Journal of Health Care Law and Policy

Volume 3 | Issue 2 Article 7

Bragdon v. Abbott: Extending the Americans with Disabilities Act to Asymptomatic Individuals

Eugenia Liu

Follow this and additional works at: http://digitalcommons.law.umaryland.edu/jhclp

Part of the Congenital, Hereditary, and Neonatal Diseases and Abnormalities Commons, Disability Law Commons, Health Law Commons, Labor and Employment Law Commons, and the Virus Diseases Commons

Recommended Citation

Eugenia Liu, Bragdon v. Abbott: Extending the Americans with Disabilities Act to Asymptomatic Individuals, 3 J. Health Care L. & Pol'y 382 (2000).

Available at: http://digitalcommons.law.umaryland.edu/jhclp/vol3/iss2/7

This Article is brought to you for free and open access by DigitalCommons@UM Carey Law. It has been accepted for inclusion in Journal of Health Care Law and Policy by an authorized administrator of DigitalCommons@UM Carey Law. For more information, please contact smccarty@law.umaryland.edu.

BRAGDON V. ABBOTT: EXTENDING THE AMERICANS WITH DISABILITIES ACT TO ASYMPTOMATIC INDIVIDUALS

Eugenia Liu, J.D.*

INTRODUCTION

In Bragdon v. Abbott1 the Supreme Court held that asymptomatic HIV infection constitutes a disability within the parameters of the Americans with Disabilities Act (ADA).² By accepting asymptomatic HIV infection as a "disability" under the ADA, Bragdon expanded the scope of what qualifies as a "disability" to include a condition that exhibits no clinical signs of the actual disease but is merely a precursor to the actual disease.³ This raises questions as to the potential inclusion of other "asymptomatic" conditions under the ADA, such as the presence of genetic alterations, that predispose a person to a particular disease but do not currently elicit medical complaints from the carrier. In fact, the dissent queried whether the majority's decision in Bragdon would open the doors to other diseases where the person appeared outwardly healthy. The dissent worried that the argument to qualify asymptomatic HIV infection as a disability "taken to its logical extreme would render every individual with a genetic marker for some debilitating disease 'disabled' here and now because of some possible future effects." With the rapid developments in mapping out the human genome, 6 these concerns are not unfounded.

Within the last few years, scientists have not only identified alterations and changes within genes that lead to specific disorders, but they have also developed tests to detect and predict genetic diseases that

^{*} Eugenia Liu, J.D., University of Maryland School of Law, 1999. Manuscript prepared under the mentorship of Barbara Fuller, Senior Policy Analyst at the National Human Genome Research Institute.

^{1. 524} U.S. 624 (1998).

^{2.} See 42 U.S.C. §§ 12101-12213 (1994).

^{3.} See Bragdon, 524 U.S. at 633-35 (discussing HIV as a precursor to the terminal AIDS virus).

^{4.} See National Cancer Inst., U.S. Dep't of Health and Human Servs., NIH Pub. No. 96-3905, Understanding Gene Testing 1 (1995) [hereinafter Understanding Gene Testing].

^{5.} Bragdon, 524 U.S. at 661 (Rehnquist, C.J., concurring in the judgment in part and dissenting in part).

^{6.} See Justin Gillis, Md.'s Celera Finishes 'Rough Draft' of Human Genetic Code, WASH. Post, Jan. 11, 2000, at E08 (stating that one private corporation has completed mapping more than 80% of the human genetic code).

have not yet manifested themselves.⁷ As a result, a person could determine whether or not he carried the gene for diseases such as Huntington's disease or breast cancer years before the disease actually sets in. Genetic predisposition to a particular disease and asymptomatic HIV infection share some strong similarities under the *Bragdon* framework. These similarities could lead a court to find that a person carrying a particular gene is "disabled" years prior to the actual manifestation of the genetic disease. However, the resolution of such a case may depend on the type of genetic disease, the penetrance rate of the gene, and the probability that the person's offspring will acquire the defective or altered gene.

Part I of this Article provides a background of *Bragdon v. Abbott* and its impact in light of previous cases concerning HIV infection and the ADA.⁸ Part II examines the feasibility of including genetic diseases within the purview of *Bragdon* by assessing the case against two very different types of genetic markers: the genetic predisposition to Huntington's disease, which has a 100% manifestation rate,⁹ and the predisposition to breast cancer, where the presence of the gene merely indicates a greater probability of acquiring the disease.¹⁰ Part III briefly explores the impact of three recent Supreme Court decisions mandating the inclusion of any mitigating factors in determining what constitutes a disability.¹¹ A discussion of whether genetic predisposition to a disease could qualify under the "regarded as" prong of the ADA as an alternative to the approach undertaken by *Bragdon* follows in Part IV.¹²

I. Bragdon v. Abbott — Classifying Asymptomatic HIV Infection as a Disability

A. The United States Supreme Court's Interpretation of the ADA in Bragdon

In 1993 Congress declined to include an exhaustive list of physical or mental impairments that would be considered a disability under the statute. Following Congress' decision, a significant amount of

^{7.} See Understanding Gene Testing, supra note 4, at 1.

^{8.} See infra notes 13-73 and accompanying text.

^{9.} See infra notes 79-95 and accompanying text.

^{10.} See infra notes 96-100 and accompanying text.

^{11.} See infra notes 113-137 and accompanying text.

^{12.} See infra notes 138-152 and accompanying text.

^{13.} See Catherine J. Lanctot, Ad Hoc Decision Making and Per Se Prejudice: How Individualizing the Determination of "Disability" Undermines the ADA, 42 VILL. L. REV. 327, 333 (1997) (discussing the impossibility of listing all the specific conditions, diseases, or infections that would constitute a physical or mental impairment under the Act due to the difficulty of

litigation arose in an effort to determine what qualifies as a disability. Under the ADA, an individual may qualify as disabled under any one of three criteria. According to the ADA, a person may possess a disability if she has "(A) a physical or mental impairment that substantially limits one or more of the major life activities of such individual; (B) a record of such an impairment; or (C) [could be] regarded as having such an impairment."

Courts examining whether to classify asymptomatic HIV infection as a disability have generally focused on the first prong of the ADA, which assesses whether asymptomatic HIV infection constitutes a physical or mental impairment that substantially limits one or more of the major life activities. Prior to Bragdon, the lower circuits were split on the issue of whether asymptomatic HIV constituted a disability, with the Fourth Circuit finding that asymptomatic HIV did not constitute a disability and the Ninth Circuit holding that it did. 17

In *Bragdon*, Sidney Abbott contracted HIV in 1986 but remained asymptomatic and did not exhibit any of the symptoms indicative of full-blown AIDS. ¹⁸ In 1994, she went to Randon Bragdon for a dental appointment and disclosed on a patient registration form that she had HIV. ¹⁹ Bragdon discovered a cavity during his examination and informed Abbott that he could not fill cavities of HIV-infected patients within his office, but he offered to perform the work at a hospital. ²⁰ Abbott declined and brought suit against Bragdon under state law and § 12182 of the ADA, alleging that he had discriminated against her on the basis of her disability. ²¹

The district court held that "asymptomatic HIV constitutes a physical impairment for the purposes of the ADA," 22 and that it sub-

ensuring the comprehensiveness of such a list when new disorders may develop in the future).

^{14. 42} U.S.C. § 12102(2)(A)-(C) (1999).

^{15.} See EEOC v. R. J. Gallagher Co., 181 F.3d 645 (5th Cir. 1999); Ellison v. Software Spectrum, Inc., 85 F.3d 187 (5th Cir. 1996); Gordon v. E.L. Hamm & Assocs., Inc., 100 F.3d 907 (11th Cir. 1996); Madjlessi v. Macy's West, Inc., 993 F. Supp. 736 (N.D. Cal. 1997); Cortes v. McDonald's Corp., 955 F. Supp. 541 (E.D.N.C. 1996).

^{16.} See Runnebaum v. Nationsbank of Md., 123 F.3d 156 (4th Cir. 1997) (holding that a person with HIV, who lacked physical symptoms, did not have a disability per se); Ennis v. National Ass'n of Bus. & Educ. Radio, Inc., 53 F.3d 55, 60 (4th Cir. 1995) (same).

^{17.} See Gates v. Rowland, 39 F.3d 1439, 1446 (9th Cir. 1994) (finding that HIV is a "disability" whether it is symptomatic or asymptomatic because of the possibility of transmission).

