation: “This is because the patented cell line is *factually and legally* distinct from the cells taken from Moore’s body.” (*Ibid.*, italics added.) Neither branch of the explanation withstands analysis.

[118] First, in support of their statement that the Mo cell line is “factually distinct” from Moore’s cells, the majority assert that “Cells change while being developed into a cell line and continue to change over time,” and in particular may acquire an abnormal number of chromosomes. (Maj. opn., *ante*, p. 159, fn. 35 of 271 Cal.Rptr., p. 492, fn. 35 of 793 P.2d.) No one disputes these assertions, but they are nonetheless irrelevant. For present purposes no distinction can be drawn between Moore’s cells and the Mo cell line. It appears that the principal reason for establishing a cell line is not to “improve” the quality of the parent cells but simply to extend their life indefinitely, in order to permit long-term study and/or exploitation of the qualities already present in such cells. The complaint alleges that Moore’s cells naturally produced certain valuable proteins in larger than normal quantities; indeed, that was why defendants were eager to culture them in the first place. Defendants do not claim that the cells of the Mo cell line are in any degree more productive of such proteins than were Moore’s own cells. Even if the cells of the Mo cell line in fact have an abnormal number of chromosomes, at the present stage of this case we do not know if that fact has any bearing whatever on their capacity to produce proteins; yet it is in the commercial exploitation of that capacity—not simply in their number of chromosomes—that Moore seeks to assert an interest. For all that appears, therefore, the emphasized fact is a distinction without a difference.

[119] Second, the majority assert in effect that Moore cannot have an ownership interest in the Mo cell line because defendants patented it. The majority’s point wholly fails to meet Moore’s claim that he is entitled to compensation for defendants’ unauthorized use of his bodily tissues *before* defendants patented the Mo cell line: defendants undertook such use immediately after the splenectomy on October 20, 1976, and continued to extract and use Moore’s cells and tissue at least until September 20, 1983; the patent, however, did not issue until March 20, 1984, more than seven years after the unauthorized use began. Whatever the legal consequences of that event, it did not operate retroactively to immunize defendants from accountability for conduct occurring long before the patent was granted.

[120] Nor did the issuance of the patent in 1984 necessarily have the drastic effect that the majority contend. To be sure, the patent granted defendants the exclusive right to make, use, or sell the invention for a period of 17 years.(35 U.S.C. § 154.) But Moore does not assert any such right for himself. Rather, he seeks to show that he is entitled, in fairness and equity, to some share in the profits that defendants have made and will make from their commercial exploitation of the Mo cell line. I do not question that the cell line is primarily the product of defendants’ inventive effort. Yet likewise no one can question Moore’s crucial contribution to the invention—an invention named, ironically, after him: but for the cells of Moore’s body taken by defendants, *there would have been no Mo cell line*. Thus the complaint alleges that Moore’s “Blood and Bodily Substances were absolutely essential to defendants’ research and commercial activities with regard to his cells, cell lines, [and] the Mo cell-line, … and that defendants could not have applied for and had issued to them the Mo cell-line patent and other patents described herein without obtaining and culturing specimens of plaintiff’s Blood and Bodily Substances.” Defendants admit this allegation by their demurrers, as well they should: for all their expertise, defendants do not claim they could have extracted the Mo cell line out of thin air.

[121] Nevertheless the majority conclude that the patent somehow cut off all Moore’s rights—past, present, and future—to share in the proceeds of defendants’ commercial exploitation of the cell line derived from his own body tissue. The majority cite no authority for this unfair result, and I cannot believe it is compelled by the general law of patents: a patent is not a license to defraud.Perhaps the answer lies in an analogy to the concept of “joint inventor.” I am aware that “patients and research subjects who contribute cells to research will not be considered inventors.” (OTA Rep., *supra*, at p. 71.) Nor is such a person strictly speaking a “joint inventor” within the meaning of the term in federal law.(35 U.S.C. § 116.) But he does fall within the spirit of that law: “The joint invention provision guarantees that all who contribute in a substantial way to a product’s development benefit from the reward that the product brings. Thus, the protection of joint inventors encourages scientists to cooperate with each other and ensures that each contributor is rewarded fairly.

