JOHN MOORE, Plaintiff and Appellant, v. THE REGENTS OF THE UNIVERSITY OF CALIFORNIA et al., Defendants and Repondents

No. S006987

Supreme Court of California

51 Cal. 3d 120*; *793 P.2d 479*; *271 Cal. Rptr. 146*; *1990 Cal. LEXIS 2858*; *16 A.L.R.5th 903*; *15 U.S.P.Q.2D (BNA) 1753

July 9, 1990

SUBSEQUENT HISTORY: **[***1]** Respondents' petition for a rehearing was denied August 30, 1990. Mosk, J., and Broussard, J., were of the opinion that the petition should be granted.

PRIOR HISTORY: Superior Court of Los Angeles County, No. C513755, Warren H. Deering and John L. Cole, Judges.

DISPOSITION: 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.

[...]

JUDGES: Opinion by Panelli, J., with Lucas, C. J., Eagleson and Kennard, JJ., concurring. Separate concurring opinion by Arabian, J. Separate concurring and dissenting opinion by Broussard, J. Separate dissenting opinion by Mosk, J.

OPINION BY: PANELLI

OPINION

[*124] **[**147]** I. Introduction

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 **[*125]** 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. **[***3]** 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

(1) 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. (*Phillips v. Desert Hospital Dist. (1989) 49 Cal.3d 699, 702 [263 Cal. Rptr. 119, 780 P.2d 349]*; *Blank v. Kirwan (1985) 39 Cal.3d 311, 318 [216 Cal. Rptr. 718, 703 P.2d 58]*; *Tameny v. Atlantic Richfield Co. (1980) 27 Cal.3d 167, 170 [164 Cal. Rptr. 839, 610 P.2d 1330, 9 A.L.R.4th 314]*.) We do not, however, assume the truth of contentions, deductions, or conclusions of fact or law. (*Daar v. Yellow Cab Co. (1967) 67 Cal.2d 695, 713 [63 Cal. Rptr. 724, 433 P.2d 732]*.) **[***4]** For these purposes we briefly summarize the pertinent factual allegations of the 50-page complaint.

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 **[**148]** 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).

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 [1] 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 **[***5]** these substances would provide "competitive, commercial, and scientific advantages."

On October 8, 1976, Golde recommended that Moore's spleen be removed. Golde informed Moore "that he had reason **[***6]** 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.

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.

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 **[***7]** 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.

"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] ongoing physician-patient relationship . . . ."

[*127] Sometime before August 1979, Golde established a cell line from Moore's T-lymphocytes. [2] On January 30, 1981, the Regents **[**149]** 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 **[***8]** Quan as the inventors of the cell line and the Regents as the assignee of the patent. (*U.S. Patent No. 4,438,032* (Mar. 20, 1984).)

2 A T-lymphocyte is a type of white blood cell. T-lymphocytes produce lymphokines, or proteins that regulate the immune system. Some lymphokines have potential therapeutic value. If the genetic material responsible for producing a particular lymphokine can be identified, it can sometimes be used to manufacture large quantities of the lymphokine through the techniques of recombinant DNA. (See generally U.S. Congress, Office of Technology Assessment, New Developments in Biotechnology: Ownership of Human Tissues and Cells (1987) at pp. 31-46 (hereafter OTA Report); see also fn. 29, *post*.)

While the genetic code for lymphokines does not vary from individual to individual, it can nevertheless be quite difficult to locate the gene responsible for a particular lymphokine. Because T-lymphocytes produce many different lymphokines, the relevant gene is often like a needle in a haystack. (OTA Rep., *supra*, at p. 42.) Moore's T-lymphocytes were interesting to the defendants because they overproduced certain lymphokines, thus making the corresponding genetic material easier to identify. (In published research papers, defendants and other researchers have shown that the overproduction was caused by a virus, and that normal T-lymphocytes infected by the virus will also overproduce. See fn. 30, *post*.)