^{18.} See Bragdon v. Abbott, 524 U.S. 624, 628 (1998).

^{19.} See id. at 628-29.

^{20.} See id. at 629.

^{21.} See id.

^{22.} Abbott v. Bragdon, 912 F. Supp. 580, 585 (D. Me. 1995).

stantially limited Abbott's major life activity of reproduction.²³ The First Circuit affirmed, citing regulations issued by the EEOC and other legislative history suggesting that asymptomatic HIV qualifies as a physical impairment under the ADA.²⁴

The Supreme Court agreed with the First Circuit and held that asymptomatic HIV infection did qualify as a disability under the first prong of the ADA because it constituted an impairment that substantially limited the major life activity of reproduction.²⁵ Finding the scientific studies on the development of the disease from HIV infection to AIDS compelling, the Supreme Court held that from the moment of infection, "HIV infection satisfies the statutory and regulatory definition of a physical impairment during every stage of the disease."26 The Court engaged in a detailed and highly technical description of the effects of HIV infection before reaching its decision. Describing with specificity the primary infection stage of HIV, the Court cited studies concluding that the initial HIV infection stage is often associated with mono or flu-like symptoms that emerge early and then abate while the HIV antibodies appear in the bloodstream.²⁷ The Court noted that the "assault on the immune system is immediate" 28 and that the "victim suffers from a sudden and serious decline in the number of white blood cells."29 Asymptomatic HIV was even deemed a "misnomer" because the studies revealed that, even during this stage, the virus remains active and migrates to the lymph nodes where the assault on the body continues.³⁰ Consequently, the Court concluded that "HIV infection must be regarded as a physiological disorder with a constant and detrimental effect on the infected person's hemic and lymphatic systems from the moment of infection."31

The Court then turned to the second part of the first prong of the ADA disability determination requiring that the disability limit a

^{23.} See id. at 586.

^{24.} See Abbott v. Bragdon, 107 F.3d 934, 939 (1st Cir. 1997) (asserting that according to EEOC guidelines, HIV, whether symptomatic or asymptomatic, is a disability under the ADA).

^{25.} See Bragdon, 524 U.S. at 641-42.

^{26.} Id. at 637.

^{27.} See id. at 635. According to the Court, "mononucleosis-like symptoms often emerge between six days and six weeks after infection, at times accompanied by fever, headache, enlargement of the lymph nodes (lymphadenopathy), muscle pain (myalgia), rash, lethargy, gastrointestinal disorders, and neurological disorders." Id. Following this description, the Court launches into a discussion of the progression of the disease including an explanation of the CD4+ counts and the clinical symptoms associated with this stage. See id.

^{28.} Id.

^{29.} Id.

^{30.} See id.

^{31.} Id. at 637.

major life activity. Stressing that "[r]eproduction and the sexual dynamics surrounding it are central to the life process itself,"32 the Court found that reproduction "falls well within the phrase 'major life activity.' "33 Furthermore, the Court concluded that reproduction was "substantially limited" by Abbott's HIV infection and justified its conclusion on two public health concerns: that the woman would pose a significant risk of infection to both her partner and, through perinatal transmission, to her child.³⁴ The Court rejected Bragdon's contention that HIV was not substantially limiting because certain drug therapies could reduce the risk of perinatal transmission to about 8%, stating that "[i]t cannot be said as a matter of law that an 8% risk of transmitting a dread and fatal disease to one's child does not represent a substantial limitation on reproduction."35 As additional support for its decision, the Court referenced the legislative history and administrative interpretations on HIV as a disability, 36 as well as previous judicial decisions concluding that asymptomatic HIV did qualify as a substantially limiting disability.³⁷

B. What Bragdon Accomplished in Light of Other Cases on HIV

Prior to *Bragdon*, the lower courts addressing HIV and the ADA reached opposite conclusions depending on the focus of their ADA assessment. The Fourth Circuit held that HIV did not constitute a disability within the purview of the ADA, in *Runnebaum v. Nationsbank of Md.* and *Ennis v. National Ass'n of Business and Educational Radio, Inc.* The court stressed the individualized nature of an ADA disability analysis³⁸ and strictly focused on the individual's particular symptoms as well as whether those symptoms restricted that particular person's major life activities.³⁹ The Ninth Circuit directed its attention to the nature of the disease and its effects in determining that asymptomatic HIV did fall within the provisions of the ADA.⁴⁰ The Supreme Court

^{32.} Id. at 638.

^{33.} Id.

^{34.} See id. at 639-40.

^{35.} Id. at 641.

^{36.} See id. at 629-33 (discussing the development of the ADA and the historical context of the Rehabilitation Act of 1973, the Department of Health, Education and Welfare regulations, and the President's Executive Order No. 12250).

^{37.} See id. at 644.

^{38.} See generally Runnebaum v. Nationsbank of Md., 123 F.3d 156, 163-72 (4th Cir. 1997); Ennis v. National Ass'n of Bus. & Educ. Radio, Inc., 53 F.3d 55, 59-61 (4th Cir. 1995).

^{39.} See generally Lanctot, supra note 13.

^{40.} See Gates v. Rowland, 39 F.3d 1439, 1446 (9th Cir. 1994). In Gates, prison inmates alleged that a prison policy segregating HIV-positive inmates from other inmates and ex-

in *Bragdon* appeared to adopt the latter approach, and while the Court did not establish a new standard for assessing disabilities under the ADA, it nonetheless broadened and generalized the scope of analysis.

Both Runnebaum and Ennis involved plaintiffs alleging wrongful termination from their employment on the basis of discrimination against their disabilities.⁴¹ In Runnebaum, the Fourth Circuit commenced its discussion by emphasizing that a finding of a disability under the ADA statute requires an individual inquiry.⁴² Reiterating its holding in Ennis,⁴³ the Fourth Circuit rejected the claim of an employee with asymptomatic HIV and once again stressed that the "'individualized focus' contemplates a case-by-case determination of whether a given impairment substantially limits one or more of the major life activities of the individual."⁴⁴ By claiming that the ADA statute was clear and unambiguous the Runnebaum court dismissed the legislative history which suggested that asymptomatic HIV infection could be a disability.⁴⁵ Thus it did not require a searching inquiry

cluding them from food service jobs at the prison violated the Rehabilitation Act, a predecessor to the Americans with Disabilities Act. See id. at 1444-45. In holding that the HIV-positive inmates did qualify as individuals with a disability, the court noted that "the physical impairment to the individual is not the issue, but rather the issue is the contagious effect of the HIV virus." Id. at 1446. However, relying on a Supreme Court decision that stated "the contagious effects of a disease could not be meaningfully distinguished from the disease's physical effect on the claimant," the court refused to make a distinction between HIV-positive individuals and individuals with full-blown AIDS. Id. (citing School Bd. v. Arline, 480 U.S. 273, 282 (1987)). As a result, the Ninth Circuit focused on the nature and effect of the disease as a whole and concluded that it is "the possible transmission of the virus to others that is the basis of the individual's disability under the provisions of the Act." Id. This Article specifically examines the impact and accomplishments of the Supreme Court's decision to accept asymptomatic HIV as a disability in Bragdon. Consequently, a fuller discussion of the previous cases accepting asymptomatic HIV as a disability will not be used as a point of comparison.

- 41. See Runnebaum, 123 F.3d at 163 (explaining that Runnebaum claimed that his employer violated the ADA because of his HIV-positive status); Ennis, 53 F.3d at 57 (describing Ennis' claim that she was protected under the ADA as an individual known to have a relationship or association with a person with a known disability and the allegation that her employer violated the ADA in terminating her because of fears that her HIV-positive son would increase insurance rates for the company).
 - 42. See Runnebaum, 123 F.3d at 166; Ennis, 53 F.3d at 59.
- 43. See generally Ennis, 53 F.3d at 55. Addressing whether a woman qualified as an ADA-protected class member through her relationship with a person with a known disability, her HIV-positive son, the Ennis court held that the plain language of the ADA "requires that a finding of a disability be made on an individual-by-individual basis." Id. at 59. The Ennis court pointed out that the statute "is specifically defined, for each of the subparts... with respect to [the] individual and ... 'that the underlying impairment substantially limit a major life activity of the individual.'" Id. As a result, it laid the framework for Runnebaum by concluding that the language clearly required an individualized focus for determining a disability.
 - 44. Runnebaum, 123 F.3d at 166.
 - 45. See id. at 168-69.

into legislative background to ascertain what Congress intended to include under the term "disability." As a result, the Fourth Circuit focused on the plain definition of "impairment."

