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Medical Research Oversight From the Corporate Governance Perspective: Comparing Institutional Review Boards and Corporate Boards

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MEDICAL RESEARCH OVERSIGHT FROM THE CORPORATE GOVERNANCE PERSPECTIVE: COMPARING INSTITUTIONAL REVIEW BOARDS AND CORPORATE BOARDS

RICHARD S. SAVER*

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INTRODUCTION

Dr. John Mendelsohn did not have a very good year in 2001. As president of the prestigious University of Texas M.D. Anderson Cancer Center, Mendelsohn enjoyed a reputation as one of the best cancer doctors in the country. He also worked as a high profile ambassador for the institution. Under his tenure, M.D. Anderson raised its public visibility, attracted record donations from private philanthropists, and doubled both its budget and federal research funding.¹

But, in 2001 two seemingly unrelated business disasters hit in succession-Enron and ImClone. Dr. Mendelsohn figured prominently in the news again, but this was not the typical favorable coverage. In the ImClone fiasco, Mendelsohn's involvement made more sense. Dr. Mendelsohn served on the corporate board of ImClone, a New York biotechnology company, owned ImClone stock, and helped develop its leading experimental cancer drug, Erbitux.2 In early 2001, ImClone's fortunes seemed to be riding high on the prospects of Erbitux receiving full approval by the Food and Drug Administration (FDA) relatively early in the drug's testing cycle. In late December of that year, however, the FDA declined to give the drug early approval, questioning some of the clinical trial data and concluding that more testing needed to be done before it could be cleared as safe and effective for clinical care. ImClone's stock price plummeted when this bad news hit the financial markets.3 The downward turn of events then generated an insider trading scandal of epic proportions. Securities regulators accused Samuel Waksal, ImClone's CEO, of tipping family members to sell their ImClone stock in advance of the FDA announcement.4 The ImClone scandal

^{1.} Leigh Hopper, Cancer Crusader Weathers Scandals: ImClone and Enron Don't Derail President of M.D. Anderson, HOUS. CHRON., Mar. 30, 2003, at A33.

^{2.} Justin Gillis, A Hospital's Conflict of Interest: Patients Weren't Told of Stake in Cancer Drug, WASH. POST, June 30, 2002, at A1.

^{3.} Robert W. Hamilton, *The Crisis in Corporate Governance: 2002 Style*, 40 Hous. L. Rev. 1, 28 (2003).

^{4.} Id. at 28-29. Waksal ended up pleading guilty to securities fraud, conspiracy, obstruction of justice, perjury, and bank fraud. Press Release, United States Attorney, Southern District of New York, Samuel Waksal Sentenced in Federal Court to 7 Years 3 Months in Prison, Fined \$3 Million (June 10, 2003). He also was fined \$3 million and ordered

also engulfed lifestyle entrepreneur Martha Stewart. Ms. Stewart was convicted on federal criminal charges of obstruction of justice and related counts arising from a governmental investigation as to whether she sold her ImClone stock based on an illegal inside tip.⁵

With the Waksal and Stewart charges dominating the news. another troubling aspect of the ImClone saga received considerably less attention. Clinical investigators tested Erbitux on approximately 195 research subjects at M.D. Anderson. All this occurred while Dr. Mendelsohn simultaneously served as M.D. Anderson's president and yet remained financially and operationally involved with ImClone, including still serving on the ImClone corporate board. 6 The research subjects were not told that the medical center's president had a very large financial stake in the company developing the experimental drug. In fact, Mendelsohn made approximately \$6 million on the sale of twenty percent of his ImClone shares in November 2001.8 Although Mendelsohn did not directly conduct the Erbitux trials at M.D. Anderson-other faculty members did the actual research—critics still questioned the potentially serious conflict of interest for M.D. Anderson's top executive and for the medical center generally.9

to pay restitution of more than \$1.2 million. See id. Interestingly, later clinical studies in Europe suggested that Erbitux is indeed an effective drug for colon cancer patients. See Todd Ackerman, New Study Validates Cancer Drug Erbitux, HOUS. CHRON., June 2, 2003, at A1. Thus, the FDA recently approved the release of Erbitux onto the commercial market. See Andrew Pollach, ImClone Cancer Drug Behind Martha Stewart Trial Is Approved by F.D.A., N.Y. TIMES, Feb. 13, 2004, at C2.

^{5.} Waksal and Stewart coincidentally shared the same broker. See Superseding Indictment at 2, 5, United States v. Stewart, S1 03 Cr. 717 (MGC) (S.D.N.Y.). Allegedly, the broker, through his assistant, told Stewart about impending bad news for the company and advised her to sell her ImClone stock. Id. at 7. Ms. Stewart faced federal charges of, among other things, obstruction of justice and perjury in connection with the government's investigation as to why she sold her ImClone shares, as well as securities fraud for allegedly misleading investors in her own company about her actions in the ImClone trading scandal. See id. at 1-24. The securities fraud count was thrown out during the trial, but the jury convicted Stewart on all other charges. See Constance L. Hays & Leslie Eaton, Stewart Found Guilty of Lying in Sale of Stock, N.Y. TIMES, Mar. 6, 2004, at A1.

Todd Ackerman, Doctor Regrets Failure to Tell of Stake in Drug, HOUS. CHRON., July 4, 2002, at A1.

^{7.} Gillis, supra note 2.

^{8.} Todd Ackerman, Report Tackles Conflicts Within Medical Research: M.D. Anderson Faced Related Flap, HOUS. CHRON., Sept. 26, 2002, at A27.

^{9.} See Gillis, supra note 2; M.D. Anderson in ImClone Media Hype, PHARMA MARKETLETTER, July 15, 2002; Mary Papenfuss, The Patient or the Portfolio?, Salon.com, Dec.

Among the concerns arising from the Erbitux episode, the relatively passive role of M.D. Anderson's institutional review board (IRB) stands out. Why did the M.D. Anderson IRB allow all of this to happen in the first place? IRBs, the federally required research review committees at major academic medical centers, are responsible for reviewing, approving, and monitoring research protocols involving human subjects. Did the oversight body fail to take appropriate actions? Should it have investigated the potential conflicts of interest and moved the Erbitux clinical trials to another medical center? Should the IRB have at least insisted that research subjects be told about the financial ties during the informed consent process?

ImClone actually presented the second major headache for Dr. Mendelsohn in 2001. He also had the misfortune of being associated with the downfall of Enron, one of the major business disasters in American history. Enron, an energy trading giant and the seventh largest company in the United States shortly before its collapse. began to unravel in mid-2001. Enron management insiders allegedly had caused the company to enter into a number of off transactions with affiliated entities under sheet arrangements benefiting several of the insiders while hiding the corporation's true financial debt. When Enron issued restated financial statements revealing more accurate debt estimates. swift and severe market disfavor resulted, eventually culminating with the company declaring bankruptcy in December 2001.12

^{9, 2002,} at http://archive.Salon.com/mwt/feature/2002/12/09/clinictrials/index.html.

^{10.} See generally 21 C.F.R. §§ 50.1-50.56 (2003) (Food and Drug Administration regulations); 45 C.F.R. §§ 46.101-46.409 (2003) (Department of Health and Human Services regulations); infra notes 65-95 and accompanying text.

^{11.} Dr. Mendelsohn later apologized for not ensuring that the cancer trial subjects were told about his ties to ImClone. Hopper, supra note 1. Meanwhile, M.D. Anderson has changed its policy to require disclosure of such information to research subjects. Todd Ackerman, Feds Had Advised Hospitals to Reveal any Financial Interests in Drug Trials, HOUS. CHRON., July 2, 2002, at A1; Hopper, supra note 1.

^{12.} For a thorough examination of Enron's downfall, see generally ENRON: CORPORATE FIASCOS AND THEIR IMPLICATIONS (Nancy B. Rapoport & Bala G. Dharan eds., 2004). The Enron debacle has been described as "a synergistic combination of human errors and hubris: a 'Titanic' miscalculation" Nancy B. Rapoport, Enron, Titanic, and The Perfect Storm, in ENRON: CORPORATE FIASCOS AND THEIR IMPLICATIONS, supra, at 927, 930 (footnote omitted). For other overviews of Enron's collapse, see Charles M. Elson & Christopher J. Gyves, The Enron Failure and Corporate Governance Reform, 38 WAKE FOREST L. REV. 855, 856-59 (2003);

Dr. Mendelsohn's connection to Enron surprised many. Although a research doctor, he served on Enron's board of directors as well as on the board's audit committee. He apparently had performed his role as ambassador for M.D. Anderson Cancer Center quite well, forging relationships with the business and social elite in Houston, which later earned him an invitation onto the Enron board.¹³

Among the many questions emanating from the Enron debacle: where was the Enron corporate board? Boards of directors are supposed to monitor management for the benefit of shareholders. Why did the Enron board allegedly approve the questionable off balance sheet transactions and waive conflict of interest policies for senior executives? Did the Enron directors really even know and truly understand the grave financial risks senior management caused the corporation to take? Why did the board not suspect alleged self-dealing and false financial reporting by management insiders when numerous signals indicated something might be wrong?¹⁴

The connection between the conduct of the Enron corporate board and the conduct of the M.D. Anderson Cancer Center IRB might, at first blush, seem to be a fluke. One entity, a corporate board elected by shareholders, appears to have very little to do with the other, an internal research oversight committee, other than the fortuitous involvement of Dr. Mendelsohn. The major proposition of this Article, however, is that there is indeed a very strong connection. The alleged problems with the Enron corporate board resonate with and have major implications for understanding the alleged monitoring deficiencies of the M.D. Anderson Cancer Center IRB. This Article contends that policy makers and health law scholars interested in better understanding and improving research over-

Marleen A. O'Connor, The Enron Board: The Perils of Groupthink, 71 U. CIN. L. REV. 1233, 1233-34 (2003).

^{13.} Mendelsohn became acquainted with Ken Lay, Enron's former CEO, through his efforts to target major philanthropic supporters for the M.D. Anderson Cancer Center. See Hopper, supra note 1. Lay later asked Mendelsohn if the physician would like to serve on the Enron board. See id.; Jo Thomas & Reed Abelson, How a Top Medical Researcher Became Entangled with Enron, N.Y. TIMES, Jan. 28, 2002, at C1.

^{14.} See S. Rep. No. 107-70 (2002), available at http://www.senate.gov/~gov_affairs/070902enronboardreport.pdf; Elson & Gyves, supra note 12, at 858-62; Troy A. Paredes, Enron: The Board, Corporate Governance, and Some Thoughts on the Role of Congress, in Enron: Corporate Fiascos and Their Implications, supra note 12, at 495, 503-15.

sight performed by the nation's IRBs should pay more attention to the role of boards of directors in corporate governance.

Like London and Paris in A Tale of Two Cities, this is "the best of times" and "the worst of times" for IRBs and corporate boards. ¹⁵ As a result of several high profile research subject deaths at major institutions, such as Johns Hopkins University ¹⁶ and the University of Pennsylvania, ¹⁷ IRBs have come under increasing fire. Leading academic medical centers have had their research programs temporarily suspended because of IRBs' alleged failures to protect research subjects. ¹⁸ A recent series of critical government reports

^{15.} As Charles Dickens wrote: "It was the best of times, it was the worst of times, it was the age of wisdom, it was the age of foolishness" CHARLES DICKENS, A TALE OF TWO CITIES 7 (First Vintage Classics 1990) (1859).

^{16.} In 2001, Ellen Roche, a healthy subject, volunteered to participate in a Johns Hopkins University trial that was designed to study the effects of nebulized hexamethonium on the physiology of asthma. She died after participating. An internal investigation concluded the death was most likely the result of an adverse reaction to the experimental drug. Among the problems identified were that: (1) the IRB approved the use of boilerplate consent forms which failed to identify the drug's pulmonary toxicity and failed to mention that it was not currently FDA approved for human use nor had it ever been approved as an inhalant; (2) the IRB did not conduct substantive or meaningful ongoing review of trials once approved; (3) the IRB members did not sufficiently understand what the federal research regulations required; and (4) protocols were not presented individually and were not discussed in detail when a majority of IRB members were present. See generally Bette-Jane Crigger, What Does It Mean to "Review" a Protocol?: Johns Hopkins & OHRP, 23 IRB: ETHICS AND HUM. RES. 13, 13-15 (2001).

^{17.} In 1999, Jesse Gelsinger died after participation in a gene therapy study at the University of Pennsylvania. See Jesse A. Goldner, Dealing with Conflicts of Interest in Biomedical Research: IRB Oversight as the Next Best Solution to the Abolitionist Approach, 28 J.L. MED. & ETHICS 379, 379 (2000). Investigations after his death found several problems with the oversight of the trial, including that: (1) he was allowed to enroll in the trial despite the fact that his clinical condition did not meet the narrow eligibility criteria for the study; (2) researchers had not told the federal agencies or the IRB about severe side effects experienced by previous research subjects; (3) the consent form approved by the IRB did not disclose previous subjects' complications or the death of animal subjects that had received the therapy; (4) documentation was lacking that all subjects received appropriate information about the risks and benefits of the therapy; and (5) Gelsinger allegedly was not told about the investigator's and University's complicated financial ties with the company sponsoring the research and that the investigator had patents on some aspects of the procedure. In fact, the principal investigator had a 30% equity interest and the University a 3.2% equity interest in the company sponsoring the trial. See generally Mark Barnes & Patrik S. Florencio, Financial Conflicts of Interest in Human Subjects Research: The Problem of Institutional Conflicts, 30 J.L. MED. & ETHICS 390, 394 (2002); Goldner, supra, at 379-80; Sheryl Gay Stolberg, The Biotech Death of Jesse Gelsinger, N.Y. TIMES MAG., Nov. 28, 1999, at 136.

^{18.} See, e.g., Philip J. Hilts, Safety Concerns Halt Oklahoma Research, N.Y. TIMES, July 11, 2000, at F12 (discussing suspension of human experiments at the University of

concludes that IRBs review too many protocols in too rapid a timeframe while lacking sufficient resources and expertise. ¹⁹ Critics charge that the IRB system of review simply is tilted too much in favor of researcher and institutional interests at the expense of human subject protection. ²⁰ In short, this has been called a time of "crisis" in which IRBs are "under strain" and awaiting serious reform. ²¹

Meanwhile, with recent high profile business disasters at large, publicly traded corporations such as Enron and WorldCom,²² these are also very unsettling, difficult times in corporate boardrooms.

Oklahoma); Gina Kolata, Johns Hopkins Death Brings Halt to U.S. Financed Human Studies, N.Y. TIMES, July 20, 2001, at A1 (discussing suspension of human research at Johns Hopkins University); J. Obermayer & S. Kauffman, Duke Awaits Research Ruling, NEWS & OBSERVER, May 14, 1999, at B1; Duff Wilson & David Heath, Class-Action Suit Filed Against 'The Hutch,' SEATTLE TIMES, Mar. 27, 2001, at A1 (discussing a suit filed against the Fred Hutchison Cancer Research Center at the University of Washington).

- 19. See, e.g., U.S. GEN. ACCOUNTING OFFICE, BIOMEDICAL RESEARCH: HHS DIRECTION NEEDED TO ADDRESS FINANCIAL CONFLICTS OF INTEREST (2001); NAT'L BIOETHICS ADVISORY COMM'N, ETHICAL AND POLICY ISSUES IN RESEARCH INVOLVING HUMAN PARTICIPANTS (2001); OFFICE OF INSPECTOR GEN., DEP'T OF HEALTH & HUMAN SERVS., INSTITUTIONAL REVIEW BOARDS: A TIME FOR REFORM (1998) [hereinafter IRBS: A TIME]; OFFICE OF INSPECTOR GEN., DEP'T OF HEALTH & HUMAN SERVS., PROTECTING HUMAN RESEARCH SUBJECTS: STATUS OF RECOMMENDATIONS (2000) [hereinafter PROTECTING SUBJECTS]; OFFICE OF INSPECTOR GEN., DEP'T OF HEALTH & HUMAN SERVS., RECRUITING HUMAN SUBJECTS: PRESSURES IN INDUSTRY-SPONSORED CLINICAL RESEARCH (2000) [hereinafter RECRUITING SUBJECTS]; see also Robert Steinbrook, Improving Protection for Research Subjects, 346 New Eng. J. Med. 1425, 1425-26 (2002).
- 20. See, e.g., Hazel Glenn Beh, The Role of Institutional Review Boards in Protecting Human Subjects: Are We Really Ready to Fix a Broken System?, 26 LAW & PSYCHOL. REV. 1, 39-41 (2002); John Biemer, Research Overload?, HOUS. CHRON., Aug. 29, 2001, at 17A; Kerry Burke, Note, Loose-Fitting Genes: The Inadequacies in Federal Regulation of Institutional Review Boards, 3 B.U. J. SCI. & TECH. L. 10, ¶ 41 (Apr. 10, 1997), at http://www.bu.edu/law/scitech/volume3/3JSTL10.pdf.
- 21. See COMM. ON ASSESSING THE SYSTEM FOR PROTECTING HUMAN RESEARCH PARTICIPANTS, INST. OF MED., RESPONSIBLE RESEARCH: A SYSTEMS APPROACH TO PROTECTING RESEARCH PARTICIPANTS 5 (Daniel D. Federman et al. eds., 2003); Robert J. Levine, Institutional Review Boards: A Crisis in Confidence, 134 ANNALS OF INTERNAL MED. 161, 161 (2001) ("There is a sense of crisis in the country about the effectiveness of the nationwide system that protects the rights and welfare of human research subjects.").
- 22. For the Enron troubles, see *supra* notes 12-14 and accompanying text. As for WorldCom, in June 2002, the company announced that it had overstated its earnings by \$3.8 billion in previous years by treating various expense items inaccurately as capital investments. See Hamilton, supra note 3, at 21. The bad news led to a steep decline in the trading price of WorldCom stock, and the company eventually filed for bankruptcy in July 2002. *Id.* The company and its CEO, Bernard Ebbers, face numerous fraud charges filed by the SEC. *Id.* at 21-22.

The conduct of corporate boards features prominently in the current business scandals.²³ As with the current period of IRB crisis, this is perceived to be a critical time for corporate boards, "a watershed moment in U.S. corporate governance."²⁴

Although IRBs and corporate boards both seem to be navigating troubled waters, not all is bleak. For one, because of the renewed attention, reformers have come forward with ideas to improve the monitoring effectiveness of both corporate boards and IRBs. On the corporate governance side, significant legal and regulatory changes are already underway. For example, the recent Sarbanes-Oxley Act and revisions to the New York Stock Exchange and National Association of Securities Dealers listing requirements are pushing corporations to adopt different approaches to board composition and conduct. 25 Market pressures and other factors have also contributed to a renewed interest in more vigorous board performance.²⁶ On the IRB side, both the influential Institute of Medicine and the National Bioethics Advisory Commission recently issued reports calling for significant changes to the IRB system of human subjects research oversight.27 In addition, the Department of Health and Human Services has issued relatively new regulatory guidance directed at

^{23.} E. Norman Veasey, Chief Justice of the Delaware Supreme Court, noted that independent reports of the Enron and WorldCom collapses "point to colossal corporate governance failures of the boards of directors in carrying out their duties to direct the management of the business and affairs of the firms." E. Norman Veasey, Corporate Governance and Ethics in the Post-Enron Worldcom Environment, 38 WAKE FOREST L. REV. 839, 840 (2003).

^{24.} Elson & Gyves, supra note 12, at 856.

^{25.} See infra notes 139-40 and accompanying text; see also Elson & Gyves, supra note 12, at 856, 874-79 (discussing the New York Stock Exchange listing standards and the Sarbanes-Oxley Act as a response to the Enron failure).

^{26.} See Stephen M. Bainbridge, Director Primacy: The Means and Ends of Corporate Governance, 97 Nw. U. L. REV. 547, 562-63 (2003) (discussing several factors at play in the trend, taking hold in the 1990s, toward more active and effective director oversight, including the demands of institutional investors for more responsive boards); Veasey, supra note 23, at 840-41 (discussing the demands of institutional investors for more accountability and independence of directors, and lawyer reforms in this area).

^{27.} See COMM. ON ASSESSING THE SYSTEM FOR PROTECTING HUMAN RESEARCH PARTICIPANTS, INST. OF MED., supra note 21, at 44; COMM. ON ASSESSING THE SYSTEM FOR PROTECTING HUMAN RESEARCH SUBJECTS, INST. OF MED., PRESERVING PUBLIC TRUST: ACCREDITATION AND HUMAN RESEARCH PARTICIPANT PROTECTION PROGRAMS 6-21 (2001); NAT'L BIOETHICS ADVISORY COMM'N, supra note 19, at xi-xxi.

helping IRBs do a better job of evaluating investigator and institutional financial conflicts of interest.²⁸

What seems odd is that the many groups seeking to understand and improve the performance of IRBs and corporate boards have paid little attention to one another, perhaps oblivious to the similarities in governance and oversight undertaken by both types of boards. It is important to bridge this gap, especially for health law policy makers and scholars. This Article contributes to the ongoing debates over IRB reform by contending that a deeper, richer, more nuanced understanding of the IRB as an oversight and governance body is gained by considering how IRBs exhibit institutional strengths and limitations very similar to those of corporate boards.²⁹

Development of such comparative institutional analysis is particularly important for health law and policy scholarship in the area of human subjects research. Government estimates indicate that 3,000 to 5,000 IRBs now operate across the country. Indeed, the IRB serves as the "centerpiece" in the current regulatory system of protecting research subjects. Yet, scholars and policy makers experience understandable confusion and frustration in attempting to develop a coherent taxonomy for IRBs. Although IRBs historically looked and functioned very much like peer review committees, they have morphed into larger oversight bodies, comprised of both scientific peers and non-scientists, and have a complicated structure and perform numerous functions no longer limited to a traditional peer review body. The IRB defies easy categorization. It has at times been compared to the jury system, to a quasi-regulatory agency,

^{28.} See Financial Relationships and Interests in Research Involving Human Subjects: Guidance for Human Subject Protection, 69 Fed. Reg. 26,393, 26,395-97 (May 12, 2004).

^{29.} Conversely, scholars and reformers interested in corporate governance might benefit from paying greater attention to IRBs, but this latter inquiry—how an IRB perspective might impact corporate governance issues—is beyond the intended scope of this Article.

^{30.} See Office of Inspector Gen., Dep't of Health & Human Servs., Institutional Review Boards: Their Role in Reviewing Approved Research 3 (1998) [hereinafter IRBs: Their Role].

^{31.} Levine, supra note 21, at 161.

^{32.} For a discussion of the initial peer review committees, see infra Part I.A.

^{33.} See Carl H. Coleman, Rationalizing Risk Assessment in Human Subject Research, 46 ARIZ. L. REV. 1, 4, 13-27 (2004) (arguing that IRBs and juries follow similar decision-making processes).

^{34.} See Lars Noah & Barbara A. Noah, Law, Medicine, and Medical Technology:

and even to a "deputy sheriff" of the government.³⁵ Yet none of these descriptions fully captures its essential nature. The IRB remains a very strange entity, with diverse and not always consistent expectations about its performance. It is little surprise, then, that it has been described as an institutional "giraffe," because "so odd is it when compared to other creatures in the jungle."

Perhaps looking to the more developed track record of corporate boards can help. In short, this Article claims that the IRB "giraffe" can be better understood by considering how, functionally, it performs much like a mini-corporate board, overseeing significant components of the research enterprise within an institution, just as a corporate board oversees the general business of the firm. To start, and by way of qualification, it is acknowledged that obvious differences exist between the corporate board, a governance entity for the overall firm subject to shareholder elections and influenced by market forces, and the IRB, a body created by federal regulation and charged to protect research subjects. The more narrow position advanced here is that, despite the different environments in which they work and their distinct overall missions, examination of how IRBs and corporate boards actually operate reveals that they have much in common both structurally and functionally. The parallels are at least significant enough to merit greater attention to corporate governance debates by persons seriously interested in IRB reform. The comparison advanced in this Article also remains

CASES AND MATERIALS 155 (2002) (questioning whether it is appropriate for the FDA to delegate "quasi-regulatory" functions to IRBs when most IRBs are not, technically, government entities). Lars Noah emphasizes that IRBs do not exercise full regulatory powers as do bona fide agencies. Yet, IRBs may involve some limited governmental delegation of authority, at least to the extent that the federal agencies depend on IRBs as front-line monitors. Noah ultimately characterizes the IRB as an example of an "audited self-regulation" system. See Lars Noah, Deputizing Institutional Review Boards to Police (Audit?) Biomedical Research, 25 J. LEGAL MED. (forthcoming 2004); see also John A. Robertson, The Law of Institutional Review Boards, 26 UCLA L. REV. 484, 539 n.271 (1979) ("Like other governmental bodies, [IRBs] may have policy-making, executive, administrative, or even judicial powers: legislative powers when they prescribe rules and policies for implementing their mandate, executive powers in administering the review process, and judicial powers in deciding whether an investigator complied with IRB directives.").

^{35.} See Thomas A. Huff, The IRB as Deputy Sheriff: Proposed FDA Regulation of the Institutional Review Board, 27 CLINICAL RES. 103 (1979).

^{36.} Harold Edgar & David J. Rothman, The Institutional Review Board and Beyond: Future Challenges to the Ethics of Human Experimentation, 73 MILBANK Q. 489, 489 (1995).

intentionally limited to boards for public corporations. Boards of directors for close corporations present distinct issues that make them less analogous to IRBs. 37

IRBs and corporate boards suffer from remarkably similar drawbacks regarding their structure, composition, procedures, and operations. All of these factors combine to make these entities imperfect monitoring agents to represent the interests of their purported principals—research subjects and shareholders. example, individuals serving on IRBs and corporate boards face enormous conformity pressures and possible social sanctions for aggressive oversight. They can become entangled in and compromised by complex, personal relationships with each other and the very actors they are supposed to monitor. Additionally, IRBs and corporate boards are comprised of a mix of "inside" and "outside" interests. Corporate boards ordinarily include "inside" directors who are directly employed by the firm and "outside" directors, nonemployees who are nominally more independent. 38 Similarly, IRBs include "inside" members, typically researchers and other personnel who work within the institution, as well as "outside" members.

^{37.} There are many similarities in the relationships between: (1) the research subject and IRB, and (2) the shareholder and corporate board. Both the research subject and the shareholder depend upon a relatively well insulated board to monitor vigorously and to take actions for his or her benefit, even though he or she wields, as a practical matter, very little influence over the board.

The situation is very different, however, for close corporations. In close corporations, many shareholders typically serve on the board and are also officers. See David W. Leebron, Limited Liability, Tort Victims, and Creditors, 91 COLUM. L. REV. 1565, 1626 (1991). The different monitoring dynamics and relationships between the board and shareholders in the close corporation, therefore, make it a less useful comparison for understanding IRBs.

In addition, the limited focus of this Article does not include a discussion of nonprofit corporate boards. Nonprofit corporate boards have not been studied and analyzed as in-depth as the boards of publicly traded firms. There are, however, interesting parallels between IRBs and nonprofit boards. Just as in the research subject-IRB relationship, members of a nonprofit corporation depend on the board of trustees to act on their behalf, though the members often wield very little influence over the board. See, e.g., Geoffrey A. Manne, Agency Costs and the Oversight of Charitable Organizations, 1999 Wis. L. Rev. 227, 238-39 (describing the lack of member control over nonprofit boards).

^{38.} Employment by the firm is the traditional way of distinguishing "inside" from "outside" directors. See Laura Lin, The Effectiveness of Outside Directors as a Corporate Governance Mechanism: Theories and Evidence, 90 Nw. U. L. Rev. 898, 900 (1996). Others have questioned, however, how "outside" the perspective is of a non-employed director who represents an entity that does substantial business with the firm, such as a director employed by the firm's investment banker, outside auditor, or principal supplier. See id. at 900 n.8.

usually non-scientists drawn from the larger community who have no affiliation with the institution.³⁹ This inside/outside mix is fraught with complications in terms of how it affects a board's or IRB's overall monitoring effectiveness.

More generally, IRBs and corporate boards share a significant degree of insularity. They operate largely free from the controlling influence of individual research subjects and shareholders. Additionally, IRB members and corporate directors suffer from similar informational and time constraints in performing their duties. While IRB members and corporate directors are expected to exert monitoring effort, there exist disappointingly few clear external incentives for them to do so. As so much depends upon the goodwill and commitment of dedicated individuals serving on the boards, the effective performance of IRBs and corporate boards becomes quite difficult to ensure. Goodwill and commitment can be in short supply and, in any event, cannot compensate for all the inherent problems with corporate board and IRB review. IRBs and corporate boards raise the same critical challenge for health law and corporate law: who is monitoring the monitors?40 Moreover, why should these oversight bodies be trusted and even expected to do a good job?

Applying the corporate governance perspective helps to illuminate not only the problems in using the IRB as a monitoring body but also the IRB's unappreciated power and strength as an oversight and governance institution. In other words, although IRBs may not be particularly adept monitoring bodies, they should not be dismissed as useless and moribund. Corporate governance theorists similarly have struggled to understand why the corporate board, which seemingly has few legal and other incentives to act as a vigorous monitoring agent for shareholders, makes sense as a governance entity. The corporate governance literature, however, has identified multiple non-monitoring functions, such as acting as a mediating hierarch among different stakeholders in the firm, that the corporate board remains uniquely positioned to perform, even

^{39.} See infra notes 143-54 and accompanying text.

^{40.} See Ronald J. Gilson & Reinier Kraakman, Reinventing the Outside Director: An Agenda for Institutional Investors, 43 STAN. L. REV. 863, 873-76 (1991); Philip J. Hilts, In Tests on People, Who Watches the Watchers?, N.Y. TIMES, May 25, 1999, at F1.

if, at times, it is a weak monitoring agent.⁴¹ The corporate board experience suggests that the IRB remains positioned to perform important, non-monitoring functions as well—features which need to be accounted for in any proposed IRB reform.

Part I of this Article reviews the legal and historical background of IRBs. It briefly explores how IRBs first became part of the federal regulatory scheme, how they have evolved from peer review committees to take on a more complicated structure and multiple missions, and their central role in research oversight today. Part II explores the many shared features and characteristics of IRBs and corporate boards. Both entities raise many of the same agency cost problems, in that IRBs and corporate boards are poor monitoring representatives for their principals—research subjects and shareholders—for remarkably similar reasons.

