No. 10-16696

United States Court of Appeals For The Ninth Circuit

KRISTIN PERRY, et al.,

Plaintiffs-Appellees,

v.

ARNOLD SCHWARZENEGGER, et al.,

Defendants,

and

DENNIS HOLLINGSWORTH, et al.,

Defendant-Intervenors-Appellants.

Appeal from United States District Court for the Northern District of California

BRIEF AMICUS CURIAE OF PAUL McHUGH, M.D., JOHNS HOPKINS UNIVERSITY DISTINGUISHED SERVICE PROFESSOR OF PYSCHIATRY,

in support of Defendant-Intervenors-Appellants Urging Reversal

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INTEREST OF AMICUS CURIAE

Amicus is a scholar of psychiatry with a professional interest in orientation issues. Dr. Paul McHugh, M.D. is the University Distinguished Service Professor of Psychiatry at Johns Hopkins University. Dr. McHugh has previously served as the Director of the Department of Psychiatry at Johns Hopkins and as Psychiatrist-in-Chief at Johns Hopkins Hospital. Dr. McHugh seeks to provide information to this Court bearing on its decision of whether to endorse a legal declaration that orientation is a fixed and immutable characteristic similar to race or gender.

This Brief is filed pursuant to consent of all parties.

SUMMARY OF ARGUMENT

Citing psychological and social science authority, as well as evidence from the trial record, this Brief expands on an argument made by the Defendant-Intervenors-Appellants: that whatever common trait Plaintiffs-Appellees possess, it is very different from race or gender. The profound difficulty in defining sexual orientation and the mutability of sexual orientation preclude its designation as a suspect class.

ARGUMENT

As an expert in psychiatry and psychology, Dr. McHugh offers scientific information that is directly relevant to this Court in assessing whether sexual orientation as a category is sufficiently similar to race and gender to merit

analogous treatment in constitutional law. In particular, this brief discusses two highly relevant facts: (1) there is no scientific or social consensus on what homosexuality is, thus the number of people who fit into a "gay and lesbian" class varies widely depending on which definition of homosexuality is used; and (2) unlike race and gender, there is no scientific consensus that homosexuality is exclusively or primarily genetic in origin and homosexuality changes over a lifetime.

I. THERE IS NO SCIENTIFIC AGREEMENT ON THE DEFINITION OF HOMOSEXUALITY, RAISING GREAT UNCERTAINTY OVER WHO MIGHT BE A MEMBER OF THAT CLASS.

"There is currently no scientific or popular consensus . . . that definitively 'qualify' an individual as lesbian, gay, or bisexual." Lisa M. Diamond, *New Paradigms for Research on Heterosexual and Sexual Minority Development*, 32 J. of Clinical Child and Adolescent Psychol. 492 (2003). *See also* Lisa A. Diamond & Ritch C. Savin-Williams, *Gender & Sexual Identity in Handbook of Applied Development Science* 101, 102 (Richard M. Lerner, *et al.*, eds. 2002) ("There is currently no scientific or popular consensus on the exact constellation of experiences that 'qualify' an individual as lesbian, gay, or bisexual (rather than confused, curious, or maladjusted)"). "Much of the confusion about sexual orientation occurs because there is no single agreed upon definition of the term. There is no one universally accepted definition of sexual orientation, nor of who is

bisexual, lesbian, or gay." Gail S. Bernstein, Ph.D., *Defining Sexual Orientation*, Selfhelp Magazine, http://www.selfhelpmagazine.com/article/sexual_orientation. "The meaning of the phrase 'sexual orientation' is complex and not universally agreed upon." Todd A. Salzman & Michael G. Lawler, *The Sexual Person* 65 (2008).

Nearly all studies of sexual orientation describe the difficulty in defining the population of homosexuals. The authors of the "Chicago Sex Survey," which is considered one of the most reliable scholarly efforts to determine sexual practices in the United States, noted the following:

[The authors' research] raises quite provocative questions about the definition of homosexuality. While there is a core group (about 2.4 percent of the total men and about 1.3 percent of the total women) in our survey who define themselves as homosexual or bisexual, have same-gender partners, and express homosexual desires, there are also sizable groups who do not consider themselves to be either homosexual or bisexual but have had adult homosexual experiences or express some degree of desire.

Edward O. Laumann *et al.*, *The Social Organization of Sexuality: Sexual Practices in the United States* 300-301 (1994). Other researchers report similar definitional complexities, *e.g.*, "There is a physical orientation, an affectional orientation, and a fantasy orientation, with each of those three further divided into a past (historical) component and a present component. A person's behavior may be totally at variance with all aspects of orientation, and the various parts of orientation may

not all agree." A.E. Moses & R.O. Hawkins, Jr., Counseling Lesbian Women and Gay Men: A Life Issues Approach 43 (1982).