Relying on various dictionaries, the court in Runnebaum found that most defined impairment as a "decrease," "deterioration," or "diminishing" of some aspect⁴⁶ and consequently held that "asymptomatic HIV infection is simply not an impairment [because] without symptoms, there are no diminishing effects on the individual."⁴⁷ Despite its finding that the absence of any diminishing effects prohibited asymptomatic HIV infection from qualifying as a disability, the court acknowledged that the ADA required an individualized assessment and examined the particular circumstances surrounding the plaintiff. However, the court still failed to find a disability in light of the plaintiff's statements that he was not handicapped because his statements signified "his own belief that he suffered no disability."⁴⁹

Unlike the Fourth Circuit, the Supreme Court in *Bragdon* closely examined the legislative history, agency interpretations, and administrative guidelines. Reasoning that Congress borrowed the term "disability" from the Rehabilitation Act in enacting the ADA, the Supreme Court determined that "Congress' repetition of a well-established term carries the implication that Congress intended the term to be construed in accordance with pre-existing regulatory interpretations." The Supreme Court found that these pre-existing regulatory interpretations all pointed to the conclusion that the Rehabilitation Act protected both symptomatic and asymptomatic HIV infected individuals. Consequently, the Court concluded that these interpreta-

^{46.} See id. at 168. "Impair" is defined as to "make worse by or as if by diminishing in some material respect." Merriam-Webster's Collegiate Dictionary 581 (10th ed. 1986). The court also considered other definitions, including, "to weaken, to make worse, to lessen in power, diminish, or relax, or otherwise affect in an injurious manner" and "to diminish in quality, value, excellence or strength...." Black's Law Dictionary 752 (6th ed. 1990).

^{47.} Runnebaum, 123 F.3d at 168.

^{48.} See id. at 169.

^{49.} Id.

^{50.} See Bragdon v. Abbott, 524 U.S. 624, 642-47 (1998).

^{51.} Id. at 631.

^{52.} See id. at 647. The majority cited a 1988 opinion by the Office of Legal Counsel of the Department of Justice (OLC) which stated that the Rehabilitation Act "'protects symptomatic and asymptomatic HIV-infected individuals against discrimination in any covered program.'" Id. at 642 (quoting 12 Op. Off. Legal Counsel 264, 264-65 (Sept. 27, 1988)). Moreover, the Court pointed out that Congress employed the same definition in the Fair Housing Amendments Act, and the Court found it compelling that the Department of Housing and Urban Development had interpreted the definition to include HIV-infected individuals. See id. at 645.

tions confirmed its holding that asymptomatic HIV infection did qualify as a disability under the ADA.⁵³ The Fourth Circuit in *Runnebaum* was able to reach the opposite decision because it briefly examined the legislative history of the ADA, rather than reaching back to the interpretations found under the Rehabilitation Act. Furthermore, the *Runnebaum* court found that the Committee Reports and legislative history for the ADA did not "distinguish between symptomatic and asymptomatic conditions" and thus "d[id] not answer whether asymptomatic HIV infection [was] an impairment under the statute."⁵⁴ Thus, the *Runnebaum* court refused to delve into the legislative history to determine Congress' intent and instead applied the plain meaning of the word "impair." By employing different methods of statutory interpretation, the Fourth Circuit and the Supreme Court fall on opposing ends of the spectrum.

While the Runnebaum court also considered procreation and sexual relations as the "major life activity" limited by the disability, it expressed hesitation over accepting procreation as a "major life activity" and failed to find convincing evidence that sexual relations did constitute a major life activity. According to the Fourth Circuit, "[w]e agree that procreation is a fundamental human activity, but are not certain that it is one of the major life activities contemplated by the ADA."55 On the other hand, the Supreme Court expressly held that procreation and reproduction fell within the statute's purview. Drawing upon the appellate court opinion that held that the term "major" "'denotes comparative importance' and 'suggest[s] that the touchstone for determining an activity's inclusion under the statutory rubric is its significance,' "56 the Supreme Court concluded that reproduction constituted a major life activity. Finding that "[r]eproduction and the sexual dynamics surrounding it are central to the life process itself,"57 the Bragdon Court held that reproduction fell within the statutory definition of "major life activity."58

The Fourth Circuit and the Supreme Court also had divergent approaches to determining whether asymptomatic HIV infection substantially limited the major life activity of procreation. In *Runnebaum*, the Fourth Circuit found that an "individual's response to his knowl-

^{53.} See id.

^{54.} Runnebaum, 123 F.3d at 169.

^{55.} Id. at 170.

^{56.} Bragdon, 524 U.S. at 638 (quoting Abbott v. Bragdon, 107 F.3d 934, 939-40 (1st Cir. 1997)).

^{57.} Id.

^{58.} See id.

edge of his infection is 'not fully persuasive since it depends upon the conscience and good sense of the person infected.' "59 Consequently, the court held nothing inherent in the infection actually limited procreation or intimate relations, and that any limitations resulted from personal choice or reaction to the infection. The Supreme Court rejected this notion in *Bragdon* and stated that "the disability definition does not turn on personal choice." The Court supported its decision by referencing scientific reports on the transmission rates of HIV to both the sexual partner and the child. Despite evidence presented by the petitioner that antiretroviral therapy could reduce the risk of perinatal transmission from 25% to about 8%, the Court stressed that "[i]t cannot be said as a matter of law that an 8% risk of transmitting a dread and fatal disease to one's child does not represent a substantial limitation on reproduction." As a result, the *Bragdon* Court seemed to focus more on the disease itself rather than on how that particular person dealt with having the disease.

Thus, even though the Supreme Court did not expressly adopt a new standard for assessing a disability claim under the ADA, its decision in Bragdon extended and broadened the scope of analysis employed for such claims. The noticeable absence in the Supreme Court's majority opinion of any reference to the fact that the ADA requires an "individualized inquiry" or any references to specific evidence in the record indicating a substantial limitation of Abbott's own ability to reproduce suggests the Supreme Court did not employ an individualized inquiry. Despite the fact that the Court never explicitly stated that it was departing from an individualized inquiry, its reliance on scientific studies and administrative guidances reveals that the Court, in effect, employed a generalized assessment of the symptoms and effects arising from asymptomatic HIV infection. However, the Supreme Court was able to depart from a strict individual inquiry (case-by-case inquiry) because the First Circuit's approach to the question from a broadened perspective in Abbott v. Bragdon⁶⁵ paved the ground for a more generalized holding. Even though the appellate court acknowledged the ADA's call for an individualized inquiry, it

^{59.} Runnebaum, 123 F.3d at 171 (quoting Memorandum from Douglas W. Kmiec, Acting Assistant Attorney General, Office of Legal Counsel, to Arthur B. Culvahouse, Jr., Counsel to the President (Sept. 27, 1988)).

^{60.} See id.

^{61.} Bragdon, 524 U.S. at 641.

^{62.} See id. at 639-40.

^{63.} See id. at 640.

^{64.} Id. at 641.

^{65. 107} F.3d 934 (1st Cir. 1997).

stated that "the need for this case-by-case analysis of disability does not necessarily require a corresponding case-by-case inquiry into the connection between the plaintiff and the major life activity." However, most courts addressing ADA claims have opted for the more restrictive approach, requiring a tight nexus between the individual plaintiff and the major life activity. As one critic noted, "courts that have narrowed ADA's protected class have done so by insisting that they are required to engage in a 'case-by-case' analysis of each individual plaintiff's medical condition, rather than an analysis of whether a particular impairment inherently poses such a limitation."