Part III, drawing on corporate governance theory, discusses the monitoring trade-off problem of corporate boards. Corporate directors perform many important non-monitoring functions, such as mediating among the corporation's stakeholders and performing a service role in providing strategic planning advice to senior executives. Increasing the monitoring function, however, presents a dilemma, as it may make corporate boards less able to fulfill their significant non-monitoring roles adequately. This Part also considers how IRBs can perform overlooked, critical, non-monitoring functions too, such as mediating among the different stakeholders involved in an institution's research enterprise. Reform proponents should recognize that IRBs, like corporate boards, confront a monitoring trade-off dilemma as well.

Part IV explores preliminary implications of the corporate governance perspective by asking what IRB reformers could learn from corporate boards. It sounds a note of caution regarding two significant proposals currently attracting much support within the IRB reform movement: (1) efforts to increase the number of "outside" community members serving on IRBs; and (2) calls for IRBs to take a more direct role in reviewing financial conflicts of interest. The corporate governance perspective suggests that adjusting the insider/outsider mix likely will not register much of an impact

^{41.} See infra text accompanying notes 249-58 (discussing the corporate board's role as a mediating hierarch).

without also changing the underlying process by which all members are appointed to IRBs and without deeper modifications to IRB structures, procedures, and operations. As for financial conflicts of interest, the corporate governance perspective suggests that IRBs may be particularly ill suited for this type of review.

Part V concludes with a brief discussion of the importance of social norms, rather than laws and regulations, in understanding corporate board behavior. A critical lesson IRB reform proponents should heed from the experience of corporate boards is that improving board performance will require paying much greater attention to the norms surrounding IRB service.

I. LEGAL BACKGROUND: THE EVOLUTION OF IRBS AND THEIR ROLE IN RESEARCH REGULATION

Nearly all research proposals involving human subjects must obtain approval by an IRB. Yet for all the apparent power they wield, IRBs are incredibly strange institutions that are not necessarily well designed for their multiple assigned roles. The reasons for this can partially be found in a review of IRB history. Although IRBs originated as peer review committees, they have suffered from mission creep. That is, IRBs have been urged to perform not only peer review but also monitoring, ethical analysis, legal counseling, regulatory compliance, and policy formulation. At the same time, IRBs are also expected to reflect diverse viewpoints, including those of non-scientists. Thus, IRBs have morphed into hybrid entities that function very differently from their peer review body ancestors.

A. The Initial Peer Review Committees in the 1950s and 1960s

IRBs formally became part of the federal research regulatory scheme in 1974 through regulations issued by the Department of Health, Education, and Welfare,⁴² but their origins trace further back. The development of the Nuremberg Code⁴³ in the aftermath

^{42.} See Protection of Human Subjects, 39 Fed. Reg. 18,914 (May 30, 1974) (subsequently codified at 45 C.F.R. pt. 46).

^{43.} See The Nuremberg Code (1949), reprinted in Institutional Review Board: Management and Function 490-91 (Robert J. Amdur & Elizabeth A. Bankert eds., 2002).

of World War II and the Declaration of Helsinki in 1964⁴⁴ introduced critical new ethical standards for the conduct of human experimentation. These standards emphasized the individual rights of research subjects, the importance of informed consent, and the appropriate balancing of risks and benefits in presenting research opportunities to subjects.⁴⁵ The ethical guidelines, however, did not clearly call for separate review and approval of research protocols by distinct, deliberative bodies such as IRBs. Indeed, the original versions of these ethical guidelines pushed almost all responsibility for the conduct of trials onto the principal investigators.⁴⁶

However, in 1953, the National Institutes of Health (NIH) issued the first set of federal guidelines calling for some form of peer review of research studies by an investigator's professional colleagues. The guidelines applied only to some internal NIH studies. Apparently, the peer review idea came about in part because of concern for "normal," healthy research subjects who were not referred to a clinical trial by their doctor. Such volunteers, because they did not have regular treating physicians acting on their behalf, were thought to be particularly vulnerable and in need of peer review as an additional safeguard. During this period, several academic medical centers developed their own informal committees to review human subjects research within their own institutions, even though the then-current legal and ethical guidelines did not require it.

Despite the voluntary movement for separate reviewing bodies during the 1950s and 1960s, research abuses still occurred.⁵¹ The

^{44.} See World Med. Ass'n, Declaration of Helsinki (1964), reprinted in Institutional Review Board: Management and Function, supra note 43, at 499-500.

^{45.} See The Nuremberg Code, supra note 43, at 490-91; World Med. Ass'n, supra note 44.

^{46.} ROBERT J. LEVINE, ETHICS AND REGULATION OF CLINICAL RESEARCH 322 (2d ed. 1986).

^{47.} See id.; Marian F. Ratnoff, Who Shall Decide When Doctors Disagree? A Review of the Legal Development of Informed Consent and the Implications of Proposed Lay Review of Human Experimentation, 25 CASE W. RES. L. REV. 472, 502 (1975).

^{48.} See LEVINE, supra note 46, at 322; Ratnoff, supra note 47, at 502.

^{49.} See Ratnoff, supra note 47, at 501-02.

^{50.} See LEVINE, supra note 46, at 322-23.

^{51.} Ethical guidelines, such as the Declaration of Helsinki, had failed to register much of an impact and did not lead to widespread changes. See Jesse A. Goldner, An Overview of Legal Controls on Human Experimentation and the Regulatory Implications of Taking Professor Katz Seriously, 38 St. Louis U. L.J. 63, 92 (1993). For example, in an infamous study at the Jewish Chronic Disease Hospital in Brooklyn, investigators injected live cancer cells into

government, recognizing increasing public concern, expanded the use of peer review bodies in 1966, when the Surgeon General issued a policy directive requiring that most Public Health Service (PHS) funded research with human subjects, whether performed within NIH or in private institutions, undergo prior review by a committee of the investigator's peers. The review was supposed to focus on the rights of individual subjects, informed consent, and appropriateness of risks and benefits arising from the study. Later PHS policy directives clarified and expanded the peer review bodies' mission to include accounting for ethical concerns and compliance with relevant law. In addition, the Department of Health, Education, and Welfare (DHEW) extended the committee review requirement to all institutions receiving DHEW research funds.

Thus, the peer review bodies became saddled with mission creep. Their initial limited purpose—to act on behalf of healthy subjects who did not have preexisting relationships with physicians and to provide technical reviews of research proposals—dramatically expanded to consideration of ethical and legal issues. Yet, PHS's vaguely written policies provided few specific mandates for the reviewing bodies to follow. ⁵⁶ As a result, even as their potential functions expanded, the reviewing bodies were left without clearly defined standards to implement, leading to potential accountability and performance evaluation problems.

As the issues considered by peer review bodies expanded, natural questions arose as to their capacity. Committees comprised solely of the investigator and his physician peers would not necessarily have the training, expertise, or orientation necessary to tackle ethical and

elderly patients without their knowledge or consent. See Hyman v. Jewish Chronic Disease Hosp., 251 N.Y.S.2d 818, 820 (N.Y. App. Div. 1964). Henry Beecher's famous 1966 article in the New England Journal of Medicine catalogued numerous such examples of post-World War II studies that involved serious breaches of research ethics. See Henry K. Beecher, Ethics and Clinical Research, 274 NEW ENG. J. MED. 1354, 1355-59 (1966).

^{52.} See Dale H. Cowan, Human Experimentation: The Review Process in Practice, 25 CASE W. RES. L. REV. 533, 534-35 (1975); Charles R. McCarthy, The Institutional Review Board: Its Origins, Purpose, Function, and Future, in RESEARCH ON HUMAN SUBJECTS: ETHICS, LAW, & SOCIAL POLICY 301, 307 (David N. Weisstub ed., 1998) (discussing the Surgeon General's Policy and Procedure Order issued on February 8, 1966); Ratnoff, supra note 47, at 503.

^{53.} See Ratnoff, supra note 47, at 503.

^{54.} See LEVINE, supra note 46, at 323.

^{55.} See Robertson, supra note 34, at 488.

^{56.} See Goldner, supra note 51, at 95.

legal implications or to account for community viewpoints. Thus, by 1969, revised PHS guidelines strongly suggested that the reviewing bodies include non-scientists.⁵⁷ During this period, however, research scientists and physicians made up almost the entire membership of the committees, and the representation of other groups was extremely limited.⁵⁸

B. The National Research Act, Report of the National Commission, and Initial Regulations

Public concern about research practices continued to mount despite the implementation of the PHS peer review policies in the mid-1960s. The uneasiness with human subject experimentation was fueled by revelation of the federally funded Tuskegee syphilis study, in which poor African-American men, suffering from syphilis, were deliberately left untreated as part of a decades long investigation into the natural history of the disease. The Tuskegee scandal led to congressional hearings, demands for greater research oversight, and eventually new legislation and regulations. DHEW published final rules in May 1974, requiring that all DHEW-funded research involving human subjects undergo prior review and approval by a distinct research review committee. DHEW stood firm in its position that at least some persons not affiliated with the research institutions should serve on the committees.

^{57.} See LEVINE, supra note 46, at 324. Others have suggested that the move to include nonscientists on reviewing panels followed from developments in informed consent law. See Joan P. Porter, What Are the Ideal Characteristics of Unaffiliated/Nonscientist IRB Members?, 8 IRB 1, 1 (1986). As the reasonable patient approach developed in case law in some jurisdictions, clarifying that the disclosure obligation of the physician extended to what the reasonable patient would want to know, it was similarly thought that IRBs should include at least one nonscientist who could better represent a reasonable subject's point of view. See id.

^{58.} See LEVINE, supra note 46, at 323-24.

^{59.} See James H. Jones, Bad Blood: The Tuskegee Syphilis Experiment 1-2, 4-5 (new & expanded ed. 1993). Some of the research subjects were not even told that they had contracted syphilis. Id. at 5.

^{60.} See McCarthy, supra note 52, at 312-13; Robertson, supra note 34, at 488-89.

^{61.} See Protection of Human Subjects, 39 Fed. Reg. 18,914, 18,917-20 (May 30, 1974) (subsequently codified at 45 C.F.R. pt. 46). This followed DHEW's proposed regulations issued in 1973. See Protection of Human Subjects, 38 Fed. Reg. 27,882 (proposed Oct. 9, 1973) (subsequently codified at 45 C.F.R. pt. 46).

^{62.} DHEW maintained that the addition of such outsiders helped protect "against the

DHEW envisioned a committee structure that was more diverse and free of institutional interests than a completely internal peer review committee, the required presence of these outside members did not necessarily mean much pragmatically or set a very high bar.⁶³

In any event, shortly after DHEW finalized its research regulations in 1974, Congress passed the National Research Act. ⁶⁴ The Act required that institutions receiving DHEW research funds establish "Institutional Review Board[s] ... in order to protect the rights of the human subjects" ⁶⁵ In 1975, DHEW reissued its previous research regulations, relabeling the previous reviewing committees as IRBs, to meet the requirement of the National Research Act. ⁶⁶

The Act also authorized the creation of the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research (the Commission) and charged it, among other things, with further studying the role of IRBs. ⁶⁷ The Commission issued its IRB Report in 1978. ⁶⁸ It endorsed the view that, in addition to any protections offered to human subjects by informed consent requirements, an IRB review system independent of the investigator was needed. ⁶⁹ Among its interesting recommendations, the Commission advised that IRBs should be revamped as more effective monitoring bodies by: (1) giving them direct funding from DHEW research grants; (2) having at least one-third non-scientist membership; (3) rewarding members with institutional "credit" for their IRB service;

development of insular or parochial committee attitudes, ... assist[ed] in maintaining community contacts, and ... augment[ed] the credibility of the committee's independent role in protection of the subject." Protection of Human Subjects, 39 Fed. Reg. at 18,915.

^{63.} Under the initial set of regulations, the committees needed to include only one scientist and one person external to the research institution. See id. at 18,918. In addition, the committees could still meet and deliberate in quorums that did not require the presence of the nonaffiliated persons. Id. In other words, the committees were heavily tilted in favor of research and institutional interests.

^{64.} National Research Act of 1974, Pub. L. No. 93-348, 88 Stat. 342 (1974) (codified as amended in scattered sections of 42 U.S.C.).

^{65.} See National Research Act of 1974 § 212(a). This section was codified, but later omitted in the revision. Similar provisions now appear in 42 U.S.C. § 289.

^{66.} See Protection of Human Subjects, 40 Fed. Reg. 11,854 (Mar. 13, 1975) (subsequently codified at 45 C.F.R. pt. 46).

^{67.} See National Research Act of 1974 §§ 201-202.

^{68.} See Protection of Human Subjects, 43 Fed. Reg. 56,174 (Nov. 30, 1978).

^{69.} See id. at 56,175.

and (4) encouraging IRBs to obtain information on the progress of trials not only from the investigator but also through independent examinations of records, discussions with subjects, and direct observations of the enrollment and informed consent process.⁷⁰

In response to the Commission's recommendations, DHEW, which was subsequently renamed the Department of Health and Human Services (HHS), revised its research regulations again, issuing final rules in 1981.⁷¹ At approximately the same time, the FDA issued a parallel set of research regulations that were substantially similar to the HHS rules.⁷² The FDA regulations apply to clinical trials that are testing drugs and devices for FDA approval, whereas the HHS regulations apply to HHS-funded trials.

The final FDA and HHS regulations did not implement certain key recommendations of the Commission. In fact, the agencies made a series of pragmatic concessions and trade-offs, in which they were unable, or unwilling, to structure IRBs with the active monitoring capacity envisioned by the Commission. For example, the final regulations did not implement the Commission's recommendation that IRBs consist of at least one-third non-scientists, and they allowed IRBs to continue with membership that was largely dominated by scientific viewpoints. Nor did the final regulations require direct grant funding for IRBs, leaving their

^{70.} See id. at 56,176, 56,178.

^{71.} DHEW had issued a new set of proposed regulations in 1979. See Proposed Regulations Amending Basic HEW Policy for Protection of Human Research Subjects, 44 Fed. Reg. 47,688 (proposed Aug. 14, 1979) (subsequently codified at 45 C.F.R. pt. 46). The final regulations were issued in 1981. See Final Regulations Amending Basic HHS Policy for the Protection of Human Research Subjects, 46 Fed. Reg. 8,366 (Jan. 26, 1981) (subsequently codified at 45 C.F.R. pt. 46).

^{72.} The FDA had published its own proposed standards for IRB review of clinical investigations in August, 1978, before the Commission issued its report. See Standards for Institutional Review Boards for Clinical Investigations, 43 Fed. Reg. 35,186 (proposed Aug. 8, 1978). The FDA withdrew its proposal, however, after the Commission's report was issued. See Standards for Institutional Review Boards for Clinical Investigations; Withdrawal of Proposal, 44 Fed. Reg. 47,698 (Aug. 14, 1979). The FDA decided to try to harmonize its regulations with HHS and to respond to the Commission's report. When HHS issued its final regulations in 1981, the FDA issued a parallel set of final regulations that were substantially similar in terms of IRB review requirements and how IRBs function. See Protection of Human Subjects; Informed Consent, 46 Fed. Reg. 8,942, 8,950-53 (Jan. 27, 1981) (subsequently codified in scattered parts of 21 C.F.R.).

^{73.} See Final Regulations Amending Basic HHS Policy for the Protection of Human Research Subjects, 46 Fed. Reg. at 8,375-76.

ability to marshal resources appropriate for their responsibilities in a precarious state. The Finally, and critically important, the final regulations were considerably more vague than the Commission had recommended concerning IRB procedures for ongoing monitoring of already approved research studies.

C. Alternatives and What Might Have Been

The IRB system of review described in the final 1981 FDA and HHS rules is not the most obvious, logical choice for monitoring research conduct. Letting local institutions essentially police themselves seems to invite weak controls and investigator and institutional bias. Also, researchers serving on IRBs will, by professional orientation, be inclined to favor the pursuit of knowledge and may evaluate experimental protocols differently than reasonable subjects would. The IRB system, therefore, seems fundamentally flawed if it is meant to represent the views of research subjects.

For many of these reasons, other leading proposals of the day would have bypassed a local IRB system of review in favor of alternative procedures and monitoring bodies. For example, the Commission considered recommending regional or national review bodies that would have evaluated clinical research proposals, removed from the academic institutions themselves. An earlier ad hoc panel convened by DHEW to investigate the Tuskegee syphilis scandal had recommended a system under which most research protocols would undergo evaluation by separate, distinct peer and lay review committees, subject to appellate-like review by a national

^{74.} See id. at 8,386-91.

^{75.} All HHS required was that investigators submit progress reports to the IRB "at least annually." See id. at 8,378. It further stated that "[t]he precise procedure adopted by the IRB for continuing review without unnecessarily hindering research should be left to the discretion of the IRB." Id.

^{76.} As critics of the early IRB review system pointed out, "[i]f scientists have an understandably unique commitment to the value of the knowledge to be gained, their judgments about what lay people will want to know are likely to be systematically skewed." Robert M. Veatch, *The National Commission on IRBs: An Evolutionary Approach*, 9 HASTINGS CENTER REP. 22, 26 (1979).

^{77.} See Protection of Human Subjects, 43 Fed. Reg. 56,174, 56,175 (Nov. 30, 1978).

regulatory body that would oversee research trials.⁷⁸ Furthermore, in the legislative debates leading to enactment of the National Research Act, legislators introduced different bills that would have emphasized lay review and public attitudes regarding research to a larger degree than the local IRB system.⁷⁹

The Commission offered the following explanation for why it eventually favored a local IRB system of review rather than some of the leading alternatives:

Compared to the possible alternatives of a regional or national review process, local committees have the advantage of greater familiarity with the actual conditions surrounding the conduct of research. Such committees can work closely with [the] investigator to assure that the rights and welfare of human subjects are protected and, at the same time, that the application of policies is fair to the investigators. They can contribute to the education of the research community and the public regarding the ethical conduct of research. The committees can become resource centers for information concerning ethical standards and federal requirements and can communicate with federal officials and with other local committees about matters of common concern.⁸⁰

Although such considerations may have had some influence in why the final IRB system was selected, clearly pragmatic politics played a large part as well. The Commission, DHEW, and the FDA no doubt recognized that a regional or national system of review could prove costly and difficult to administer, particularly if clinical investigators, dissatisfied with such a review system, regularly tried to obstruct and evade it. A local IRB system of review likely seemed more palatable to the research community and, therefore, easier to implement.

Clearly, too, some element of path dependence was at play in the development of IRBs. Although the Commission and federal agencies had apparent discretion to consider a number of different options, they all recommended a structure that was substantially

^{78.} See Ratnoff, supra note 47, at 515-16.

See id. at 517 n.280.

^{80.} See Protection of Human Subjects, 43 Fed. Reg. at 56,175-76.

similar to what the previous DHEW regulations already required, and that followed from the earlier PHS and NIH peer review bodies.⁸¹ The perceived path of least resistance may have been to use the quasi-peer review mechanism that was already in place and build upon that institutional structure rather than start anew with radically different oversight bodies.

D. Regulatory Requirements and the Role of IRBs Today

The IRB review system finalized in the 1981 FDA and HHS regulations has continued to the present without significant change. Clinical trials involving human subjects, funded in whole or in part by HHS, usually require IRB review. Industry sponsored clinical trials developing drugs and devices for FDA approval—involving testing performed with human subjects—also generally require IRB review. Many academic medical centers and other research institutions file a general assurance with HHS and structure it to require IRB review and compliance with the FDA and HHS regulations for all human subjects research done on their premises, even if the research is not federally funded, or the IRB review is not otherwise required by the regulations. In addition, many foundations and other private research funding organizations require compliance with the FDA and HHS regulations, and therefore

^{81.} Indeed, the Commission seems to have followed a deliberately "gradualist" method of policy development by using much of the status quo framework and avoiding radical changes. See Veatch, supra note 76, at 23.

^{82.} See 21 C.F.R. §§ 50.1, 56.103 (2003) (FDA regulations); 45 C.F.R. §§ 46.101, 46.109 (2003) (HHS regulations). The general requirements of the research regulations, including the IRB review system, were extended to research funded or regulated by other federal agencies, apart from HHS and FDA, with the adoption of the "Common Rule" by multiple other federal agencies in 1991. See Federal Policy for the Protection of Human Subjects, 56 Fed. Reg. 28,003 (June 18, 1991); NAT'L BIOETHICS ADVISORY COMM'N, supra note 19, at 154. It is the FDA and HHS regulations, however, that have the broadest application, as they affect most clinical research activities with human subjects in the United States.

^{83.} See 45 C.F.R. § 46.103 (2003); Jeffrey M. Cohen, OHRP Federal-Wide Assurance, in Institutional Review Board: Management and Function, supra note 43, at 313. The assurance document is a type of contract between the research institution and HHS under which the institution agrees to abide by the federal regulations governing human subjects research, as well as to comply with appropriate ethical standards. The assurance formalizes the institution's undertaking to respect and protect research subjects. See 45 C.F.R. § 46.103 (2003); Jeffrey M. Cohen, OHRP Federal-Wide Assurance, in Institutional Review Board: Management and Function, supra note 43, at 313.

require IRB review, for any clinical trials that they support.⁸⁴ Non-institutional review boards, otherwise known as "independent review boards," also review some clinical research projects. However, independent review boards oversee only a small proportion of the overall number of research projects, with IRBs functioning as the dominant oversight institution.⁸⁵

IRBs' regulatory responsibilities today remain much the same as when DHEW first codified the initial set of IRB regulations. First, IRBs consider proposed research projects with human subjects under an initial review. This initial review generally consists of an examination of the proposed research design and protocol, informed consent documents, and any advertising or other recruitment devices. The IRB may vote to approve the project, to approve it with required modifications, or to reject it. In order to approve a project undergoing initial review, the regulations require IRBs to determine that: (1) risks to subjects are minimized through the use of a sound research design; (2) risks to subjects are reasonable in light of anticipated benefits to the subjects and the importance of the knowledge to be gained; (3) subjects are selected equitably; (4) informed consent will be obtained from subjects and documented; (5) when appropriate because of safety concerns, a plan is in place to monitor incoming data from subjects on the protocol; (6) there are adequate protections for protecting subjects' privacy and confidentiality; and (7) appropriate precautions are in place when particularly vulnerable subjects, such as children, prisoners, or the mentally disabled, will participate.86 In addition, IRBs must follow additional

^{84.} See Richard S. Saver, Critical Care Research and Informed Consent, 75 N.C. L. Rev. 205, 215-26 (1996).

^{85.} Independent review boards, often established by private, for-profit companies, operate outside of academic institutions. They offer their review services to investigators in private community practice who do not have a relationship with a local IRB or who may prefer to avoid going through a local IRB. See Office of Inspector Gen., Dep't of Health & Human Servs., Institutional Review Boards: The Emergence of Independent Boards i-ii (1998) [hereinafter IRBs: The Emergence]. Other than the fact that they are formally independent of any one institution, the board membership requirements and general oversight responsibilities of such independent review boards remain much the same as for local IRBs. See id. at 2-5.

^{86.} See 45 C.F.R. § 46.111 (2003); see also Susan Z. Kornetsky, Overview of Initial Protocol Review, in INSTITUTIONAL REVIEW BOARD: MANAGEMENT AND FUNCTION, supra note 43, at 143-51. Among the many important IRB tasks for initial review described here, possibly the most critical, is to ensure that subjects will receive adequate informed consent, that risk/benefit

procedures, and consider other safeguards, when the research involves fetuses, pregnant women, neonates, prisoners, children, and subjects in emergency situations who are unable to provide advance consent.⁸⁷

IRB responsibilities do not end with the initial review. They also must conduct continuing review of already approved research projects at appropriate intervals determined by the IRB, but in no event less than annually.⁸⁸ IRBs have authority to suspend or terminate research projects that fail to adhere to the requirements for initial approval. IRBs can also shut down research that leads to unexpected, serious harm to subjects.⁸⁹ IRBs regularly receive "adverse event reports" regarding serious, unexpected complications with research subjects⁹⁰ and consider such reports to determine whether any changes in the ongoing research project are warranted.

Under the current regulations, IRBs must be comprised of at least five persons with varying backgrounds to ensure adequate review of not only the scientific aspects of a protocol but also the acceptability of the proposed research in terms of institutional policies, applicable law, ethics, and professional standards of conduct. IRBs are not only required to be professionally diverse but also to include members of diverse gender, race, and cultural backgrounds to ensure the committee can take account of community attitudes and the differing viewpoints of potential research subjects. Despite the general aspirations for diverse membership, the regulations permit

ratios are at acceptable levels, and that the burdens and benefits of the research are distributed equitably across the population. See McCarthy, supra note 52, at 315-16 (describing the "paramount obligation and purpose of the IRB" as protecting research subjects through review of informed consent documents, determining that risks are reasonable in light of the research's benefits, and ensuring the risks/benefits are distributed equitably). Individual IRB members generally may not participate in deliberations about protocols in which they serve as the investigator or otherwise have a direct conflict of interest. See 45 C.F.R. § 46.107(e) (2003).

^{87.} See 21 C.F.R. §§ 50.24, 50.50-50.56 (2003); 45 C.F.R. §§ 46.201-46.207, 46.301-46.306, 46.401-46.409 (2003).

^{88.} See 45 C.F.R. § 46.109(e) (2003).

^{89.} See 45 C.F.R. § 46.113 (2003).

^{90.} See 21 C.F.R. § 56.108(b) (2003); 45 C.F.R. § 46.103(b)(5) (2003) (requiring research institutions to have procedures for prompt reporting of adverse events to the IRB, institutional, and agency officials); see also Barbara A. Noah, Adverse Drug Reactions: Harnessing Experimental Data to Promote Patient Welfare, 49 CATH. U. L. REV. 449 (2000).

^{91.} See 45 C.F.R. § 46.107(a) (2003).

^{92.} See id.

IRBs to be dominated by institutional and researcher representation. Only one non-scientist is required on a committee.⁹³ Also, though diversity surely includes views beyond the institution, an IRB need have only one member who is not affiliated with or employed by the institution.⁹⁴ As a result, the typical IRB member is a clinical researcher who works at the institution.

IRBs function largely as self-governing entities, but they are ultimately overseen by the Office for Human Research Protections (OHRP) within HHS, as well as by the FDA, as part of the agencies' implementation of the federal research regulations. Institutions file written assurances with OHRP regarding their IRB operations and procedures. OHRP also conducts a limited number of site visits to evaluate IRBs and to confirm that they are following written assurance documents and HHS requirements. The FDA also conducts occasional on-site audits of IRB operations. 95

II. THE SHARED MONITORING LIMITATIONS OF IRBS AND CORPORATE BOARDS

Given that the IRB today operates as a strange hybrid entity with many responsibilities, including scientific review, ethics guidance, regulatory compliance, and representation of community views, ⁹⁶ it should not be surprising that it has occasionally not met expectations. IRBs may not be very good at performing all these functions simultaneously. ⁹⁷ Yet despite much criticism of IRB effectiveness, few studies have examined how IRBs perform functionally in relation to comparable institutions. The corporate board serves a

^{93.} See 45 C.F.R. § 46.107(c) (2003).

^{94.} See 45 C.F.R. § 46.107(d) (2003); 45 C.F.R. § 46.107(e) (2003).

^{95.} See IRBS: THEIR ROLE, supra note 30, at 12-13; see also Gary L. Chadwick, Preparing for an FDA Audit, in Institutional Review Board: Management and Function, supra note 43, at 359-64; Thomas Puglisi & Michele Russell-Einhorn, Preparing for an OHRP Site Visit, in Institutional Review Board: Management and Function, supra note 43, at 365-69.

^{96.} See, e.g., Susan M. Wolf, Law & Bioethics: From Values to Violence, 32 J. L. Med. & Ethics 293 (2004).

IRBs are a perfect example of a body conceived to do both law and ethics. They are required to apply the federal regulations, which are law, but those regulations are so open-textured and the overriding mission of IRBs is so clearly to protect human subjects, that IRBs must do ethics too.

^{97.} See Goldner, supra note 51, at 104-05; Veatch, supra note 76, at 26.

useful reference point for critically assessing the advantages and weaknesses of the IRB as a governance and oversight institution.

Of course, IRBs and corporate boards have obvious, important differences. Shareholders elect directors for general oversight and monitoring of the corporation in the firm's many broad areas of activity. Boards of directors engage in a variety of important decisions, from hiring and firing key management, setting general strategy for the corporation, and playing a prominent procedural role in structuring major transactions and corporate combinations. Boards of directors also feel the push and discipline of external market pressures, including the market for corporate control and the market for directors.98 IRBs, in contrast, are more narrow oversight bodies. Their more limited focus concerns protection of human research subjects. Rather than open-ended governance of the firm, they perform circumscribed activities and derive their limited authority from the HHS and FDA regulations. IRBs also operate with little influence felt from external markets. The corporate board-IRB parallels need not be exact, however, to have possible explanatory and predictive power. The experience of corporate boards still can offer key insights as to the IRB's problem areas as a monitoring body.

A. Agency Relationships and the Classic Monitoring Function of Both Boards

To appreciate why both institutions present similar governance and oversight problems, it is first necessary to examine the underlying agency relationships. In the standard definition of an agency relationship, the agent acts on behalf of the principal and

^{98.} Institutional investors and Wall Street analysts constantly monitor the performance of directors to the extent that they evaluate the performance of the company that the directors run. See Jonathan R. Macey, Efficient Capital Markets, Corporate Disclosure, and Enron, 89 CORNELL L. REV. 394, 402-06 (2004). Plus, the market for corporate control supposedly disciplines underperforming directors. See id. at 406-07. Companies that are run poorly will experience depressed share prices, which will attract corporate acquirers who may see an opportunity to purchase a controlling interest in the company, throw out the current management (including electing a different board), and run the company more profitably. Id. Finally, because there is a market for directors, they compete for a limited number of board seats. Underperforming directors risk being passed over for renomination to the board in favor of more talented persons.

subject to the principal's control. 99 Traditional application of agency theory to the corporate setting states that boards of directors act as agents for the firm's shareholders. 100 Thus, a norm of "shareholder primacy" underlies corporate governance, with corporate law urging directors to govern the firm with the goal of maximizing shareholder interests. 101 Agency theory posits that shareholders need to make use of boards of directors as agents because of the separation of ownership and control in the modern corporation. This division exposes shareholders to risks of managerial opportunism, shirking, and incompetence. Also, even well-meaning managers may view risks differently than shareholders and take actions divergent from shareholders' preferences. 102 All such costs are a form of agency costs that inherently arise from the fact that managers, and not shareholders, directly run the corporation day to day. 103 The board of directors helps minimize such agency costs on behalf of shareholders. The board can hire and fire senior management, set compensation incentives, oversee the accounting, auditing, and financial reporting activities of the corporation, and take other actions to ensure that management acts for the shareholders. This is the classic, vitally important "monitoring" function performed by the corporate board. 104

Many critique the conventional, principal-agent view of the shareholder-director relationship as not accurately describing how corporate boards really function, because corporate directors, as purported agents, enjoy unfettered discretion from the control of shareholders as principals. ¹⁰⁵ Indeed, directors may, at times, take actions that further other stakeholders' interests in the corporation, such as favoring creditors and bondholders over shareholders in deciding whether to pursue risky investments when the firm is on

^{99.} RESTATEMENT (THIRD) OF AGENCY § 1.01 (Tentative Draft No. 2, 2001).