A. The three most commonly-used scientific definitions of sexual orientation capture very different groups of people.

Scientific literature includes at least three different basic definitions of orientation, based on (1) sexual behavior, (2) sexual attraction, or (3) self-ascribed social identity. Laumann, *supra* at 291. *See also* M.V. Lee Badgett, *Money*, Myths, & Change: The Economic Lives of Lesbians & Gay Men 4 (2001) (discussing the difficulty in "[d]efining the [] boundary around the sexual orientation of gay men and lesbians . . . [d]oes it mean someone who engages in same-sex sexual behavior? Someone who fantasizes about such acts? Someone who will identify himself or herself as gay or lesbian?"); Lauren Dean & Ilan H. Meyer, et. al., Lesbian, Gay, Bisexual, and Transgender Health: Findings and Concerns, 4 J. Gay and Lesbian Medical Assoc. 102, 135 (2000) (sexual orientation definitions include "components of at least one of three dimensions: (1) sexual orientation identity, (2) sexual behavior, and/or (3) sexual attraction."); Michael R. Kauth & Seth C. Kallchman, Sexual Orientation & Development: An Interactive Approach in Psychology of Sexual Orientation, Behavior & Identity 81, 82 (Louis Diamant & Richard M. McAnulty, eds., 1995) ("By sexual orientation we mean the cumulative experience and interaction of erotic fantasy, romanticemotional feelings and sexual behavior directed toward one or both genders.");

Williams Institute, *Best Practices for Asking Questions about Sexual Orientation* on *Surveys* (2009) ("Conceptually, sexual orientation has three major dimensions," including sexual attraction, sexual behavior, and self-identification).

This definitional disparity is not a point of dispute; Plaintiffs-Appellees' experts acknowledged these differences. In his testimony, Professor Herek explained "[s]exual orientation is a term that we use to describe an enduring sexual, romantic, or intensely affectional *attraction* to men, to women, or to both men and women. It's also used to refer to an *identity* or a sense of self . . . based on one's enduring patterns of attraction. And it's also sometimes used to describe an enduring *pattern of behavior*. So, sexual behaviors with men, with women, or with both men and women." Trial Tr. 2025:5-12 (Herek) (emphasis added). In addition, a myriad of evidence was presented at trial demonstrating that there is no consistent definition for sexual orientation. See Brief for The National Legal Foundation as *Amicus Curiae* Supporting Defendant-Intervenors-Appellants, *Perry* v. Schwarzenegger, 704 F. Supp. 2d 921 (N.D. Cal. 2010), Appendix, Trial Evidence Establishing the Absence of a Common Scientific Definition of Homosexual, Gay, Lesbian, Bisexual, and Other Related Terms.

The same group does not simply go by various names. Each definition—sexual behavior, sexual attraction, and self-ascribed social identity—captures a different group of people. C.S. Carpenter & G.J. Gates, *Gay and Lesbian*

Partnership: Evidence from California 45 Demography 573, 574 (2008 ("We believe that self-reported sexual orientation—which as is well-known, is not always concordant with sexual behavior . . . "); John C. Gonsiorek & James D. Weinrich, The Definition and Scope of Sexual Orientation, in Homosexuality: Research Implications for Public Policy (1991) ("It can be safely assumed that there is no necessary relationship between a person's sexual behavior and selfidentity unless both are individually assessed."); Letitia Anne Peplau, et al., The Development of Sexual Orientation in Women, Annual R. of Sex Research 70, 83 (1999) ("there is ample documentation that same-sex attractions and behaviors are not inevitably or inherently linked to one's identity"). In addition, the labels are not used consistently. "Sizable numbers of people reporting only same-sex attraction and/or behavior self-identify as heterosexual or bisexual. Similarly, sizable numbers of those who identify as gay or lesbian report some sexual partners of a different sex and/or some level of attraction to different sex partners." Williams Institute, *supra*, at 6 (citations omitted). *See also* Letitia Anne Peplau & Linda D. Garnets, A New Paradigm for Understanding Women's Sexuality and Sexual Orientation, 56 J. Soc. Issues. 329, 334 (2000) ("A woman might identify as lesbian, be attracted exclusively to women, and have sex with women partners only. But exceptions to this pattern of consistency are common.").

These complications mirror researchers' findings that few individuals consistently fall into all three of the common definitions of homosexual orientation. See Laumann, supra at 299 (diagram showing 15% overlap on all three dimensions for women, 24% for men); Ilan H. Meyer & Patrick A. Wilson, Sampling Lesbian, Gay, and Bisexual Populations, 56 J. Counseling Psychol. 24 (2009) (noting while "[r]esearchers have distinguished among sexual identity, sexual behavior and attraction" and there is some overlap, "this overlap is not great" and citing overlap in all three categories of fifteen percent in women and twenty-four percent in men). See also Trial Tr. 2141:7-14 (Herek) (confirming his deposition testimony that no national study in the United States with a large probability sample has addressed questions of sexuality in the way that the Laumann study did, that Laumann's was a very comprehensive survey, and is still considered the current authoritative source for data).

Once again, this is a point on which the parties have no dispute. Plaintiffs-Appellees' expert Badgett explained that "[there are] sizeable numbers of people reporting only same-sex attraction and/or behavior [who] self-identify as heterosexual or bisexual. Similarly, sizeable numbers of those who identify as gay or lesbian report some sexual partners of a different sex and/or some level of attraction to different sex partners." Trial Tr. 1373:8-23 (Badgett). In her book, *Sexual Orientation Discrimination: An International Perspective*, Badgett also

said:

Perhaps the findings from the 1992 National Health and Social Life Survey reveal the [definitional] complexity most clearly. One group of respondents, 6.2 percent of men and 4.4 percent of women, report feeling sexual attraction to people of the same sex. A smaller group, 4.1 percent of women and 4.9 percent of men, have engaged in sexual behavior with someone of the same sex since the age of 18. An even smaller group, 2.8 percent of men and 1.4 percent of women, reported that they think of themselves as gay (or lesbian for women) or bisexual, and the potential nesting is not necessarily complete or consistent.