[122] “Although a patient who donates cells does not fit squarely within the definition of a joint inventor, the policy reasons that inform joint inventor patents should also apply to cell donors. Neither John Moore nor any other patient whose cells become the basis for a patentable cell line qualifies as a ‘joint inventor’ because he or she did not further the development of the product in any intellectual or conceptual sense. Nor does the status of patients as sole owners of a component part make them deserving of joint inventorship status. What the patients did do, knowingly or unknowingly, is collaborate with the researchers by donating their body tissue…. By providing the researchers with unique raw materials, without which the resulting product could not exist, the donors become necessary contributors to the product. Concededly, the patent is not granted for the cell as it is found in nature, but for the modified biogenetic product. However, the uniqueness of the product that gives rise to its patentability stems from the uniqueness of the original cell. *A patient’s claim to share in the profits flowing from a patent would be analogous to that of an inventor whose collaboration was essential to the success of a resulting product. The patient was not a coequal, but was a necessary contributor to the cell line.*”(Danforth, *Cells, Sales, & Royalties: The Patient’s Right to a Portion of the Profits* (1988) 6 Yale L. & Pol’y Rev. 179, 197, fns. omitted, italics added (hereafter Danforth).)

[123] Under this reasoning, which I find persuasive, the law of patents would not be a bar to Moore’s assertion of an ownership interest in his cells and their products sufficient to warrant his sharing in the proceeds of their commercial exploitation.

[124] Having concluded—mistakenly, in my view—that Moore has no cause of action for conversion under existing law, the majority next consider whether to “extend” the conversion cause of action to this context. Again the majority find three reasons not to do so, and again I respectfully disagree with each.

[125] The majority’s first reason is that a balancing of the “relevant policy considerations” counsels against recognizing a conversion cause of action in these circumstances. (Maj. opn., *ante*, p. 160 of 271 Cal.Rptr., p. 493 of 793 P.2d.) The memo identifies two such policies, but concedes that one of them—“protection of a competent patient’s right to make autonomous medical decisions” (*id.* at p. 160 of 271 Cal.Rptr., p. 493 of 793 P.2d)—would in fact be promoted, even though “indirectly,” by recognizing a conversion cause of action. (*Id.* at p. 160 of 271 Cal.Rptr., at p. 493 of 793 P.2d.)

[126] The majority focus instead on a second policy consideration, i.e., their concern “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.” (Maj. opn., *ante*, p. 160 of 271 Cal.Rptr., p. 493 of 793 P.2d.)As will appear, in my view this concern is both overstated and outweighed by contrary considerations.

[127] The majority begin their analysis by stressing the obvious facts that research on human cells plays an increasingly important role in the progress of medicine, and that the manipulation of those cells by the methods of biotechnology has resulted in numerous beneficial products and treatments. Yet it does not necessarily follow that, as the majority claim, application of the law of conversion to this area “will hinder research by restricting access to the necessary raw materials,” i.e., to cells, cell cultures, and cell lines. (Maj. opn., *ante*, p. 161 of 271 Cal.Rptr., p. 494 of 793 P.2d.) The majority observe that many researchers obtain their tissue samples, routinely and at little or no cost, from cell-culture repositories. The majority then speculate that “This exchange of scientific materials, which still is relatively free and efficient, will surely be compromised if each cell sample becomes the potential subject matter of a lawsuit.” (Maj. opn., *ante*, p. 162 of 271 Cal.Rptr., p. 495 of 793 P.2d.) There are two grounds to doubt that this prophecy will be fulfilled.

[128] To begin with, if the relevant exchange of scientific materials was ever “free and efficient,” it is much less so today. Since biological products of genetic engineering became patentable in 1980 (*Diamond v. Chakrabarty* 1980) 447 U.S. 303, 100 S.Ct. 2204, 65 L.Ed.2d 144), human cell lines have been amenable to patent protection and, as the Court of Appeal observed in its opinion below, “The rush to patent for exclusive use has been rampant.” Among those who have taken advantage of this development, of course, are the defendants herein: as we have seen, defendants Golde and Quan obtained a patent on the Mo cell line in 1984 and assigned it to defendant Regents. With such patentability has come a drastic reduction in the formerly free access of researchers to new cell lines and their products: the “novelty” requirement for patentability prohibits public disclosure of the invention at all times up to one year before the filing of the patent application.(35 U.S.C. § 102(b).)Thus defendants herein recited in their patent specification, “At no time has the Mo cell line been available to other than the investigators involved with its initial discovery and only the conditioned medium from the cell line has been made available to a limited number of investigators for collaborative work with the original discoverers of the Mo cell line.”

[129] An even greater force for restricting the free exchange of new cell lines and their products has been the rise of the biotechnology industry and the increasing involvement of academic researchers in that industry. When scientists became entrepreneurs and negotiated with biotechnological and pharmaceutical companies to develop and exploit the commercial potential of their discoveries—as did defendants in the case at bar—layers of contractual restrictions were added to the protections of the patent law.