^{100.} See, e.g., Bainbridge, supra note 26, at 548, 565.

^{101.} See, e.g., Alan J. Meese, The Team Production Theory of Corporate Law: A Critical Assessment, 43 Wm. & MARY L. REV. 1629, 1631 (2002).

^{102.} See id. at 1637-39, 1637 n.28.

^{103.} See id. at 1638.

^{104.} See, e.g., MELVIN ARON EISENBERG, CORPORATIONS AND OTHER BUSINESS ORGANIZATIONS: CASES AND MATERIALS 203-05 (8th ed. 2000).

^{105.} See Margaret M. Blair & Lynn A. Stout, Director Accountability and the Mediating Role of the Corporate Board, 79 WASH. U. L.Q. 403, 405-07 (2001); see also infra notes 249-58 and accompanying text.

the brink of insolvency. ¹⁰⁶ Some view the board, therefore, as not in a traditional agent-principal relationship with shareholders but operating as more of an independent institution. ¹⁰⁷ Nonetheless, the classic agency view of directors continues to find much support. Even if one concedes that directors may act for stakeholders other than shareholders or concedes that the board may consider something other than maximizing shareholder welfare, directors can still be viewed as acting for shareholder interests so frequently and to such a large degree that the norm of "shareholder primacy" and the view that directors perform at least as quasi-agents for shareholders continue to find much support. Indeed, the principal-agent model remains the "dominant paradigm" in corporate law. ¹⁰⁸

IRBs can similarly be viewed as acting as agents for another set of principals—human research subjects. The relationship of the IRB to human research subjects, however, does not fall neatly within the technical definition of a classic agency relationship. The control element in the agency relationship is lacking as research subjects have almost no ability to control the IRB. ¹⁰⁹ The principal also ordinarily manifests some expression of intent that the agent will act on the principal's behalf for an agency relationship to arise. ¹¹⁰ It is doubtful whether most research subjects can be said to assent to IRBs acting on their behalf, for ordinary clinical trial participants may not even understand the research regulatory scheme well enough to know what IRBs do and how they function. ¹¹¹

^{106.} For Chancellor Allen's opinion stating that when the corporation approaches insolvency, the directors are not mere agents of the shareholders but owe a duty to the larger corporate enterprise, see, e.g., Credit Lyonnais Bank Nederland, N.V. v. Pathe Communications Corp., No. 12150, 1991 WL 277613, at *34 (Del. Ch. Dec. 30, 1991). Certain corporate constituency statutes also permit the board to consider the interests of parties other than shareholders. See, e.g., 15 PA. CONS. STAT. ANN. § 1716(a) (West 1995) (permitting directors, in discharging their duties, to consider the effects of corporate action on the firm's employees, suppliers, customers, and the communities where the firm does business).

^{107.} See, e.g., Bainbridge, supra note 26, at 550-51 (arguing that the board can be viewed as a "sui generis body—a sort of Platonic guardian" that serves as the nexus for the various contracts that make up the firm).

^{108.} See Meese, supra note 101, at 1701-02.

^{109.} See infra notes 117-19 and accompanying text.

^{110.} An agency relationship is created when the principal manifests assent that the agent shall act on his behalf. See RESTATEMENT (THIRD) OF AGENCY § 1.01 (Tentative Draft No. 2, 2001).

^{111.} Even if a consent form mentions the local IRB to the research subject—alerting the subject to bring questions or concerns about the research to the IRB—it is questionable

Thus, IRBs are quasi-"agents" for research subjects in a more loose sense of the term, to the extent that their raison d'etre is to act for the benefit of research subjects. 112 Indeed, the conventional explanation given for why the IRB review system exists is that IRBs protect research subjects. 113 Akin to the classic monitoring function of the corporate board, the IRB monitors for its principals. Informed consent alone is regarded as insufficient protection, because research subjects, in vulnerable states and facing significant informational disadvantages, can be convinced to consent to unsafe, poorly designed, or unethical research. The IRB's examination of proposed protocols thus becomes a very important second level of review. 114 IRBs also can monitor by sanctioning noncomplying researchers, including, among other actions, withholding IRB approval for ongoing or future clinical trials. The IRB also can set record-keeping requirements and audit clinical trials to keep track of researchers' activities. As with corporate boards and the perceived norm of shareholder primacy, one sees a norm of research subject primacy in IRB operations. 115

whether the IRB's existence has any significant impact on a subject's decision to participate in a clinical trial in the first place.

^{112.} One reviewer of an earlier draft of this Article suggested that because IRBs and research subjects do not squarely fall within the classic definition of an agency relationship, it might be more accurate to refer to IRBs as "reputational intermediaries" of research subjects rather than as their agents. Whether viewing IRBs as quasi-agents or reputational intermediaries, the fundamental analogy to corporate boards still offers useful insights. Both boards perform classic monitoring functions for third parties, yet both boards display similar weaknesses as monitoring bodies. Both boards are also insular, enjoy a great deal of discretion, and lack clear incentives to perform as vigorous monitors for the third parties they supposedly represented. Thus, whether the underlying relationships involve classic agency or not, the fundamental monitoring challenges and limitations exhibited by corporate boards can offer key insights to understanding how IRBs operate.

^{113.} See 21 C.F.R. § 56.102(g) (2003) ("[T]he primary purpose of [IRB] review is to assure the protection of the rights and welfare of the human subjects."); McCarthy, supra note 52, at 315-16 ("[T]here has never been any question that the paramount obligation and purpose of the IRB is to protect the rights and welfare of human research subjects.").

^{114.} See Protection of Human Subjects, 39 Fed. Reg. 18,914 (May 30, 1974) (emphasizing the important roles research review committees play in addition to creating the requirements for securing subjects' informed consent); IRBS: THEIR ROLE, supra note 30, at 4.

^{115.} IRB members typically report that they perceive their primary role as acting on behalf of research subjects. See, e.g., Sohini Sengupta & Bernard Lo, The Roles and Experiences of Nonaffiliated and Non-Scientist Members of Institutional Review Boards, 78 ACAD. MED. 212, 215 (2003) (noting that the majority of non-affiliated, non-scientist members of IRBs report that they feel their role is to represent the "community of human subjects").

B. Imperfect Agents and Weak Monitoring Bodies

Despite the norms of shareholder and research subject primacy and the classic monitoring function ascribed to IRBs and corporate boards, these bodies often may not do a very good job of representing their respective principals' interests. This should not come as a surprise. In most agency relationships, a principal cannot ensure that the agent will always take actions optimal from the principal's standpoint without incurring significant additional monitoring and bonding costs. ¹¹⁶ Yet IRBs and corporate boards seem particularly ill-suited to perform as effective monitoring agents for remarkably similar reasons.

1. Election and Removal

First, corporate directors and IRB members operate largely free from the controlling influence of their principals. As a practical matter, shareholders and research subjects have little opportunity to decide which persons serve on these boards and have limited ability to remove them. An individual research subject has no legal right to gain appointment to an IRB or to elect the members of an IRB. Institutional officials determine the IRB's composition. Ordinarily, the medical center's senior management, with the help of clinical department chairs, decides which persons should be appointed. Once an IRB is up and running, it is not uncommon for the IRB chair and current IRB members themselves to have significant input as to which new members to invite to join the board. Removal of IRB members also lies beyond the reach of the individual research subject; removal authority remains with the

^{116.} See, e.g., Theresa M. Welbourne & Luis R. Gomez Mejia, Gainsharing: A Critical Review and a Future Research Agenda, 21 J. MGMT. 559, 577-82 (1995) (discussing the monitoring, bonding, and residual loss costs inherent in agency relationships).

^{117.} The only possible legal hook for research subject representation on IRBs is the regulation stating that if an IRB regularly reviews research that involves vulnerable subjects, such as prisoners, pregnant women, or the mentally disabled, that "consideration shall be given to inclusion of one or more individuals who are knowledgeable about and experienced in working with these subjects." 45 C.F.R. § 46.107(a) (2003). This is phrased as a recommendation, however, rather than a regulatory requirement, and even then the representative is still chosen by the institution and may be someone only familiar with these groups, rather than an actual research subject.

institution.¹¹⁸ Even with the recent research scandals at major medical centers, there are almost no reported instances of the forced removal of particular IRB members at the troubled institutions.¹¹⁹ In short, the IRB experience so far has been that the typical IRB member faces little risk of being removed once appointed.

In theory, shareholders have greater opportunity regarding selection and removal of their representatives than research subjects. Shareholders, after all, elect the board of directors annually, and the voting right to elect directors is regarded by courts as one of the most fundamental rights of share ownership. ¹²⁰ Shareholder voting theoretically serves as one of the limited means for shareholders to discipline the board for poor oversight of the corporation by voting out the current slate of directors. ¹²¹

In practice, however, the shareholder franchise provides a very weak system for shareholders to influence their choice of directors or to influence director conduct. Corporate management has largely captured and controlled shareholder voting contests in publicly traded corporations. Nominations to a board of directors are typically made by a committee of the current board, with the CEO often playing a critical and decisive behind-the-scenes role in deciding which persons are nominated. Shareholders disappointed with management's nominees to the board must mount a costly and time-consuming proxy battle to try to get other persons elected to the board. Not surprisingly, shareholders tend to be rationally apathetic and disinclined to vote in director elections. 123

^{118.} The final IRB regulations are silent on many key details regarding appointment and removal of IRB members, but the earlier Commission Report recommended that IRB members be appointed for terms of at least one year. Also, removal of members was not to be permitted, according to the Commission's view, except for good cause. The Commission envisioned an IRB that had relatively stable membership from year to year in order for it to perform with consistency and for members to benefit from increased experience in reviewing research proposals. See Protection of Human Subjects, 43 Fed. Reg. 56,174, 56,178 (Nov. 30, 1978).

^{119.} See infra note 233.

^{120.} See Blasius Indus., Inc. v. Atlas Corp., 564 A.2d 651, 659 (Del. Ch. 1988) (describing shareholder voting as "the ideological underpinning upon which the legitimacy of directorial power rests").

^{121.} The other commonly identified alternative for shareholders dissatisfied with corporate performance in publicly traded corporations is to sell their stock.

^{122.} See Lin, supra note 38, at 913-14.

^{123.} See Douglas R. Cole, E-Proxies for Sale? Corporate Vote-Buying in the Internet Age, 76 WASH. L. REV. 793, 808-09 (2001).

They may view their limited holdings as not decisive to a vote in which a large number of shares will be cast, they may be content to free-ride on the work and effort of other shareholders who will gather the costly information necessary to decide how to cast a vote, and they face coordination and collective action problems in gathering information and voting in sync so as to wield true voting power.¹²⁴

Institutional investors, who hold investments over the long-term and in larger proportions to justify greater monitoring through use of the shareholder franchise, could be expected to make director elections more contested and representative of shareholder demands. Evidence of institutional investors having a major impact on director elections remains limited, however, and "the nonreviewability by shareholders of board decisions seems to be an inherent and enduring characteristic of the corporate form." Recent corporate governance reforms attempt to make nominations for board election less subject to the influence of the CEO, such as through the use of nominating committees comprised exclusively of independent directors or by implementing the SEC's proposal to require certain companies to include shareholder nominees for director slots in the company's proxy materials. It is simply too early, however, to determine the impact of such reforms.

2. Board Size, Composition, and Insider/Outsider Mix

IRBs and corporate boards function as deliberative bodies; most major decisions cannot be made unilaterally by individual persons but require the presence and participation of a quorum of the board. Consideration of overall board size, and which constituencies predominately are represented on the board, is therefore key to

^{124.} See id. at 805-08.

^{125.} See, e.g., John H. Matheson & Brent A. Olson, Corporate Cooperation, Relationship Management, and the Trialogical Imperative for Corporate Law, 78 MINN. L. REV. 1443, 1464-65 (1994).

^{126.} Bainbridge, supra note 26, at 571-72.

^{127.} See Securities and Exchange Commission, Self-Regulatory Organizations; New York Stock Exchange, Inc. and National Association of Securities Dealers, Inc.; Order Approving Proposed Rule Changes, 68 Fed. Reg. 64,154, 64,158, 64,163 (Nov. 12, 2003).

^{128.} See Security Holder Director Nominations, Exchange Act Release Nos. 34-48626, IC-26206 (Oct. 17, 2003), available at http://www.sec.gov/rules/proposed/34-48626.htm.

understanding how board decisions are reached and the extent to which shareholder and research subject interests are taken into account. Both institutional bodies are roughly similar in size. While many corporation statutes permit boards of directors to consist solely of one person, with little in the way of formal required qualifications, ¹²⁹ most corporate boards are larger, with estimates of average board size for non-close corporations ranging from seven to nine directors on the lower end to an average of thirteen directors. ¹³⁰ As for IRBs, the federal regulations require at least five members with varying backgrounds, ¹³¹ but larger, leading research institutions tend to have IRBs consisting of between fifteen and twenty members. ¹³²

Both corporate boards and IRBs have been criticized for following the agenda of inside interests at the expense of shareholders and research subjects. For corporate boards, a recurring concern is whether the directors as a group can remain sufficiently independent from the corporation's internal senior officers, particularly when the board includes inside directors who are employees of the firm and who are drawn from the management ranks. ¹³³ Inside directors may be averse to challenging the CEO. ¹³⁴ In addition, insiders may share the same biases of current management in viewing the corporation's performance and, thus, even if not acting out of self-interest, remain overconfident about certain plans of action. ¹³⁵ Outside directors are thought to be in a much better position to

^{129.} See DEL. CODE ANN. tit. 8, § 141(b) (2002).

^{130.} See Stephen M. Bainbridge, Why a Board? Group Decisionmaking in Corporate Governance, 55 VAND. L. REV. 1, 42 & n.172 (2002) (noting that the National Association of Corporate Directors survey indicated that forty-four percent of boards reviewed had between seven and nine members); Daniel P. Forbes & Frances J. Milliken, Cognition and Corporate Governance: Understanding Boards of Directors as Strategic Decision-Making Groups, 24 ACAD. MGMT. REV. 489, 492 (1999) (suggesting the average board size is thirteen members). Similarly, the average Fortune 500 company board consists of thirteen directors. See Edward B. Rock, Saints and Sinners: How Does Delaware Corporate Law Work?, 44 UCLA L. REV. 1009, 1013 n.7 (1997).

^{131.} See 45 C.F.R. § 46.107(a) (2003).

^{132.} See IRBs: A TIME, supra note 19, at 8.

^{133.} For an explanation of the distinction between inside directors and outside directors, see *supra* note 38 and accompanying text.

^{134.} See, e.g., Lin, supra note 38, at 901.

^{135.} See Donald C. Langevoort, The Human Nature of Corporate Boards: Laws, Norms, and the Unintended Consequences of Independence and Accountability, 89 GEO. L.J. 797, 803 (2001).

question current management, raise dissonant viewpoints, and willingly perform an active monitoring role on behalf of shareholders. Even among outside directors, however, a desire to maintain ongoing business relationships with the firm can raise questions about their ability to take independent action and challenge management. ¹³⁶

For many years, inside directors dominated corporate boardrooms, with outside directors relegated to a passive, behind-thescenes role. Recently, however, corporate law changes and other forces have combined to lead to nominally greater outsider representation in the boardroom. ¹³⁷ First, institutional investors have used their market clout to advocate for more outside directors. ¹³⁸

Second, the recent Sarbanes-Oxley Act, enacted partially in response to the Enron debacle and criticisms over the role of the Enron board, increases the need for and prominence of outside directors. Among other changes, the new law requires that every public company have an audit committee comprised of solely independent outside directors. It also bolsters the audit committee's power by authorizing the committee to hire and fire the company's outside auditor and to retain its own counsel and advisors in conducting investigations of the company. 139

Third, and also in response to the recent corporate scandals, the New York Stock Exchange (NYSE) and the National Association of Securities Dealers Stock Market (NASDAQ) have revised the

^{136.} For example, several of the outside directors for Enron were criticized for performing consulting services and participating in ongoing business relationships with Enron. Even Dr. Mendelsohn's capacity for independence as an outside Enron director was called into question because his own institution, M.D. Anderson Cancer Center, received sizable charitable donations from Enron and its senior officers. See Elson & Gyves, supra note 12, at 872-73; see also infra notes 296-317 and accompanying text (describing factors that may make outside directors less than truly independent).

^{137.} Even before the recent changes arising from Sarbanes-Oxley and the revisions to the NYSE/NASDAQ listing requirements, see *infra* notes 139-40 and accompanying text, studies indicated that among large firms with a market capitalization of ten billion dollars or greater, approximately 66% of the board members were independent in that they had no employment or direct service relationship with the corporation. See Melvin A. Eisenberg, Corporate Law and Social Norms, 99 COLUM. L. REV. 1253, 1279 n.70 (1999); see also Langevoort, supra note 135, at 798.

^{138.} See Jonathan Johnson et al., Boards of Directors: A Review and Research Agenda, 22 J. MGMT. 409, 416 (1996).

^{139.} See Sarbanes-Oxley Act of 2002, Pub. L. No. 107-204, §§ 201-301, 116 Stat. 745 (2002); see also Elson & Gyves, supra note 12, at 878-79.

requirements for publicly traded corporations listed on their exchanges. Principal among the reforms is a common requirement that the board of each listed company consist of a majority of independent directors, with the definition of "independent" narrowed to preclude certain outside directors who have significant, ongoing business relationships with the company and persons who work for the company's outside audit firm.¹⁴⁰

Even though the proportion of inside directors in the boardroom has likely dropped over recent decades, this trend has not necessarily diminished the influence of inside interests. Given the realities of how director elections work, current management has played a large behind-the-scenes role in determining which outside directors get nominated by the board's nominating committee and eventually get elected to the board.141 Also, many so-called "independent" outside directors have had personal relationships with senior management and the CEO. This social interdependence makes it more difficult for outside directors to assume an active monitoring role.142 Whether the trend toward adding more outside directors means that corporate boards have evolved into truly more independent monitoring bodies remains a highly debatable, thorny question. It is also simply too early to determine the true impact of the very recent Sarbanes-Oxley Act and NYSE/NASDAQ reforms elevating the role of independent directors.

An inside/outside mix in board composition similarly complicates IRB operations. This confounding factor may hinder IRBs' overall monitoring effectiveness. As discussed above, the regulations permit inside institutional and researcher constituencies to dominate IRBs. Only one nonscientist and only one member who is not affiliated with the institution must serve on an IRB. He Most IRBs

^{140.} See generally Securities and Exchange Commission, Self-Regulatory Organizations; New York Stock Exchange, Inc. and National Association of Securities Dealers, Inc.; Order Approving Proposed Rule Changes, 68 Fed. Reg. 64,154, 64,156-66 (Nov. 12, 2003). Another significant reform is the requirement that the independent directors of listed corporations meet periodically in closed session, without the other directors present. See id. at 64,158, 64,162.

^{141.} See Lin, supra note 38, at 913-14.

^{142.} See Gilson & Kraakman, supra note 40, at 874-85; see also infra notes 296-307 and accompanying text.

^{143.} See supra note 73 and accompanying text.

^{144.} See 45 C.F.R. §§ 46.107(c)-(e) (2003).

today include only a token number of non-insiders. IRBs of up to fifteen members have, for example, typically included only one or two persons not affiliated with the institution.¹⁴⁵

The nonscientist or nonaffiliated IRB members, referred here collectively for simplicity as the "outside" IRB members, 146 can be seen as the equivalent of the outside directors on the corporate board. Just as so many efforts at improving corporate governance have focused on the outside directors, enhanced IRB monitoring and oversight may hinge on the outside IRB members. Outside IRB members, for example, may force the board to consider the layperson's or research subject's view and help to combat the other board members' likely biases in favor of experimentation and research. 147 Outside IRB members may also prove more resilient to the constant pressures within many institutions for quick and easy IRB approval. Academic medical center economics and norms can make it quite daunting for inside IRB members to vote to delay important research protocols, as everyone within the institution recognizes the need for a steady flow of research dollars in order for the institution as a whole to thrive. 148

^{145.} See IRBS: A TIME, supra note 19, at 8. The Office of Inspector General survey indicated that IRBs seldom maintained better than a one-to-five ratio of outside to inside members. See IRBS: THEIR ROLE, supra note 30, at 11.

^{146.} Whether an IRB member is non-affiliated or a non-scientist are two distinct inquiries. Some IRBs draw a portion of their non-scientist members from within the institution, such as when persons from the medical center's counsel or ethics office serve on the IRB. However, non-scientists drawn from within the institution are still "outsiders" to the extent that they have a different perspective than the typical researcher. In any event, the total number of non-scientists and non-affiliated persons ordinarily serving on the IRB is quite small compared to the rest of the board.

^{147.} Because of their work as research scientists, clinical investigators on the board have special insight into the value of conducting clinical trials but do not necessarily have any special appreciation for risks to subjects' welfare. The inside IRB members may tend to overstate and overvalue the benefits of a protocol while discounting the risks. See Peter C. Williams, Success in Spite of Failure: Why IRBs Falter in Reviewing Risks and Benefits, 6 IRB 1, 2 (1984).

^{148.} See Trudo Lemmens & Paul B. Miller, The Human Subjects Trade: Ethical and Legal Issues Surrounding Recruitment Incentives, 31 J. L. MED. & ETHICS 398, 406 (2003) ("Members of academic IRBs may sometimes themselves feel the financial pressures facing their institution, as for example where they realize what the rejection of a lucrative study could mean for funding of research at the institution."). On the other hand, outside IRB members not dependent on the institution for their careers may be less prone to such pressures, as they "are uniquely positioned on the IRB to put people first, unhampered by personal ambition, scientific bias, interdepartmental rivalry, or the profit motive." Patricia E. Bauer, A Few Simple Truths About Your Community IRB Members, 23 IRB: ETHICS &

If effective IRB representation of research subject interests depends so critically on the outside members, then the token number of outsiders on the typical board poses obvious and serious problems. Yet the difficulties go deeper than sheer numerical representation. A number of factors suggest that researcher interests dominate not only the number of board positions but also how the boards actually function. ¹⁴⁹ Nonaffiliated IRB members are most often recruited by their friends and acquaintances already serving on the IRB or working within the institution, and the nonaffiliated members rarely compete for the slots or go through a formal interview process for the position. ¹⁵⁰ Institutional officials can be expected to select outside members who share values and goals that closely match those of the research institution. As Robert Veatch has noted:

If one of the goals of IRB review is to apply the values and principles of the broader society and/or the subject groups in deciding whether the rights and welfare of subjects are being adequately protected, it would be surprising if that goal could be achieved by a group selected by local institutional officials who have very special and sometimes idiosyncratic sets of values. ¹⁵¹

Even accounting for the outside members, therefore, IRBs might more accurately be characterized as agents of the institution rather than as agents of the research subjects. ¹⁵²

Moreover, outside IRB members often have very little in common with the average research subject. Their socioeconomic backgrounds and educational levels vary considerably from the average patient, making them questionable proxies. ¹⁵³ Non-scientist members of

HUM. RES. 7, 7 (2001).

^{149.} See Goldner, supra note 51, at 106.

^{150.} See, e.g., Porter, supra note 57, at 6 (stating that a large number of unaffiliated IRB members report that they were recruited by the IRB chair or a friend/acquaintance also on the board and that the appointment process was rather ad hoc and informal).

^{151.} Veatch, supra note 76, at 27.

^{152.} See LEVINE, supra note 46, at 342-43.

^{153.} See Porter, supra note 57, at 2 (noting that a survey of non-scientist, non-affiliated IRB members revealed that many held doctoral and masters degrees and they could hardly be viewed as "average citizens"); NAT'L BIOETHICS ADVISORY COMM., supra note 19, at 63 ("Professionals who are nonscientists might be no more able to represent the view of low-income or seriously ill participants, for example, than scientists.").

IRBs also face legitimate questions about their capacity to be vigilant monitors. Often lacking clinical and scientific expertise, they may not be in a position to recognize and understand fully the technical risk and benefit issues embedded within the protocol description, and they will have to follow the lead of the inside members. They also may find their questions and concerns dismissed or talked over by persons with clinical training on the board. Outside IRB members also lack knowledge of the inner workings, policies, and procedures of the institution. This can put them at a clear disadvantage in their attempts to gather information and keep track of clinical investigators' activities.

3. Time Constraints

Corporate directors and IRB members typically serve on the board as only a part-time activity. Their limited time commitment seems increasingly disproportionate to the expanding tasks and responsibilities confronting corporate boards and IRBs. Corporate boards and IRBs are episodic bodies; most deliberations and major decisions require a scheduled formal meeting with a quorum of the board present. Boards of publicly held corporations meet an average of only eight times a year and estimates indicate that directors spend the equivalent of only fifteen working days a year on board matters. Directors can realistically keep up with only so much given the limited time devoted to board affairs. 156

Outside directors in particular may face severe time constraints, as they have competing time demands from their positions external to the corporation. As outside directors may be new to the corporation, there is also a learning curve to overcome about firm history and operations. Efforts to gather information and to monitor effectively will require significant up-front investment of time and other resources, yet there are few incentives for outside directors to

^{154.} See Bauer, supra note 148, at 7 ("In the alphabet-soup world of the highly credentialed [inside IRB members], the input of these singleton community members is easily overlooked—or worse, discounted.").

^{155.} See EISENBERG, supra note 104, at 203-04.

^{156.} Further, critics charge that boards squander their limited deliberative time, devoting far too much time to routine matters not as critical for board attention. See JAY W. LORSCH & ELIZABETH MACINVER, PAWNS OR POTENTATES: THE REALITY OF AMERICA'S CORPORATE BOARDS 178-79 (1989).

make such an investment. 157 Plus, outside directors may serve on more than one board, adding additional competing time demands. 158

Service on an IRB also involves considerable time pressures. Affiliated IRB members must juggle the time demands of their regular positions within the institution with their IRB service. It is highly questionable whether IRB members receive sufficient administrative credit and freedom from other responsibilities to allow time for their IRB activities. Instead, IRB work may be added on as an "extra" to their regular duties. Meanwhile, outside IRB members have their own regular, external activities to pursue, competing with IRB service. Indeed, outside members report that reviewing protocols in advance and otherwise preparing for IRB meetings makes significant demands on their time. 159

The part-time nature of IRB service has not kept up with IRBs' dramatically increasing workloads. Even at busy academic medical centers, many IRBs meet only one or two times per month. But the rise in industry sponsored research, and financial pressures on medical centers to generate revenue through a greater volume of clinical trials (and the accompanying commercialization opportunities) means that more clinical trials are ending up before the IRB. This leads to added pressure on IRBs to perform a much larger number of reviews and with quicker turn-around. 160 Indeed, the number of protocols IRBs review today far outpaces what must have been contemplated when IRBs were first created. In the mid-1970s. when IRBs formally became part of the regulatory scheme, each IRB averaged a review of forty-three proposals per year, with IRBs at major research institutions reviewing in the hundreds. 161 Given this volume, IRBs could devote at least modest amounts of time to each protocol for review. Estimates indicate that in the mid-1970s, IRBs spent an average of almost one hour per proposal for initial reviews. 162

^{157.} See Gilson & Kraakman, supra note 40, at 875-76, 884.

^{158.} See Rock, supra note 130, at 1013 n.7 (citing estimates that, for example, 28% of directors serve on the boards of two other corporations in addition to their own company). Several corporate governance reform proposals seek to limit the number of boards upon which an outside director may serve.

^{159.} See Porter, supra note 57, at 5.

^{160.} See IRBS: THEIR ROLE, supra note 30, at 5-6.

^{161.} See Protection of Human Subjects, 43 Fed. Reg. 56,174, 56,186 (Nov. 30, 1978).

^{162.} See id. at 56,186-87.

The days of having one hour available per protocol for initial reviews are long gone. 163 One study suggests that IRBs spend an average of no more than one to two minutes deliberating on each protocol. 164 Other estimates suggest that busy IRBs can devote only about eight minutes per new protocol review. 165 Continuing reviews of already approved protocols can particularly get rushed, and IRBs have been found to cram several continuing reviews in the last fifteen minutes of a two and a half hour board meeting.¹⁶⁶ The expanding number of protocols has simply strained IRB capacity. Today, IRBs at major research institutions can face more than 2,000 protocol reviews per year.¹⁶⁷ Consider the workload increase at specific institutions. Duke University reviewed approximately four hundred protocols per year in 1974, compared to approximately 2,200 protocols per year recently. The University of California at San Francisco went from reviewing one hundred protocols per year in 1966 to nearly 4,000 protocols annually in 1999. 168

This increasing workload means that IRBs end up relying on individual board members to do the heavy lifting of protocol review. A common procedure adopted by many IRBs is for the chair to preassign proposed research projects to individual board members. At the board meeting, the reviewer summarizes the protocol for the rest of the board. Unless this reviewer raises a specific question or

^{163.} The Office of Inspector General found that IRBs at major institutions surveyed typically had meetings that lasted about two and a half hours. During this time, an average of eighteen initial reviews and nine expedited reviews were conducted, in addition to consideration of forty-three protocol amendments and twenty-one adverse event reports. See IRBs: Their Role, supra note 30, at 9.

^{164.} A General Accounting Office report indicated that IRBs spent only one to two minutes of review per study, relying chiefly on reviews conducted by a sole initial reviewer in advance of the board meeting. See GEN. ACCOUNTING OFFICE, SCIENTIFIC RESEARCH: CONTINUED VIGILANCE CRITICAL TO PROTECTING HUMAN SUBJECTS 17 (1996).