M.V. Lee Badgett, Sexual Orientation Discrimination: An International Perspective (2007). See also G.M. Herek & L.D. Garnets, Sexual Orientation and Mental Health, 3 Annual R. Clinical Psychol. 353, 362-63 (2007) ("Indeed, two leading researchers in this area estimated that only half of the individuals who report sexual contact with a same-sex adult actually identify as lesbian, gay, or bisexual. Consistent with this observation, the proportion of adults who identified as gay, lesbian, or bisexual in a 2000 national probability sample was roughly the same as the proportion who reported same-sex behavior but identified as heterosexual.").

The relevance of these uncontroverted definitional ambiguities is to highlight the impossibility of the Plaintiffs-Appellees' request—this Court has no generally accepted method to identify which individuals might fall into a new protected class of gays and lesbians. The definitional possibilities are numerous. *See, e.g.*, Gary Remafedi, *et al.*, *Demography of Sexual Orientation in*

Adolescents, 89 Pediatrics 714, 719 (1992) ("Sexual orientation has been defined as a consistent pattern of sexual arousal toward persons of the same and/or opposite gender, encompassing fantasy, conscious attractions, emotional and romantic feelings, sexual behaviors, and possibly other components. Since the heterosexual or homosexual direction of the individual events mentioned may be at variance with another, numerous permutations of orientation are possible and probable in human populations."). And the definition used greatly impacts the number of people included in the class. For example, only one to four percent of the U.S. population self-identifies as gay or lesbian. Dean & Meyer, *supra*, at 135. But a behavioral definition may include two to six percent of the population (based on homosexual behavior in the past five years). *Id.* And studies indicate that twenty-one percent of the U.S. population reports same-sex attraction "at least once in adulthood." Id. "Therefore, depending upon how it is defined and measured, 1 to 21 percent of the population could be classified as lesbian or gay to some degree, with the remainder classified as bisexual or heterosexual to some degree. . . . " *Id*.

B. The scientific definition of "homosexual" is even broader than conduct, attraction, or self-identity.

The problem of definitional ambiguity is not limited to just three different definitions of sexual orientation. Each definitional category has significant subvariations. Badgett, *Money, Myths, & Change, supra* at 135 ("Within each of

the above three dimensions there is even further variation."); Peplau & Garnets, supra, at 342 ("Sexual identity, attraction, and behavior can be varied, complex, and inconsistent."). Each of the three commonly-used definitions can be broken out "for example, between gender identity and sexual identity, desire and behavior, sexual versus affectional feelings, early-appearing versus late-appearing attractions and fantasies, or social identifications and sexual profiles . . . [it is] complicated . . . because few individuals report uniform inter-correlations among these three domains." Diamond & Savin-Williams, Gender & Sexual Identity, supra, at 102.

In addition, "[i]dentity labels (and even whether a person uses an LGB identity label at all) vary across generations, racial and ethnic groups, geographic regions, education levels and other group characteristics. Behavioral definitions, which rely on seemingly objective and clear criteria ... also vary." Meyer & Wilson, *supra* at 24. *See also* Williams Institute, *supra*, at 28 (discussing variances from cultural differences; "Differences in relationships and sexual practices around the world call into question the cross-cultural equivalence of sexual orientation as a social construct, independent of how the construct is operationalized or how well items intended to measure the construct have been linguistically translated.").

Some subvariations rely on a compilation of several criteria. John C.

Gonsiorek, et al., Definition & Measurement of Sexual Orientation, 25 Suicide and

Life-Threatening Behavior 40 (1995) ("At this point in time, it seems to make the

most sense to: a) measure behavior and attraction/fantasy separately; b) inquire about change/evolution of erotic interests over time; and c) measure same- and opposite-sex orientations separately, not as one continuous variable.").

Yet again, Plaintiffs-Appellees' experts agree—homosexuality cannot be simply defined by choosing from the three commonly-used definitions. In her book, Plaintiffs-Appellees' expert Badgett suggested that a comparison of two of the three common sexual orientation definitions might produce helpful results.

The simplest way to categorize people would be to label as gay or lesbian those who have ever had a same-sex partner. Since bisexual people will also fall into that category using the behavioral measure, this analysis compares heterosexual people with gay, lesbian or bisexual people. But a second categorization that might capture the usualness of same-sex partners is to compare the number of same-sex partners to the number of opposite-sex partners. If someone has had at least as many same-sex as opposite-sex partners, it seems unlikely that he or she would have a strictly heterosexual orientation. [A 1992 survey using this comparison reported off the people who have had one or more same-sex partners 46.3%, 50 individuals, classified themselves as heterosexual, suggesting a poor match between the simple classification by behavior and self-identity. Of [those] with at least as many same-sex as opposite-sex partners, however, only 15.7 percent considered themselves heterosexual, while 56.9 percent considered themselves homosexual, 11.8 percent called themselves bisexual, and 13.7 percent considered themselves something else."