Cells taken directly from the body (primary cells) are not very useful for these purposes. Primary cells typically reproduce a few times and then die. One can, however, sometimes continue to use cells for an extended period of time by developing them into a "cell line," a culture capable of reproducing indefinitely. This is not, however, always an easy task. "Longterm growth of human cells and tissues is difficult, often an art," and the probability of succeeding with any given cell sample is low, except for a few types of cells not involved in this case. (OTA Rep., *supra*, at p. 5.)

[*9]** The Regent's patent also covers various methods for using the cell line to produce lymphokines. [3] 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 Dol-

lars by the year 1990 for a whole range of [such lymphokines] . . . ."

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" **[***10]** on the cell line and products derived from it. On June 4, 1982, **[*128]** 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.

Based upon these allegations, Moore attempted to state 13 causes of action. [4] 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. [5] 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 **[**150]** defective allegations about conversion rendered the entire complaint insufficient, **[***11]** the superior court took the remaining demurrers off its calendar.

> 4 (1) "Conversion"; (2) "lack of informed consent"; (3) "breach of fiduciary duty"; (4) "fraud and deceit"; (5) "unjust enrichment"; (6) "quasi-contract"; (7) "bad faith breach of the implied covenant of good faith and fair dealing"; (8) "intentional infliction of emotional distress"; (9) "negligent misrepresentation"; (10) "intentional interference with prospective advantageous economic relationships"; (11) "slander of title"; (12) "accounting"; and (13) "declaratory relief."

> 5 The superior court did not reach (a) any defendant's general demurrer to the causes of action numbered 2 through 13; (b) any defendant's demurrer on the ground of the statute of limitations; (c) Golde's, Quan's, and the Regents' demurrers on the grounds of governmental immunity; or (d) Genetics Institute's and Sandoz's numerous demurrers for uncertainty.

With one justice dissenting, the Court of Appeal reversed, holding that the complaint did state a cause of action for **[***12]** 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."

III. Discussion

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

[***omissis***]

B. *Conversion*

(4a) 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 **[*135]** 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 **[***28]** 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. [15] While that fact does not end our inquiry, it raises a flag of caution. **(5) (See fn. 16.)** 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. [16] 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. [17] Invoking a tort theory originally **[**155]** 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. [18]

> 17 Conversion arose out of the common law action of trover. "We probably do not have the earliest examples of its use, but they were almost certainly cases in which the finder of lost goods did not return them, but used them himself, or disposed of them to someone else. . . .

> By 1554 the allegations of the complaint had become more or less standardized: that the plaintiff was possessed of certain goods, that he casually lost them, that the defendant found them, and that the defendant did not return them, but instead 'converted them to his own use.' From that phrase in the pleading came the name of the tort." (Prosser & Keeton, Torts (5th ed. 1984) § 15, p. 89.)

[*30]**

> 18 Moore alleges, for example, that "genetic sequences . . . are his tangible personal property . . . ." We are not, however, bound by that conclusion of law. (*Daar v. Yellow Cab Co., supra, 67 Cal.2d at p. 713*.) Moreover, as already mentioned, the genetic code for lymphokines does not vary from individual to individual. (See fns. 2, *ante*, and 30, *post*.)

(6) 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* [declining to expand negligence law to encompass theory of "clergyman malpractice"]; *Foley v. Interactive Data Corp. (1988) 47 Cal.3d 654, 694-700* **[*136]** *[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]* **[***31]** [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*), 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.) 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*, quoting *Peter W. v. San Francisco Unified Sch. Dist. (1976) 60 Cal. App.3d 814, 824 [131 Cal. Rptr. 854]*.)

(4b) Accordingly, we first consider whether the tort **[***32]** 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*

(7) "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." [19] (*Del E. Webb Corp. v. Structural Materials Co. (1981) 123 Cal. App.3d 593, 610-611 [176 Cal. Rptr. 824]*, italics added. See also *General Motors A. Corp. v. Dallas (1926) 198 Cal. 365, 370 [245 P. 184]*.)