Both the Runnebaum and Ennis courts followed the narrow approach whereby "[e]ach symptom is then scrutinized to see whether the claimant is truly 'substantially limited' by the particular set of symptoms he or she possesses." In Runnebaum, the Fourth Circuit determined that there was "no evidence in the record that Runnebaum, because of his infection, forewent having children or engaging in intimate sexual relations," and nothing existed to suggest that "Runnebaum was at all interested in fathering a child." 69 Moreover, the court emphasized that "the record makes clear that Runnebaum's ability to engage in intimate sexual relations was not substantially limited by his HIV infection" because he "concealed his HIV infection from his lover." While the Ennis court assumed that the child with asymptomatic HIV infection was disabled after determining that the record was not adequately developed, it nonetheless pointed to the lack of evidence of any limitations on the child and noted that his mother "candidly admitted that her son suffers no ailments or conditions that affect the manner in which he lives on a daily basis."71 The plaintiff in Abbott made similar statements, but the generality of the approach adopted by the First Circuit is evidenced by its refusal to consider such evidence in its decision. In her deposition, Ms. Abbott replied "no" when asked, "'Are you impaired in your ability to carry out any of your life functions by the fact that you are HIV-positive?"72 While the Fourth Circuit considered the plaintiff's statement that her HIV-positive son was not affected in his daily living as an admission that her son was not totally disabled, in Abbott, the First Circuit expressly condemned the use of such statements as mere attempts to

^{66.} Id. at 941.

^{67.} Lanctot, supra note 13, at 332.

^{68.} Ia

^{69.} Runnebaum v. Nationsbank of Md., 123 F.3d 156, 172 (4th Cir. 1997).

^{70.} Id

^{71.} Ennis v. National Ass'n of Bus. & Educ. Radio, Inc., 53 F.3d 55, 60 (4th Cir. 1995).

^{72.} Abbott, 107 F.3d at 942.

"cast doubts on her sincerity."⁷³ It refused to consider such statements as potential admissions that plaintiff did not suffer from a substantial limitation. Consequently, the absence of any discussions on specific evidence in the record in *Bragdon* suggests that neither the Supreme Court nor the First Circuit strictly adhered to a case-by-case individualized analysis of the disability.

II. APPLICABILITY TO GENETIC PREDISPOSITION

In denouncing the extension of the term "disability" to include asymptomatic HIV infection, both the dissent in Bragdon and the majority in Runnebaum noted the potential inclusion of persons, who have genetic markers yet appear outwardly healthy, in the definition The Runnebaum majority commented that of disability. "[a]dvancements in genetic research . . . have given doctors and scientists the increasing ability to identify seemingly healthy individuals who will develop various serious diseases,"74 and "[u]nder the dissent's logic, such otherwise healthy individuals would be impaired for purposes of the ADA."75 Chief Justice Rehnquist echoed this argument in his dissent to Bragdon, claiming that "[r]espondent's argument, taken to its logical extreme, would render every individual with a genetic marker for some debilitating disease 'disabled' here and now because of some possible future effects."⁷⁶ However, given the wide variations in the triggers and characteristics of genetic diseases, their concerns may not hold true for all genetic diseases. In particular, predispositions to genetic diseases with an absolute manifestation rate, such as Huntington's disease, 77 is more likely to be classified as a "disability" than genetic markers for diseases with a more questionable manifestation rate, such as breast cancer. 78 Under the Bragdon frame-

^{73.} Id.

^{74.} Runnebaum, 123 F.3d at 169 n.6.

^{75.} Id.

^{76.} Bragdon v. Abbott, 524 U.S. 624, 661 (1995) (Rehnquist, C.J., concurring in the judgment in part and dissenting in part).

^{77.} See Brian R. Gin, Genetic Discrimination: Huntington's Disease and the Americans With Disabilities Act, 97 COLUM. L. REV. 1406, 1414-15 (1997). A person with Huntington's disease risks a 50% chance of passing the gene on to his children, and if the child has the gene for Huntington's, there is a 100% manifestation rate. See Joseph S. Alper, Does the ADA Provide Protection Against Discrimination on the Basis of Genotype?, 23 J.L. Med. & Ethics 167, 169 (1995). An individual with Huntington's disease "remains completely free of symptoms until mid-life" when the individual begins to suffer from "an extended period of dementia and loss of body control" until the individual succumbs to death. Gin, supra at 1414-15.

^{78.} Even though the *BRCA1* gene is a dominant gene that will prevail over a normal gene, the gene merely indicates that the person is at a higher risk for breast cancer. Unlike Huntington's disease which has a 100% manifestation rate, a person with *BRCA1* has about

work, a person harboring a predisposition to Huntington's disease could possibly fall within the ADA's purview, while a person possessing the *BRCA1* or 2 alteration for breast cancer would have a much harder argument to make under the ADA.

A. Predisposition to Huntington's Disease Is Likely to Qualify as a Disability

In finding an "impairment," one author has asserted that both HIV-positive individuals and individuals with the gene for Huntington's disease possess "current impairments." According to this argument, a person with the gene for Huntington's disease is currently impaired because the presence of the gene signifies a "'defect in a specific chromosome [that] can be identified as the beginning of a genetic disease process in the same way as infection is identified as the beginning of a contagious disease process.'"79 However, this argument is unlikely to succeed in light of the emphasis the Supreme Court in Bragdon placed on the scientific evidence that individuals infected with HIV suffer from immediate flu-like symptoms. The Court stressed that the "assault on the immune system is immediate" with the individual suffering from "a sudden and serious decline in the number of white blood cells" and "[m]ononucleosis-like symptoms . . . emerge . . . at times accompanied by fever, headache, enlargement of lymph nodes, muscle pain, rash, lethargy, gastrointestinal disorders, and neurological disorders."80 In fact, the Court went so far as to say that asymptomatic HIV infection is a "misnomer" because "clinical features persist throughout [this stage], including lymphadenopathy, dermatological disorders, oral lesions, and bacterial infections."81

On the other hand, unlike an infection that prompts the body's immune system to launch an immediate defense to fight the infection, a genetic alteration often lies dormant for years before triggering any response from the body.⁸² An individual with the gene for Huntington's does not suffer any immediate assault to any bodily systems, nor

a 56% manifestation rate. See Jeffery P. Struewing et al., The Risk of Cancer Associated with Specific Mutations of BRCA1 and BRCA2 Among Ashkenazi Jews, 336 New Eng. J. Med. 1401, 1404 (1997). As a result, having the BRCA1 does not necessarily condemn the person to having breast cancer later in life, but rather the person has a higher risk than someone without the gene.

^{79.} Gin, supra note 77, at 1425 (quoting Larry Gostin, Genetic Discrimination: The Use of Genetically Based Diagnostic and Prognostic Tests by Employers and Insurers, 17 Am. J.L. & Med. 109, 126 (1991)).

^{80.} Bragdon, 524 U.S. at 635.

^{81.} *Id*.

^{82.} See Katherine Brokaw, Genetic Screening in the Workplace and Employers' Liability, 23 COLUM. J.L. & SOC. PROBS. 317, 321-22 (1990).

does it elicit fevers, fatigue, aches, or other disorders that accompany asymptomatic HIV. Aside from the presence of an altered gene within the body, the Huntington's gene has no real or measurable effect on the body until many years later when the clinical symptoms of Huntington's begin to appear.⁸³ Absent the development of a significant body of scientific evidence suggesting that a person predisposed to Huntington's disease suffers from similar ailments during the "asymptomatic" stage, it will be very difficult to qualify genetic predisposition to Huntington's as an "impairment" under the *Bragdon* framework.

In another effort to classify genetic alterations as an impairment, Joseph Alper argues that "[a]n altered genotype is also a physiological condition either because an altered gene associated with a disease is incapable of producing the normal gene product in the appropriate amounts or because its regulatory function has been compromised."⁸⁴ However, this argument fails to consider whether the physiological condition affects any of the body's systems. Even if an altered gene is a physiological condition, the altered gene does not produce any clinical symptoms or have any measurable effects on any bodily systems. Consequently, such a classification will be unpersuasive in light of the *Bragdon* Court's emphasis on the symptoms presented by asymptomatic HIV.

However, a successful analogy between possessing the gene for Huntington's disease and asymptomatic HIV may not be far off in the future. Some scientific evidence is surfacing that Huntington's disease does impact the body years prior to the actual onset of the clinical signs. One study of individuals at risk for Huntington's disease has revealed that this at-risk population suffers major deficits in cognitive tests. Similarly, another recent project showed that once a person reached a certain amount of neuronal loss in the striatum, the portion of the brain attacked by Huntington's disease, the clinical signs of Huntington's disease begin to manifest, suggesting that some striatal loss must occur before the actual symptoms of Huntington's

^{83.} See Gin, supra note 77, at 1414-15.