Badgett, *Money, Myths & Change*, *supra*, at 30. Professor Herek, another expert for Plaintiffs-Appellees, pointed out that there are important variances within a self-identity definition, noting that there is a distinction between social and personal identity. Trial Tr. 2061:17-2062:3(Herek) ("Social identity is an identity

that is based on a collective membership, a membership in a larger community.

Personal identity can focus more on an individual's own personal life, on their idiosyncratic characteristics, on their specific relationships with other people. . . . both of those types of identity can be involved in sexual orientation.").

The definitional problem is actually even *more* complex, as it is not limited to only three criteria—conduct, attraction, or self-identity—and their subvariations. Some recommend the use of a seventeen question, multiple subpart test to measure sexual orientation. Gonsiorek, *Definition and Measurement of Sexual Orientation supra*, at 40. Going farther, some researchers believe sexual orientation must be analyzed on a continuum. Alfred C. Kinsey, *et al.*, *Sexual Behavior in the Human Male* (1948) ("Males do not represent two discrete populations, heterosexual and homosexual."); Committee on Lesbian Health Research Priorities, Institute of Medicine, *Lesbian Health* (1999) at 25 ("In general, sexual orientation is most often described as including behavioral, affective (i.e., desire or attraction), and cognitive (i.e., identity) dimensions that occur along continua.").

This highly fluid definitional view of homosexuality is one more aspect that the parties do not dispute. Plaintiffs-Appellees' expert, Professor Herek, agrees that "Homosexuality encompasses a variety of phenomena related to a same-sex sexual orientation. Although definitions of the term often focus mainly on sexual acts and attractions between persons of the same biological sex, homosexuality

also refers to patterns of same-sex romantic and emotional bonding, identities and communities based on same-sex desires, and the shared culture created by those communities." G.M. Herek, *Homosexuality, in Encyclopedia of Psychology* 149, 149 (A.E. Kazdin, ed. 2000). Herek adds: "Homosexuality has at least five different components (sexual attraction and desire, sexual behavior, identities, relationships and families, communities)." *Id.* Also acknowledging the vast array of categorization options, Plaintiffs-Appellees' expert Badgett wrote "For economists and other social scientists interested in survey based comparisons of economic outcomes by sexual orientation, the different possible measures of sexual orientation obviously pose an empirical challenge." Badgett, *Sexual Orientation Discrimination*, *supra*, at 20-21.

The definitional disagreement is so pronounced that Plaintiffs' own experts disagree about the most accurate definition of homosexuality. Professor Herek emphasizes same-sex attraction, testifying that primarily "sexual orientation is a term that we use to describe an enduring sexual, romantic, or intensely affectional attraction to men, to women, or to both men and women." Trial Tr. 2025:5-7 (Herek). But Professor Meyer disagrees. Acknowledging there is no one "correct definition of the LGB population," Meyer & Wilson, *supra* at 24, Professor Meyer believes "attraction is a very, very fluid thing," Trial Tr. 958:2 (Meyer). Accordingly, Meyer does not "use the attraction definition," *Id.* at 958:17. In fact,

despite Herek's testimony, Meyer stated that he does not "think anybody would say that attraction is a true measure of [the] LGB" population. *Id.* at 957:22-23; *cf.* Badgett, *Money, Myths, & Change, supra* at 29-30 (noting "the sexual orientation definition issue has provoked a heated theoretical debate about how to think about the meaning of sexual orientation").

The bottom line is that "[T]here is no one right way to define who is a lesbian." ... Comm. on Lesbian Health, *supra*, at 33. As plaintiffs' own expert conceded: "[W]hat is the correct definition of the LGB population? The answer depends on the purpose of the study." Meyer & Wilson, *supra*, at 24. It is important to understand that the many possible definitions of homosexuality are not minor variations on a theme. Rather, they present fundamentally different ways of understanding who is "gay." *See* Laumann, *supra* at 294-295, 297; *see also* Ritch C. Savin-Williams, *The New Gay Teenager* (2005); Ritch C. Savin-Williams, *Who's Gay? Does it Matter?*, 15 Current Directions Psychol. Sci. 40 (2006); Ritch C. Savin-Williams, *Then and Now: Recruitment, Definition, Diversity, and Positive Attributes of Same-Sex Populations*, 44 Dev. Psychol. 135, 135-38 (2008); Bernstein, *supra*; Carpenter & Gates, *supra*, at 574.

C. There is no common social definition of sexual orientation, as the wide variety of legislative definitions demonstrates.

The lack of consensus on the definition of sexual orientation among scientists and academics is reflected in the varied statutory definitions of sexual

orientation throughout the country. Legislatures have included homosexuality, bisexuality, same-sex attraction, external perception of orientation and gender, social identity, behavior, and the existence of a same-sex relationship in their efforts to delineate who falls within the group. See, e.g., Employment Non-Discrimination Act, H.R. 3017 § 3(a) (2009) (defining group by reference to "gender-related identity, appearance, or mannerisms or other gender-related characteristics of an individual, with or without regard to the individual's designated sex at birth" and "homosexuality, heterosexuality, or bisexuality"); Hate Crime Statistics Act, P.L. 101-275, 104 Stat. 140 (April 23, 1990) (defining "sexual orientation" as "consensual homosexuality or heterosexuality").