[130] In their turn, the biotechnological and pharmaceutical companies demanded and received exclusive rights in the scientists’ discoveries, and frequently placed those discoveries under trade secret protection. Trade secret protection is popular among biotechnology companies because, among other reasons, the invention need not meet the strict standards of patentability and the protection is both quickly acquired and unlimited in duration. (Note, *Patent and Trade Secret Protection in University–Industry Research Relationships in Biotechnology* (1987) 24 Harv.J. on Legis. 191, 218–219.) Secrecy as a normal business practice is also taking hold in university research laboratories, often because of industry pressure (*id.* at pp. 204–208): “One of the most serious fears associated with university-industry cooperative research concerns keeping work private and not disclosing it to the researcher’s peers. [Citation.] … Economic arrangements between industry and universities inhibit open communication between researchers, especially for those who are financially tied to smaller biotechnology firms.” (Howard, *supra*, 44 Food Drug Cosm.L.J. at p. 339, fn. 72.)

[131] Secondly, to the extent that cell cultures and cell lines may still be “freely exchanged,” e.g., for purely research purposes, it does not follow that the researcher who obtains such material must necessarily remain ignorant of any limitations on its use: by means of appropriate record keeping, the researcher can be assured that the source of the material has consented to his proposed use of it, and hence that such use is not a conversion. To achieve this end the originator of the tissue sample first determines the extent of the source’s informed consent to its use— e.g., for research only, or for public but academic use, or for specific or general commercial purposes; he then enters this information in the record of the tissue sample, and the record accompanies the sample into the hands of any researcher who thereafter undertakes to work with it. “Record keeping would not be overly burdensome because researchers generally keep accurate records of tissue sources for other reasons: to trace anomalies to the medical history of the patient, to maintain title for other researchers and for themselves, and to insure reproducibility of the experiment.” (*Toward the Right of Commerciality*, *supra*, 34 UCLA L.Rev. at p. 241.) As the Court of Appeal correctly observed, any claim to the contrary “is dubious in light of the meticulous care and planning necessary in serious modern medical research.”

[132] The majority rely on *Brown v. Superior Court*, *supra*, 44 Cal.3d 1049, 245 Cal.Rptr. 412, 751 P.2d 470 (hereafter *Brown*),but the case is plainly distinguishable. In a unanimous opinion that I authored for the court, we considered inter alia whether pharmaceutical manufacturers should be held strictly liable for injuries caused by “defectively designed” prescription drugs. We declined to so hold for several policy reasons.(*Id.* at pp. 1063–1065, 245 Cal.Rptr. 412, 751 P.2d 470.) One of those reasons was our concern that “the fear of large adverse monetary judgments” might dissuade such manufacturers from developing or distributing potentially beneficial new drugs. (*Id.* at p. 1063, 245 Cal.Rptr. 412, 751 P.2d 470.) The majority now seek to draw an analogy between *Brown* and the case at bar, but the analogy fails because liability exposure in the *Brown* context is qualitatively far greater. As we acknowledged in *Brown*, “unlike other important medical products … harm to some users from prescription drugs is unavoidable.”(Ibid., italics added.) On an industry-wide basis, therefore, the imposition of strict liability for defective prescription drugs would inevitably result in hundreds, if not thousands, of meritorious claims by often seriously harmed plaintiffs, most of them likely to be seeking exemplary as well as compensatory damages. Given the innocence and vulnerability of the typical plaintiff in such cases, sympathetic juries might well return substantial verdicts again and again, and the industry’s total liability could reach intimidating proportions. Indeed, in *Brown* we chronicled actual instances in which the mere threat of such liability did cause the industry to refuse to supply new prescription drugs. (*Id.* at p. 1064, 245 Cal.Rptr. 412, 751 P.2d 470.)

[133] None of the foregoing is true in the case at bar. The majority claim that a conversion cause of action threatens to “destroy the economic incentive” to conduct the type of research here in issue (maj. opn., *ante*, p. 162 of 271 Cal.Rptr., p. 495 of 793 P.2d), but it is difficult to take this hyperbole seriously. First, the majority reason that with every cell sample a researcher “purchases a ticket in a litigation lottery.” (*Id.* at p. 162–163 of 271 Cal.Rptr., at p. 495–496 of 793 P.2d.)This is a colorful image, but it does not necessarily reflect reality: as explained above, with proper record keeping the researcher acquires not a litigation-lottery ticket but the information he needs precisely in order to avoid litigation. In contrast to *Brown*,therefore, here the harm is by no means “unavoidable.” Second, the risk at hand is not of a multiplicity of actions: in *Brown* the harm would be suffered by many members of the public—the users of the end product of the process of developing the new drug—while here it can be suffered by only one person—the original source of the research material that began that process. Third, the harm to the latter will be primarily economic, rather than the potentially grave physical injuries at issue in *Brown*.