^{165.} Assuming the typical three-hour meeting and an average of twenty-two meeting times per year, an IRB has but eight minutes to devote per new protocol review and four minutes per continuing review. See William J. Burman et al., Breaking the Camel's Back: Multicenter Clinical Trials and Local Institutional Review Boards, 134 ANNALS OF INTERNAL MED. 152, 153 (2001). This estimate is based on an estimated workload, consistent with industry trends, of five hundred new and one thousand continuing reviews per year for an academic medical center with two separately functioning IRBs. See id.

^{166.} See IRBS: THEIR ROLE, supra note 30, at 7.

^{167.} See id. at 7, 9. From the period of 1993-1998, the number of initial reviews IRBs were asked to perform increased 42%. See IRBs: A TIME, supra note 19, at 5.

^{168.} Mary R. Anderlik & Nanette Elster, Lawsuits Against IRBs: Accountability or Incongruity?, 29 J.L. MED. & ETHICS 220, 223 (2001).

concern or invites the rest of the board to consider some aspect of the research project, the rest of the board will not even see and review the entire protocol documentation, and they typically will not question approval of a protocol unless the initial reviewer does first. ¹⁶⁹ This makes for a particularly fragile, problem-prone system of monitoring as so much hinges on the efforts of a lone, initial reviewer. This single-reviewer-led deliberation also is clearly not the type of group-effort review process that the National Commission contemplated for IRBs. ¹⁷⁰

Time constraints, more than any other factor, probably best explain why the IRB has often disappointed as an effective monitoring body, even at the most prestigious research institutions. A review system burdened by such workload strain is bound to have errors and failures. The heightened workload pressures means that [m]any IRBs, especially in large institutions, are on the verge of imploding."

^{169.} Observers of IRB deliberations report that unless the initial reviewer flags a problem, the rest of the board typically will approve a research protocol with little or no discussion. See IRBS: A TIME, supra note 19, at 6.

^{170.} The National Commission emphasized that IRBs were deliberative, group decision-making bodies and that the boards functioned best when all committee members used their expertise to consider a protocol. The Commission stated that "[s]ince discussion among IRB members is an important element in the successful functioning of an IRB, all members of the IRB should receive a copy of each research protocol and IRB determinations should be made in convened meetings of a representative quorum of the members." Protection of Human Subjects, 43 Fed. Reg. 56,174, 56,182 (Nov. 30, 1978) (emphasis added). This recommendation simply flies in the face of how most IRBs function today. Because of increasing workloads and the number of protocols to review, very few IRBs are even able to copy and circulate the entire contents of the protocol file to all members before it is scheduled for discussion.

^{171.} For example, IRB work overload figured prominently in the oversight problems surrounding the death of Ellen Roche in a Johns Hopkins Bayview Medical Center study. See supra note 16. An external review committee found that the IRB protocol review process was grossly inadequate. The committee was particularly troubled that until the research subject death, there had been only one meeting every two weeks of an IRB responsible for the review of 800 new protocols per year, plus numerous more continuing reviews for already approved protocols. See Robert Steinbrook, Protecting Research Subjects—The Crisis at Johns Hopkins, 346 New Eng. J. Med. 716, 719 (2002).

^{172.} IRBS: THEIR ROLE, supra note 30, at 9 (quoting an unnamed, senior IRB official). Others have referred to the time constraint problem as creating a "pressure cooker atmosphere" for IRBs. See Burman et al., supra note 165, at 153.

4. Information Constraints

Similar to time constraints, informational deficits hamper corporate boards and IRBs' effectiveness as monitoring bodies. The corporate board frequently performs as a reactive institution, and directors' understanding of what is happening with the corporation day to day is largely dependent on what senior officers tell them. The directors rarely venture out into the field themselves to interview corporate personnel or to conduct hands-on inquiries. Without direct access to information about managerial opportunism, incompetence, or other problematic conduct, the board may be ill-prepared to take sufficient action.

The corporate board particularly lacks access to credible, independent sources of information.¹⁷³ Management typically controls board meeting dates, influences the board's agenda, and identifies matters for board deliberation. Management can stymie board requests for information outside of the traditional, tightly controlled meeting process in the form of direct resistance or, more often, half-hearted cooperation and lack of full disclosure.¹⁷⁴ Management's large degree of influence over the information presented to directors at board meetings means directors can be cued to favor management's position.¹⁷⁵

IRBs also suffer from significant informational deficits. At the typical IRB meeting, members evaluate new protocols based on written paperwork submitted by the clinical investigator, which, at a minimum, typically includes a description of the experimental design and procedures and a sample consent form. The IRB boilerplate submission form will query the investigator for certain information, but the IRB is largely dependent on the clinical investigator to alert the board in the first place as to possible risks and benefits associated with the experimental technology. For industry sponsored research, the clinical investigators, in turn, must often look to the drug company or device manufacturer

^{173.} See Lynne L. Dallas, The Relational Board: Three Theories of Corporate Boards of Directors, 22 J. CORP. L. 1, 4-5 (1996).

^{174.} See Gilson & Kraakman, supra note 40, at 888-90.

^{175.} See Lin, supra note 38, at 914-16. In fact, CEOs have a strong temptation and the opportunity to manipulate information presented to the board so that the CEO's reputation before the board is preserved. See Langevoort, supra note 135, at 812.

sponsoring the trial for much of the needed background information, including preliminary data results from other clinical trials and animal studies. As with management presenting to the corporate board, investigators and sponsors can be expected to cue the information in such a way as is necessary to obtain favorable IRB review.

Moreover, IRBs often reach their decisions on new protocols unaware of previous decisions of other IRBs. For example, researchers seeking IRB approval for a protocol are generally not required to disclose that their proposed research may have been previously rejected by another IRB at another institution, ¹⁷⁶ information that surely would be relevant to the second reviewing IRB. To address the potential forum shopping problem, the FDA is considering new regulations that would require sponsors and investigators participating in FDA-regulated trials to inform IRBs about any previous IRB review decisions on the same or similar protocols. ¹⁷⁷ No such requirement currently exists in the regulations, and, at present, one lenient IRB can allow problematic studies to move forward unaware of, and in any event not obligated to follow, the previous decisions of other IRBs.

IRBs can also operate unaware of credible information from other sources. For certain large-scale investigations, trial sponsors create Data Safety Monitoring Boards (DSMBs) to act as a central repository and to collect preliminary trial data arising from the same or similar clinical investigations conducted at multiple research sites. DSMBs attempt to track and synthesize such multisite information in order to identify emerging safety problems associated with an experimental technology. 178 Accordingly, DSMBs

^{176.} See IRB'S: A TIME, supra note 19, at 7.

^{177.} See Institutional Review Boards: Requiring Sponsors and Investigators to Inform IRBs of any Prior IRB Reviews, 67 Fed. Reg. 10,115-16 (Mar. 6, 2002) (providing advance notice of proposed rulemaking) (to be codified at 21 C.F.R. pt. 56).

^{178.} DSMBs are reviewing bodies that, like IRBs, have a membership of mostly clinical scientists, as well as statisticians and other professionals. The basic function of the DSMB is to review study data as it is being collected and to analyze any adverse event reports arising from a study, all with an eye for monitoring any potential safety problems to ensure patient safety. DSMBs are required for certain multi-site research projects in trials funded by the National Cancer Institute. Many commercial trial sponsors conducting research projects at multiple sites also establish DSMBs. See IRBS: THEIR ROLE, supra note 30, at 10; NAT'L INSTS. OF HEALTH, NIH POLICY FOR DATA AND SAFETY MONITORING (June 10, 1998), available at http://grants.nih.gov/grants/guide/notice-files/not98-084.html.

may become aware of safety concerns for certain investigations before a local IRB. Unfortunately, this information may not always be reported back effectively to the local IRBs. A DSMB report can lack sufficient context to put a local IRB on notice of potential problems in a research protocol it already approved, because the local IRB still lacks important data elements that only the DSMB possesses. Similarly, the FDA will occasionally issue warning letters to clinical investigators regarding possible regulatory violations or trial data concerns, yet IRBs are not always made aware of such events. 180

More generally, critics charge that the IRB oversight system regularly misses valuable information by focusing too much on paper review without paying needed attention to what really happens in the clinic. 181 For example, IRB inquiries into informed consent tend to examine heavily the wording of the proposed consent forms rather than how subjects get identified and recruited into a trial and how investigators actually discuss the research with potential subjects. 182 Meanwhile, for the critically important continuing review process, IRBs seldom interview research subjects. physically observe informed consent procedures, or visit the research site to evaluate how a research project is proceeding before deciding whether to grant continuing approval. IRBs also seldom engage auditors to perform these tasks. IRBs largely depend on investigators to self-report any problems through accurate, timely adverse event reports to the IRB, which makes for a fragile and incomplete continuing review system. 183

^{179.} See Burman et al., supra note 165, at 154.

^{180.} See IRBs: A TIME, supra note 19, at 6-7.

^{181.} See, e.g., NAT'L BIOETHICS ADVISORY COMM'N, supra note 19, at 8-9.

^{182.} See Michelle M. Mello et al., The Rise of Litigation in Human Subjects Research, 139 Annals Internal Med. 40, 40-41 (2003).

^{183.} Indeed, continuing review is one area where IRBs are routinely faulted for not seeking out more information. The process seems perfunctory and unlikely to catch developing problems, because so many IRB members treat continuing review as very minimal review. One IRB member told the Office of Inspector General that he reviews the continuing review summaries during the board meeting to see if a patient has died. If no patient has died, then he generally does not raise questions. See IRBs: A TIME, supra note 19, at 6; see also Sharona Hoffman, Continued Concern: Human Subject Protection, The Institutional Review Board, and Continuing Review, 68 TENN. L. REV. 725, 733 (2001).

5. Compensation

Rewarding good performance through bonuses, contingency payments, or other variable compensation can align the incentives of agent and principal and help minimize the problems inherent in agency relationships. 184 However, such fine-tuned compensation schemes are rarely applied to IRB members and corporate directors. With regard to IRBs, the applicable regulations do not even require that members receive any form of compensation. As the IRB structure was initially taking shape, the Commission suggested that at least nonaffiliated members receive some form of direct payment for their services. It also recommended that the internal members of an IRB at least receive recognition and "credit" from their institutions as a way of rewarding their good service, hoping, for example, that institutions would relieve IRB members of other administrative tasks. 185 In the final rulemaking process, however, HHS concluded that it did not have legislative authority to require compensation for IRB members and so left it to each institution's discretion. 186

Few institutions have opted to pay IRB members. Inside members of an institution may be expected to serve as part of their overall administrative duties for the institution, without any additional money earned for IRB work. Their general compensation from the institution rarely is pegged to performing on the IRB or in any way based on the results of their IRB service. Nor is it clear, despite the Commission's recommendations, that enough institutions appropriately credit IRB members with relief from other administrative duties given the increasing workloads IRBs must now carry. Meanwhile, most outside, nonaffiliated IRB members act as true volunteers, serving on the committees without any compensation. For the few who receive some form of payment, they usually receive only a very modest gratuity or stipend. 187

^{184.} See David A. Hyman & Charles Silver, You Get What You Pay For: Result-Based Compensation For Health Care, 58 WASH. & LEE L. REV. 1427, 1429 (2001).

^{185.} See Protection of Human Subjects, 43 Fed. Reg. 56,174, 56,178 (Nov. 30, 1978).

^{186.} See Final Regulations Amending Basic HHS Policy for the Protection of Human Research Subjects, 46 Fed. Reg. 8,366, 8,385 (Jan. 26, 1981) (to be codified at 45 C.F.R. pt. 46).

^{187.} See Sengupta & Lo, supra note 115, at 214 (reporting that among outside IRB members surveyed, only nineteen percent reported monetary compensation to serve on an IRB).

Apart from the failure to utilize economic incentives effectively to align the interests of IRB members and research subjects, the lack of compensation schemes may have an additional negative spillover effect. Monetary rewards can exert psychological influence by signaling and reinforcing certain behaviors or by attaching value and esteem to a job well done. Because IRB members are not paid, it may conversely signal to IRB members, and to the researchers that they must monitor, that what IRBs do is not very important or does not require any particular expertise. This no doubt contributes to and reinforces IRB members' feelings of frustration and lack of support. This can contribute to further inattentiveness by IRB members and less than vigilant performance. As the maxim goes, you get what you pay for.

Unlike IRB members, corporate directors receive direct payment for their services. Yet the compensation does not necessarily establish clear incentives for effective monitoring on behalf of shareholders. A director's compensation traditionally has been unrelated to the director's performance. Most directors receive the same compensation package for service on the same board. Directors who work extra hard at monitoring are not rewarded with extra compensation, nor are inattentive directors who do a poor job penalized financially. Each will receive the same predetermined director payment. 190

^{188.} Compensating IRB members is not without controversy, however. A small subset of independent review boards do compensate their members. Independent review boards typically complete their reviews in a more timely manner than ordinary IRBs, which may be evidence that the economic incentives encourage diligent work by board members. However, concerns have been raised that independent review board members may face conflicts of interest and feel pressures to grant favorable reviews because of the money involved. Trial sponsor and clinical investigator payments to independent review boards fund board operations, including board payments to individual board members. Thus, independent review boards are financially dependent on the same parties that seek their review. See IRBs: The EMERGENCE, supra note 85, at 6-7.

^{189.} See Richard A. Guzzo & Raymond A. Katzell, Effects of Economic Incentives on Productivity: A Psychological View, in INCENTIVES, COOPERATION, AND RISK SHARING 108-11 (Haig R. Nalbantian ed., 1987); Edward E. Lawler III, Pay for Performance: A Motivational Analysis, in INCENTIVES, COOPERATION, AND RISK SHARING, supra, at 69-70, 79-84.

^{190.} See Eisenberg, supra note 137, at 1268.

In addition, though director compensation is on the rise, 191 the pay traditionally has been modest, at least modest in terms of the money that these directors, often well-paid CEOs or other senior executives, could earn elsewhere for their services. 192 Thus, the overall effect of director payments may be blunted. CEOs join the boards of other companies as outside directors usually not because of direct financial compensation for director service but rather for the prestige associated with a board seat, the chance to learn about another company, and the perceived quality and talent of other board members. 193 Recognizing the limitations of the traditional director compensation schemes, corporations have started experimenting with more sizable payment packages contingent on good corporate performance. For example, the firm may offer directors stock options in the corporation in the hopes that this will align director interests with maximizing the wealth of the firm. Such compensation schemes, however, are only a recent development. 194

6. Vague Performance Standards and Difficulty in Evaluating Effort

Identifying whether and when a corporate board or IRB does its job well is no easy task, thus compounding the difficulties of aligning agent-principal incentives and ensuring good performance by directors and IRB members. Part of the difficulty in gauging corporate board and IRB effort stems from the fact that IRB and corporate board functions defy clear, rule-like specification. Instead, more flexible and ultimately vague standards must suffice.

^{191.} Average director payments at 200 large public companies in 2001 were over \$150,000. See Troy A. Paredes, Enron: The Board, Corporate Governance, and Some Thoughts on the Role of Congress, in ENRON: CORPORATE FIASCOS AND THEIR IMPLICATIONS, supra note 12, at 510.

^{192.} See Blair & Stout, supra note 105, at 443; Jill E. Fisch, Taking Boards Seriously, 19 CARDOZO L. REV. 265, 275 (1997) (noting that "most outside directors are CEOs of other major corporations and receive sufficient compensation to render trivial their compensation for serving as outside directors").

^{193.} Dallas, supra note 173, at 14.

^{194.} See Eisenberg, supra note 137, at 1268; see also Fisch, supra note 192, at 275 (suggesting that even directors paid by stock options in a corporation, as a way to align director performance with the corporation's, may end up thwarting the intended effects by shifting some of their personal financial risk based on the corporation's performance through the use of derivative instruments).

For corporate boards, conventional analysis holds that directors should direct their efforts to the primary purpose of the corporation—shareholder wealth maximization. Legally, however, not much is said about what specific steps directors should take to achieve that end. Consider how the Michigan Supreme Court, in the classic corporate law case, *Dodge v. Ford Motor Co.*, addressed what directors do: "A business corporation is organized and carried on primarily for the profit of the stockholders. The powers of the directors are to be employed for that end. The discretion of directors is to be exercised in the choice of means to attain that end." 195

Wealth maximization is such a broad goal and the steps required towards that end are subject to such reasonable disagreement that corporate law seems to keep things purposely fuzzy with regard to gauging director conduct. The law often steers clear of specifying prescribed courses of action for the corporate board, leaving many details of oversight and monitoring to director discretion through the business judgment rule. 196 The fiduciary duty case law of Delaware, the leading corporate law jurisdiction, has been described as essentially "mushy" in its reluctance to specify when the fiduciary duties of directors become actionable and in its failure to offer clearer rules for determining appropriate director conduct. 197 These vague legal standards mean that, at bottom, "[w]e do not know what the directors are supposed to do; we know only that they are

^{195. 170} N.W. 668, 684 (Mich. 1919). The case involved a challenge to Henry Ford's stated plans to have Ford Motor Company earn lower profits and avoid paying certain dividends. He had hoped to return some of the foregone profits to the public in the form of lower prices for the company's cars. See id. at 671.

^{196.} Because business affairs are "extraordinarily complex, opaque, and uncertain," courts have tended to focus on the process corporate boards use to reach their decisions as a way of gauging board negligence, rather than focusing on the substance of the decisions. See Lynn A. Stout, In Praise of Procedure: An Economic and Behavioral Defense of Smith v. Van Gorkom and the Business Judgment Rule, 96 Nw. U. L. Rev. 675, 681 (2002). The inability of the law to prescribe particular director conduct is evident in the business judgment rule. The doctrine generally protects from legal challenge a business decision made by directors that they believe is in the best interests of the corporation, in which the directors act in good faith, free from conflict of interest, and after having reasonably gathered information. See, e.g., Smith v. Van Gorkom, 488 A.2d 858 (Del. 1985). Courts applying the business judgment rule express reluctance in questioning and second-guessing the substantive merits of a business decision by the board, thus creating a wide zone of discretion for director performance.

^{197.} See Rock, supra note 130, at 1101-02.

supposed to do it 'with care." The inability of courts to produce more circumscribed measures of board conduct reflects the larger problem of shareholders' reliance on director oversight. Apart from cases of sheer board incompetence, director self-dealing, or board neglect in the face of flagrant managerial opportunism, it actually becomes quite complicated to evaluate which boards do their monitoring tasks well and which do not.

Publicly traded corporations might appear to have an easy marker by which to judge the board's performance—the corporation's current share trading price. However, stock price can rise and fall for many reasons unrelated to the board's monitoring performance. A firm with inattentive, lazy, and unimaginative directors may still produce good financial results because of talented, trustworthy managers, favorable market positions the corporation has historically enjoyed, or other factors independent of the board itself. Active, vigilant, and talented directors may still end up in a corporation producing poor financial results because of general economic downturns in the applicable industry or other factors extrinsic to the board. 199

Moreover, using overall corporate financial performance as a proxy for the board's performance may inappropriately ignore the contributions of other corporate actors. The public corporation has been analogized to a "team production" process where the activities and output of the team are dependent on the contributions of multiple parties, such as investors, employees, bondholders, and managers, operating in a complex network of interactions. On It often becomes hard to attribute components of the corporation's eventual, non-segmentable output to the specific contributions of individual team members. In Blecause the inputs and outputs of team production are to some extent unverifiable—meaning they cannot be readily identified and measured by an outside party such as a court—there is no way to set a substantive judicial standard for

^{198.} Bayless A. Manning, The Business Judgment Rule in Overview, 45 OHIO St. L.J. 615, 620-21 (1984).

^{199.} The firm's stock price and other conventional market indicators, such as return on investment, are subject to continual debate as to whether they accurately measure good corporate performance, suggesting additional problems with using such measures indirectly to gauge board performance. See Johnson et al., supra note 138, at 430.

^{200.} See Blair & Stout, supra note 105, at 418-19.

gauging how good a job the board is doing."²⁰¹ Similarly, the board of directors itself can be viewed as a production team comprised of individual directors working together to produce collective output. This approach makes it arduous to evaluate and monitor the effort of individual corporate directors.²⁰²

IRBs share similar performance verification problems. The elusively broad goal for corporate directors—shareholder welfare maximization—is instead for IRBs the equally intangible, obscure goal of protecting the rights and welfare of human subjects. The practical means to this lofty end are not spelled out in rule-like specificity. The regulatory IRB review criteria for evaluating a new protocol²⁰³ leave considerable room for variation in decisions between IRB members and between IRBs. The regulations merely call for a "rough utilitarian weighing of the risks and benefits" of a study. 204 The Commission cautioned that in reviewing risks and benefits for trial protocols, quantitative measures of acceptable levels of risk compared to benefit simply were not available to IRBs. The Commission further warned that it would be difficult to make precise, line-drawing judgments about which protocols IRBs should approve or reject. 205 Similarly, the continuing review regulations fail to tell IRBs when, if ever, it is necessary to conduct on-site visits for direct observation of research procedures or even what documents IRBs should examine in performing continuing review.²⁰⁶ In short. "[t]here are very few provisions in the regulations that protect against bodies that might be sloppy, venal, or subservient to the

^{201.} Id. at 437.

^{202.} See Bainbridge, supra note 130, at 10.

^{203.} See supra notes 86-87 and accompanying text.

^{204.} Mello et al., supra note 182, at 40.

^{205.} See Goldner, supra note 51, at 98 (summarizing and quoting the National Commission's Belmont Report discussion of this issue). As Peter Williams has further observed, the vague regulatory criteria leave a lot of room for each IRB to proceed in many possible different directions:

Moreover, [IRBs] are asked to compare the impact of research on individuals and on society as a whole; yet boards are given no guidance in how to balance the interests of a particular subject against the interests of the collective. These lacunae in the regulations must be filled on a case-by-case basis by IRB members relying on their judgment both about what counts as a benefit or danger and how each is to be weighed.

Williams, supra note 147, at 1.

^{206.} Hoffman, supra note 183, at 733.

institution. Put another way, the quality of an IRB's work depends to an inordinate degree on the conscience and commitment of its volunteer members."²⁰⁷ Not surpisingly, given these open-ended review standards, assessments can vary widely between IRBs. Indeed, inconsistencies in decisions between different IRBs for the same or similar protocols occur with relatively significant frequency. Even a seemingly simple question, such as whether allergy skin testing on children, without the prospect of direct benefit for the participants, is too risky for IRB approval, leads to very different risk assessments by IRBs given the vague regulatory criteria. ²⁰⁹

In contrast to corporate boards, IRBs do not even have apparently objective measures such as the corporation's stock trading price, by which to evaluate their effort. One could look to the number of adverse complications or patient deaths in clinical trials at an institution as a measure of IRB effectiveness. Given that many clinical trials involve critically ill research subjects who have failed conventional therapy, however, it is enormously difficult to attribute causation of death and injury to inappropriate research conduct rather than to the background risks the ill subjects were likely going to face anyway. Further, the reality of allowing clinical experimentation to occur means exposing subjects to unknown yet potentially very serious risks. Accordingly, prevention of research subject deaths and serious injury may be a skewed and inappropriate measure of IRB performance, as with such criteria, "it is inherently

^{207.} Edgar & Rothman, supra note 36, at 493.

^{208.} See, e.g., Jon Mark Hirson et al., Variability in Institutional Review Board Assessment of Minimal-Risk Research, 9 ACAD. EMERGENCY MED. 1417 (2002); Henry Silverman et al., Variability Among Institutional Review Boards' Decisions Within the Context of a Multicenter Trial, 29 CRITICAL CARE MED. 235 (2001).

^{209.} The research regulations provide that IRBs should not approve pediatric research that poses more than a "minor" increase over "minimal risk" when it does not offer a prospect of direct benefit to the children. See 45 C.F.R. § 46.406 (2003). The regulations do not provide very helpful guidance for how to interpret these terms. Not surprisingly, a recent survey found significant disagreement among IRB chairpersons as to whether, in light of the regulations, allergy skin testing without the prospect of direct benefit for children is therefore too risky for IRB approval. See Seema Shah et al., How Do Institutional Review Boards Apply the Federal Risk and Benefit Standards for Pediatric Research?, 291 J. Am. MED. ASS'N 476, 479 (2004) (noting 27% of IRB chairpersons thought the allergy skin testing research was too risky to approve, while 66% deemed it safe enough).

easy to fail and almost impossible to succeed fully."²¹⁰ Similarly, an institution with a track record of few physical adverse events in its clinical trials may simply have an overly cautious and ultimately ineffective IRB that is preventing research subjects from important clinical trial opportunities that, although risky, the subjects very much want to pursue.

Finally, exacerbating the problems of gauging IRB and corporate board performance is that the interests of the principals -shareholders and research subjects—as a group are not uniform. Measuring whether corporate boards or IRBs act in the best interests of shareholders and research subjects in the aggregate may gloss over the fact that sometimes the interests of shareholders and research subjects within a class may conflict or need to be traded-off against one another. For example, short-term investors can be expected to have very different risk preferences than longterm shareholders. Short-term investors should only be concerned with how a corporation's stock price moves during the very short interval during which they invest in the firm.211 Corporate boards that constantly play to short-term investor interests, with a view toward generating immediate, favorable financial news to boost share price, may end up pushing the firm in directions that are not optimal for the firm's financial health and strategic survival in the future, thus disfavoring long-term shareholders.

Similarly, the views of potential research subjects can vary widely as to risk preferences and ultimate goals. Some subjects may volunteer for clinical trials out of a sense of altruism in order to help future patients who may benefit from the knowledge gained. Other subjects will enter a trial because they believe they will experience therapeutic benefit. Another class of subjects, urged on by powerful research advocacy groups, may be more concerned with access to new technology and more willing to tolerate and volunteer for riskier experiments. ²¹² An IRB that consistently rejects protocols as

^{210.} Steinbrook, supra note 19, at 1429.

^{211.} See Gilson & Kraakman, supra note 40, at 863.

^{212.} As Rebecca Dresser has detailed, research advocacy groups such as breast cancer and HIV/AIDS activists have developed as a powerful constituency in influencing how research trials get funded and conducted. Many research advocacy groups portray study participation as the way to obtain cutting-edge therapy. They have pressed for clinical trials with increasing levels of risk and possibly unrealistic expectations of benefit. In addition, many so-called research advocates vary in their ability to be representative of potential research

presenting unacceptable levels of risk may in fact be favoring more risk-averse subjects at the expense of subjects more concerned about access to new technology. Determining whether an IRB functions effectively first requires resolving the complex and highly debatable issue of which research subject constituency the IRB should be favoring, making it quite difficult to gauge overall IRB performance.

7. Limited Liability

In theory, the threat of legal sanctions incentivizes individual IRB members and corporate directors to exert monitoring effort, IRBs and corporate boards share a great degree of insulation from legal liability, however, making it questionable whether liability exposure impacts board monitoring performance significantly. For corporate directors, the threat of legal liability for insufficient monitoring principally arises from potential fiduciary claims brought against the directors, either by shareholders directly or pursued as a derivative suit on behalf of the corporation. The director's major fiduciary duties include the duty of care, duty of loyalty, duty of good faith, and duty to act lawfully. Questionable monitoring by a director, apart from instances of self-dealing or illegal activity, ordinarily would give rise to alleged duty of care violations. The duty of care holds that a director should, in discharging his oversight function, act with the care that a person in a like position would reasonably believe appropriate under similar circumstances. 213 Board decisions challenged for breaching the duty of care, however, ordinarily receive the protection of the business judgment rule.214 In addition, significant procedural hurdles, such as the demand requirement for bringing a derivative suit, can impede shareholder claims alleging a director's breach of fiduciary duty. 215 Accordingly, the legal standards remain very deferential to and protective of directors' discretion.

subjects, as they may receive funding from drug companies or other sponsors, or have personal experiences with the diseases that skew their views of what the typical research subject would want. See generally REBECCA DRESSER, WHEN SCIENCE OFFERS SALVATION: PATIENT ADVOCACY AND RESEARCH ETHICS (2001).

^{213.} See, e.g., REV. MODEL BUS. CORP. ACT § 8.30(b) (2002).

^{214.} Hillary A. Sale, Delaware's Good Faith, 89 CORNELL L. REV. 456, 464-66 (2004).

^{215.} See Troy A. Paredes, A Systems Approach to Corporate Governance Reform: Why Importing U.S. Corporate Law Isn't the Answer, 45 Wm. & MARY L. REV. 1055, 1084 (2004).

In addition to business judgment rule protections, leading corporate law jurisdictions such as Delaware permit the corporation, through its certificate of incorporation, to nearly eliminate director liability for duty of care violations. ²¹⁶ Also, many large corporations, to entice persons to serve on the board, offer comprehensive liability insurance or will indemnify the directors for a large range of board activity. The combined effect of the various legal protections and potential indemnification and insurance arrangements means that the actual risk exposure for any particular director for a violation of the duty of care is actually quite low. Indeed, liability for directors for duty of care violations remains so "extremely rare" that, in terms of real likelihood of a successful suit, the threat of such liability should not play more than a modest role in shaping board conduct. ²¹⁸

Like corporate directors, the actual risk of liability exposure for IRB members remains quite low. Indeed, when HHS codified the revised IRB regulations in 1981, it addressed concerns of commentators that qualified IRB members would not serve on the boards because of liability fears. HHS noted that it was not aware of any action where an IRB member had been successfully sued for negligence and felt that directly addressing liability protection for IRB members was, therefore, not necessary.²¹⁹

In theory, IRB members could be sued under general common law tort theories for negligently approving a research protocol or for negligent failure to monitor ongoing trials adequately. Such an action assumes that IRBs, as indirect third parties in the research process, have a legal duty of care that extends to individual human research subjects, an issue that the courts have not adequately resolved due to the dearth of litigated cases. In any event, such negligence suits may face limited success for a variety of reasons. First, it often proves difficult, when dealing with a class of research subjects who may be seriously ill and failing on conventional

^{216.} See DEL. GEN. CORP. LAW § 102(b)(7) (permitting elimination of duty of care liability except in limited circumstances such as when the act is not in good faith, involves intentional misconduct, or the director derives an improper benefit).