Differences are also apparent at the state and local level:

- Preference or attraction. See, e.g., Conn. Gen. Stat. § 46a-81a (" '[S]exual orientation' means having a preference for heterosexuality, homosexuality orbisexuality ").
- External perception. See, e.g., Cal. Gov. Code §§ 11135, 12926(m), 12955(m) (" '[S]exual orientation' . . . includes a perception that a person has any of those characteristics ").
- Social identity. See, e.g., Mass. Gen. Laws ch. 151B, § 3(6) (" '[S]exual orientation' mean[s]... being identified as having an orientation forheterosexuality, bisexuality, or homosexuality ").
- Conduct. See, e.g, D.C. Code§ 2-1401.02(28) (" '[S]exual orientation' means male or female homosexuality, heterosexuality and bisexuality, by preference or *practice*.") (emphasis added).
- Relationship. See, e.g., S.F. Admin. Code § 12A.3 (" '[S]exual orientation' shall mean the choice of human adult sexual partner according to gender.")¹

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See also Ariz. Rev. Stat. §§ 41-1750(Y)(13), 41-1822(E); Colo. Rev. Stat. §§ 2-4-401(13.5), 24-34-401(7.5); Del. Code Ann. tit. 11 § 1304(a)(2); D.C. Code § 2-1401.02(28); Haw. Rev. Stat. Ann. §§ 378-1, 489-2; 775 Ill. Comp. Stat. Ann. §

Even within a single legislative group—the California Legislature—there is no consensus on who is gay. Instead, California's broad array of laws tailored for gays and lesbians include a range of definitions of this group:

"heterosexuality, homosexuality, or bisexuality;" a perception that the person has any of those characteristics or that the person is associated with a person who has, or is perceived to have, any of those characteristics;" and sex, "includ[ing] a person's gender identity and gender related appearance and behavior whether or not stereotypically associated with the person's assigned sex at birth".

D. The definitional gap results in hugely significant differences in the possible number of class members.

How much difference do varying definitions of homosexuality make?

Limiting ourselves only to the three commonly-used scientific definitions yields the following results: The 2000 Census reports 12,130,354 men and 12,491,465

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^{5/1-103(}O-1), 730 III. Comp. Stat. Ann. § 5/5-5-3.2(10); Iowa Code § 216.2(14); Me. Rev. Stat. Ann. tit. 5 § 4553(9-C); Md. Code Ann., Crim. Law § 10-301;

Minn. Stat. § 363A.03(44); Nev. Rev. Stat. Ann. §§ 233.020(5), 281.370(3)(b), 338.125(4), 610.010(5), 613.310(6); N.H. Rev. Stat. Ann. §§ 21:49, 354-A:2(XIV-

c); N.J. Stat. Ann. § 10:5-5(hh); N.M. Stat. Ann. §§ 28-1-2(P), 31-18B-2(E); N.Y.

Exec. Law § 292(27); Or. Rev. Stat. § 174.100(6); R.I. Gen. Laws §§ 11-24-2.1(h), 28-5-6(15), 34-37-3(16); Vt. Stat. Ann. tit. 1 § 143; Wash. Rev. Code §

^{49.60.040(26);} Wis. Stat. § 111.32(13m); S.F. Admin. Code §§ 12A.3, 12B.1(c), 12C.2 (defining sexual orientation in a variety of ways, looking to factors such as

attraction, external perception, social identity, behavior, and relationships). ² See See Cal. Civ. Code § 51.7; Cal. Educ. Code §§ 212.6, 66262.7; Cal. Gov't

² See See Cal. Civ. Code § 51.7; Cal. Educ. Code §§ 212.6, 66262.7; Cal. Gov't Code § 12926(q); Cal. Penal Code § 422.55-56.

³ See Cal. Educ. Code § 210.2; Cal. Gov't Code §§ 11135, 12926(m); 12955(m); Cal. Penal Code § 422.55.

⁴ Cal. Penal Code § 422.56(c).

women over 18 in California. Applying the Chicago Sex Survey's populational proportions, using self-identification as gay or bisexual, 339,650 men and 174,881 women in California are gay or lesbian (based on reports that "2.8 percent of the men and 1.4 percent of the women" surveyed in the U.S. "reported some level of homosexuality (or bisexual) identity" Laumann, *supra* at 293). If homosexuality is defined by sexual attraction, however, the numbers would increase to 545,865 for men and 699,520 for women. Laumann, *supra* at 297. Accordingly, in California the number of gay men varies from 340,000 to 546,000 and the number of gay women varies from 175,000 to 700,000, depending on which equally scientifically legitimate and commonly-used definition is applied.

But there is more. Researchers note that "it will be useful to expand our notions of sexual orientation to include more than just bisexuality, heterosexuality and homosexuality. . . . With respect to various components of sexual orientation, an individual may be heterosexual, homosexual, bisexual, as well as fetishistic, transvestitic, zoophiliac, and so on. . . . that these are not mutually exclusive categories." John P. DeCecco, *Gay Personality and Sexual Labeling* 16 (1985). In Essentially, the full spectrum of sexual orientations and corresponding definitional difficulties preclude sexual orientation from suspect classification. The absence of any scientific or social agreement about who is included as a gay or lesbian, together with the evidence discussed below showing at least some flux in self-

ascription over time and a lack of evidence that homosexuality is innate, makes sexual orientation fundamentally different in nature than race or gender.