^{84.} Alper, supra note 77, at 168.

^{85.} According to 45 C.F.R. § 84.3(j)(2)(i) (1999), a physical impairment is defined as "any physiological disorder or condition, cosmetic disfigurement, or anatomical loss affecting one or more of the following body systems: neurological; musculoskeletal; . . . reproductive; . . . lymphatic; skin; and endocrine" *Id.*

^{86.} See Andrew D. Lawrence et al., Evidence for Specific Cognitive Deficit in Pre-Clinical Huntington's Disease, 121 Brain 1329, 1333-34 (1998). This study was performed on those at risk of obtaining Huntington's disease before they were actually tested for the gene and before they knew whether or not they had the gene. See id. at 1330. Each participant was subjected to cognitive tests, and the results showed that those who eventually had the gene for Huntington's disease had major cognitive deficits. See id.

disease surface.⁸⁷ As a result, this process of "neuronal loss" could be analogized to the decreasing CD-4 count⁸⁸ in a person suffering from asymptomatic HIV, and the cognitive deficits could be representative of the other physical impacts detailed by the Court of an HIV-infected person. Furthermore, some evidence exists to suggest that those with Huntington's disease are more susceptible to depression than those who do not suffer from the disease.⁸⁹ If scientists later find a definitive link between the Huntington's disease gene and the chemical or protein changes in the body that lead to depression, the presence of depression could strengthen the host of "symptoms" experienced by those predisposed to Huntington's. With the emerging evidence revealing possible changes in the body years before the manifestation of the disease, one can draw strong parallels between the "asymptomatic" disease process of Huntington's and HIV infection.

If a court finds that predisposition to Huntington's does constitute an impairment, a plaintiff with Huntington's disease should meet the second prong of the definition of an ADA disability. A plaintiff could easily prove that reproduction is the "major life activity" substantially limited by a predisposition to Huntington's, especially in light of the relaxed nexus to an individualized assessment. The Court in *Bragdon* emphasized that "[r]eproduction and the sexual dynamics surrounding it are central to the life process itself" in reaching the conclusion that reproduction qualifies as a "major life activity." Furthermore, the Court concluded that asymptomatic HIV infection substantially limits reproduction in two independent ways: first, a woman infected with HIV who engages in reproductive activities imposes a significant risk of infection on her partner, and secondly, the woman risks infecting her child through perinatal transmission. ⁹¹ Even though Huntington's disease cannot be transmitted to a partner dur-

^{87.} See Jean Paul G. Vonsattel & Marian DiFiglia, Huntington Disease, 57 J. NEUROPATHOLOGY & EXPERIMENTAL NEUROLOGY 369, 370 (1998). This study suggests that if one could measure "neuronal" loss, one could feasibly argue that this is a physical "impairment" experienced by the body years before the manifestation of Huntington's disease. See id.

^{88.} See Bragdon v. Abbott, 524 U.S. 624, 634 (1998) (describing CD4+ cells as white blood cells that are particularly vulnerable to HIV). The Court further noted that these cells "play a critical role in coordinating the body's immune response system, and the decline in their number causes corresponding deterioration of the body's ability to fight infections from many sources." Id.

^{89.} See Gin, supra note 77, at 1434 n.105. The author notes that the suicide rate for persons with Huntington's disease is four to seven times higher than the national average. See id. (citing Peter Gorner, Out of the Shadow A New Genetic Test Can Foretell Agonizing Death: Would You Take It?, Chi. Trib., Aug. 4, 1988, at T1).

^{90.} Bragdon, 524 U.S. at 638.

^{91.} See id. at 639-40.

ing reproductive activities, it does possess a high rate of transmission to the child. In fact, Huntington's disease poses a higher risk of transmission to the child than asymptomatic HIV infection. An adult with Huntington's disease who attempts to conceive a child carries a 50% risk of transmitting the Huntington's gene to the child, who would then have a 100% chance of developing Huntington's upon reaching middle age.⁹² Moreover, both asymptomatic HIV infection and predisposition to Huntington's are fatal conditions, with both diseases causing deteriorations to the body until the person finally succumbs to death. 93 In Bragdon, the Court specifically dismissed evidence showing that antiretroviral therapy could reduce the risk of perinatal transmission from 25% to 8%,94 and stated that "[i]t cannot be said as a matter of law that an 8% risk of transmitting a dread and fatal disease to one's child does not represent a substantial limitation on reproduction."95 In light of the Court's statement, the risk of transmitting an equally dreaded and fatal disease at a transmittal rate that is twice as high as HIV infection should also be found to "substantially limit" reproduction for a person with a predisposition to Huntington's disease.

B. Predisposition to Breast Cancer Is Less Likely to be a Disability

A person carrying the breast cancer gene alteration faces greater difficulties in analogizing a predisposition to breast cancer to asymptomatic HIV infection. This is because, unlike Huntington's and HIV which have 100% manifestation rates, *BRCA1* and 2 merely increase the chances that the disease will manifest itself. In both Huntington's and asymptomatic HIV infection, the infection or presence of the genetic marker condemns the person to eventual development of the actual disease. On the other hand, the gene alteration for breast cancer merely increases a woman's susceptibility to the disease. Thus, a woman found to carry the *BRCA1* or 2 gene alteration may have as high as a 56% chance of developing breast cancer, and while the risk is high, it is not an absolute or definite fate. A woman who possesses the *BRCA1* or 2 gene alteration and actually develops cancer could possibly fit within the *Bragdon* framework pending the discovery of evidence that during the asymptomatic stage and, prior to the actual

^{92.} See Gin, supra note 77, at 1414-16.

^{93.} See id. at 1406.

^{94.} See Bragdon, 524 U.S. at 640.

^{95.} Id. at 641.

^{96.} See Gin, supra note 77, at 1414-16.

^{97.} See Struewing et al., supra note 78, at 1401.

manifestation of the cancer, actual changes occur in her body. However, if the same woman escapes the development of cancer and never experiences the changes in her body leading to the manifestation of cancer, she would not be deemed "disabled" under the ADA despite the presence of a genetic marker. As a result, possessing a susceptibility gene for breast cancer bears a more tenuous connection to the essential elements stressed by the Supreme Court than a predisposition to Huntington's disease does.

However, similar to Huntington's disease, if sufficient evidence is discovered which supports a finding that a predisposition to breast cancer qualifies as an impairment, a person with *BRCA1* or 2 will have no difficulties satisfying the substantial limitation standard. Both *BRCA1* and 2 are dominant genes which have a 50% chance of being passed through reproduction. A woman with a single defective copy of *BRCA1* or 2 is automatically placed at a significantly higher risk of manifesting breast cancer, and this woman's child then risks a 50% chance of inheriting that gene alteration. If the genetic alteration does pass to the child, the child would face a 56% chance of developing a fatal cancer. As a result, a 50% chance of passing a gene alteration for a dread and fatal cancer to a child should also lead a court to find that a person with *BRCA1* or 2 is substantially limited in her ability to reproduce.

C. Reproduction as a Major Life Activity Is Key in Extending Bragdon

The Court's acceptance of reproduction as a "major life activity" actually has the largest impact on the potential inclusion of genetic markers as a "disability." This is particularly true in light of other cases that have refused to hold that cancer, despite being a physical impairment, did not substantially limit work activities to qualify as a "disability" under the ADA. The Eleventh, Ninth, and Fifth Circuits have addressed situations where the plaintiffs suffered from cancer, but nonetheless they each concluded that the cancer did not substantially limit the plaintiff's major life activities. Work activities were the "major life activity" considered in these cases. In Gordon v. E. L. Hamm & Assoc., Inc., 102 the Eleventh Circuit determined that while the side

^{98.} See Understanding Gene Testing, supra note 4, at 6.

^{99.} See Jerome Groopman, Decoding Destiny, New Yorker, Feb. 9, 1998, at 43.

^{100.} See Struewing et al., supra note 78, at 1401.

^{101.} See generally Gordon v. E.L. Hamm & Assocs., Inc., 100 F.3d 907 (11th Cir. 1996); Sanders v. Arneson Prods., Inc., 91 F.3d 1351 (9th Cir. 1996); Ellison v. Software Spectrum, Inc., 85 F.3d 187 (5th Cir. 1996).