^{217.} See Rock, supra note 130, at 1012; see also Langevoort, supra note 135, at 820 (concluding that the objective risk of liability exposure for directors "remains small").

^{218.} See Eisenberg, supra note 137, at 1268.

^{219.} See Final Regulations Amending Basic HHS Policy for the Protection of Human Research Subjects, 46 Fed. Reg. 8,366, 8,385 (Jan. 26, 1981) (to be codified at 45 C.F.R. pt. 46).

therapy, to show that any alleged injury a research subject suffers was in fact research-related and not due to the subject's natural disease progression. Similarly, proving damages can present problems, as it may be difficult to demonstrate that an ill research subject would have fared any differently under conventional therapy. These causation and damage problems are compounded by trying to link IRB actions or inactions to the alleged research subject harm. In certain instances of alleged misconduct, the IRB may credibly contend that the researchers deviated from its approval requirements or that information was not reasonably available to IRB members about problems with a protocol, so that the IRB should not be viewed as a responsible party.

The low level of liability for IRBs initially contemplated by the federal agencies has proven to be fairly accurate. There are very few instances of research subjects suing IRB members and alleging inadequate oversight of a clinical trial. Noteworthy recent examples include the litigation arising from a clinical trial of an experimental melanoma vaccine conducted at the University of Oklahoma Health Science Center. Research subjects filed a lawsuit in 2001 against the university's IRB and several board members, alleging numerous violations of federal research regulations. ²²¹ Also, in recent litigation

^{220.} For example, in the recent litigation arising from research subject deaths in experimental leukemia therapy trials at the University of Washington's Fred Hutchinson Cancer Research Center in the 1980s, the jury was prepared to award damages of over \$5 million to one subject's family. The medical center was found negligent in damaging bone marrow donated for that particular subject's transplant. Nonetheless, the jury significantly reduced the award because the subject's chance of surviving his leukemia with or without the experimental intervention was not very high. See Tracy Johnson, Jury Sides with Hutch, Doctors in Deaths of 5 Patients Knew Risks of Leukemia Treatment Study, Panel Decides, SEATTLE POST-INTELLIGENCER, Apr. 9, 2004, at A1.

^{221.} See Complaint, Robertson v. McGee, No. 01CV00G0H(M) (N.D. Okla. filed Jan. 29, 2001), available at http://www.sskrplaw.com/gene/robertson/complaint/.html. The plaintiffs alleged, among other claims, that the IRB members failed to examine the protocol design and the investigator's qualifications, to review proposed amendments to the trial protocol, to approve advertisements for the study, and to make sure that the study comported with ethical standards. See id. Some of the defendants settled the case in 2002. See University of Oklahoma Settles State Lawsuit over Melanoma Study, Other Claims Proceed, 11 HEALTH L. REP. 1269, 1269-70 (2002). The plaintiffs' law firm in the University of Oklahoma case—Sherman, Silverstein, Kohl, Rose, and Podolsky—has taken a particularly aggressive stance and named IRBs and IRB members in other recent medical research litigation. See, e.g., Complaint, Wade v. Or. Health and Sci. Univ., No. 02CV877KI (D. Or. filed August 2002), available at http://www.sskrplaw.com/gene/cordy.html; Complaint, Scheer v. Burke, No. 000375 (Philadelphia County Ct. Com. Pl. filed July 2003), available at http://www.

concerning a Johns Hopkins University affiliated study, which involved the ongoing exposure of children to hazardous levels of lead paint, the Maryland Court of Appeals openly chastised the performance of the IRB.²²²

Such cases, although generating much attention in academic medical research circles, remain the clear exception to the general pattern of limited legal exposure for IRBs. Though some predict an increase in the frequency of IRB-related litigation, as plaintiffs' counsel develop more sophisticated litigation strategies and as they recognize that some IRB cases may present good litigation prospects, ²²³ any such upswing is still in its beginning stages. The fact remains that, considering the number of IRBs and clinical trials currently up and running, IRBs and individual IRB members rarely ever get named as defendants in litigation. ²²⁴ Plaintiffs' counsel may not want to complicate the lawsuit by focusing on the IRB per se compared to more visible targets, such as the trial sponsor, the researcher, and the medical center generally, ²²⁵ who already have

sskrplaw.com/gene/scheer.pdf.

^{222.} See Grimes v. Kennedy Krieger Inst., Inc., 782 A.2d 807, 813 (Md. 2001) (finding that the university IRB had "abdicated" its responsibility to protect research subjects and that the IRB seemed more concerned with helping the investigators complete their study than the ethics of the research). See generally Diane E. Hoffmann & Karen H. Rothenberg, Whose Duty Is It Anyway?: The Kennedy Krieger Opinion and Its Implications for Public Health Research, 6 J. HEALTH CARE L. & POLY 109 (2002).

^{223.} Litigation against IRBs is the fact predicted to rise because, among other reasons, plaintiffs' counsel recognize that there has been poor compliance with the research regulations, investigators and institutions may have conflicts of interest, institutions may be risk-averse and willing to settle, and because there is a potential for class-action claims. See Mello et al., supra note 182, at 43.

^{224.} Complicating matters is that IRBs are not necessarily independent legal parties. At most institutions IRBs are mere committees organized by and within the medical center or university. Under litigation procedure, plaintiffs naming the medical center or university as a defendant may try to hold the larger medical center or university responsible for the conduct of the IRB, even without naming the IRB as an independent party in the complaint. Universities or medical centers may also be found vicariously liable for their employees and agents serving on the IRB. But individual defendants may quickly get dropped from the litigation as plaintiffs focus on the deeper-pocket institutional defendant. In any event, individual IRB members have rarely experienced civil litigation because of their IRB activity.

^{225.} See Hoffmann, supra note 183, at 746. For example, in two other recent high-profile research cases: (1) the death of Jesse Gelsinger in the gene therapy trial at the University of Pennsylvania; and (2) problems arising in experimental leukemia therapy trials at the University of Washington's Fred Hutchison Cancer Research Center, the institutions' IRBs were not named as defendants in the resulting final complaints. See Complaint, Gelsinger v. Trs. of the Univ. of Pa. (Philadelphia County Ct. Com. Pl. filed Sept. 18, 2000), available at

ample deep pockets. Plaintiffs' counsel may also strategically conclude that it is best not to alienate IRB members by naming them in a lawsuit, in the hopes that information from the IRB may be forthcoming as plaintiffs pursue actions against the researcher or institution generally. Even if the IRB is named in the initial complaint (in addition to plaintiffs already naming the institution which organized the IRB), it may later get dropped from the case as the litigation progresses. Moreover, it may otherwise be difficult for plaintiffs to access information by which to build a case against an IRB. Peer review statutes generally protect as confidential the deliberations and records of peer review committees to allow members to engage in frank and open discussion.²²⁶ In some states, the peer review statutes have been applied to IRBs, allowing the boards to refuse to disclose requested documents to plaintiffs by claiming the information as privileged and protected by the peer review laws. 227

http://www.sskrplaw.com/links/healthcare2.html; Complaint, Wright v. The Fred Hutchinson Cancer Research Ctr., No. 01-2-008376 (Kitsap County Super. Ct., Wash. filed Mar. 29, 2001), available at http://www.sskrplaw.com/gene/wright/complaint1.html; Anderlik & Elster, supra note 168, at 221-22 (discussing the Fred Hutchinson Cancer Research Center litigation). Although the jury recently returned a verdict awarding approximately \$1 million to the family of one research subject in the Hutchinson Cancer Center case, the outcome was interpreted as largely favorable to the medical center and the physician-investigators. The defendants were found negligent for damaging bone marrow donated for one patient but not negligent in conducting the overall study or in failing to disclose the risks involved. See Johnson, supra note 220, at A1.

226. Peer review committees-typically comprised of practicing physicians-appear in many different segments of the health care system. For example, hospitals use peer review committees to investigate the competence of medical staff applicants and to evaluate the quality of care rendered within an institution. See generally Gail N. Friend et al., The New Rules of Show and Tell: Identifying and Protecting the Peer Review and Medical Committee Privileges, 49 BAYLOR L. REV. 607 (1997) (discussing protection of peer review records). The federal Health Care Quality Improvement Act of 1986 encourages such peer review activities by offering potential immunity protection for peer reviewers. See 42 U.S.C. §§ 11101-11152 (2004). State medical licensing boards also use peer review procedures to investigate and discipline physicians. See KENNETH R. WING ET AL., THE LAW AND AMERICAN HEALTH CARE 511-12 (1998). In addition, the Medicare program has long depended upon peer review bodies to evaluate and monitor quality of care. See generally 42 C.F.R. § 476 (2003); Timothy Stoltzfus Jost, Administrative Law Issues Involving the Medicare Utilization and Quality Control Peer Review Organization (PRO) Program: Analysis and Recommendations, 50 OHIO St. L.J. 1 (1989). The FDA and other regulatory agencies also depend on the scientific peer review process for all sorts of risk assessments. See Lars Noah, Sanctifying Peer Review: Publication as a Proxy for Regulatory Decisionmaking, 59 U. PITT. L. REV. 677 (1998).

227. See Doe v. Ill. Masonic Med. Ctr., 696 N.E.2d 707 (Ill. App. Ct. 1998) (finding that

Though their overall negligence liability remains low, IRBs may nonetheless face liability exposure under more novel theories, such as under the federal False Claims Act.²²⁸ Such theories are new and evolving, however, and currently add very little in the form of additional liability pressure on what IRBs do. Finally, as with corporate boards, IRBs can make insurance and indemnification protection available for members, thus further limiting any individual member's liability exposure.²²⁹

Apart from litigation exposure, non-performing IRB members enjoy considerable insulation from administrative sanctions as well. Direct regulatory oversight of IRBs traditionally has been lax. 230 Within the last five to seven years, regulatory activity has increased, with OHRP (and its predecessor—the Office for Protection from Research Risks (OPRR)) doing more on-site field inspections and actually shutting down clinical trials at influential research institutions such as Duke and Johns Hopkins. 231 Indeed, the number of significant regulatory actions by the FDA and OPRR/OHRP against academic medical centers for IRB-related issues rose from

Illinois' peer review statute precluded granting plaintiff access to IRB records). Public record sunshine laws may apply to IRBs at state-run institutions, such as a state university medical school, and potentially allow research subjects some limited access rights to IRB records. State laws permitting research subjects and the general public wide access to all IRB deliberation records are the exception, however. Maryland has enacted one of the first laws that attempts to provide broader public access to IRB records. Under the Maryland law, an IRB must make minutes of meetings available for inspection upon request, although the IRB may redact confidential and privileged information from public view. See MD. CODE ANN. HEALTH-GEN. I § 13-2003 (2003).

228. For an interesting exploration of how the False Claims Act could be applied to IRB activities, see Daniel J. Powell, *Using the False Claims Act as a Basis for Institutional Review Board Liability*, 69 U. CHI. L. REV. 1399 (2002).

229. See Sandra P. Kaltman & John M. Isidor, IRB Member Liability, in INSTITUTIONAL REVIEW BOARD: MANAGEMENT AND FUNCTION, supra note 43, at 343.

230. HHS's Office for Protection from Research Risks (OPRR), the predecessor to today's OHRP, ordinarily did most of its oversight through negotiating up-front assurances with institutions regarding their IRBs. These assessments rarely involved on-site audits and evaluations of how the IRBs functioned. While the FDA has tended to conduct more on-site investigations of IRBs, the sanctions have usually been for procedural irregularities and technical record-keeping matters. The FDA inspections have rarely looked at overall monitoring by IRBs. See generally IRBs: THEIR ROLE, supra note 30, at 12-14.

231. See Jonathan Bor & Tom Pelton, U.S. Halts Hopkins Research, BALTIMORE SUN, July 20, 2001, at 1A; Susan Kauffman & Joel B. Obermayer, Ban on Duke Trials Lifted, NEWS & OBSERVER, May 15, 1999, at A1. See generally PROTECTING SUBJECTS, supra note 19, at 9-10 (detailing substantial increase in regulatory activity with regard to IRBs since 1998).

one in 1997 to fourteen in 1999.²³² Considering the number of research protocols that get reviewed each year, however, this still means that only a modest amount of IRB activity is ever subject to on-site agency evaluations or possible administrative sanction. Moreover, in nearly all recent OPRR/OHRP investigations, the agency refrained from sanctioning the individual IRB members. While an institution's research funding and participation in federally funded trials might have been suspended or jeopardized because of the deficiencies found, the individual IRB members fared much better. At worst, the agencies required IRB members to undergo enhanced training and education, rather than imposing fines, disbarment from federal programs, or other serious administrative penalties on the individual members.²³³

8. Group-Think Problems, Social Bonds, and Conformity Pressures

The insight that IRBs and corporate boards are, at bottom, social institutions driven by a complex web of personal associations and bonds provides an additional reason for doubting their monitoring effectiveness. IRB members and corporate directors confront similar group-based pressures and can become entangled in and compromised by ongoing relationships with each other and the very actors that they are supposed to be monitoring. Psychological studies of highly cohesive groups with strong preferences for cooperation show that they can develop a "groupthink" bias. This bias urges consensus among members, even if suboptimal and inaccurate decisions

^{232.} See Burman et al., supra note 165, at 153.

^{233.} See NAT'L BIOETHICS ADVISORY COMM'N, supra note 19, at 54-56 (listing and summarizing all major OPRR Compliance Oversight Investigations of research institutions for the period January 1990-June 2000). In most cases where IRB performance was partly at issue, such as at University of Illinois at Chicago (1999), University of Maryland-Baltimore (1998), and Cornell University Medical Center (1996), the institution was required to have IRB members undergo more education and training. Only in very rare situations, such as at Virginia Commonwealth University (VCU) (2000), was the IRB required actually to change its membership or discipline a member by asking him or her to step down from the board. VCU, for example, was required to designate new IRB chairpersons in order to lift its regulatory suspension from participation in federally funded research trials. See id. at 56.

result.²³⁴ Groupthink discourages a critical examination of alternatives and may lead the group to gather incomplete information.²³⁵

Directors may be at risk for groupthink problems, because cohesiveness has been a fundamental, distinct characteristic of the typical corporate board. The traditional corporate board culture favors consensus and collegiality over conflict. Directors on corporate boards face psychological conditions which generate tremendous pressures to conform to the group. Directors who directly challenge the CEO or ask critical questions of management or of each other run up against firmly entrenched board traditions that emphasize politeness and civility and avoidance of conflict. One particular problem associated with groupthink is a tendency to stay committed to a decision once made and not to want to reexamine or change it because of the level of discomfort in admitting a

^{234.} See, e.g., Bainbridge, supra note 130, at 31 (discussing the groupthink phenomenon); Langevoort, supra note 135, at 810 (describing the groupthink bias as the implicit tendency of cohesive groups to censor non-preferred points of view and to discount information inconsistent with what is preferred).

^{235.} See Bainbridge, supra note 130, at 31. See generally O'Connor, supra note 12, at 1233 (highlighting the negative effects of groupthink in the Enron disaster).

^{236.} See, e.g., James D. Cox & Harry L. Munsinger, Bias in the Boardroom: Psychological Foundations and Legal Implications of Corporate Cohesion, 48 LAW & CONTEMP. PROBS. 83, 91-92 (1985) (describing how boards tend to select directors who are seen as agreeable and like-minded, and how boards disfavor individuals who are quarrelsome and who will not cooperate in reaching decisions by group consensus); Langevoort, supra note 135, at 797 (describing the dominant view of the board as one that places a "heavy emphasis on teamwork and conflict-avoidance"); Lin, supra note 38, at 916 (describing the board culture as one that "rewards consent and discourages conflicts").

^{237.} Conditions favoring conformity include: (1) board decisions often raise judgment issues involving a degree of uncertainty and ambiguity, the exact type of decisions in which individuals will tend to be more influenced by what others in the group think; (2) conformity increases when members value or admire each other, a condition evident in the "elite" club atmosphere of corporate boards; and (3) opponents to the group must voice their opposition at face-to-face meetings, making dissent more psychologically uncomfortable. See Dallas, supra note 173, at 6; see also Gilson & Kraakman, supra note 40, at 899 (describing how most outside directors take their responsibilities seriously but how they rarely get to exercise independent judgment because "board meetings are dominated by a management ethos of forced collegiality and agreement").

^{238.} See Forbes & Milliken, supra note 130, at 494-95. Directors who create conflict by departing from the norms of cohesion and collegiality will tend to experience less satisfaction with board service and will likely respond to such conflict by spending less time on board service rather than more. See id.

mistake. This phenomenon may, for example, partly explain the reluctance of corporate boards to dismiss nonperforming CEOs.²³⁹

A director's principal benefit from board service often is gaining entry to and being perceived as part of the elite, talented social group that comprises the board. Accordingly, the average director may prefer not to challenge this very same group and will try to avoid rocking the boat. Similarly, directors' social ties to senior management can inhibit vigorous oversight. Directors also clearly recognize that their interactions with senior management are not isolated but will extend over the course of their board tenure and also potentially to other business dealings, and, accordingly, they may be hesitant to jeopardize such relationships. Finally, many outside directors hold CEO positions in their own companies and socially identify with the executives of the firm that they are overseeing. They may resist vigorous board questioning of management, because they would not want to be challenged by their own corporate boards to such a degree.²⁴⁰

IRBs are also considerably at risk for groupthink bias and for experiencing related social pressures that discourage effective monitoring. Indeed, IRB members face several of the same psychological conditions identified as creating the high levels of conformity in corporate boardrooms. First, IRB decisions involve uncertainty and ambiguity, such as in applying the very open-ended, vague regulatory review criteria²⁴¹ to evaluate new protocols. Second, members of the group tend to identify closely with each other, as most IRB members are fellow clinical investigators who place a high value on the research process and who have been chosen by the same board selection procedures. Even outside IRB members tend to be recruited by their friends or acquaintances on the IRB²⁴² and thus can be expected to have considerable social loyalties to certain members of the group. Third, IRB meetings are face-to-face, and

^{239.} See Langevoort, supra note 135, at 811. But see Bainbridge, supra note 130, at 27-29 (suggesting that the group decision-making process of the board can counter the individual overconfidence biases of managers—biases that can lead managers to become wedded to their initial plans and not see the flaws and need for change).

^{240.} See Gilson & Kraakman, supra note 40, at 875 (stating that outside directors who hold management positions with other companies "are unlikely to monitor more energetically than they believe they should be monitored by their own boards").

^{241.} See supra notes 86-87 and accompanying text.

^{242.} See Porter, supra note 57, at 6.

persons who want to dissent from the group or request that the IRB spend more time on a protocol must do so openly, making it more uncomfortable for those who do not conform.²⁴³

Indeed, the overall IRB culture tends to favor cohesion and conflict-avoidance. Outside IRB members can find it daunting to show up at periodic meetings and directly challenge and disagree with the sizable majority of inside members who already know each other through the institution. Surveys reveal that outside IRB members perceive that their presence is not always welcome.²⁴⁴ Accordingly, they may be reluctant to strain the situation further with nonconforming conduct. Even inside IRB members who wish to challenge the status quo recognize that they can be punished for being obstructionist through social disapproval from other IRB members and through other sanctions. 245 Additionally, inside IRB members may hesitate to confront certain clinical investigators. preferring to avoid such disagreements with their institutional and social colleagues. 246 Finally, inside IRB members can be expected to socially identify with the clinical investigators as fellow researchers. Inside IRB members thus may be inclined to favor a more hands-off approach. In conducting their own clinical research as principal investigators, they would no doubt prefer less IRB oversight and accompanying hassle.

Because of such groupthink bias and social pressures, IRBs likely face the same risk of over-commitment error as corporate boards. This risk suggests that IRBs may be particularly weak at doing what is arguably their most important function—continuing review of already approved protocols. The IRB members as a social group may implicitly stay committed to an initial approval decision for a

^{243.} See Dallas, supra note 173, at 6 (discussing such psychological conditions as tending to create conformity in groups).

^{244.} For example, non-affiliated IRB members often report negative experiences in interactions with the inside scientist members, including feelings that the scientists tolerate their presence on the IRB only because diverse membership is required by the federal regulations. See Sengupta & Lo, supra note 115, at 214-15; see also Porter, supra note 57, at 6 (noting that many outside IRB members reported feeling intimidated and/or inadequately prepared for their roles when they went to meetings and were surrounded by scientific experts who were more familiar with institutional operations and used technical jargon).

^{245.} Obstructionist IRB members may find that their own research grants do not get approval or they may be denied promotion within the institution. See Edgar & Rothman, supra note 36, at 492.

^{246.} See Williams, supra note 147, at 3.

protocol and resist or discount mounting evidence of problems once the research is underway. IRB members can also engage in "risk-shifting," a pattern of behavior related to groupthink. That is, it may be easier for the group to approve of a new protocol with a certain level of risk that individual members, if making the decision alone, would not favor. Any problems and sense of regret and responsibility an individual IRB member might experience from a bad decision can be diffused among the group.²⁴⁷

III. MULTIPLE BOARD ROLES AND THE MONITORING TRADE-OFF

If the IRB, like its corporate counterpart, suffers from such deep, systematic flaws in performing its classic monitoring function, then why continue to use the IRB as an oversight institution? Why not abandon the IRB structure entirely? However, the corporate governance perspective cautions against rashly dismissing IRBs as useless oversight bodies because of their monitoring limitations. This Part summarizes the corporate governance literature to illustrate how corporate directors perform significant, non-monitoring functions, such as acting as mediating hierarchs among the corporation's stakeholders and performing a service role in providing strategic planning advice to senior executives. Corporate governance theory suggests that attempts to augment the classic monitoring function may make corporate boards less able to fulfill these significant non-monitoring roles. This Part also considers how IRBs perform similar non-monitoring roles and may likewise confront a monitoring trade-off dilemma.

Corporate governance scholarship is rich with debate over the multiple roles performed by corporate boards and what should serve as the board's overall objective. 248 The various theories of corporate boards are not necessarily consistent with each other. It is beyond the intended scope of this Article to capture, summarize, and reconcile fully all prevailing views of corporate board dynamics. Instead, this Article more modestly aims to highlight several

^{247.} See id. at 3-4.

^{248.} For representative recent scholarship, see Symposium, Enron and the Future of U.S. Corporate Law and Policy, 89 CORNELL L. REV. 269 (2004); Symposium, Agency Law Inside the Corporation, 71 U. CIN. L. REV. 1167 (2003); Symposium, Van Gorkom and the Corporate Board: Problem, Solution, or Placebo?, 96 Nw. U. L. REV. 447 (2002).

leading theories of what corporate boards actually do beyond the classic monitoring function. Exploring the non-monitoring dimensions of the corporate board helps one recognize that the IRB has perhaps unappreciated strengths and offers certain advantages as an oversight institution. As a result, the IRB remains positioned to perform important, non-monitoring functions.

A. The Mediating Hierarch Role

Recent, provocative corporate governance scholarship argues that the corporate board performs its most important role not as a monitoring agent of the shareholders. Instead, because of the board's unique position in the governance scheme, it functions as a "mediating hierarch" capable of balancing the often conflicting claims of shareholders, bondholders, managers, employees, the local community, and other stakeholders to the corporation's assets and resources.²⁴⁹ Under this view, directors may often act to advance shareholder interests; however, as mediating hierarchs, directors need not account to any particular constituency of the firm. 250 Such theories, therefore, reject the classic principal-agent description of the shareholder-director relationship as an inaccurate and incomplete explanation of what directors actually do and should do. The classic principal-agent model fails, for example, to explain why shareholders have so little control over the board, their purported agents, and why directors enjoy such broad discretion in their regular activities. The classic principal-agent view also fails to explain why bondholders, creditors, and other third parties would regularly make investments in corporations if directors rigidly

^{249.} See Blair & Stout, supra note 105, at 408.

^{250.} See id.; Margaret M. Blair & Lynn A. Stout, A Team Production Theory of Corporate Law, 85 VA. L. REV. 247, 276-87 (1999). The mediating hierarch view of corporate directors has generated much debate and is not without its critics. See, e.g., Meese, supra note 101. A more recent model proposed for understanding the corporate board is that of "director primacy." See generally Bainbridge, supra note 26. This view is similar to the mediating hierarch model, in holding that directors are not the mere agents of the shareholders. Id. at 550. The director primacy model, however, differs from the mediating hierarch theory in positing that directors, rather than acting as mediating hierarchs for various constituencies of the corporation, instead serve as the nexus for the various contractual relationships making up the corporation. Id. at 551. This model envisions the director more as a "Platonic guardian" and the board as a sui generis body, rather than principally seeing the board as a mediator among different constituents in a team production process. Id. at 550-51.

pursued only shareholder interests, a strategy which can disfavor non-shareholder constituents. 251

The alternative understanding of the corporate board as mediating hierarch stems from initially viewing the corporation as a production team. That is, the corporation's activities and output depend upon a group of shareholders, creditors, employees. managers, and other stakeholders combining assets, investments, and other efforts in some degree of coordination together as a team.²⁵² Recognizing that the corporation has team production aspects, however, presents a fundamental governance problem; how to allocate surpluses among the team members. The different constituents of the corporation can make different investmentscapital, sweat equity, etc.-that combine to produce a corporate output that is non-separable. 253 In other words, there is no easy way to allocate the overall corporate surplus to each team member according to his or her individual efforts. The individual contributions combine in synergistic and not easily visible ways to benefit the corporation as a whole. Plus, it may be very difficult in advance for all the parties to identify one another, come together, and agree on how to divide the wealth resulting from their joint efforts.²⁵⁴

The participants in the corporate production team thus may prefer to relinquish control of the enterprise to a neutral third party who will try to best represent the entire corporation and fairly allocate surplus among the team members. This is where the directors come into play. Directors can function as mediating hierarchs and balance and broker between different stakeholders' claims to the collective residual produced by the corporation. There can be efficiency advantages to this model of corporate governance. Team production members who understand that the directors, as mediating hierarchs, will oversee the corporation's affairs so as not to favor any one constituency, will more likely invest in the corporation and develop ongoing business relationships with the other production team members. The board as mediating hierarch,

^{251.} Blair & Stout, supra note 250, at 251-52, 276-81.

^{252.} Id. at 278.

^{253.} Blair & Stout, supra note 105, at 419.

^{254.} Peter C. Kostant, Team Production and the Progressive Corporate Law Agenda, 35 U.C. DAVIS L. REV. 667, 672-73 (2002).

^{255.} Id.

therefore, helps to lower transaction costs and facilitate teamspecific investments in the firm from the various corporate constituencies.²⁵⁶

Considering directors as mediating hierarchs helps explain why the corporate board seems at times to be so inadequately designed as an effective monitoring body for the shareholders. Shareholders are not the only stakeholder constituency with which the board must principally concern itself. Certainly, the directors cannot pursue self-interest or abandon shareholders. As mediating hierarchs, however, directors owe a more general duty to do what is best for the corporation as a whole, rather than solely pursuing shareholders' interests. The director's role may be more accurately described as resembling a fiduciary or trustee for the firm itself, with some obligation to maximize corporate surplus so that it can be divided among the many stakeholders. 257 Thus, not all boards can be expected to, above all other activities, engage in or even need to engage in aggressive monitoring for shareholders. Team members may be able to resolve disputes or curb opportunism between different constituencies by their own effort. These self-help actions are bolstered nonetheless by all stakeholders knowing that, as a backdrop safeguard, they can take a serious dispute to the board for resolution by the directors as mediating hierarchs, even if this option is not invoked frequently. 258

Do IRBs play a similar role as mediating hierarch? IRBs may not oversee a team production process to the same degree as do corporate boards, but there are certain parallels. Just as the

^{256.} Various team members may be reluctant to make capital and sweat equity investments in the corporation if they run the risk of exploitation or opportunism by any one constituency, including opportunism by shareholders. If no one constituency can make an exclusive claim to the corporation's residual assets, however, team members are more likely to refrain from opportunistic conduct and more likely to invest in the team. They will all take some comfort that the board of directors will resolve any conflicts among team members regarding the division of any corporate surplus. In other words, it may be an efficient way for all the team members to agree to resolve any such conflicts over how to divide the corporate surplus by agreeing to subject themselves to the will of the board, which will monitor their efforts and decide how to divide the surplus most appropriately. The mediating hierarch model thus may be an important, efficient means for coordinating the investments and maintaining favorable relations among the different team members in the firm. See Blair & Stout, supra note 105, at 419-26.

^{257.} See Blair & Stout, supra note 250, at 290-92, 316.

^{258.} See Blair & Stout, supra note 105, at 425-26.

corporate board must confront different stakeholders with claims to the corporation's residual surplus, the IRB must deal among various stakeholders who have distinct agendas regarding the institution's research activities. These stakeholders include the faculty investigators, clinical trial sponsors, research subjects, senior institutional officials, government funding agencies, and even future patients who might benefit from the knowledge gained by research.

Such actors may find that their research objectives conflict and that they remain vulnerable to opportunistic attempts by other stakeholders to direct the institution's overall research enterprise. Clinical investigators, for example, might pressure research subjects to enroll in trials that offer high risk and little immediate direct therapeutic benefit, because the knowledge gained will significantly advance the researchers' experimental goals and help their academic pursuits. Similarly, external research sponsors, such as pharmaceutical companies, may press to start and conclude a clinical trial with great speed, even before the technical research issues get adequately resolved to the satisfaction of many academic investigators, because of the pressures to get new drugs through the FDA approval process in order to reap commercial benefits. Even research subjects may try to game the system for their own advantage. In their desire to gain access to new technology, research subjects can compromise the scientific integrity of the trial results at the expense of the clinical investigators and trial sponsors. 259

A certain level of stakeholder tension and disagreement, therefore, is inherent in an institution's research enterprise, and it can jeopardize and make more costly the pursuit of clinical trials. The IRB, however, has the capacity to perform a very helpful role in mediating such potential conflicts among the different research

^{259.} For example, nearly one-third of research subjects in a recent study of inhaler medication discarded the contents of their inhalers in an attempt to conceal their failure to take the medication at intervals and in dosages as required by study protocol. Presumably, the deception was motivated in part by the research subjects' desire not to be excluded from the trial for noncompliance, so as to maintain access to the experimental therapy. See Michael S. Simmons et al., Unpredictability of Deception in Compliance with Physician-Prescribed Bronchodilator Inhaler Use in a Clinical Trial, 118 CHEST 290, 290 (2000); see also Hamilton Moses III et al., Collaborating with Industry—Choices for the Academic Medical Center, 347 NEW ENG. J. MED. 1371, 1372 (2002) (describing how patients' expectations for access to new treatments may compete with the objectives of commercial sponsors regarding conduct of clinical trials).

stakeholders. The requirement for IRB review of each protocol positions the IRB as a potential reconciling force. The IRB wields enough effective power to command necessary attention from the stakeholders. Even the corporate board of a medical institution has no final veto power over an IRB's decision to approve or reject a protocol. The buck stops with the IRB.260 Apart from outright approval or rejection of a protocol, an IRB has many direct and indirect means at its disposal to impact which studies actually get performed, in what timeframe, and at what cost to the different stakeholders involved. 261 This power can be used to broker potential stakeholder conflict and curb certain opportunism. As with corporate boards, mediating hierarch theory suggests that the IRB need not intervene frequently in stakeholder disputes to adequately perform as a mediator. The backdrop of regular IRB review, and the thought that the IRB will not favor any one constituency, may spur the stakeholders to work through certain disagreements by themselves or to refrain from opportunistic conduct initially, thus facilitating regular, recurring participation in the institution's research activities by the various stakeholders.