II. EMERGING EVIDENCE SUGGESTS THAT HOMOSEXUALITY IS NOT AN INNATE CHARACTERISTIC LIKE RACE OR GENDER.

There is a growing consensus in the medical community that homosexuality is not "an accident of birth" similar to race and gender.

A. There is no scientific consensus on whether homosexuality is genetic.

Recent scientific research and opinion indicates that genetics are *not* the primary explanation for homosexuality. *See* American Psychiatric Association, *Gay/Lesbian/Bisexuals* 2 (2009) ("[T]o date there are no replicated scientific studies supporting any specific biological etiology for homosexuality."); Peplau & Garnets, *supra*, at 332 ("there is little evidence that biological factors are a major determinant of women's sexual orientation"); Peplau, *supra*, at 81 ("Available evidence indicates that biological contributions to the development of sexual orientation in women are minimal."); *id.* at 87 ("Second, the impact of biological factors in determining women's sexual orientation appears to be weak or non-existent.").

In a recent study, two Columbia University sociologists said that efforts to establish genetic or hormonal effects on sexual orientation have been "inconclusive at best." Peter S. Bearman & Hannah Bruckner, *Opposite-Sex Twins and Adolescent Same-Sex Attraction*, 107 Am. J. of Sociology 1179, 1180 (2002).

Going even farther, two other scholars recently said that "... the assertion that homosexuality is genetic is so reductionistic that it must be dismissed out of hand as a general principle of psychology." Richard C. Friedman and Jennifer I. Downey, *Sexual Orientation and Psychoanalysis: Sexual Science and Clinical Practice* 39 (2002).

Plaintiffs-Appellees' expert, Professor Herek, explained the problem in his testimony. "...[W]e don't really understand the origins of sexual orientation in men or in women. There are many different competing theories, some biologically based, others based more on culture and individual experience. So I would say that [what researchers are] suggesting is that the available evidence doesn't support the idea of there being a strong biological factor that explains the development of sexual orientation in women." Trial Tr. 2284:15-2285:13 (Herek).

Many studies demonstrate the importance of environmental and cultural factors. This research identifies several salient factors:

• Cohort effect: "An analysis of some national survey data from the United States found that women in recent birth cohorts were more likely to report having a female sexual partner during adulthood."; "These findings suggest a major cohort effect in same-gender sexual behavior and perhaps also in sexual orientation. If a cohort effect in sexual orientation exists, it has implications for purely biological theories of sexual orientation, because there must be historical changes in environmental factors that account for such an effect." See A.F. Jorm, et al., Cohort Difference in Sexual Orientation: Results from a Large Age-Stratified Population Sample, 49 Gerontology 392, 393 (2003); Peplau, The Development of Sexual Orientation in Women, supra at 92 ("In the U.S. Gagnon (1990) suggested that the creation of visible urban gay and lesbian communities made the

- choice of a same-sex lifestyle more attractive to wider audiences.").
- **Education and Socioeconomics**: Education and socioeconomic levels have also been suggested as contributing factors to homosexuality. See Trial Tr. 2271:6-8 (Herek) ("It may very well be the case that on average lesbians and gay men in the United States have a higher educational level than comparable heterosexual men and women."); Trial Tr. 328:6-10(Cott) (conceding that behavior is "really infinitely malleable by social circumstances and by culture"); Badgett, Sexual Orientation Discrimination, supra at 23 ("sexual behavior and sexual identities might also be related in some way to economic outcomes or to an individual's socioeconomic class background"). Education alone appears to heavily influence homosexuality. Linda D. Garnets & Letitia Anne Peplau, A New Look at Women's Sexuality & Sexual Orientation, CSW Update 4 (2006) ("Women's sexual orientation is shaped by such social and cultural factors as women's education, social status and power, economic opportunities and attitudes about women's roles."). According to one survey, "completing college doubled the likelihood that a man identified as gay or bisexual but was associated with a 900% increase in the percentage of women identifying as lesbian/bisexual." Peplau, A New Paradigm for Understanding Women's Sexuality & Sexual Orientation, supra at 332.
- <u>Politics</u>: Others assert that some "develop a lesbian or gay identity primarily on the basis of political or esthetic values rather than erotic attractions." Herek, *Homosexuality*, Encyclopedia of Psychology, *supra* at 150.

Identical twin studies confirm that homosexual orientation is not genetically determined. *See*, *e.g.*, E. Eckert, *et al.*, *Homosexuality in Monozygotic Twins*Reared apart, 148 British J. Psychiatry 421 (1986) (finding no genetic component of homosexuality); J. Michael Bailey, *et al.*, *Genetic & Environmental Influences*on Sexual Orientation & its Correlates in an Australian Twin Sample, 78 J.