[134] In any event, in my view whatever merit the majority’s single policy consideration may have is outweighed by two contrary considerations, i.e., policies that are promoted by recognizing that every individual has a legally protectable property interest in his own body and its products. First, our 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 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, *supra*,6 Yale L. & Pol’y Rev. at p. 190, fn. omitted.)

[135] 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. We are repeatedly told that the commercial products of the biotechnological revolution “hold the promise of tremendous profit.” (*Toward the Right of Commerciality*, *supra*, 34 UCLA L.Rev. at p. 211.)In the case at bar, for example, the complaint alleges that the market for the kinds of proteins produced by the Mo cell line was predicted to exceed $3 billion by 1990. These profits are currently shared exclusively between the biotechnology industry and the universities that support that industry. The profits are shared in a wide variety of ways, including “direct entrepreneurial ties to genetic-engineering firms” and “an equity interest in fledgling biotechnology firms” (Howard, *supra*, 44 Food Drug Cosm.L.J. at p. 338). Thus the complaint alleges that because of his development of the Mo cell line defendant Golde became a paid consultant of defendant Genetics Institute and acquired the rights to 75,000 shares of that firm’s stock at a cost of 1 cent each; that Genetics Institute further contracted to pay Golde and the Regents at least $330,000 over 3 years, including a pro rata share of Golde’s salary and fringe benefits; and that defendant Sandoz Pharmaceuticals Corporation subsequently contracted to increase that compensation by a further $110,000.

[136] There is, however, a third party to the biotechnology enterprise—the patient who is the source of the blood or tissue from which all these profits are derived. While he may be a silent partner, his contribution to the venture is absolutely crucial: as pointed out above (pt. 3, *ante*), but for the cells of Moore’s body taken by defendants there would have been no Mo cell line at all.Yet defendants deny that Moore is entitled to any share whatever in the proceeds of this cell line. This is both inequitable and immoral. As Dr. Thomas H. Murray, a respected professor of ethics and public policy, testified before Congress, “the person [who furnishes the tissue] should be justly compensated…. If biotechnologists fail to make provision for a just sharing of profits with the person whose gift made it possible, the public’s sense of justice will be offended and no one will be the winner.” (Murray, *Who Owns the Body? On the Ethics of Using Human Tissue for Commercial Purposes* (Jan.–Feb.1986) IRB: A Review of Human Subjects Research, at p. 5.)

[137] There will be such 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….

[138] 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.” (*Toward the Right of Commerciality*, *supra*, 34 UCLA L.Rev. at p. 229.)“Recognizing a donor’s property rights would prevent unjust enrichment by giving monetary rewards to the donor and researcher proportionate to the value of their respective contributions. Biotechnology depends upon the contributions of both patients and researchers. If not for the patient’s contribution of cells with unique attributes, the medical value of the bioengineered cells would be negligible. But for the physician’s contribution of knowledge and skill in developing the cell product, the commercial value of the patient’s cells would also be negligible. Failing to compensate the patient unjustly enriches the researcher because only the researcher’s contribution is recognized.” (*Id.* at p. 230.) In short, as the Court of Appeal succinctly put it, “If this science has become science for profit, then we fail to see any justification for excluding the patient from participation in those profits.”

[139] The majority’s second reason for declining to extend the conversion cause of action to the present context is that “the Legislature should make that decision.” (Maj. opn., *ante*, p. 163 of 271 Cal.Rptr., p. 496 of 793 P.2d.) I do not doubt that the Legislature is competent to act on this topic. The fact that the Legislature may intervene if and when it chooses, however, does not in the meanwhile relieve the courts of their duty of enforcing—or if need be, fashioning—an effective judicial remedy for the wrong here alleged. As I observed above (pt. 1, *ante*), if a conversion cause of action is otherwise an appropriate remedy on these facts we should not refrain from recognizing it merely because the Legislature has not yet addressed the question. To do so would be to abdicate pro tanto our responsibility over a body of law—torts—that is particularly a creature of the common law. And such reluctance to act would be especially unfortunate at the present time, when the rapid expansion of biotechnological science and industry makes resolution of these issues an increasingly pressing need.