As an example of the IRB's mediating role, consider what happens when potentially competing clinical trials get conducted at the same institution. Natural coordination problems arise as the different investigations must compete for the same eligible popula-

^{260.} Indeed, the Commission considered but rejected the idea of requiring a mechanism for appeal of IRB decisions, adopting the view that "an IRB should have the final word at its institution regarding the ethical acceptability of proposed research involving human subjects." Protection of Human Subjects, 43 Fed. Reg. 56,174, 56,183 (Nov. 30, 1978). Lars Noah suggests that:

Although academic and other institutions that house IRBs may choose to review board decisions (perhaps at the behest of a patient advocate even though no formal mechanism exists for challenging board decisions to approve a protocol), the regulations expressly prevent these institutions from overriding an IRB decision to reject a protocol.

Noah, supra note 34.

^{261.} For example, an IRB may choose to make approval of a protocol contingent upon numerous conditions, such as limiting the number of subjects or narrowing the clinical criteria for subjects to be eligible. Alternatively, an IRB can insist on rigid enrollment/informed consent procedures, such as requiring the presence of a patient advocate during all discussions with research subjects or precluding investigators from enrolling subjects directly and mandating that another, independent physician do the enrollment to counter any investigator bias. See Levine, supra note 46, at 111-12, 122-23. All conditions imposed will be favorable to certain stakeholders but not others.

tion in recruiting research subjects. ²⁶² For example, the IRB at Loyola University's Stritch School of Medicine recently faced this dilemma. A research protocol before the IRB proposed to recruit renal cell cancer patients; meanwhile, another renal cell cancer study was preliminarily underway at the same facility. Both investigations tested attempts to reduce the cancer recurrence rate and improve the survival rate after surgery for these patients. One protocol intended to give the subjects the drug interleukin post-surgery, while the other would use a vaccine. ²⁶³ When the investigators found out about the potential conflict in recruiting the same renal cell cancer subjects for the different trials, they attempted, through a crude political compromise, to work out an enrollment coordination plan that favored the interleukin trial.

In essence, the investigator for the disfavored vaccine protocol agreed to narrow its eligibility criteria and recruit fewer subjects overall. Also, when patients technically would be eligible for both protocols, they would not be told about the second, disfavored vaccine protocol.²⁶⁴ The IRB, however, overruled this initial coordination plan. The IRB concluded that it was unethical not to let subjects eligible for both trials know about the existence of both research opportunities. The IRB thus proposed that investigators alert potential subjects about both trials during the enrollment process.²⁶⁵

Here, one sees the IRB acting akin to a mediating hierarch. The IRB intervened in a preliminary agreement already brokered among the lead investigators to steer a course of action more attentive to research subject interests. Although it might appear that the IRB simply imposed an obvious solution—let subjects know about both trials—and acted primarily as an agent of research subjects, the issues and interests at stake are in fact more complex. In thwarting initial attempts to favor the progress of the interleukin trial, the IRB instead attempted a middle-of-the-road, consensus-building

^{262.} See Elisa J. Gordon & Kenneth C. Micetich, Competing Clinical Trials in the Same Institution: Ethical Issues in Subject Selection and Informed Consent, 24 IRB: ETHICS & HUM. RES. 1, 1 (2002).

^{263.} See id.

^{264.} See id. at 1-2.

^{265.} See id. at 5.

approach. This compromise was not necessarily the optimal one for potential research subjects or for the clinical investigators. Perhaps a more acceptable solution would have been to favor the trial that posed less risk to subjects or to favor the trial capable of quicker data resolution, so that the knowledge gained could be diffused more broadly and quickly to help similarly situated patients. Perhaps the institution should have refused to allow both trials to run concurrently in the first place and award exclusive priority to the first-intime protocol, as some research subjects had already made significant commitments to that investigation.

Viewing the IRB as a mediating hierarch, the more important point is that the IRB reached a decision sufficiently attuned to different stakeholder interests. In competing trial scenarios such as this example, research stakeholder conflicts may become intractable or pose severe problems for the institution as a whole unless capable of regular resolution by an interceding body trying to represent all stakeholder interests fairly. Clinical investigators may face their own career demands, or pressures from their funding sponsors, to complete enrollment as quickly as possible and, consequently, may be unwilling to yield potential subjects to any other trial at the institution. If the trials run concurrently, competition for the same subjects may limit each investigation's potential enrollment, significantly delaying progression and data collection.

In fact, with concurrently run trials, the danger exists that both trials will end up with "underpowered" data based on too few research subjects enrolling to produce meaningful results. Moreover, an inability to control coordination problems has negative spillover effects that can jeopardize the institution's future research enterprise generally. An institution that regularly forces coordinated enrollment between two competing clinical trials in such a way as to make the conduct of either one of the trials infeasible may simply force investigators and trial sponsors to look to other institutional settings for their work. Similarly, if an institution gains the reputation of withholding clinical trial opportunities from eligible subjects, future research subjects may vote with their feet and look to other institutions for research opportunities.

An effective mediating body, however, can minimize such problems arising from trial coordination conflict over the long run. Although the Loyola University IRB's decision may not have been the right one or the best one in all situations that involve competing trials, the decision is defensible as not significantly favoring one constituency over the other. Also, because of the institutional power that the IRB wields, the stakeholders had to live with the IRB's decision as final. If the IRB review mechanism was not available to work out such disputes on a regular basis, it would become more costly for the stakeholders to settle such issues themselves, certain issues might never get considered, and the recurring general conflict could disrupt the institution's research mission. In this example, by using its position to reach a solution viewed as fair enough to the various stakeholders, the Loyola University IRB helped facilitate their continued participation in the institution's research activities.

Another example of the IRB's mediating potential concerns controversies over whether to provide preliminary clinical trial data to research subjects. The federal research regulations provide that, "[w]hen appropriate," the informed consent document should include a statement that "significant new findings" developed during the course of the research, which may relate to the subject's willingness to continue with the experiment, will be disclosed to the subject on an on-going basis. ²⁶⁶ The regulations, however, provide no further express guidance. What a "significant new finding" is and when it is appropriate for investigators to disclose preliminary trial data to research subjects, even before it becomes statistically significant, remains open to vigorous debate and subject to many differing interpretations. ²⁶⁷ Because of the lack of clear regulatory guidance, this is one decision that an IRB basically can make on a case-by-case basis as it sees fit.

Different stakeholders to the research enterprise can be expected to have vastly contrasting views about preliminary data disclosure. On the one hand, it would seem that the reasonable research subject would want to know if the preliminary trial data suggests the experimental intervention is no better than or possibly worse than conventional therapy, or if material, unanticipated side effects to the experimental therapy have been observed. Trial sponsors,

^{266. 45} C.F.R. § 46.116(b)(5).

^{267.} See Goldner, supra note 51, at 126; Thomas Keens, Informing Subjects About Research Results, in INSTITUTIONAL REVIEW BOARD: MANAGEMENT AND FUNCTION, supra note 43, at 269 ("[R]egulations on protecting human research subjects do not guide the IRB in deciding which research information [about study results], if any, should be communicated to subjects.").

however, might be reluctant to share this information, even though subjects would regard it as material, because of fears it could deter ongoing subject recruitment, convince current subjects to withdraw prematurely, or otherwise lead to bad publicity for the still unproven therapy.²⁶⁸

Indeed, very valid, countervailing reasons exist for not disclosing all preliminary data to research subjects. Until such data is accumulated from a large enough sample to be statistically significant, it may merely confuse research subjects, alarm them unnecessarily, or be of such limited value that to require its disclosure in all instances would merely add burdensome administrative costs to the research protocol. Moreover, investigators and trial sponsors might legitimately fear that trial data could become tainted if later subjects were given even slightly different risk information than earlier ones, because this may introduce certain research-subject biases or premature withdrawals that could affect the trial results.²⁶⁹

Whether and when to require preliminary trial data disclosure thus is one area where the IRB must balance differing stakeholder views. It also is one area where the various stakeholders, if left to negotiate the issues themselves, might not be able to come to any easy solution or better result in terms of satisfying all stakeholder interests. They likely could not even anticipate all the different scenarios involving emerging trial data as to be able to reach definitive agreement in advance. Moreover, negotiating such issues

^{268.} See Goldner, supra note 51, at 126. As an example of such a dispute, consider the recent controversies in clinical trials of an iron chelation drug at the University of Toronto and the Hospital for Sick Children. The experimental drug was given to transfusiondependent thalassemia patients. When clinical researchers identified unexpected risks with the drug, the trial sponsor and drug manufacturer, Apotex Inc., terminated the trials before full subject enrollment. Apotex then sought to prevent the lead researcher from disclosing the risks to patients or publishing the findings, relying upon a confidentiality clause in its research agreement with the investigator. As a result of the eventual public outcry surrounding this incident, the University of Toronto and its affiliated teaching hospitals eventually implemented a new policy intended to prohibit contract clauses that could be used to prohibit disclosure of such risks to research subjects. See Patricia Baird et al., Clinical Trials and Industry, 297 SCIENCE 2211, 2211 (2002); see also Bruce M. Psaty & Drummond Rennie, Stopping Medical Research to Save Money: A Broken Pact With Researchers and Patients, 289 JAMA 2128 (2003) (discussing the related problem of what to do when a trial sponsor decides to terminate an investigation before completion and before full subject enrollment because of commercial or financing reasons).

^{269.} Goldner, supra note 51, at 126.

for each and every protocol would be costly and time-intensive. But the IRB can play an important mediating role. By remaining relatively neutral and above the potential stakeholder conflict on this issue, the IRB remains uniquely situated to intervene on a protocol-by-protocol basis and to reach a decision it believes is at least fair to all the stakeholders involved and best for the overall research enterprise. Furthermore, because of the power the IRB wields and the essential nonreviewability of its actions, the stakeholders will have to abide by the IRB's decision. If the IRB performs its role effectively, it can satisfy a sufficient number of the stakeholders enough of the time so as to minimize conflict and facilitate continued participation in the institution's research enterprise.

B. Monitoring Trade-off Problems

If IRBs can and do perform such a helpful mediating role, the corporate governance perspective warns that an IRB's mediating abilities can become compromised by attempts to bolster its monitoring function. The experience of corporate boards indicates that the very insularity and autonomy that may make them weak monitoring bodies nonetheless remains critically essential to their mediating effectiveness. Team production theories explain that stakeholders may be willing to look to the corporate board to resolve critical issues such as the division of corporate surpluses, because the corporate board functions as an autonomous body and enjoys, as a practical matter, such few curbs on its discretion that it is beholden to no single group. A board beholden to no one interest group may be viewed as more trustworthy than a board that consistently favors one constituency's interests. An effective corporate board makes use of such above-the-fray perceptions to work through potential governance disagreements regarding the firm's activities.270

Like corporate boards, IRBs depend upon and make use of implicit assumptions about their trustworthiness. Trust is essential to so many aspects of the healthcare system,²⁷¹ with the area of

^{270.} See Blair & Stout, supra note 105, at 435-40.

^{271.} See generally Mark A. Hall, Law, Medicine, and Trust, 55 STAN. L. REV. 463 (2002).

human subjects research no exception.²⁷² As the Office of Inspector General has observed, the IRB review process "is rooted in trust."²⁷³ This includes more than the significant trust that research subjects put in the clinical investigators by volunteering for a clinical trial in the first place. Researchers themselves must trust and assume that members of an IRB will act in good faith.

For example, the very process of submitting a potential research protocol for IRB review may involve disclosure of sensitive or proprietary information, and the clinical investigator must have some level of comfort that IRB members will not try to use this information for personal advantage. Clinical investigators also recognize that IRB review is largely evaluation by one's peers. As a general matter, therefore, researchers may expect a certain level of deference and respect from their professional colleagues, rather than harsh, inflexible scrutiny from a suspicious, enforcementoriented tribunal. The limited nature of IRB review helps to preserve investigator goodwill and control costs so that clinical trials can be conducted with relatively greater speed and efficiency. 274 Although many researchers may presently perceive the IRB review system as bureaucratic, burdensome, and inefficient, they have yet to view the IRB as a watchdog to be feared and altogether avoided. Indeed, IRBs have traditionally approached their reviews in a collegial, non-threatening, non-skeptical manner.275

If IRBs aggressively adopt the monitoring function, however, the fragile level of trust that researchers presently place in IRB review may disappear. As medical ethicist Robert Levine has warned, an IRB that interacts with researchers as a "police force," with extensive, formal monitoring, can create more problems than it solves. The enormous ill will created between the IRB and its researcher-constituents can discourage honest investigators from pursuing research at the institution. It can inject norms of doubt

^{272.} See Robert Gatter, Walking the Talk of Trust in Human Subjects Research: The Challenge of Regulating Financial Conflicts of Interest, 52 EMORY L.J. 327, 355-61 (2003).

^{273.} IRBS: THEIR ROLE, supra note 30, at 12.

^{274.} See Nicholas A. Chistakis, Should IRBs Monitor Research More Strictly?, 10 IRB 8, 8-9 (1988).

^{275.} IRBs: Their Role, supra note 30, at 12.

^{276.} LEVINE, supra note 46, at 348.

and suspicion, norms at odds with an academic medical culture in which colleagues ordinarily must trust one another to interact productively and successfully. It also can make stakeholders less inclined to look to the IRB for mediating help.²⁷⁷

Loss of trust can also weaken informal monitoring channels normally available to the IRB. When an IRB is trusted and respected by researchers within an institution, they may actively seek its advice and assistance in working through thorny problems of clinical trial conduct and design. If, however, the researchers generally view the IRB as not credible, nor sufficiently neutral, they will disclose only the bare minimum of required information and otherwise seek to evade IRB review. Researchers may also be less likely to notify an IRB perceived as untrustworthy about questionable research practices of colleagues at the institution, for fear that the IRB will overreact and impose burdensome constraints on all clinical investigations at the facility.²⁷⁸

C. Service Role and Further Exploration of the Monitoring Trade-off

Corporate boards perform additional, vitally important functions other than monitoring and mediating. Consideration of these additional board functions further illustrates the monitoring trade-off problem. The "service" role describes the actions of a corporate board in advising the CEO and senior executives on long-term planning and strategy for the corporation, as well as in reviewing the structure of significant transactions. The service role recognizes that the CEO and senior executives can benefit by seeking and receiving regular advice from the board. Communication of this sort allows management to tap the broader views and experience of the directors and, in particular, to benefit from particular pockets of

^{277.} See id. at 348-50.

^{278.} See id. at 341-42.

^{279.} See Bainbridge, supra note 130, at 8; Fisch, supra note 192, at 272; Forbes & Milliken, supra note 130, at 492; Johnson et al., supra note 138, at 411, 424. The corporate governance literature sometimes describes such service conduct as, alternatively, the "managerial" function of the board. See Fisch, supra note 192, at 272. Another role corporate boards perform is the "resource" function. Directors can use their contacts to facilitate the corporation's access to critical talent, supplies, and resources. See Johnson et al., supra note 138, at 427.

expertise in the boardroom that may not exist within the firm's internal management ranks.

The service role markedly differs from the classic monitoring activity, in that directors function as expert background advisors, working with the CEO and offering guidance, rather than seeking to replace or otherwise sanction the CEO for transgressions and subpar performance.²⁸⁰ The service role, rather than monitoring, may more accurately describe what most directors see as their responsibility—working with current management to formulate successful strategies for the corporation's best interests.²⁸¹ In their service mode, directors offer management an opportunity to strategize and brainstorm. Management biases, including a potential overconfidence in currently adopted plans for the firm, can be corrected by having senior executives hear the views of other business experts serving as directors.²⁸²

Attempts to increase the monitoring role of the corporate board can undercut this service function. If the board monitors too often and directly intervenes in the day-to-day decisions of management, it can make managers overly concerned about avoiding risks, consequently jeopardizing implementation of strategic initiatives, including those favored by the board.²⁸³ More importantly, overzealous monitoring can chill the communication flow essential to the board's service role. A board that signals it will sanction management for bad news, or that regularly displays skepticism about management reports, will fuel feelings of distrust and even animosity between the board and senior executives.

^{280.} See Johnson et al., supra note 138, at 424. The service role of the board, however, sometimes can lead directors into even more of an active role, making day-to-day management decisions. For certain key transactions, such as mergers, boards of directors have become so actively involved in formulating strategy as to effectively take control of the transaction and displace management to the background. See Langevoort, supra note 135, at 803. For such transactions, courts have often required active participation by the board. See Fisch, supra note 192, at 273.

^{281.} In fact, monitoring is probably reserved for rare, crisis-mode situations within the corporation, whereas the service role of the board comes up more frequently in regular corporate decision making. See Fisch, supra note 192, at 282.

^{282.} See Langevoort, supra note 135, at 803.

^{283.} See Ira M. Millstein, The Professional Board, 50 Bus. Law. 1427, 1433 (1995). Also, management may be less interested in implementing a board-imposed plan, making the plan less likely to succeed. See id.

This can become a self-perpetuating phenomenon. The more suspicious the board becomes of management disclosures, and the increasing pressure the board places on management to disclose more, the less likely management will want to seek out the board's advice in the first place. A high level of distrust between the board and senior management is bad for the firm overall, as it can seriously inhibit desirable brainstorming between the two groups. ²⁸⁴ In other words, "overloading the board with true monitors may create too stark a dilemma for the senior managers, forcing them to engage in impression management tactics at the expense of seeking needed advice and assistance in strategy formulation." ²⁸⁵ It seems, therefore, that a board's effectiveness in monitoring must, to a large degree, be traded off against its effectiveness in performing the service role.

Do IRBs perform a service role akin to corporate boards? Although this role may not be expressly stated as such in the federal research regulations, IRBs certainly can help with strategic brainstorming. As seen with the mediating function, the requirement for regular IRB review of new and continuing protocols is key to its service role. This positions the IRB to serve as a sounding board and conduit for discussions among research colleagues regarding complicated questions of research design, statistical power, trial feasibility, recruitment procedures, and the like. Clinical investigators can tap the collective expertise of IRB members on such matters and may even seek IRB guidance and input on a particular technical issue when submitting a protocol for review. Similarly, the IRB can give informal suggestions and recommendations about the protocol beyond the express conditions it imposes to meet regulatory requirements.

Indeed, IRB review, by allowing for and augmenting regular communication between active participants in the research enterprise, can be particularly helpful for junior investigators. Often, a learning curve needs to be overcome for successful trial

^{284.} See Paredes, supra note 191, at 521.

^{285.} Langevoort, supra note 135, at 816.

^{286.} Cf. Noah, supra note 34 (noting that the IRB review process is "open and interactive" and provides an opportunity for constructive dialogue between the IRB and the investigator, similar to how referees for peer review publications provide useful feedback to authors to improve the quality of the published work and the underlying research).

management, and new investigators may not recognize pragmatic problems in protocol design that more experienced researchers on the IRB can identify. For example, an IRB with trained statisticians may alert a clinical investigator that the proposed study will have insufficient statistical power and may suggest expanding the number of subjects studied. In a similar vein, IRB members may warn an investigator new to the institution that the proposed recruitment procedures will, in their experience in conducting research at the same facility, not likely yield the number of potential research subjects needed, and they may advise exploring additional recruitment possibilities.

Increased monitoring by an IRB can negatively impact its service role ability. For one, the demands of increased monitoring compete with service activities for the already limited time IRB members have to devote to IRB work overall. If IRBs are required to spend increasing amounts of time on continuing review protocols, auditing consent procedures in the field, and other monitoring activities. it will leave little time for the IRB to brainstorm with clinical investigators over improving research design or institutional research policies. Also, as previously noted, a vigilant, active monitoring IRB can undermine the fragile trust researchers place in the oversight body. Such a climate of trust promotes and makes possible informal appeals to the IRB for guidance and assistance.²⁸⁷ Allowing IRBs a degree of flexibility in how they function can offer certain advantages and efficiencies in providing quick, open lines of communication between the investigators and the IRB within an institution.²⁸⁸ But a high level of required IRB monitoring activity runs the risk of foreclosing such spontaneous, informal discussions and brainstorming. Increased monitoring may simply inhibit individual researchers' willingness to seek advice and input from IRB members, or to heed their recommendations, in the first place.

D. Problems with One-Size-Fits-All IRB Reform

Demonstrating that IRBs, like corporate boards, perform a variety of non-monitoring roles helps to remind us that IRBs possess

^{287.} See Levine, supra note 21, at 162.

^{288.} See Edgar & Rothman, supra note 36, at 497.

certain unappreciated strengths. In other words, IRBs as currently structured may be particularly effective at performing mediating, service, and other non-monitoring functions. This suggests that radical reform proposals to abandon or completely overhaul IRBs require careful thought. The monitoring trade-off dilemma cautions that what may be gained through increased IRB monitoring may not always be worth what is sacrificed as a result.

This analysis at the very least suggests that IRB reformers need to be more attentive to context and to the particular needs of each research institution before dismissing an institution's IRB as nonproductive and ineffective. Corporate governance theorists have warned about the dangers of trying to reform corporate boardrooms under a one-size-fits-all monitoring model. Companies can have very different needs for certain pockets of expertise on the board depending on the firm's activities. Plus, in some corporate environments, intense market pressures, institutional culture, and other factors serve as a sufficient check on managerial opportunism as to lessen the need for a vigorous monitoring board. A universal model of the corporate board that emphasizes the monitoring role, therefore, will not always serve a specific corporation's interests.²⁸⁹

These insights likely apply to IRBs as well. A universal model of the IRB rigidly focused on the monitoring role will not be the optimal board structure at each research institution. More attention needs to be paid to the particular challenges and stress points confronting the institution's overall research enterprise. For example, an institution weakened by faculty power struggles, by an organizational culture that encourages clinical departments and individual investigators to compete against each other for limited research funding, and by fragile relationships with wary, fickle clinical trial sponsors may be prone to potential conflict and opportunistic conduct among the research enterprise stakeholders. In such an environment, the IRB's ability to act as mediating

^{289.} See Fisch, supra note 192, at 284-86. Professor Fisch notes, for example, how corporations in highly regulated industries may benefit less from a monitoring board, because the increased regulatory environment already imposes clear constraints on the corporation's activities. Id. at 285. Also, some high-profile corporations, such as Warren Buffett's Berkshire Hathaway company, have performed extremely well for shareholders while using a board structure that emphasizes the service and relations function much more than the monitoring function. See id. at 287-88; see also Lin, supra note 38, at 931 (emphasizing that a board's expertise in monitoring may detract from other board responsibilities and talents).

hierarch takes on increased importance. At another institution, junior researchers may take on increased trial management responsibilities without guidance from senior colleagues within their own clinical department. Here, the IRB's service role becomes more critical. Attempts to force all IRBs into a unitary monitoring model thus may be counterproductive and hamper their ability to engage in non-monitoring functions for which they possess certain institutional strengths and advantages. None of this means that we should remain unconcerned about IRB's monitoring limitations or that IRBs should neglect their fundamental responsibility for protection of research subjects. But there are reasons to be wary and somewhat cautious about IRB reform attempts to impose a one-size-fits-all monitoring model as the solution for all research institutions.

IV. IMPLICATIONS OF THE CORPORATE GOVERNANCE PERSPECTIVE FOR IRB REFORM

The IRB-corporate board comparison does much more than simply highlight a monitoring trade-off dilemma. The experience of corporate boards can help in predicting how particular changes in structure, mandate, and procedures will likely affect an IRB's overall performance. This Part preliminarily explores such implications of the corporate governance perspective by considering two significant IRB reform proposals currently attracting much support: (1) attempts to increase the number of outside, community members serving on IRBs; and (2) calls for IRBs to take on a more direct role in reviewing financial conflicts of interest.

A. Increasing the Number of Outsiders on IRBs

Increasing outsider presence stands out as the central, recurring theme in many current IRB reform proposals. The Institute of Medicine (IOM) recently called for IRBs to expand the ranks of unaffiliated members, including non-scientists, local community residents, and patient representatives, so that they hold at least twenty-five percent of the membership slots on each IRB.²⁹⁰ This

^{290.} See COMM. ON ASSESSING THE SYSTEM FOR PROTECTING HUMAN RESEARCH PARTICIPANTS, INST. OF MED., supra note 21, at 96.

recommendation follows a very similar minimum twenty-five percent suggestion made by the National Bioethics Advisory Commission (NBAC) in 2001. PBAC has further advised bolstering the outside presence by revising IRB procedural rules to require the presence of representatives from the patient, nonscientific, and noninstitutional membership categories at an IRB meeting in order for a sufficient quorum to exist. PAdditionally, academic commentators frequently urge increasing the number of community and nonscientific IRB members. Recall, too, that the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, in supporting an IRB review system, had initially suggested that nonscientists should comprise at least one-third of an IRB's membership, a recommendation that the final IRB regulations failed to follow.

In theory, increasing the outside presence on IRBs offers several important advantages for improving IRB oversight. A greater number of outside members could have more practical success. through the force of sheer numbers, in getting the IRB to consider layperson and noninstitutional viewpoints. Additional outside members could help establish stronger links between the IRB and the greater community, enhancing perceptions of the IRB's legitimacy. They also could serve as a sounding board for researcher and inside IRB members seeking insight about layperson and other professionals' perspectives. 295 Moreover, the very prospect of having their protocols reviewed and discussed by a sizable number of outside members can encourage researchers to take more care in designing protocols. Presumably, they would be concerned about wider exposure of potentially questionable research activities, as well as anticipate receiving a qualitatively different level of scrutiny from outside members, as compared to insiders.

But the corporate governance perspective cautions that merely adding more outside members offers no simple, quick-fix remedy. Indeed, there are limits to how much numerical changes in the

^{291.} See NAT'L BIOETHICS ADVISORY COMM'N, supra note 19, at 64.

^{292.} See id.

^{293.} See, e.g., Bauer, supra note 148, at 7-8; Goldner, supra note 51, at 107-09.

^{294.} See supra note 73 and accompanying text.

^{295.} See Porter, supra note 57, at 2 (describing multiple expectations that have been held for outside IRB members).

insider/outsider mix, without more, can realistically affect board operations. The corporate board experience teaches that pursuit of shareholder interests and active monitoring do not go hand in hand with outside status. With regard to corporate boards, the traditional label of outside director may not entirely reflect that director's capacity for independence.²⁹⁶ True independence turns on the director's state of mind and willingness to act, including readiness to buck management.²⁹⁷ An outside director, although not employed by the firm, may still have significant business and financial relationships with the company that affect his willingness to challenge management. Indeed, for this reason the new NYSE and NASDAQ listing requirements have tried to define "independent" directors for public corporations more narrowly, accounting for such financial ties.²⁹⁸

Even if an outside director avoids significant business relationships with the firm, however, the outside status still does not mean that director will vigorously represent shareholders as a truly independent director. In other words, "[g]ood character and financial independence from management may be necessary conditions for effective monitoring, but they are hardly sufficient." A number of additional factors can affect an outside director's monitoring ability. First, and critically important, many outside directors have on-going personal relationships or socially identify with the firm's senior executives. Such outside directors can face considerable social pressures. Indeed, in the recent *In re Oracle Corp. Derivative Litigation* proceeding, the Delaware Court of Chancery recognized the degree to which social ties and other affiliations between directors and management can compromise an outside director's capacity for independence. The court questioned whether two

^{296.} See Gilson & Kraakman, supra note 40, at 874-75.

^{297.} Paredes, supra note 191, at 522.

^{298.} See supra note 140 and accompanying text.

^{299.} Gilson & Kraakman, supra note 40, at 874-75.

^{300.} See, e.g., Johnson et al., supra note 138, at 418-19. For example, the typical outside director may depend on management for his board seat and may find it socially uncomfortable to monitor friends and peers in management positions. The typical outside director in a large public company also holds a senior executive position at another corporation. He may be inclined, therefore, to grant management wide discretion, because that is how he would prefer to be treated by his own company's board. See Gilson & Kraakman, supra note 40, at 874-75.

^{301. 824} A.2d 917 (Del. Ch. 2003).

outside directors, both Stanford University professors, could maintain sufficient independence in evaluating insider trading allegations against a fellow colleague at their university in light of other personal relationships between the outside directors and the interested parties.³⁰²

For example, psychological studies indicate that directors elected to the board during the tenure of a CEO may feel a personal sense of obligation and loyalty to that individual. This no doubt reflects the practical reality that although shareholders nominally elect the directors, the CEO is often able, through indirect means, to determine who actually gets elected as a director. Outside directors thus may feel they owe their board seats in large part to current management. They may also be concerned about renomination to the board and may not want to risk jeopardizing their lucrative, prestigious board seats by being critical of senior management. They may also be less willing to challenge persons they identify as like-minded social peers. As a result, "[a]ll too often ... outside directors who are selected in the usual way from the usual pool turn out to be more independent of shareholders than they are of management."

Plus, as previously discussed, any director, whether inside or outside, has few clear incentives to consider shareholder views when making board decisions. A nominally independent director may have joined the board primarily to increase his social reputation and

^{302.} See id. at 942-48. The two outside directors were members of Oracle's special litigation committee (SLC). The SLC had to evaluate a shareholder derivative action alleging insider trading against the CEO and other members of the Oracle board of directors. See id. at 920-23. The court concluded that there was reason to doubt the SLC's impartiality in evaluating the litigation in part because of the numerous social ties and affiliations between the outside directors, Stanford, and the accused defendants. See id. at 942-48. The court emphasized that director independence can be threatened not just by financial considerations but also by personal or other relationships to the interested parties. See id. at 938-39.