Personality & Soc. Psychol. 524 (2000) (finding no genetic component of homosexuality). For example, 1991 and 1993 studies, involving twin pairs

recruited through gay and lesbian publications, reported a concordance rate (similarity across the twins) of only approximately fifty percent. Clearly, genetics alone are not determinative. J.M. Bailey, et al., Heritable Factors Influence Sexual Orientation in Women, 50 Archives of Gen'l Psychiatry 217 (1993); J.M. Bailey & R.C. Pillard, A Genetic Study of Male Sexual Orientation, 48 Archives of Gen'1 Psychiatry 1089 (1991). Other twin studies support this conclusion. See Niklas Langstrom, et al., Genetic and Environmental Effects of Same-Sex Sexual Behavior: A Population of Twins in Sweden, Arch. Sexual Behav. 77-78 (2010) (finding genetic effects explained .34-.39 of the variance in men and .18-.19 of the variance in women and concluding that "same-sex behavior arises not only from heritable but also from individual specific environmental sources."); Michael King & Elizabeth McDonald, *Homosexuals Who are Twins*, 160 British J. Psychiatry 407, 409 (1992) (finding a striking "discordance for sexual orientation in both monozygotic and dizygotic pairs . . . [that] confirms that genetic factors are insufficient explanation of the development of sexual orientation" and concluding "[i]t is clear that our current genetic and psychological theories are untenable. The co-twins of men and women who identify themselves as homosexual appear to have a potential for a range of sexual expression."). A small-scale study

⁹ Studies show "substantial heritability for caring for tropical fish (28%), and frequency of various behaviors such as purchasing folk music in the past year

published in 2000 showed low concordance rates of 31.6 percent. Kenneth S. Kendler, *et al.*, *Sexual Orientation in a U.S. National Sample of Twin and Nontwin Sibling Pairs*, 157 Am. J. of Psychiatry 1843, 1845 (2000) (sample of nineteen pairs).

Additionally, Columbia professors Bearman and Bruckner note that "[a]s samples become more representative, concordance on sexual behavior, attraction, and orientation, as expected, declines." Bearman & Bruckner, *supra* at 1184. Their own study focused on "same-sex romantic attraction" in a large, nationally representative sample (the Add-Health database, which is representative of all teens in schools in the late 1990s). This study found no noticeable pattern suggesting genetic influence at all. Concordance rates for identical twins were only 6.7 percent, which was about the same as the 7.2 percent found for fraternal twins. *Id.* at 1197-198. They concluded: "[W]e find no support for genetic influences on same-sex preference net of social structural constraints. . . . Finally, we find substantial indirect evidence in support of a socialization model at the individual level." *Id.* at 1199.

B. Sexual orientation changes over time.

Research also clearly establishes that homosexual orientation can change over time and actually does change for a significant number of people. "Contrary

(46%), chewing gum (58%), and riding a taxi (38%)." Bearman & Bruckner, *supra* at 1185 n.8.

to the notion that most sexual minorities undergo a one-time discovery of their true identities, 50% of [a study's] respondents had changed their identity label more than once since first relinquishing their heterosexual identity." Lisa M. Diamond & Ritch C. Savin-Williams, *Explaining Diversity in the Development of Same-Sex Sexuality Among Young Women*, 56 J. of Soc. Issues 301 (2000). In another study, the author noted that "[h]alf of the young women in this sample relinquished the first sexual-minority identity they adopted." Lisa M. Diamond, *Sexual Identity*, *Attractions, and Behavior Among Young Sexual-Minority Women Over a 2-Year Period*, 36 *Developmental Psychol*. 247 (2000).

Change in homosexual orientation is not limited to women. See e.g., Nigel Dickson, et al., Same Sex Attraction in a Birth Cohort: Prevalence and Persistence in Early Adulthood, 56 Soc. Sci. & Med. 1607, 1612-13 (2003) ("Overall 451 men and 436 women reported their current sexual attraction at both ages 21 and 26."; "The findings also reveal a surprising degree of change over time. Ten percent of men and nearly a quarter of the women reported same-sex attraction at any time, but this nearly halved for current attraction at age 26. The changes were not just in one direction. The instability was most marked for women, with a greater movement away from exclusively heterosexual attraction from age 21 to 26 than among men."). Statistics relating to same-sex couples who have registered as domestic partners or married also demonstrate changes in sexual orientation. Gary

J. Gates et al., Marriage, Registration and Dissolution by Same-Sex Couples in the U.S., Williams Inst. 2, 10 (2008) ("Data from three states suggest that more than one in five individuals in same-sex couples who marry or register have previously been married to a different-sex partner."; "In Massachusetts, Vermont, and California, the proportion of individuals in same-sex couples who have been previously married to opposite-sex partners varies from 11 to 29%"). Accordingly, many researchers view "sexual orientation as multi-variate and dynamic" for all individuals, and as something that "differ[s] over time." Fritz Klein, et al, Sexual Orientation: A Multi-Variable Dynamic Process, 11 J. Homosexuality 38 (Sept. 1985).

The authoritative study of Edward Laumann shows that many of those with same-sex partners report have also had an opposite-sex partner. Laumann, *supra*, at 310-11. "In the past five years, 4.1% of the men and 2.2% of the women had at least one same-gender partner. About half these men had both male and female partners in this time period. The women are more likely than the men to have had sex with both men and women than only same-gender partners. Almost two-thirds of the women reporting a female partner in the last five years also report a male partner." *Id.; see also* Carren Strock, *Married Women Who Love Women* (1998). The University of Chicago study found that among men and women who have had *any* same-sex intimate partners since age 18, only 20 percent of those men and 10

percent of those women limited themselves *only* to same-sex intimate partners since that age. Laumann, *supra*, at 310-12 (1994).

Once again, the parties do not dispute the volatility of sexual orientation. Plaintiffs-Appellees' expert agrees that sexual orientation "is not static and may vary throughout the course of a lifetime." Trial Tr. 2234:24-2235:3 (Herek); *see also id.* at 2212:21-24. Additionally, Plaintiffs-Appellees' expert has also admitted: "[S]ome [people] experience considerable fluidity in their sexuality throughout their lives." Herek, *Homosexuality*, *supra*, at 149.