^{102. 100} F.3d 907 (11th Cir. 1996).

effects of chemotherapy could be a physical impairment under the ADA, they did not substantially limit the plaintiff in this case. 103 The Eleventh Circuit found this to be true due to the fact that the plaintiff worked during chemotherapy, was not hospitalized at any time, and conceded he could work and continue with normal life activities despite his mild nausea. 104 Similarly, the Ninth Circuit in Sanders v. Arneson Prods., Inc. 105 held that the plaintiff's cancer-related psychological disorders failed to qualify as a disability under the ADA because "'temporary, non-chronic impairments of short duration, with little or no long term or permanent impact, are usually not disabilities." The Fifth Circuit also applied a narrow ADA analysis and found that the plaintiff's breast cancer did not substantially limit her major life activities because she continued to work on a modified schedule, and despite feeling sick and fatigued, she was still able to perform the essential functions of her job. 107 In each of these cases, the courts failed to find a substantial limitation of that individual's work activities because that individual mustered the strength to continue to complete their jobs and perform their normal life activities. Thus, these courts primarily focused on the individual's response to the disease and the effects the disease had on that individual, which provides the courts with greater latitude in exercising their discretion as to what constitutes a "substantial limitation."

Unlike the cases in which plaintiffs argued that cancer posed a substantial limitation, each person possessing a particular genetic predisposition for a particular disease will face the same rates of transmitting that gene to their offspring. A person with Huntington's who decides to reproduce or not reproduce will face the same risks that another person with Huntington's will: both stand a fifty percent chance of passing the gene for a "dread and fatal" disease to their child. Similarly, any person carrying the *BRCA1* or 2 gene alteration faces the same fifty percent chance of increasing her child's susceptibility to cancer. This restricts the discretionary latitude courts would possess in assessing what constitutes a "substantial limitation" and prevent courts from conservatively exercising their discretion as the courts in the Eleventh, Ninth, and Fifth Circuits did to preclude individuals from invoking the protections of the ADA.

^{103.} See id. at 912.

^{104.} See id.

^{105. 91} F.3d 1351 (9th Cir. 1996).

^{106.} Id. at 1354 (citing 29 C.F.R. § 1630.2(j) (1999)).

^{107.} See Ellison, 85 F.3d at 190-91.

George Annas noted that the Bragdon Court's acceptance of "reproduction" as a major life activity could render the Court's decision inapplicable in light of alternative reproductive technologies. 108 According to Annas, the Court assumed that the partner and the child would be at risk because reproduction would be achieved through traditional sexual intercourse and gestation. 109 While this argument validly applies to asymptomatic HIV infection, the risk of transmitting a genetic disease to a child will be present at all times, regardless of whether or not reproduction is achieved through sexual intercourse or with assisted reproductive technologies. With assisted reproduction, an HIV-positive woman could eliminate transmission risks to both her partner and child because she could conceive without sexual intercourse and use a surrogate mother to gestate the child. 110 Assisted reproduction eliminates perinatal transmission because the egg does not carry the HIV virus.111 By employing in vitro fertilization and using a surrogate mother, the developing fetus would never be exposed to the virus and never risk perinatal transmission of a "dread and fatal disease." On the other hand, even if a woman with Huntington's disease or with BRCA1 or 2 employs alternative reproductive technologies, her child will still face a 50% chance of inheriting that disease because the disease is encoded in the genes of that egg. Consequently, a person with a genetically based disease will always risk transmitting a potentially "dread and fatal" disease to their child, 112 making the Supreme Court's acceptance of reproduction as the major life activity more significant in an analysis of genetic diseases and the ADA.

III. DEFINING DISABILITY IN LIGHT OF MITIGATING FACTORS

A. The Sutton, Murphy, and Albertsons Decisions

The Court significantly changed what qualifies as a disability under the ADA by requiring the consideration of any mitigating factors in determining what constitutes as a disability. In *Sutton v. United*

^{108.} See George J. Annas, Protecting Patients from Discrimination—The Americans with Disabilities Act and HIV Infection, 339 New Eng. J. Med. 1255, 1257 (1998).

^{109.} See id.

^{110.} See id.

^{111.} See Baccio Baccetti et al., Failure of HIV-1 to Infect Human Oocytes Directly, 21 J. Acquired Immune Deficiency Syndromes 355, 357 (1999).

^{112.} See Annas, supra note 108, at 1257. The risk of transmitting genetic diseases will always exist barring developments in germline gene therapy, which manipulates the genetic material in reproductive cells to eliminate the disease causing genetic alterations. Genetic scientists have yet to develop such a therapy for Huntington's disease or BRCA1 and 2. See id.

Air Lines, Inc., 113 Murphy v. United Parcel Serv., Inc., 114 and Albertsons, Inc. v. Kirkingburg, 115 each decided last term, the Court concluded that one must account for mitigating factors in deciding what is a disability under the ADA. Despite the fact that these three decisions arose out of ADA claims in employment discrimination contexts, they nonetheless have an impact upon whether genetic predispositions will be accepted as a disability under the Act. However, the Bragdon Court's decision to recognize reproduction as a major life activity may have limited the effect of these most recent ADA cases on treating genetic predispositions as a disability.

In Sutton, the main case setting forth the mitigating factor requirement, the Court addressed an ADA employment discrimination claim brought by two severely myopic women, who were denied positions as commercial airline pilots. 116 In rejecting their ADA claim, the Court announced that "[a] 'disability' exists only where an impairment 'substantially limits' a major life activity, not where it 'might,' 'could,' or 'would' be substantially limiting if mitigating measures were not taken."117 The Court reasoned that "[b]ecause the phrase 'substantially limits' appears in the Act in the present indicative verb form, we think the language is properly read as requiring that a person be presently—not potentially or hypothetically—substantially limited in order to demonstrate a disability."118 As a result, the Court concluded that the two severely myopic women who wore corrective lenses did not meet the ADA's definition of disability because with corrective lenses, the women functioned as well as persons who did not suffer from myopia. 119 With corrective lenses, the two women no longer had a "substantial limitation" which "actually and presently ex-Consequently, mitigating measures such as corrective lenses, medication, or other forms of treatment may render an individual with an impairment no longer "impaired" or disabled as contemplated by the ADA. The Court reached similar conclusions in Murphy and Albertsons, where the Court respectively found that neither a man taking hypertension medication to control his high blood pres-

^{113. 119} S. Ct. 2139 (1999).

^{114. 119} S. Ct. 2133 (1999).

^{115. 119} S. Ct. 2162 (1999).

^{116.} See Sutton, 119 S. Ct. at 2143.

^{117.} Id. at 2146.

^{118.} Id.

^{119.} See id. at 2149.

^{120.} Id. at 2146.

sure¹²¹ nor a man whose body subconsciously compensated for his monocular vision could qualify as disabled under the ADA.¹²²

B. The Impact of Mitigating Factors on Including Genetic Predisposition as a Disability

While many regarded the Court's decision as a significant curtailment of those protected under the ADA¹²³ these three decisions do not change the outcome of Bragdon or the previous section's analysis of extending the ADA to genetic predispositions. As mentioned in the previous section, the first prong of an ADA disability determination rests upon three elements: (1) the presence of a physical or mental impairment, (2) whether the impairment affects a major life activity, and (3) whether the impairment substantially limits the major life activity. The Court in Bragdon engaged in a full-scale ADA analysis by examining whether or not asymptomatic HIV met each element of the first prong. In Bragdon, the greatest obstacle lay in a determination that an asymptomatic condition qualified as a physical impairment. On the other hand, in Sutton, Murphy, and Albertsons, the Court never challenged whether the ADA claimants suffered from a physical or mental impairment, 124 but rather focused on the third element of "substantially limits" in their decision to adopt mitigating factors as a part of an ADA determination.

^{121.} See Murphy, 119 S. Ct. at 2136 (discussing the claimant who was fired from his position as a mechanic, which required him to drive motor vehicles, after employer determined that he did not qualify for a Department of Transportation health certification because of his high blood pressure).

^{122.} See Albertsons, 119 S. Ct. at 2165-66 (claimant was fired from his position as a truck driver because his amblyopia, an uncorrectable condition that caused extremely poor vision in one eye and in effect left him with monocular vision, prevented him from meeting the Department of Transportation vision standard).