^{303.} Johnson et al., supra note 138, at 419.

^{304.} See supra notes 122-24 and accompanying text.

^{305.} See Paredes, supra note 191, at 511.

^{306.} See id. at 508.

^{307.} Gilson & Kraakman, supra note 40, at 873; see also Cox & Munsinger, supra note 236, at 91-97 (describing how the typical board appointment process, in which nominees are sought who are like-minded and who will be compatible with the present directors, can generate powerful biases that compromise a director's ability for making independent judgment); Matheson & Olson, supra note 125, at 1461 ("[E]ven the most independent of directors shun shareholder input.").

because of perceived perks of director service, and thus care very little about the monitoring role and seeking shareholder input. ³⁰⁸ In fact, outside directors often have less at stake financially in how the corporation fares than inside directors, meaning that they actually have less incentive to perform as vigilant monitors and to help with strategic decision making. ³⁰⁹ Also, the addition of more outside directors to a board does nothing to address the problem that time constraints severely limit even the most dedicated outside director's effectiveness. ³¹⁰ Further, inside directors can be expected to have superior information compared to outsiders regarding company operations, an advantage that still may allow the insiders to control or hinder much of what gets done by the board, notwithstanding the insiders' diminished numbers. ³¹¹

Length of board service can also impact a director's monitoring capacity. Simply serving on a board over time may wear down outsiders' capacity for detachment and objectivity. A long-serving director can become assimilated into and coopted by the corporation's governing culture. Corporate law has taken only tentative steps to account for this particular factor influencing board dynamics, reflected, for example, in Michigan's unusual corporation statute. Under the Michigan law, lengthy board service, regardless of non-employment and lack of significant financial ties with the firm, can disqualify a director from obtaining independent status important for approval of conflict of interest transactions and for certain other corporate actions. Similarly, some institutional

^{308.} See Langevoort, supra note 135, at 798-99.

^{309.} See id. at 806-07.

^{310.} For this very reason, several current corporate governance reform proposals have focused on limiting the number of boards on which outside directors may sit, at least to ensure that they have more time to devote to each corporation's affairs. The Council of Institutional Investors, for example, has suggested that outside directors with full-time jobs should not serve on more than two other company's boards. The Council further recommends that CEOs limit their outside director service to only one other corporation and that, in any event, no person should serve on more than five corporate boards. Council of Institutional Investors, Corporate Governance Policies (2003), available at http://www.cii.org/dcwascii/web.nsf/doc/policies_index.cm (last modified Oct. 13, 2004).

^{311.} See Gilson & Kraakman, supra note 40, at 874-75.

^{312.} See Sanjai Bhagat & Bernard Black, The Uncertain Relationship Between Board Composition and Firm Performance, 54 Bus. LAW. 921, 953 (1999) (noting the potential that "directors who have been on the board for a long time, though nominally independent, may simply be less energetic than newer directors").

^{313.} Michigan excludes from the definition of "independent directors" persons who have

investors have urged that term limits apply to director service, in order to bring new ideas and talent to the board.³¹⁴ On the other hand, in certain corporate environments, increased board tenure might help, rather than hurt, a director's monitoring role. The longer an outside director serves, the more company-specific information he gathers, reducing his dependency on management for information.³¹⁵

The intricacies involved in accounting for how length of board service impacts an outside director's monitoring role point to the much larger, underlying problem. The experience of corporate boards demonstrates that trying to change board conduct through the mere addition of more outside directors is no easy task. The board is an unwieldy, convoluted institution responsive to many factors. Numerous, distinct variables interact in a non-linear, often attenuated manner to drive the actions of individual directors and the overall board. Empirical studies of corporate board behavior suggest that whether an outside director will be an effective, independent monitor depends on a number of conditions wholly apart from the director's nominal outside status. Such conditions range from the length of the director's board service, to the size of the overall board, to the person's professional training and experience before going on the board. 316 Accordingly, the empirical research indicates that the makeup of the board does not correspond neatly with particular performance outcomes; instead, the effects of

served on the corporate board for more than three years, whether or not they were considered independent when first elected. MICH. COMP. LAWS ANN. § 450.1107(3)(f) (West 2002). This definition implicitly recognizes that a director's capacity for independence becomes compromised after years of board service and the development of interpersonal ties with management.

^{314.} The influential California Public Employees' Retirement System (CalPERS) and the Teachers Insurance Annuity Association College Retirement Equities Fund (TIAA-CREF) have called for director term limits. See Elson & Gyves, supra note 12, at 882.

^{315.} See Lin, supra note 38, at 950.

^{316.} See id. at 903. Professor Lin, reviewing the empirical literature, identifies a number of factors that influence an outside director's capacity for independence, including: (1) the number of other outside directors in the boardroom; (2) the length of the director's service on the board; (3) the director's professional qualifications; (4) the length of the CEO's tenure in office; (5) the director's equity interest in the company and other business ties to the firm; (6) the director's general experience with the firm's industry; and (7) the overall size of the board. See id. at 957.

board composition are probably far more complicated, subtle, and indirect. 317

The lesson for IRBs is that simply adding more outside, unaffiliated members to an IRB does not guarantee any significant change in board operations. Given the complex variables that affect overall board performance, changing board composition will, at best, have an attenuated impact. Additionally, an IRB member's capacity for independence and active monitoring does not automatically track his outside, non-affiliated status. Like outside directors. nonaffiliated IRB members may become worn down by lengthy tenure on the board. Unless there is significant turnover in committee membership, outside IRB members may become easily co-opted by institutional interests. They also will continue to face significant time constraints, calling into question their ability to be effective monitors. Simply increasing the number of outside members by a modest degree also will not address the underlying problem that all outside IRB members have to perform an uncomfortable social role of onlooker and intruder. As one outside IRB member describes it, "Oftentimes, we feel like the skunk at the picnic. Institutions and researchers alike view us with skepticism, or with resignation at best."318

Perhaps more important, the corporate governance perspective cautions that unless the appointment process for outside IRB members also radically changes, simply adding more non-affiliated IRB members may not change board dynamics a great deal. Outside IRB members usually join the board upon invitation of the existing IRB chair or upon recommendation by someone already on the IRB. Thus, like outside corporate directors, non-affiliated IRB members typically join a board already encumbered by social relationships with several current board members. In addition, like outside corporate directors, IRB members may feel some degree of loyalty and obligation to the persons and institution who appointed them to the board. This will make it difficult for the typical outside member to adopt a more active monitoring stance and shake up current board operations. Adding a few more outside members to

^{317.} See Forbes & Milliken, supra note 130, at 490; Lin, supra note 38, at 922, 925-26.

^{318.} Bauer, supra note 148, at 7.

^{319.} See supra notes 150-52 and accompanying text.

the room does not necessarily change the underlying pressures for IRB members to conform, act for the institution's benefit, and continue operations as usual.

If IRB reform really requires more active monitoring by nonaffiliated members, then perhaps the entire IRB appointment process needs to be overhauled. Imagine, for example, if nonaffiliated members of an IRB had to be nominated and elected by community groups or other representatives of an institution's patient base, without any involvement by institutional officials other than making sure such elections take place. One might then expect to see outside IRB members with very different expectations about their responsibilities and with fewer interpersonal and professional relationships weighing down the inclination to monitor. Elected IRB members who do not owe their direct appointment to anyone at the institution might feel more comfortable and even obligated to take on clearer research subject advocacy roles, even if this creates clear tensions with other members of the board. 320 Similarly, if outside IRB members served limited tenures on the committees, perhaps they would approach their tasks with more vigor and capacity for detachment and be able to conclude their board service before the many social pressures take hold and wear them down.

The corporate governance perspective further suggests that changing board procedural rules is equally important as changing board composition in order to reap the benefits of an increased outsider presence on the board. Although corporate boards have been adding more outside directors over the past decade, this apparently did not help in avoiding the most recent round of corporate scandals. Accordingly, reform proponents have additionally advocated for treating the outside faction, procedurally, as a more independent organ. For example, the American Law Institute's Principles of Corporate Governance instructs that independent directors, acting as their own group, should be entitled in certain situations to retain their own legal counsel, accountants, and other

^{320.} Of course, management has largely co-opted the board election process in shareholder voting contests. It therefore would be important to put sufficient procedural protections in place to ensure that institutional officials do not have the ability to influence the outcome of IRB member elections.

experts for advice in overseeing the corporation's affairs.³²¹ Similarly, the new NYSE and NASDAQ listing requirements require the independent directors of the board to meet at regularly scheduled executive sessions, without the inside directors present.³²² Finally, the Sarbanes-Oxley Act requires that the corporation's critically important audit committee be comprised entirely of independent directors,³²³ while the new NYSE and NASDAQ listing requirements also require the nominating and compensation committees to consist solely of independent directors,³²⁴ ensuring that the outside faction has regular platforms for taking monitoring action without the involvement and potentially chilling presence of the inside directors.

An apparent lesson to be learned from corporate board reform is that the outsiders require sufficient opportunities and support to act independently. The underlying board procedural rules may therefore also need changing to treat the outsider group as a quasidistinct body expected to undertake autonomous deliberation and action without the presence of the insiders. For example, perhaps an IRB's outside members should be required to meet and convene regularly in closed sessions, without the inside members present. In addition, perhaps certain audit and investigation functions of the IRB should be overseen by a committee of the IRB comprised solely of the outside members. In fact, it may be necessary to go even further and split the IRB itself into two distinct groups with different responsibilities. One group would consist of inside members, and the second group would consist solely of outside

^{321.} See AM. LAW INST., PRINCIPLES OF CORPORATE GOVERNANCE: ANALYSIS AND RECOMMENDATIONS § 3.04 (1994); see also Eisenberg, supra note 137, at 1282 (describing an emerging norm in the corporate governance world to treat "the body of independent directors as a de facto corporate organ").

^{322.} See Securities and Exchange Commission, Self-Regulatory Organizations; New York Stock Exchange, Inc. and National Association of Securities Dealers, Inc.; Order Approving Proposed Rule Changes, 68 Fed. Reg. 64,154, 64,158, 64,162 (Nov. 12, 2003); see also Elson & Gyves, supra note 12, at 877-78 (describing such reforms as "a critical step in fostering board independence and better consequent management monitoring").

^{323.} See Sarbanes-Oxley Act of 2002, Pub. L. No. 107-204, § 301, 116 Stat. 745, 775-77 (2002) (to be codified at 15 U.S.C. § 78j-l).

^{324.} See Securities and Exchange Commission, Order Approving Proposed Rule Changes, 68 Fed. Reg. at 64,158, 64,162-63.

members, with certain critical oversight functions assigned to the outside faction alone.³²⁵

Alternatively, to ensure a more vigorous outside presence on IRBs, it may be necessary to develop a cadre of accredited individuals who would serve as "professional" outside IRB members for pay. This suggestion parallels a related corporate governance reform proposal that has attracted attention: creation of a class of professional independent directors to serve on corporate boards. Academic commentators, for example, have called for the development of a core of professional directors. These persons would be selected based on having sufficient skills, backgrounds, and time availability to bring to the job and would receive competitive compensation for their board service as independent directors. These persons would be reform proponents might similarly explore the merits of creating a class of professional outside members to serve on IRBs for compensation and other rewards.

Finally, corporate governance scholarship suggests that excessive outsider presence in the boardroom may be too much of a good thing and can have counterproductive effects. Adding more non-peers to a board creates more distant, less trust-based relationships in the boardroom and between the board and senior management. A board that is distant, with members not alike, may find that its directors take their board service less seriously, leading to an ultimately less productive board.³²⁷ Also, reducing the number of inside directors means putting greater reliance on outsiders who lack knowledge of the corporation's day-to-day workings and who may have less applicable expertise to bring to the table. The CEO and senior

^{325.} In this respect, Professor Goldner's recommendation for dual committees within an IRB has certain appeal. He suggests that IRBs be split into two major committees: one comprised of scientific and affiliated members and the other comprised of largely outside community-based members, with each committee having distinct charges. The first committee would review scientific aspects of a protocol and consider, from a scientific standpoint, whether risks to subjects are reasonable in light of anticipated benefits. The second committee of outsiders would review the community acceptability of proposed research projects, among other considerations. Goldner, *supra* note 51, at 107-09. At least in this type of dual committee structure, the outsider presence on the IRB is given sufficient authority to be able to take independent action.

^{326.} See generally Gilson & Kraakman, supra note 40, at 883-92.

^{327.} See Bainbridge, supra note 130, at 37-38 (discussing how mutual compatibility, trust, and cooperation between board members is a source of board strength and key to why the board often makes decisions better than individuals); Langevoort, supra note 135, at 810-11.

managers have greater incentive to provide distorted information when there is an increased outsider presence, recognizing that they are more likely to face sanctions for providing disappointing news. 328 This inaccurate information flow compromises the board's ability to monitor effectively 329 and undercuts the board's service role. Also, simply increasing the outsider presence by adding more board seats increases the overall board size. Large boards can become unwieldy and procedurally complicated, ending up able to accomplish less than smaller groups. 330

All of this suggests that increased outsider presence on IRBs may have unintended, negative spillover effects. For example, if work becomes more unpleasant because increased monitoring makes the board conflict-ridden and less collegial, IRB members may simply put less effort into their board service to begin with. A divisive IRB, with less trust-based relationships between board members and between the board and the researchers at the institution, may chill the effective communication flow necessary to the IRB's monitoring and service functions. In addition, a greater number of non-affiliated IRB members means a greater number of persons on the board who have no intimate knowledge of the inner workings of the institution, who view IRB service as a part-time volunteer activity, and who may lack the scientific background required to identify potential problems in protocol review. In short, increasing the outsider presence may deprive the IRB of valuable, needed expertise and of greater time effort from inside members in their monitoring, service, and mediating roles. 331 Reform proponents need

^{328.} See Langevoort, supra note 135, at 812-13; Lin, supra note 38, at 914 ("[S]ome believe that the outside directors merely receive selective information that would support management's desired position on the matter. As a result, ... outside directors may see major issues confronting the corporation through management's eyes.").

^{329.} See Langevoort, supra note 135, at 800.

^{330.} See Bainbridge, supra note 130, at 9 (describing how trends in recent decades for more active, monitoring boards in public corporations have tended to result in boards of smaller overall size than in the past); Fisch, supra note 192, at 278; Lin, supra note 38, at 952-53 (noting that larger boards can reduce directors' effectiveness because there is less time for everyone to speak at a board meeting, and because it may encourage some directors to shirk and free-ride on the efforts of the many other persons in the boardroom).

^{331.} Cf. Forbes & Milliken, supra note 130, at 498-99 (discussing similar problems with corporate boards that have more of an outsider presence); Lin, supra note 38, at 966 (warning about the similar problems with mandating particular board compositions for corporate boards).

to better account for such spillover effects before looking to a numerical change in board composition as the magic bullet of IRB improvement.

B. Enhanced IRB Role in Reviewing Financial Conflicts of Interest

Financial conflicts of interest "have come center-stage" as one of the most pressing challenges confronting human subjects research today. The private sector finances a greater percentage of medical research today than in the past. 333 The general increase in private sector funding, as well as more commercialization opportunities for researchers and medical centers emanating from publicly funded studies, have spawned a plethora of funding arrangements and related financial conflicts of interest. 334 The powerful economic incentives provide rewards for enrolling subjects and completing a greater volume of clinical trials speedily and with favorable results. Consequently, the objectivity of the research and the welfare of the participating subjects can be significantly compromised. 335

The push to do something more about financial conflicts of interest has extended to IRBs. For most of their history, IRBs have occupied an uncertain, ill-defined, and relatively passive role in policing financial ties in clinical research. For example, neither the general IRB regulations, nor the existing financial conflict of interest requirements imposed by the FDA regulations, ³³⁶ the Public

^{332.} Barnes & Florencio, supra note 17, at 390.

^{333.} See Patricia C. Kuszler, Curing Conflicts of Interest in Clinical Research: Impossible Dreams and Harsh Realities, 8 WIDENER L. SYMP. J. 115, 118-19 (2001); Michael J. Malinowski, Institutional Conflicts and Responsibilities in an Age of Academic-Industry Alliances, 8 WIDENER L. SYMP. J. 47, 48-49 (2001).

^{334.} The financial arrangements include honoraria, consulting fees, equity stakes in commercialization ventures, and receipt of educational grants and other funding from the trial sponsor. See generally Goldner, supra note 17, at 382-86; Kuszler, supra note 333, at 135-37 (summarizing individual investigator and institutional financial conflicts of interest).

^{335.} See, e.g., NAT'L BIOETHICS ADVISORY COMM'N, supra note 19, at 59; Sameer S. Chopra, Industry Funding of Clinical Trials: Benefit or Bias?, 290 JAMA 113, 113-14 (2003); Karen A. Jordan, Financial Conflicts of Interest in Human Subjects Research: Proposals for a More Effective Regulatory Scheme, 60 WASH. & LEE L. REV. 15, 23-29 (2003); Karine Morin et al., Managing Conflicts of Interest in the Conduct of Clinical Trials, 287 JAMA 78, 81-83 (2002).

^{336.} An applicant seeking FDA approval of an investigational product must disclose to the agency certain investigator financial conflicts of interest with regard to the drug or device being tested or the company sponsoring the research. The regulations require disclosure for equity or compensation interests exceeding specified dollar thresholds. Among other things,

Health Service (PHS) regulations, ³³⁷ and the funding policies of the National Science Foundation (NSF)³³⁸ clearly require an IRB to evaluate financial conflicts in deciding whether to approve or disapprove a research protocol. ³³⁹ The research regulations and federal agency funding policies also have not clearly required disclosure of financial conflicts to potential research subjects. ³⁴⁰ Accordingly, IRBs traditionally did not investigate financial conflicts when performing protocol review. Nor have IRBs ordinarily scrutinized consent forms for full disclosure of any financial ties. The Office of Inspector General found that seventy-five percent of IRBs do not review any financial arrangements between sponsors and investigators. ³⁴¹ Although such practices may be changing in light of increased concern regarding financial conflicts, for many decades IRBs rarely took an active role in such matters. ³⁴²

investigators must report to the FDA payments from sponsor companies of over \$25,000 (beyond compensation for actual research costs) and equity interests valued at more than \$50,000 in sponsor companies. Financial Disclosure by Clinical Investigators, 21 C.F.R. §§ 54.2-54.4 (2003).

337. Institutions participating in PHS-funded studies must develop and enforce conflict of interest policies, including requiring investigators to disclose to the institution "significant financial interests" that they have in a research study. This includes payments of \$10,000 or more to investigators from sponsor companies and investigators having more than five percent ownership in a sponsor company. The institution must then "manage, reduce, or eliminate" the conflict. This could include imposing certain monitoring requirements, moving the trial to another site, or requiring that someone other than the conflicted investigator do the actual enrollment of subjects and gathering of data. See Responsibility of Applicants for Promoting Objectivity in Research for Which PHS Funding Is Sought, 42 C.F.R. §§ 50.602-50.604 (2003); see also Responsible Prospective Contractors, 45 C.F.R. §§ 94.1-94.6 (2003).

338. The NSF policy, which applies to most NSF-funded studies, is very similar to the PHS rules. Institutions participating in NSF-funded studies must maintain conflict of interest policies. Investigators are to disclose certain financial conflicts of interest, above a specified monetary threshold, to the institution. The institution must then follow its policies to manage, reduce, or eliminate the conflict. See Investigator Financial Disclosure Policy, 60 Fed. Reg. 35,820 (July 11, 1995); NAT'L SCI. FOUND. GRANT POLICY MANUAL, § 510: Conflict of Interest Policies (July 2002), available at www.nsf.gov/pubs/2002/nsf02151/gpm5.htm.

339. See Goldner, supra note 17, at 390.

340. While disclosure to the FDA or to the institution itself is sometimes necessary to manage a conflict, disclosure to the research subject traditionally has not been required, although such an obligation might be found under common law. See Kuszler, supra note 333, at 143; Frances H. Miller, The Hidden Hazards of Clinical Trials, TRIAL, Oct. 2003, at 48, 50.

341. See Office of Inspector Gen., Dep't of Health & Human Servs., Recruiting Human Subjects: Pressures in Industry Sponsored Clinical Research 26 (2000).

342. See Goldner, supra note 17, at 391 (discussing NIH estimate that twenty-five percent of IRBs routinely considered investigators' financial conflicts of interest, but also noting that this figure represents a very recent trend and that "[i]t would appear that existing IRB review

Now, however, many urge IRBs to do much more. The National Bioethics Advisory Commission has recommended that IRBs investigate financial arrangements as part of the risk/benefit analysis done for overall protocol review and determine what information needs to be disclosed to research subjects. 343 Academic commentators have similarly advocated for more direct involvement by IRBs in monitoring financial conflicts.³⁴⁴ In a significant new regulatory development, the Department of Health and Human Services (HHS) has promulgated guidance that envisions considerable expansion of IRB activities in this area. 345 HHS recommends that IRBs consider whether methods "used for management of financial interests of parties involved in the research adequately protect the rights and welfare of human subjects."346 The HHS guidance also cautions IRBs to consider, before approving a protocol, whether additional corrective actions are required to minimize the risks subjects face in light of any conflicting financial interests.³⁴⁷

The HHS guidance does not necessarily intend IRBs to take the lead within an institution in addressing financial conflicts of interest. The guidance also contemplates that institutions, to deal with the already existing FDA, PHS, and NSF financial conflict of interest rules,³⁴⁸ might make use of distinct conflict of interest committees (COICs) to deal with recurring issues of financial

of [financial] conflicts of interest might be of recent vintage").

^{343.} See NAT'L BIOETHICS ADVISORY COMM'N, supra note 19, at 59-60.

^{344.} See, e.g., Baruch A. Brody et al., Expanding Disclosure of Conflicts of Interest: The Views of Stakeholders, 25 IRB: ETHICS & HUM. RES. 1, 6 (2003) (urging IRBs to enforce investigators' disclosures of potential financial conflicts both to IRBs themselves and to research subjects); Evan G. DeRenzo, Coercion in the Recruitment and Retention of Human Research Subjects, Pharmaceutical Industry Payments to Physician-Investigators, and the Moral Courage of the IRB, 22 IRB 1, 3 (2000) (urging IRBs to ask more questions about potential conflicts for investigators, including financial incentives for recruiting subjects); Goldner, supra note 17, at 397-98 (calling for increased IRB oversight, while conceding this may be a second-best solution compared to direct regulatory bans on such financial conflicts of interest).

^{345.} See Financial Relationships and Interests in Research Involving Human Subjects: Guidance for Human Subject Protection, 69 Fed. Reg. 26,393 (May 12, 2004).

^{346.} Id. at 26,397.

^{347.} See id. at 26,397. In addition, with regard to monitoring informed consent, HHS advises that IRBs consider what information should be disclosed, and at what level of detail, to subjects about such financial conflicts. See id.

^{348.} See supra notes 336-38 and accompanying text.

conflicts of interest for institutions and investigators.³⁴⁹ Nonetheless, institutions can choose to respond to the HHS guidance by placing much more responsibility on their IRBs. Even at institutions that make use of distinct COICs, IRBs could still play a prominent role in evaluating financial conflicts. The guidance gives IRBs considerable discretion to address such matters in their own protocol reviews, wholly apart from the COIC deliberations.³⁵⁰

Unfortunately, the corporate governance perspective cautions that an increased role for IRBs in reviewing financial conflicts of interest may be misguided and prove disappointing. Corporate boards, unlike IRBs, have a well-developed track record in reviewing financial conflicts of interest.³⁵¹ Indeed, corporate statutes encourage the firm to obtain the approval of disinterested, independent directors on the board for a transaction raising conflict of interest problems.³⁵² Whether independent directors have performed well in this assigned role is another story. For example, in the Enron fiasco, a board comprised overwhelmingly of *outside* directors nonetheless performed dismally in monitoring financial conflicts of interest for key senior executives.³⁵³ Similarly, empirical studies of

^{349.} See Financial Relationships and Interests in Research Involving Human Subjects, 69 Fed. Reg. at 26,396.

^{350.} HHS has urged IRBs to consider the impact of financial ties on each protocol that they review, both in terms of risk assessment and in ensuring that informed consent requirements are met. See id. at 26,397 (final guidance); 68 Fed. Reg. 15,459 (Mar. 31, 2003) (draft guidance). Presumably, under the guidance, IRBs can refuse to approve a protocol if they believe the institution is taking insufficient steps to protect research subjects from potential financial conflicts, even if the institution's COIC has already approved the proposed measures for dealing with the conflict.

^{351.} For example, the corporate board has to consider the impact of potential financial conflicts of interest on management decisions when setting compensation for senior executives, when evaluating proposed transactions between the firm and entities affiliated with a director/officer, and when responding to a corporate takeover threat by an acquirer that will seek to displace the current management.

^{352.} See, e.g., DEL. CODE ANN. tit. 8, § 144(a)(1)(2003) (providing that a transaction posing a conflict for a director or senior executive in the corporation is not voidable because of the conflict if it is approved by a majority of the disinterested directors on the board). See generally Kenneth B. Davis, Jr., Approval by Disinterested Directors, 20 J. CORP. L. 215, 216-19 (1995); Lin, supra note 38, at 899-900 (explaining how corporate law has traditionally relied upon outside directors to monitor financial conflicts that put management interests ahead of shareholders' interests).

^{353.} During the troubled months for Enron in 2001, the company had fourteen directors on the board—only two were classic inside directors. See Paredes, supra note 191, at 504. The board of mostly outside directors did little to monitor the financial conflicts of the company's senior executives. For example, the Enron board ratified Enron CFO Andrew Fastow's

corporate board action in setting CEO compensation do not necessarily support the view that the participation of nominally independent, outside directors has a clearly measurable impact in controlling potential financial conflicts of interest for the firm's top executive. Boards with greater participation by outside directors in the compensation process do not determine executive compensation in a manner markedly different from boards with less participation by outsiders.³⁵⁴

Nominally independent directors may not be optimal monitors of financial conflicts of interest, because, as previously discussed, being independent does not mean that such a director will be a good monitor generally.³⁵⁵ Indeed, even-handed scrutiny of a conflict of interest transaction requires challenging the manager or fellow director facing the financial conflict. Few directors may willingly take such action due to the significant psychological and social

investment in and management of several partnerships doing related-party transactions with Enron. Because this was a severe conflict of interest situation the Enron board apparently had to waive the corporation's conflict of interest policies as applied to CFO Fastow on several occasions. Fastow was ultimately enriched by his participation in the partnerships at Enron's expense. The Special Committee investigating the board's role concluded that board approval of Fastow's participation in the partnerships, given the financial conflicts of interest, was a "fundamentally flawed" decision. See WILLIAM C. POWERS, JR. ET AL., REPORT OF INVESTIGATION BY THE SPECIAL INVESTIGATIVE COMMITTEE OF THE BOARD OF DIRECTORS OF ENRON CORP. 9 (2002), available at http://news.findlaw.com/hdocs/docs/enron/sicreport. Elson and Gyves point out that:

A company's chief financial control officer acting on both sides of a corporate transaction would have been considered a highly unusual occurrence in any public company and should have caused great concern at the board level. The Enron directors, however, apparently failed to note the significance of and respond appropriately to this important red flag.

Elson & Gyves, supra note 12, at 862; see also O'Connor, supra note 12, at 1235-36 ("[A] significant factor contributing to Enron's demise was the Enron Board's approval of and failure to monitor the related-party transactions."). Part of the problem was that so many of the outside directors for Enron had their independence compromised by financial ties to the company. See S. Rep. No. 107-70 (2002), available at http://www.senate.gov/~gov_affairs/070902enronboardreport.pdf.

354. See Johnson et al., supra note 138, at 422-23. But see Lin, supra note 38, at 928-30, 962 (discussing various studies suggesting outside directors may at least indirectly benefit shareholders in the way they impact executive compensation decisions, yet also noting that studies are ultimately mixed on whether having more outside directors on the board really improves overall firm performance). See also Paredes, supra note 191, at 521 (noting the data is mixed as to whether firms perform better on several measurement scales when their boards have more independent directors).

355. See supra text accompanying notes 304-17.

pressures they regularly face in the boardroom. A director who challenges financial conflicts of interest risks appearing disloyal or seeming untrusting of his fellow peers and the persons who helped put him on the board in the first place. This is not to suggest that corporate boards are hopelessly inept at policing financial conflicts of interest. The empirical data on corporate boards' ability to deal with conflicts of interest generally remains subject to reasonable debate. The corporate boards have acted as effective financial conflict of interest monitors, however, this usually has corresponded with the presence of a critical mass of independent directors, in terms of sheer numbers, in the boardroom.

This evidence does not bode well for IRBs. Currently, IRBs have very few outside members. Meanwhile, financial ties to industry already compromise the potential objectivity of many inside IRB members. A recent study indicates that almost half of all faculty IRB members have served as consultants to pharmaceutical or medical device companies, calling into question whether such inside IRB members can sufficiently distance themselves from industry and neutrally evaluate potential financial conflicts faced by fellow investigators and their respective institutions. Expecting that the typical board's one to two outside members will do all the heavy work of financial conflicts review seems unrealistic. Moreover, hoping the outside members can stand up to powerful institutional and investigator constituencies and take the uncomfortable position of regularly challenging investigator and institutional financial conflicts—especially when the other faculty IRB

^{356.} See O'Connor, supra note 12, at 1248-49.

^{357.} For a summary of the literature and empirical studies on corporate board performance in monitoring financial conflicts of interest and, in particular, the role of outside directors, see Lin, *supra* note 38.

^{358.} See, e.g., Dallas, supra note 173, at 21. Professor Dallas reviews various studies of corporate board behavior in conflict of interest situations, for example, when boards have replaced non-performing CEOs, and observes this action is more likely to be taken when the board is "dominated" by outside directors. Professor Dallas states: "These findings confirm the importance of more independent directors on boards when corporations deal with serious conflict of interest issues." Id.

^{359.} See Eric G. Campbell et al., Characteristics of Medical School Faculty Members Serving on Institutional Review Boards: Results of a National Survey, 78 ACAD. MED. 831, 831 (2003) (presenting a survey of nearly 3,000 faculty at more than 120 medical schools that found that forty-seven percent of faculty IRB members had served as consultants to industry).

members already have so many ties to industry—may simply be too much to ask.