[*33]** **(4c)** Since Moore clearly did not expect to retain possession of his cells following their **[**156]** removal, [20] to sue for their conversion he must have retained **[*137]** 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.

Neither **[***34]** 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, [21] transplantable organs, [22] blood, [23] fetuses, [24] pituitary glands, [25] corneal tissue, [26] and dead bodies [27] 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.

Lacking direct authority for importing the law of conversion into this context, Moore relies, as did the Court of Appeal, primarily on decisions **[*138]** addressing privacy rights. [28] One line of cases involves unwanted **[**157]** publicity. (*Lugosi v. Universal Pictures (1979) 25 Cal.3d 813 [160 Cal. Rptr. 323, 603 P.2d 425, 10 A.L.R.4th 1150]*; *Motschenbacher v. R. J. Reynolds Tobacco Company (9th Cir. 1974) 498 F.2d 821* **[***37]** [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*; *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*.) 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.

[*38]** 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. [29] Lymphokines, unlike a name or a face, **[*139]** 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 **[***39]** number of vertebrae in the spine or the chemical formula of hemoglobin. [30]

[158]** Another privacy **[***41]** 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*, quoting from *Schloendorff v. New York Hospital, supra, 211 N.Y. 125 [105 N.E. 92, 93]*.) [31] 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 **[*140]** 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 **[***42]** 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." [32] Clearly the Legislature did not specifically intend this statute **[***43]** 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. [33] Yet one cannot **[**159]** 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 **[*141]** 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 **[***45]** 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. [34] 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.

[*46]** 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. [35] Federal law permits the patenting of organisms **[*142]** that represent the product of "human ingenuity," but not naturally occurring organisms. (*Diamond v. Chakrabarty (1980) 447 U.S. 303, 309-310 [65 L. Ed. 2d 144, 150, 100 S. Ct. 2204]*.) [36] Human **[**160]** 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. [37] Since such allegations are nothing more than arguments **[***47]** or conclusions of law, they of course do not bind us. (*Daar v. Yellow Cab Co., supra, 67 Cal.2d at p. 713*.)

[*48]**

2. *Should Conversion Liability Be Extended?*

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 **[***49]** 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*; *Foley v. Interactive Data Corp., supra, 47 Cal.3d at pp. 694-700*; *Brown v. Superior Court, supra, 44 Cal.3d at pp. 1061-1066*) rather than blind deference to a complaint alleging as a legal conclusion the existence of a cause of action.

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' **[*143]** rights. For these reasons, we conclude **[***50]** that the use of excised human cells in medical research does not amount to a conversion.

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*; *Bowman v. McPheeters, supra, 77 Cal. App.2d at p. 800*.) 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.

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 **[***51]** 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.

[161]** "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.)

Indeed, so significant is the potential obstacle to research stemming from uncertainty about legal title to biological **[***52]** 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.)

We need not, however, make an arbitrary choice between liability and nonliability. Instead, an examination of the relevant policy considerations **[*144]** 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. **(8) (See fn. 38.) (4d)** Since conversion is a strict liability tort, [38] **[***53]** 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.

[*54]** 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.)

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 **[***55]** the American Cancer Society. These repositories respond to tens of thousands **[*145]** of requests for samples annually. Since the patent office requires the holders of patents **[**162]** 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. [39] 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.) [40]

[*56]**

[*57]** 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*.)

[*146] 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*, the fear that strict product liability would **[***58]** 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*.)

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 **[**163]** 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.) [41] 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 **[***59]** 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*.) [42]

[*60]**

[*147] Indeed, this is a far more compelling case for limiting the expansion of tort liability than *Brown* **[***61]** . 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*.) 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.

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.) **[***62]** Legislative competence to act in this area is demonstrated by the existing statutes governing the use and disposition of human biological materials. [43] 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.)

Finally, there is no pressing need to impose a judicially created rule of strict liability, **[**164]** 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 **[***63]** 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. [44]

[*64] [*148]** IV.

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.

[***omissis***]