^{123.} See generally David G. Savage, High Court Reins In Disability Law's Scope, L.A. TIMES, June 23, 1999, at A1 ("The Supreme Court sharply narrowed the reach of the federal antidiscrimination law for people with disabilities Tuesday, ruling that it was not intended to protect workers with treatable impairments such as bad eyesight, hypertension or diabetes."); see also Joan Biskupic, Supreme Court Limits Meaning of Disability, WASH. POST, June 23, 1999, at A01 ("The Supreme Court significantly curtailed the scope of a federal law designed to protect disabled workers from discrimination yesterday.").

^{124.} See Sutton, 119 S. Ct. at 2147 ("To be sure, a person whose physical or mental impairment is corrected by mitigating measures still has an impairment, but if the impairment is corrected it does not 'substantially limi[t]' a major life activity."); Murphy, 119 S. Ct. at 2137 ("Because the question whether petitioner is 'disabled' when taking medication is not before us, we have no occasion here to consider whether petitioner is 'disabled' due to limitations that persist despite his medication or the negative side effects of his medication); Albertsons, 119 S. Ct. at 2167 ("There is no dispute either that Kirkingburg's amblyopia is a physical impairment within the meaning of the Act.").

The inclusion of mitigating factors also does not significantly change the Bragdon Court's determination that asymptomatic HIV substantially limits the major life activity of reproduction. In Bragdon, the dentist asserted that Abbott could have taken antiretroviral therapy to lower the risk of perinatal transmission from 25% to about 8%. 125 While the Bragdon Court noted the argument raised in Sutton, Murphy, and Albertsons, that a substantial limitation should be assessed with regard to mitigating factors, the Bragdon Court refused to resolve that dispute. 126 Brushing aside the issue of mitigating factors, the Court nonetheless concluded that even if the mother had taken antiretroviral drugs, a reduced 8% risk of transmitting a fatal disease does substantially limit the major life activity of reproduction.¹²⁷ The Court emphasized that "[t]he Act addresses substantial limitations on major life activities, not utter inabilities,"128 and that "the definition is met even if the difficulties are not insurmountable."129 As a result, even if mitigating factors were injected into the consideration of Bragdon, it would have no bearing on the Court's finding that asymptomatic HIV constitutes a substantial limitation on reproduction.

Similarly, an assessment of whether or not genetic predispositions are a substantial limitation on a major life activity is not the main obstacle to classifying it as a disability under the ADA. The current difficulties in classifying genetic predispositions following *Bragdon* lie in the lack of concrete evidence that the body presently experiences physical manifestations or symptoms of the genetic alteration. The Court's adoption of mitigating factors has merely crystallized the need for an impairment not only to preside in a person's body, but to have an actual effect on a major life activity. A genetic alteration in an individual's body is capable of meeting this requirement. Even though a genetic predisposition to Huntington's disease or breast cancer may not immediately trigger physical manifestations of the disease, the gene still presents a real and measurable effect on the decision to reproduce. The presence of a genetic alteration within an

^{125.} See Bragdon v. Abbott, 524 U.S. 624, 640 (1998). Antiretroviral therapy can lower the risk of perinatal transmission to about 8%. See id.

^{126.} See id. at 641. The Court acknowledged the Solicitor General's argument in an amicus curiae brief that regulatory language "requir[ed] the substantiality of a limitation to be assessed without regard to available mitigating measures." Id. at 640 (internal cites omitted).

^{127.} See id. The Court stated that the issue of mitigating factors did not need to be resolved in order for the Court to decide the Bragdon case. See id.

^{128.} Id.

^{129.} Id.

individual will substantially limit an individual's ability to reproduce and thus goes beyond the point where it "might," "could" or "would" substantially limit one's decision to reproduce. An individual carrying the Huntington's disease or BRCA1 gene will always face a 50% chance of transmitting the gene for the fatal disease or cancer to their child. Consequently, a genetic alteration with a 50% chance of passing a terminal illness to a child will affect an individual's decision to have a child, and in turn, the genetic alteration will presently and substantially limit an individual's ability to reproduce.

C. The Impact of Developments in Genetic Therapy

Meanwhile, the developments in genetic therapy could frustrate attempts to include genetic predispositions under the ADA's protection. With asymptomatic HIV, antiretroviral therapy would not completely eliminate the risk of perinatal transmission but would reduce the risk to 8%. However, genetic therapy could completely eliminate the risk of transmitting an altered gene. 132 In light of the Bragdon Court's acceptance of reproduction as the limited major life activity, germ-line gene therapy, which involves manipulating the genetic material in reproductive cells, could constitute a mitigating factor considered in genetic alterations such as Huntington's and BRCA1 which are passed from generation to generation. Once genetic scientists have successfully mapped out the human genome and identified the genes responsible for triggering certain cancers and diseases, 134 it will only be a matter of time before scientists discover a method to correct the alteration and enable a person to have a child free from genetic impairments. The existence of genetic therapy would then render the genetic impairment "correctable" so that the impairment would no longer substantially limit reproduction, but only "'might,' 'could,' or 'would' be substantially limiting if mitigating measures were not taken."¹³⁵

^{130.} See, e.g., Caryn Lerman, Interest in Genetic Testing Among First-Degree Relatives of Breast Cancer Patients, 57 Am. J. Med. Genetics 385, 386 (1995).

^{131.} See supra text accompanying notes 98-99.

^{132.} See Understanding Gene Testing, supra note 4, at 18, 27.

^{133.} See id. at 5, 28. Contrast with acquired mutations or somatic mutations which are "changes in DNA that develop throughout a person's life." Id. at 5. Unlike hereditary mutations, acquired mutations "arise in the DNA of individual cells," where "[m]utations are often the result of errors that crop up during cell division, when the cell is making a copy of itself and dividing into two." Id. Radiation, toxins, and other environmental factors are often sources of such alterations. See id.

^{134.} The Human Genome Project foresees complete mapping by 2002 or 2003, and private corporations may complete it as soon as this year. See Gillis, supra note 6, at E08. 135. Sutton v. United Air Lines, Inc., 119 S. Ct. 2139, 2146 (1999).

The potential inclusion of genetic therapy in a calculation of whether genetic predispositions qualify as a disability under the ADA raises a host of prickly ethical questions: mainly that the making of an ADA-type determination turns upon economic factors. Genetic testing to determine if a person carries BRCA1 costs about \$295.136 If genetic testing alone, without subsequent gene therapy, costs \$295, it is extremely likely that the costs for genetic therapy will far exceed a few hundred dollars. In describing the potential problems posed by genetic testing, one author noted that "we live in a society where over forty million people have no health insurance and limited or no access to our health care system. Without access to health care, it is unlikely that these individuals would have access to genetic testing or related services."137 Such individuals, who find themselves unable to bear the expenses of expensive gene therapy, could find themselves protected by the ADA's provisions. These individuals would have an identifiable impairment, the impairment would substantially limit the major life activity of reproduction, and no mitigating measures would exist to defeat an ADA claim. On the other hand, someone who had the financial capacity to pursue gene therapy would find themselves deprived of an ADA claim, as mitigating measures would remove any substantial limitation to reproduction by eliminating the possibility of transmitting the altered gene to future generations. Consequently, under the Court's decision in Sutton, Murphy, and Albertsons, to include mitigating factors in an ADA determination, the Court's acceptance of gene therapy as a mitigating measure could inadvertently include a socio-economic factor as well. While a more in depth discussion of the ethical implications created by including mitigating factors in an ADA determination for genetic predispositions is beyond the scope of this paper, it seems that the Court's recent ADA decisions do not technically restrict the inclusion of genetic predispositions as a disability but rather pose ethical questions as to its potential inclusion or exclusion.

IV. Predisposition to Genetic Disease as a Disability Under the "Regarded as" Prong

While establishing a claim under the first of the three ADA definitions poses many difficulties for those with genetic predispositions to certain diseases or cancers, formulating a claim under the third

^{136.} See Karen H. Rothenberg, Breast Cancer, The Genetic "Quick-Fix," and the Jewish Community, 7 Health Matrix 97, 101 (1997).

^{137.} Id. at 103.

defintion—the "regarded as" prong of the ADA—is less problematic. The "regarded as" prong defines disability as "being regarded as having" an impairment that substantially limits one or more major life activities. Based on the First Circuit's holding in Cook v. Rhode Island, Department of Mental Health, Retardation, and Hospitals, a person with a genetic predisposition to a certain disease may find it easier to establish a claim under the "regarded as" prong because this prong is satisfied regardless of whether the person has an actual physical or mental impairment. Consequently, if the altered gene or susceptibility to depression and suicide do not qualify as "physical impairments" for those with genetic predispositions, these persons could nonetheless contend that they are perceived as being disabled because of stereotypes or myths.