This difficulty points to a related expertise and capacity problem for IRB review of financial conflicts. IRBs may be even less suited to do this type of review than corporate boards. The typical outside director on a corporate board is better trained and equipped to address financial conflict situations than the typical outside member on an IRB. Outside directors include a sizable number of CEOs and senior executives of other companies. They can call upon their business acumen and financial expertise in evaluating numerous economic conflict of interest scenarios, such as considering whether a CEO's proposed compensation package truly aligns the CEO's interests with the firm's performance. Many IRB members reviewing financial conflict of interest situations have no equivalent financial and business background upon which to draw. The complex economic arrangements involved in funding clinical trials can include the award of stock contingent on certain occurrences, licensing rights, "put" options, seed money for commercial start-ups, limited partnership and other joint venture opportunities. royalty-based payments, and specialized grant funding to individual investigators and to institutions. These arrangements raise complicated, arcane financial issues far beyond what the ordinary IRB member is used to seeing.

It may be hopelessly naïve to expect that ordinary IRB members, generalists with regard to the business side of research, will know a real problem when they see it. Recognizing a potential financial conflict of interest and recognizing a serious financial conflict of interest that warrants immediate intervention by the IRB are two very different things. Not all financial incentives are alike. It takes the right training and background to separate the wheat from the chaff. Research on financial incentives in other health care arrangements indicates that financial incentives offered to physicians are highly contextual. For example, financial incentives offered by managed care organizations to physicians to practice cost-effective medicine vary significantly in their intensity and impact depending on the amount of incentive at issue, the time period over which it is applied, the number of physicians subject to the incentive, the number of patients involved, and what non-financial incentives are

also in place.³⁶⁰ There is every reason to expect that financial incentives in the clinical research setting will similarly vary in intensity and impact depending on the overall context, such as the number of other investigators sharing the same incentive, how the incentive is actually calculated, the amount of money to be earned compared to an investigator's other compensation sources, the time period over which the incentive is applied, and whether the institution as a whole shares in the incentive. Serious credible review of financial conflicts of interest will require the efforts of IRB reviewers who have a sophisticated understanding of such variable conditions and how they can make a potential financial conflict more or less intense in the research setting. Unfortunately, most IRBs do not have this expertise to draw upon among their typical members.

Recognizing the inevitable limitations typical corporate boards face in dealing with serious financial conflicts of interest, some corporate governance reform proposals have called for dual corporate boards. One board would consist solely of outside directors. This first board, more insulated from the traditional management structure, would take the lead in reviewing serious conflict of interest issues and would develop expertise in this area. The second board, comprised of a more traditional mix of insiders and outsiders, would handle day-to-day general business review functions. IRB reformers might similarly see value in a dual-board approach. Indeed, in light of the problems IRBs likely will face in performing serious financial conflicts review, this function might more appropriately be delegated to an institution's separate COIC, a body that would not necessarily include IRB members.

The dual board approach would call for a far more limited IRB role in reviewing financial conflicts of interest than envisioned by HHS, but would not completely eliminate IRBs from involvement in monitoring financial conflicts. Clearly, evaluating the informed

^{360.} See, e.g., U.S. GEN. ACCOUNTING OFFICE, MEDICARE: INCENTIVE PAYMENTS BY HOSPITALS COULD LEAD TO ABUSE 22-23 (1986); Celia Coelho-Kamath & Judi McLean Parks, Perceived Injustice & Framing Incentives in Physician Compensation Contracts, ACAD. MGMT. PROC. 116, 119-20 (1996); Henry T. Greely, Direct Financial Incentives in Managed Care: Unanswered Questions, 6 Health Matrix 53, 85-87 (1996); Stephen A. Magnus, Physicians' Financial Incentives in Five Dimensions: A Conceptual Framework for HMO Managers, 24 Health Care MGMT. Rev. 57 (1999).

^{361.} See, e.g., Dallas, supra note 173, at 24.

consent process, which is and should remain a prime IRB function, will require some involvement by IRBs in understanding the financial arrangements behind each research protocol so the IRB can determine what information about financial conflicts needs to be disclosed to research subjects. Ideally, the gathering of this information, and initial evaluation of the severity and intensity of the financial conflicts, and the imposition of various monitoring safeguards, would be performed by a separate body rather than by the IRB. This recommendation for distinct but parallel oversight bodies finds some support with similar proposals made by the Institute of Medicine (IOM). The IOM has recommended that separate, externally comprised conflict of interest committees take the lead in assessing and managing financial conflicts, recognizing that IRBs lack the resources, structure, and authority to perform this function appropriately. 362 Importantly, the IOM warns that if the bulk of financial conflicts review is thrust upon IRBs, it may place too great a burden on an IRB's outside members. The IOM cautions that the few token outside members on an IRB will still face very powerful obstacles and pressures in challenging financial conflicts that implicate the entire institution.³⁶³

The experience of corporate boards suggests that the IOM is correct to be suspicious about having IRBs take the lead in financial

^{362.} See COMM. ON ASSESSING THE SYSTEM FOR PROTECTING HUMAN RESEARCH PARTICIPANTS, INST. OF MED., supra note 21, at 182-85. Other organizations have reached similar conclusions to the IOM, albeit without express consideration of the corporate board parallels. The Association of American Medical Colleges and the Association of American Universities have suggested that disclosure of significant financial interests by an investigator be made primarily to a separate conflict of interest committee rather than to the IRB. See ASS'N OF AM. MED. COLLS., PROTECTING SUBJECTS, PRESERVING TRUSTS, PROMOTING PROGRESS, POLICY AND GUIDELINES FOR THE OVERSIGHT OF INDIVIDUAL FINANCIAL INTERESTS IN HUMAN SUBJECTS RESEARCH 14 (2001); ASS'N OF AM. UNIVS., TASK FORCE ON RESEARCH ACCOUNTABILITY, REPORT ON INDIVIDUAL AND INSTITUTIONAL FINANCIAL CONFLICTS OF INTEREST 6-7 (2001). In addition, other academic commentators have suggested that it is better to task distinct conflict of interest committees specifically designed with appropriate resources to review financial conflicts of interest, rather than further straining IRBs with this obligation. See, e.g., Malinowski, supra note 333, at 69.

^{363.} See COMM. ON ASSESSING THE SYSTEM FOR PROTECTING HUMAN RESEARCH PARTICIPANTS, INST. OF MED., supra note 21, at 84-86. Under the IOM proposal, the separate conflict of interest committees would communicate their findings and actions taken to manage financial conflicts to the IRB. The IRB could then use this information in performing its risk/benefit assessment and ethical review, as well as in determining what information should be disclosed to subjects about the financial conflicts and whether ongoing review is required if the protocol is approved. See id. at 72-75, 85-86.

conflict monitoring. Moreover, the extra effort required of IRB members for financial conflicts review may simply compete for time that members would devote to more traditional IRB monitoring. In the push to get IRBs to concentrate on financial conflicts of interest, it is important not to detract from IRBs' ability to address nonfinancial conflicts of interest, which may be far more pervasive and powerful and ultimately more threatening to research subjects. ³⁶⁴ A significant new role expansion for IRBs regarding financial conflicts would also likely have spillover effects on the IRB's service and mediating roles. Forcing IRBs into an enhanced financial conflicts monitoring role may raise the monitoring trade-off dilemma all over again. Moreover, this risks repeating the mission creep pattern that has plagued IRBs in the past, ³⁶⁵ expanding IRB responsibilities without the appropriate institutional structure, capacity, and sources of support to do all the tasks simultaneously well.

V. THE IMPORTANCE OF NORMS FOR UNDERSTANDING IRB CONDUCT

The corporate governance perspective cautions that any push for IRB reform may bump up against another significant, confounding limitation. The experience of corporate boards demonstrates that these entities are very much *social* institutions, powerfully guided by norms and commonly understood expectations within the business community of director performance. How directors socially perceive their roles, and the forms of community approval or disapproval that follow from vigilant director action, critically influence board function.³⁶⁶ Social norms may ultimately be more

^{364.} Non-financial conflicts of interest include the investigator's desire for academic advancement, the desire for prestige and recognition from his peers, and the investigator's zeal to make new discoveries and to develop new therapies for the sake of contributing to scientific knowledge. In addition, investigative zeal for clinical research can cause investigators to adopt certain biases and preconceptions in favor of experimentation at the expense of research subjects' interests. At some point, these non-financial forces may combine and push investigators to take actions that benefit the scientific integrity of the clinical trial more than they do individual research subjects. See id. at 83; Kuszler, supra note 333, at 137-40. Such non-financial conflicts have traditionally been more within the radar screen of IRB review.

^{365.} See supra text accompanying notes 53-58.

^{366.} See, e.g., Forbes & Milliken, supra note 130, at 493-94 (discussing how norms exert a strong influence on an individual's conduct when the individual belongs to a group, such as

determinative in shaping corporate directors' behavior than the specific content of underlying corporate laws and regulations. This insight likely applies to IRBs as well. An enhanced and improved role for IRBs in research oversight may never be attained unless, apart from legal tinkering with board structure, composition, and procedures, a serious transformation occurs in the norms surrounding IRB service.

A. Norms Theory and Board Dynamics

The recognition that social norms and conventions largely influence how parties act, regardless of what a particular law or regulation says, is of course not unique to the world of corporate boards or IRBs. Social norms theorists have identified how, in a wide variety of contexts, a community's perceptions of, and social expressions of, appropriate standards of conduct may end up guiding individuals' decisions more than the actual content of the law. Rather than responding to incentives and restraints established through direct law and regulation, in many situations an individual's concerns about violating socially understood standards of behavior, which can lead to loss of reputation, censure, ostracism, and disruption of community relationships, may better explain what the individual chooses to do and why.³⁶⁷

the corporate board, with interdependent social ties); Johnson et al., supra note 138, at 432-33 (discussing the view that the corporate board is a social construction and that directors' social understanding of their roles, and a board's overall performance, may be influenced by the spread of norms in the boardroom and between and across different boards). The term "social norm" is often used in a vague manner without much precise definition. This Article refers to social norm in a rather broad way as meaning a non-legal rule not backed by formal legal sanction. Social norms also would not include the private yet formal internal rules of conduct, such as bylaws, that a corporate board or IRB might adopt for its day-to-day operations. See Eisenberg, supra note 137, at 1255 (using a very similar definition of social norm).

367. There has been a vast amount of recent scholarship on how social norms operate to guide human behavior and the interaction of law and social norms. See, e.g., Robert C. Ellickson, Law and Economics Discovers Social Norms, 27 J. LEGAL STUD. 537 (1998); Jody S. Kraus, Legal Design and the Evolution of Commercial Norms, 26 J. LEGAL STUD. 377 (1997); Eric A. Posner, The Regulation of Groups: The Influence of Legal and Nonlegal Sanctions on Collective Action, 63 U. CHI. L. REV. 133 (1996); Cass R. Sunstein, Social Norms and Social Roles, 96 COLUM. L. REV. 903 (1996). Social norms theory has had limited application to date for health law issues and clinical research in particular. For an interesting application of social norms theory to the issue of fraud in the U.S. health care system, see David A. Hyman, Health Care Fraud and Abuse: Market Change, Social Norms, and the Trust

The reason to suspect that social norms matter particularly for corporate boards and, correspondingly, for IRBs, is that there exist so few other external influences on their behavior. As detailed in Part II. current laws and regulations afford IRB members and corporate directors considerably wide discretion in how they choose to perform their roles. They face limited oversight and influence from research subjects and shareholders, and they face very limited legal liability on an individual basis for poor performance.³⁶⁸ Indeed. Professor Edward Rock describes the "central mystery of corporate law" as why directors can be expected to do a good job for shareholders when there is an "apparent infirmity" in various legal, institutional, and market checks on corporate directors' discretion.³⁶⁹ Moreover, compared to its effect on corporate boards, market deterrence plays a much smaller role in shaping IRB conduct.³⁷⁰ Social norms should therefore be expected to help explain what IRB members do simply because of the sheer lack of other significant controlling influences on their conduct.

In light of the corporate board experience, IRB reformers should explore more seriously whether and how norms can be channeled and used to extract significant changes in board performance and conduct. For example, notwithstanding the recent business scandals, many corporate governance theorists believe that directors take their responsibilities, including the obligation to monitor management, more seriously today than in decades past. ³⁷¹ Only the most cynical corporate governance analyst would say that there has been absolutely no change in corporate board performance. To the extent that there has been some improvement, a shift in the norms surrounding service on the board has been key. Directors now

[&]quot;Reposed in the Workmen," 30 J. LEGAL STUD. 531 (2001).

^{368.} See supra Part II.

^{369.} Rock, supra note 130, at 1010.

^{370.} The market for corporate control, see *supra* note 98, does not exist for IRB members as it does for corporate directors.

^{371.} See, e.g., Eisenberg, supra note 137, at 1266. As Melvin Eisenberg has noted: The common experience of informed observers is that the level of directorial care has risen significantly in the last ten years or so; that directors today are more attentive to their responsibilities, more ready to displace inefficient CEOs, more concerned about corporate structure, more active in setting agendas and determining corporate strategy, and so forth.

Id.; see also Bainbridge, supra note 26, at 562-63 (discussing trends in the 1980s and 1990s of more active and effective board oversight).

increasingly perceive and socially understand the role of director as requiring a greater level of monitoring effort and higher level of care, rather than relying on social conventions in the past which largely shielded nonperforming directors from criticism and community disapproval.³⁷² Several factors have been identified as responsible for this norm shift, including (1) increased willingness of the media to expose poor performing boards and to subject them publicly to shame and loss of reputation; (2) institutional investors exerting their financial power and social influence to set different expectations for what directors should be doing; (3) the business community's belief that a board that monitors more contributes economic value to the corporation; and (4) the influence of the law in changing social belief systems about the role of the director.³⁷³

How has the law influenced the social norms surrounding service as a director? Corporate governance theorists suggest that the courts, in deciding duty of care, duty of loyalty, and takeover cases, have, through their written opinions, effectively "sermonized" to the business manager community about what it means to be a good director. The decisions themselves and their public nature, apart from the direct legal liability that may or may not have actually resulted from the cases, have been an additional "source of gossip, criticism, and sanction for [directors] ... who are beyond the reach of the firm's normal systems of social control." Under this view, the courts' detailed attention to the procedures and processes followed by corporate boards has had an expressive function, helping to change overall social expectations about director service. The stories told by the courts of good and not-so-good corporate board performance have contributed to, augmented, and reinforced internaliza-

^{372.} See Eisenberg, supra note 137, at 1268-69, 1279-81; see also Cox & Munsinger, supra note 236, at 91-92 (discussing how older, more traditional corporate board norms favored cooperation, consensus, and giving management the benefit of the doubt, while disagreement and conflict was frowned upon).

^{373.} See Eisenberg, supra note 137, at 1268-70; Millstein, supra note 283, at 1428-29; Rock, supra note 130, at 1013-16.

^{374.} Rock, *supra* note 130, at 1013. Professor Rock contends that the sermonizing opinions, and norms they are intended to foster, primarily reach their targets through media attention focused on legal rulings and through corporate counsel, acting as intermediaries, who transmit the norms to their clients. *See id.* at 1063-64.

tion by the business community of new beliefs and attitudes about what a model director does and for whom the director acts.³⁷⁵

B. Norms and IRB Reform

There are several important implications here for IRBs. First, more needs to be done through education, economic incentives, publicity, and other non-legal means to influence the belief systems of IRB members regarding the effort expected of them if the IRB is to take on a more active monitoring role successfully. Second, there may be an opportunity for law and regulation to influence, even indirectly, the relevant social attitudes regarding IRB service. 376 If the courts have effectively sermonized to the business community and helped create a norm shift surrounding the director's role, the logical question is whether something similar could be done with IRBs. Courts lack the opportunity to exhort the research community to the same degree, because fewer cases of inappropriate research ever get fully litigated as compared to shareholder lawsuits alleging poor corporate board performance. However, OHRP and FDA, the federal agencies that review and investigate IRB performance, could similarly use their powers of persuasion.

Like the courts hearing shareholder litigation claims, FDA and OHRP have been collecting stories about good and not-so-good instances of board conduct and performance. These agencies have increased oversight of IRBs in recent years and in a more

^{375.} See Eisenberg, supra note 137, at 1269-70, 1277, 1280; Stout, supra note 196, at 688 ("It is perhaps not too great a stretch to suggest that corporate directors view judges as persons of influence and authority ... and that judicial pronouncements about how directors ought to behave can thus influence directors' behavior even when not backed up by legal sanctions."). Professor Rock has further argued that outside directors, more than management and other insiders, would particularly be expected to be concerned about public shaming and reputational sanctions that may result from judicial opinions and other conduits for focusing on board conduct. This is because outside directors usually do not have the same degree of opportunity to take economic advantage of shareholders as the insiders, but they care very much about maintaining their reputations in good standing in elite business circles. See Rock, supra note 130, at 1104 (discussing this point in the context of the role of outside directors serving on special committees to evaluate management buy-out (MBO) offers for the corporation).

^{376.} Cf. Goldner, supra note 51, at 116-20 (suggesting that revising existing regulations regarding IRB membership, informed consent requirements, and the like, could generate internalization of patterns of behavior and significantly change the thinking of clinical researchers).

public manner, including posting the corrective actions required of institutions on the agency web sites. 377 Yet the regulatory agencies have not sufficiently capitalized on the opportunity to disseminate these stories widely, compellingly, and consistently with a view towards influencing and re-orienting social attitudes about IRB service. Certainly, there have been well-publicized research scandals in recent years, most notably the death of Jesse Gelsinger in the gene therapy trial at the University of Pennsylvania.³⁷⁸ Though the Gelsinger story is commonly used as an example of the pernicious influence of financial incentives and alleged lax oversight in clinical research, ³⁷⁹ there still does not appear to be firm consensus within the research community about the specific conduct of the IRB members involved in the Gelsinger affair. Other than a vague sense that the IRB should have done something more, there remains considerable confusion about where specifically the IRB members allegedly failed in their roles: Should the IRB members not have allowed the research to proceed at all? Or was their mistake simply not ensuring disclosure of all the financial ties to the subjects? Or simply not asking enough questions before approving the protocol? Or failing to do adequate continuing review? Meanwhile, the new HHS guidance concerning IRB review of financial conflicts has not really helped identify the appropriate boundaries of IRB conduct in such situations.³⁸⁰ The Gelsinger episode and other recent research

^{377.} See, e.g., Office for Human Research Protections, 2003 Determination Letters, at http://www.hhs.gov/ohrp/compliance/letters/2003.html (last modified Aug. 11, 2004).

^{378.} See supra note 17.

^{379.} See, e.g., Frances H. Miller, Trusting Doctors: Tricky Business When It Comes to Clinical Research, 81 B.U. L. REV. 423, 437-38 (2001); Sheryl Gay Stolberg, Teenager's Death Is Shaking Up Field of Human Gene-Therapy Experiments, N.Y. TIMES, Jan. 27, 2000, at A20.

^{380.} Consider the new HHS guidance for IRBs dealing with financial conflicts of interest. See Financial Relationships and Interests in Research Involving Human Subjects: Guidance for Human Subject Protection, 69 Fed. Reg. 26,393 (May 12, 2004). It is capable of such varying interpretation and application, for example, that it ultimately provides no clear lesson to IRBs about how to act if a scenario like the Gelsinger incident should occur again. The point is that, under the HHS guidance, it is still not clear whether the University of Pennsylvania IRB, if it had considered the financial conflicts more directly, should have absolutely refused to approve the clinical trial being conducted at the University. The HHS guidance offers many options to an IRB for deciding how to deal with such financial conflicts, such as barring the financially conflicted investigator from recruitment of subjects to using surrogates to observe the informed consent process directly. See id. at 26,396. Even though allowing IRBs great flexibility, the far-ranging options offer disappointingly vague indications about what is acceptable IRB conduct in monitoring financial conflicts. Indeed, many within

scandals simply have not been conveyed and used as effectively as they could for marshalling social firepower and community views regarding what the public expects of model IRB members.

To use the law expressively to influence the critical norms surrounding IRB service, perhaps the IRB and research community would be better served by a well-pronounced regulatory decision akin to the Delaware Supreme Court's famous ruling in Smith v. Van Gorkom. 381 In the Van Gorkom decision, well known to business organizations and corporate law students everywhere, the Delaware Supreme Court found that Trans Union's directors breached their duty of care by approving a merger in which Trans Union shareholders stood to receive a significant premium over the current market price for their shares. Van Gorkom shocked many in the business community, because the directors included highly regarded business persons, and because it was questionable whether the board's decision to sell the company on the terms proposed was actually a bad decision, especially in light of the premium over market price that the shareholders stood to gain. 382 Nonetheless, the court found flaws in the process by which the board made its decision, because directors reached the decision too hastily, without enough information, and without paying enough attention to certain management conflicts surrounding the deal. 383

Corporate governance theorists who support *Van Gorkom* suggest the decision has had a very important expressive function in terms of encouraging directors to use more effort in fulfilling their duty of care and to pay more attention to process.³⁸⁴ *Van Gorkom* sent the

the research community likely continue to hold different views of what the University of Pennsylvania IRB should have done in the Gelsinger affair. Some would say that the IRB's problem was insufficient detail as to the informed consent process, as opposed to insufficient attempts to manage the financial conflicts. Others would say that the IRB should have required the research to be conducted at a different institution altogether. No consensus has emerged within the research community as to what the real "lessons" of the Gelsinger case are, specifically for IRB members trying to conform to model roles, other than the very vague sense that IRB members should do more.

^{381. 488} A.2d 858 (Del. 1985).

^{382.} See, e.g., Fred. S. McChesney, A Bird in the Hand and Liability in the Bush: Why Van Gorkom Still Rankles, Probably, 96 Nw. U. L. Rev. 631, 635-36, 644-45 (2002).

^{383.} See Van Gorkom, 488 A.2d at 874-78.

^{384.} See Bainbridge, supra note 130, at 53-54; Stout, supra note 196, at 686-92. Van Gorkom, however, has not been without its critics. See McChesney, supra note 382, at 635-37 (summarizing many of the criticisms).

stark but simple message that it is not enough for directors to be well-intentioned and to rely on their business laurels; a director who fails to follow a reasonable oversight process still disappoints community expectations and warrants criticism. Under this view, Van Gorkom has helped develop effort norms, building up a social role of the model director as one who stays informed and deliberates. In particular, Van Gorkom may have been well-targeted at directors who genuinely wanted to do the right thing but felt socially uncomfortable confronting management. Directors who might be reluctant to probe senior executives and gather more information can now say they must ask more questions and demand more information because this is increasingly expected of a model director within the larger business community.³⁸⁵

A well-disseminated, cautionary tale of deficient IRB performance, elaborating upon specific, problematic facts of IRB procedures and operations, akin to the criticisms of the corporate board in *Van Gorkom*, could help change IRB norms. For example, it is simply unsettling to realize that at large institutions IRBs review new research protocols in less than eight minutes. Drawing greater community attention to such troubling procedural details about how IRBs conduct their reviews, through the bright glare of publicity, regulatory criticism, and other means, may be what is needed to shake up conventional attitudes about IRB service and how IRB members evaluate their own performance. Outside IRB members likely would be particularly receptive to such a norm shift exhorting members to work harder and be more critical in representing research subject interests. 387

A final, related point with regard to norms and IRB conduct is that institutions need to do much more to reward and support IRB

^{385.} See Stout, supra note 196, at 688-90.

^{386.} See supra note 165 and accompanying text.

^{387.} It can be presumed that outside IRB members truly do want to do some good, but they may feel worn down because of their minority presence among insiders and scientists. A norm that encourages and rewards them for more vigilant conduct would be very helpful. Indeed, outside IRB members probably have already partially internalized such beliefs about their appropriate roles. A survey of non-affiliated IRB members revealed that such members thought that the ideal characteristics of a non-affiliated IRB member are assertiveness, self-confidence, self-esteem, and courage—qualities important to the member's willingness and ability to ask questions and challenge the institutional perspective on a protocol. See Porter, supra note 57, at 3.

members for dedicated service, even if not financially. As the corporate board experience indicates, board work that becomes conflicted, unpleasant, and overloaded with too many tasks may simply result in a less productive board overall.³⁸⁸ The risk of increased regulatory sermonizing about IRB members' conduct is that heavy-handed shaming and criticism may simply drive otherwise willing and able IRB members off the board. IRB members likely would prefer to avoid further social disapproval for occupying a position that already offers few perks and rewards but plenty of negatives. Service on the IRB is often "considered onerous"389 and "a thankless task."390 Not only must IRB members face limited compensation and severe time constraints, but researchers within the institution are more likely to grumble about the IRB as a bureaucratic nuisance or view IRB service disparagingly than to look to the board members with gratitude for the work that they do. 391 IRB members no doubt find it "demoralizing to be overwhelmed with work ... and to realize that one has little or no institutional backing when confronting a colleague over a protocol."392

Of course, recognizing the importance of changing norms surrounding IRB service does not mean that there is an easy solution for accomplishing this. Norms operate in powerful yet subtle and indirect ways. They owe their creation to many disparate factors, and they can take hold and become entrenched in folkways and traditions of the community. Indeed, it seems that accomplishing such a norm shift is not possible without deeper changes in the culture of academic medicine. Many academic medical centers place a much higher premium on prolific and productive clinical research by faculty members than on effective IRB service. Many research-

^{388.} See, e.g., Bainbridge, supra note 130, at 37-38 (discussing how mutual compatibility, trust, and cooperation between board members is a source of board strength and key to why the board often makes decisions better than individuals); Langevoort, supra note 135, at 810-11.

^{389.} Eve E. Slater, IRB Reform, 346 NEW ENG. J. MED. 1402, 1404 (2002).

^{390.} Coleman, supra note 33, at 51.

^{391.} See, e.g., Judith Randal, Examining IRBs: Are Review Boards Fulfilling Their Duties?, 93 J. NAT'L CANCER INST. 1440, 1441 (2001) ("[T]he lot of IRB chairs and members tends not to be happy anyway [T]here is a long history of some investigators perceiving IRBs as a potential threat to their careers.").

^{392.} Anderlik & Elster, supra note 168, at 226.

ers do not get real, bona fide, measurable administrative credit for working on the IRB, particularly with regard to it being given sufficient weight for promotion and tenure within academic institutions.³⁹³

Not surprisingly, only a small minority of medical school faculty actually do IRB work, perhaps due to the lack of recognition for this activity. Much more needs to be done to increase the social prestige and institutional rewards of IRB service. Until joining and serving with dedication on an IRB is regarded as sufficiently important and necessary within the relevant medical research communities, akin to the prestige associated with a board seat in the business communities, and until a firmer social consensus develops regarding what is expected of model IRB members, one should be dubious that IRB members will persevere in any of their assigned oversight roles. Throducing long-lasting reform will require the emergence of a different view of dedicated IRB service as every researcher's responsibility and privilege, as well as the larger public's robust social approval and support for the very important work that IRBs do.

^{393.} Recently, there have been renewed calls that institutions should reward IRB members for valuable service with release time or tenure credit or that an IRB should effectively "buyout" a member's administrative time and free the IRB member from other administrative responsibilities within the institution. See id. These suggestions would not be necessary if institutions currently backed their IRB members with greater non-financial rewards and support. The current culture within academic medical centers simply places a much higher premium on productive clinical researchers than it does on good IRB service.

^{394.} See Campbell et al., supra note 359, at 834 (finding that recent service on an IRB was limited to only eleven percent of faculty members and speculating the low IRB participation rate by medical faculty is due to how little value is placed on this activity compared to publishing articles, obtaining grants, and the like).

^{395.} As Robert Levine aptly notes:

The most important problem for the human subjects protection system is that the workers—the IRB members—are frustrated and disillusioned. These people ... have received no reward apart from the satisfaction of doing something important. Now, they are weary of reading repeatedly that public opinion ... sees them as largely incompetent.

Levine, supra note 21, at 162.

^{396.} See id.; Slater, supra note 389, at 1404 ("Why should service on IRBs be considered onerous? Perhaps the privilege of conducting clinical research should carry with it the responsibility to serve on the IRB.... It is the responsibility of our [clinical research] profession to serve [research subjects] to the best of our ability.").

CONCLUSION

IRBs function as the "sine qua non" in the current regulatory system of protecting research subjects. Yet, the simple fact remains that while IRBs have, throughout their history, been tasked with many responsibilities and charges, insufficient attention has been paid to the IRB as an institutional and governance body itself. Questions such as why IRBs perform and operate as they do, what their capacity, functional characteristics, and structures realistically allow, and what roles they are well-suited for can be easily overlooked or given short-shift in the larger debates over the direction of human subjects research.

Recognizing IRBs' many parallels and shared features with corporate boards, if nothing else, should make clear that simple solutions for changing board dynamics and performance are difficult to prescribe. IRBs, as well as corporate boards, function as very complex oversight bodies, and a number of factors influence their performance. The experience of corporate boards suggests that mere tweaks in board composition or structure can become easily attenuated or overborne by other factors. The lesson for IRBs is that substantively and qualitatively changing performance will likely prove enormously difficult, with certain board behaviors hard to control given the fundamental autonomy and insularity of these institutions. Perhaps even more important, the IRB-corporate board comparison explored in this Article suggests that there may be many fruitful areas for future empirical research. More comparative data on IRB and corporate board behavior with regard to shared governance issues, such as board insider/outsider composition or effectiveness as financial conflicts monitors, could prove very useful in further understanding board dynamics and IRB capabilities.

This Article is not intended to sound complacent about the present performance of the nation's IRBs. Nor is it intended to suggest that increased monitoring by IRBs is per se unwelcome or that reform attempts are irrevocably misguided, destined for failure, and not worth pursuing. Whatever direction IRB reform takes, however, it is important to have a more realistic understanding of IRBs' unappreciated non-monitoring capabilities, the implications

^{397.} Slater, supra note 389, at 1403.

of the monitoring trade-off dilemma, IRBs' overall capacity and functional constraints, and the social norms that drive IRB member conduct. In short, greater consideration needs to be paid to the IRB's strengths and limitations as a governance and oversight institution. This requires reconsidering IRBs in a fresh, different light, accounting for what makes them tick and what they can and cannot do well. For these reasons, trying to learn more from the comparable experience of corporate boards could help a great deal.