[140] 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 (maj. opn., *ante*, p. 156, fns. 22 & 23 of 271 Cal.Rptr., p. 489, fns. 22 & 23 of 793 P.2d) 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.

[141] 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. 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.

[142] With respect to the sale of human blood the matter is much simpler: there is in fact no prohibition against such sales. The majority rely (maj. opn., *ante*, p. 156, fn. 23 of 271 Cal.Rptr., p. 489, fn. 23 of 793 P.2d) on Health and Safety Code section 1606, which provides in relevant part that the procurement and use of blood for transfusion “shall be construed to be, and is declared to be … the rendition of a service … and shall not be construed to be, and is declared not to be, a sale….” There is less here, however, than meets the eye: the statute does *not* mean that a person cannot sell his blood or, by implication, that his blood is not his property. “While many jurisdictions have classified the transfer of blood or other human tissue as a service rather than a sale, this position does not conflict with the notion that human tissue is property.” (Columbia Note, *supra*, 90 Colum.L.Rev. at p. 544, fn. 76.) The reason is plain: “No State or Federal statute prohibits the sale of blood, plasma, semen, or other replenishing tissues if taken in non-vital amounts. Nevertheless, State laws usually characterize these paid transfers as the provision of services rather than the sale of a commodity….

[143] The primary legal reason for characterizing these transactions as involving services rather than goods is to avoid liability for contaminated blood products under either general product liability principles or the [Uniform Commercial Code’s] implied warranty provisions.” (OTA Rep., *supra*, at p. 76, fn. omitted.) The courts have repeatedly recognized that the foregoing is the real purpose of this harmless legal fiction. (See, e.g., *Hyland Therapeutics v. Superior Court* (1985) 175 Cal.App.3d 509, 220 Cal.Rptr. 590;*Cramer v. Queen of Angels Hosp.* (1976) 62 Cal.App.3d 812, 133 Cal.Rptr. 339;*Shepard v. Alexian Brothers Hosp.* (1973) 33 Cal.App.3d 606, 109 Cal.Rptr. 132.) Thus despite the statute relied on by the majority, it is perfectly legal in this state for a person to sell his blood for transfusion or for any other purpose indeed, such sales are commonplace, particularly in the market for plasma. (See OTA Rep., *supra*, at p. 121.)

[144] 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.

[145] The majority’s final reason for refusing to recognize a conversion cause of action on these facts is that “there is no pressing need” to do so because the complaint also states another cause of action that is assertedly adequate to the task (maj. opn., *ante*, p. 163 of 271 Cal.Rptr., p. 496 of 793 P.2d); that cause of action is “the breach of a fiduciary duty to disclose facts material to the patient’s consent or, alternatively, … the performance of medical procedures without first having obtained the patient’s informed consent” (*id.* at p. 150 of 271 Cal.Rptr., at p. 483 of 793 P.2d). Although last, this reason is not the majority’s least; in fact, it underlies much of the opinion’s discussion of the conversion cause of action, recurring like a leitmotiv throughout that discussion.

[146] The majority hold that a physician who intends to treat a patient in whom he has either a research interest or an economic interest is under a fiduciary duty to disclose such interest to the patient before treatment; that his failure to do so may give rise to a nondisclosure cause of action; and that the complaint herein states such a cause of action at least against defendant Golde. I agree with that holding as far as it goes.

[147] I disagree, however, with the majority’s further conclusion that in the present context a nondisclosure cause of action is an adequate—in fact, a superior—substitute for a conversion cause of action. In my view the nondisclosure cause of action falls short on at least three grounds.

[*In his final set of arguments, Justice Mosk addresses the majority’s position that the availability of a claim for breach of fiduciary duty is sufficient to vindicate Moore’s interests in the case. You do not need to read this aspect of Justice Mosk’s judgement in detail — it wades into a thicket of tort law consideration that don’t concern us here. The summative paragraph 156 is sufficient for you to understand Justice Mosk’s position in this aspect of the argument.*]

[…]

[156] In sum, the nondisclosure cause of action (1) is unlikely to be successful in most cases, (2) fails to protect patients’ rights to share in the proceeds of the commercial exploitation of their tissue, and (3) may allow the true exploiters to escape liability. It is thus not an adequate substitute, in my view, for the conversion cause of action.

[*You do not need to read these additional considerations in Mosk’s judgement — they do not directly address the issue’s we focus on in this class*].

[…]

[163] I would affirm the decision of the Court of Appeal to direct the trial court to overrule the demurrers to the cause of action for conversion.