Cook suggests that the "regarded as" prong provides a more promising route for classifying persons with genetic predispositions as "disabled" under the ADA. In Cook, the First Circuit held that a morbidly obese woman could have been "regarded as" disabled because her employer could have perceived her obesity as an impairment which substantially limited her major life activities. A closer examination of the court's reasoning in light of genetic predisposition reveals that a court could find that the person carrying the gene for Huntington's disease, or breast cancer, may satisfy the elements for a "regarded as" claim.

According to the First Circuit, the plaintiff in *Cook* could only prevail on a perceived disability claim if she could show that "(1) while she had a physical or mental impairment, it did not substantially limit her ability to perform major life activities, or, alternatively, that (2) she did not suffer at all from a statutorily prescribed physical or mental impairment" in addition to showing that her employer "treated her impairment (whether actual or perceived) as substantially limiting one or more of her major life activities." ¹⁴² In discussing what constitutes a physical or mental impairment, the First Circuit stated that "the regulations define the term 'physical or mental impairment' broadly" and that the term "encompasses disorders and conditions 'whose precise nature is not at present known.'" ¹⁴³ The court then determined that a jury could have found that the plaintiff

^{138. 42} U.S.C. § 12102(2)(C) (1999).

^{139. 10} F.3d 17 (1st Cir. 1993).

^{140.} See id. at 22.

^{141.} See id. at 23.

^{142.} Id.

^{143.} Id. at 22.

had a physical impairment under both standards. First of all, a jury could have found "morbid obesity is a physiological disorder involving a dysfunction of both the metabolic system and the neurological appetite—suppressing signal system, capable of causing adverse effects." Alternatively the jury could have determined that while plaintiff was not actually impaired, her employer treated her as impaired by failing to hire her as evidenced by their concerns that her "limited mobility impeded her ability to evacuate patients in case of an emergency, and its fears that her condition augured a heightened risk of heart disease, thereby increasing the likelihood of worker's compensation claims." Furthermore, the First Circuit held that a jury could reasonably find that the employer's "pessimistic assessment of the plaintiff's capabilities demonstrated that [the employer] regarded Cook's condition as substantially limiting a major life activity—being able to work." ¹⁴⁶

The court's statement that the term "physical impairment" "encompasses disorders and conditions 'whose precise nature is not at present known' "147 could provide a hook for genetic predisposition. This is because most genetic diseases are conditions whose precise nature is not presently known. While scientists can locate the Huntington's disease gene or the breast cancer gene alteration and test for them, the actual process of manifestation is not yet known. For instance, scientists have some evidence that certain chemical changes occur in the body prior to the actual onset of Huntington's and that certain environmental factors increase the probability of triggering breast cancer, but they do not yet know the "precise nature" of these diseases. In following the First Circuit's reasoning, a physical impairment under the "regarded as" prong would include genetic predispositions where scientists have not yet discovered the nature or process of the disease.

A physical impairment may also exist if someone treated a person with a genetic predisposition as having a physical impairment. Evidence indicates that persons with genetic predispositions, such as a Huntington's disease, suffer discrimination in adoption and employ-

^{144.} Id. at 23.

^{145.} Id.

^{146.} Id. at 25. A physician for the employer admitted he "believed plaintiff's limitation foreclosed a broad range of employment options in the health care industry" Id.

^{147.} Id. at 22.

^{148.} See International Dictionary of Medicine and Biology 547 (1996) (stating that "[t]his condition often gives rise initially to disorders of character and behavior such as irritability, impulsiveness, violence, fugue, sexual aberrations, even suicide.").

^{149.} See Ackerman's Surgical Pathology 1590 (Juan Rosai ed., 8th ed. 1996).

ment contexts.¹⁵⁰ If evidence in such cases suggests that the refusal arose from concerns that a person with a predisposition to Huntington's disease limits a person's ability to care for a child or that the condition "auguer[s] a heightened risk" for depression and suicide thus restricting a person's ability to function at the workplace, the language of the First Circuit indicates that such a person would be "treated" as having a physical or mental impairment. If the Cook court found that the employer's concerns about the plaintiff's ability to evacuate patients¹⁵¹ and her potentially increased risk for heart disease indicated that the plaintiff's obesity was treated as an actual impairment, a court could similarly find that an employer, acting on fears that a person with the gene for Huntington's is more susceptible to depression and cognitive deterioration, perceives that person as having an actual impairment limiting her performance. If others further believe that the perceived or actual depression and cognitive deterioration restricts or substantially limits the person's ability to function, then the person will meet the elements of a "regarded as" claim.

As the First Circuit noted, under the "regarded as" prong, a "suit can be brought against a warehouse operator who refuses to hire all turquoise-eyed applicants solely because he believes that people with such coloring are universally incapable of lifting large crates." ¹⁵² By suggesting an employer's perception that a certain eye color diminishes a person's ability to lift crates would be sufficient to support a claim under the regarded as prong, the First Circuit seems to open the door to belief that persons with genetic predisposition are more frail, cannot have prolonged exposure to chemicals or exposure to mild radiation, as constituting sufficient evidence of perceived disability. Drawing on this illustration, as long as an employer discriminates against someone with a genetic predisposition on the grounds that he or she believes a person with a genetic predisposition is not capable of completing certain functions, that person should be able to recover under a "regarded as" claim.

^{150.} See id.; see also Lisa N. Geller et al., Individual, Family, and Societal Dimensions of Genetic Discrimination: A Case Study Analysis, 2 Sci. & Engineering Ethics 76-78 (1996). This article discusses various case studies including one where a married woman learned that she was at-risk for Huntington's disease, and when she and her husband attempted to adopt a child on the advice of her physician, the adoption agency denied their application based on her risk for Huntington's disease. See id. at 77.

^{151.} See Cook, 10 F.3d at 23.

^{152.} Id. at 25.

CONCLUSION

With the rapid developments in genetics, a person with a genetic predisposition to Huntington's disease will probably succeed in bringing a claim under the *Bragdon* framework. Evidence from recent studies indicates that certain changes and deficits do occur in the body prior to the actual manifestation of Huntington's disease. The strong parallels of the physiological impact on the body between asymptomatic HIV infection and a predisposition to Huntington's disease makes it quite feasible that a predisposition to Huntington's disease will also constitute an "impairment." Furthermore, Huntington's disease is an equally "dreaded and fatal disease" with a higher rate of transmission (50%) to the child than asymptomatic HIV infection (25% without antiretroviral therapy, 8% with antiretroviral therapy). In light of these statistics, a court should not hesitate to find that Huntington's disease substantially impairs the major life activity of reproduction.

On the other hand, the success of an ADA claim using the breast cancer gene alteration *BRCA1* may depend on further genetic research. At the moment, nothing indicates that those with *BRCA1* suffer from neuronal loss or increased susceptibility to depression as those with the gene for Huntington's disease. Furthermore, *BRCA1* merely increases the probability that the person will manifest the disease; it does not possess a 100% penetrance rate like Huntington's disease. However, as a genetic disease, the acceptance of reproduction as a major life activity by *Bragdon* provides a hook for *BRCA1* and other genetic diseases because these diseases can only be inherited. The genes are firmly encoded in the egg and reproduction will either give the child the disease or increase the probability that the child will later manifest the disease.

While the Court's recent decision to adopt mitigating factors in an ADA determination may restrict the class of persons qualifying for ADA protection, it has little impact on a *Bragdon* examination of Huntington's disease and *BRCA1*. The *Bragdon* Court acknowledged mitigating factors arguments in its decision but nonetheless concluded that even a reduced risk of a fatal disease was a sufficient limitation on reproduction. However, even if a court refuses to find that genetic predispositions fall within the *Bragdon* rubric, the "regarded as" prong provides a strong alternative argument. This is because a person with a genetic predisposition only has to be perceived as "impaired" and show that she or he was treated as having an impairment that substantially limits a major life activity. Consequently, in light of the *Bragdon* opinion, the protections offered by the ADA could extend to those with genetic predispositions.