Other research confirms Herek's statements on the fluidity of sexuality. For example, some research asks individuals to rate themselves on the homosexuality continuum, and then asks these same individuals to rate themselves again several months or years later. Like other studies, this type of research demonstrates that many individuals vary, with some becoming more "gay" and some becoming less "gay" in their own estimation over time. ¹⁰ In one such study using "a self-rated

¹⁰ Much of Professor Herek's own research relies on a self-identification method. This method is of questionable use because, for example, "Self-identification varies over time for some individuals and is heavily influenced by socio-cultural factors." Williams Institute, *supra* at 6. Self-identification studies on a concrete condition, such as whether or not the subject suffers from a toothache, are far more reliable than self-identification studies on the multi-faceted subject of homosexuality. The subjects may not fully or consistently understand the role of environmental influences and tend to adjust for them in varying ways. In addition, self-identification surveys often do not provide an adequate understanding of the subjects' thinking, motivation, or behavior. *See* Timothy Wilson, *Strangers to Ourselves: Discovering the Adaptive Unconscious* (2002).

seven-point sexual orientation scale, 73 respondents moved toward homosexuality (34%), 37 moved toward heterosexuality (17%), and 106 did not change (49%)" over a designated time period. Joseph P. Stokes, *et al*, *Predictors of Movement Toward Homosexuality: A Longitudinal Study of Bisexual Men*, 43 J. of Sex Res. 304, 307, 308 (1997). These behavior/attraction/self-identification dimensions all "suggest[] that sexual orientation is not static and may vary throughout the course of a lifetime." Louis Diamant and Richard D. McAnulty, *The Psychology of Sexual Orientation, Behavior, and Identity: A Handbook* 82 (1995).

The fluidity of sexual orientation is especially well-documented among women. 11 Plaintiffs' own expert has admitted that "Female sexual development is a potentially continuous, lifelong process in which multiple changes in sexual orientation are possible.... Women who have had exclusively heterosexual experiences may develop an attraction to other women and vice versa." Garnets & Peplau, A New Look at Women's Sexuality & Sexual Orientation, supra at 5. See also Peplau & Garnets, A New Paradigm for Understanding Women's Sexuality & Sexual Orientation, supra at 333, 336 ("Further, both women's identification as lesbian, bisexual, or heterosexual and women's actual behavior can vary over time" and "There is that the patterning of women's sexuality and sexual orientation

¹¹ The study of lesbianism is difficult, however, because—as discussed earlier—lesbians do not constitute a fixed class of research subjects. Comm. on Lesbian Health, *supra* at 23 ("Lesbians do not constitute an identifiable homogenous group for research study.").

varies across time and place").

In light of this research, Plaintiffs' expert has acknowledged the "astonishing sexual plasticity' of the human female." Letitia Ann Peplau, Rethinking Women's Sexual Orientation: An Interdisciplinary, Relationship-Focused Approach, 8 Personal Relationships 1, 5, 12-13 (2001); Peplau, The Development of Sexual Orientation in Women, supra at 93 ("the concept of erotic plasticity is the cornerstone of a new paradigm for understanding women's sexual orientation."). Illustrating that plasticity, one study found that within a ten-year period, sixty-seven percent of lesbian women changed their sexual identity at least once, and thirty-six percent changed more than once. Lisa M. Diamond, Female Bisexuality from Adolescence to Adulthood: Results from a 10-Year Longitudinal Study, 44 Developmental Psych. 5, 7-9 (2008).

C. Studies show that some aspect of sexual orientation is, in part, a choice.

Some women explain their lesbianism as a process of self-discovery. But a "second group of women . . . regarded their change more as a choice among several options of being lesbian, bisexual, celibate or heterosexual." Karen L. Bridges and James M. Croteau, *Once-Married Lesbians: Facilitating Changing Life Patterns*, 73 J. of Counseling and Dev. 134, 135 (1994) (describing C. Charbonneau and P.S. Lander, *Redefining Sexuality: Women Becoming Lesbian in Mid-Life*, *in Lesbians at Mid-Life* 35 (B. Sang, et al. ed., 1991)). Plaintiff Kristin

Perry herself admitted that after years of experimentation, she "adopted that sexual orientation for myself." Perry Dep. 151:24-152:15 (emphasis added).

Scholars of orientation are finding an increasing number of women who insist that their lesbian self-identity is a personal choice, rather than a biological constraint. See Gonsiorek & Weinrich, supra at 8 ("many lesbian women, and some heterosexual women as well, perceive choice as an important element in their sexual orientations"); G.M. Herek et al., Internalized Stigma Among Sexual Minority Adults: Insights from a Social Psychological Perspective, J. Counseling Psych. 32, 39 T.5 (2009) (study finding 13% of gays, 30% of lesbians, 41% of bisexual men, and 55% of bisexual women report at least some choice with respect to their sexual orientation). Professor Robert Spitzer of Columbia University has shown that at least some strongly motivated individuals—both male and female can change their orientation, in terms of identity, behavior, and self-reported sexual attraction. Robert L. Spitzer, Can Some Gay Men and Lesbians Change Their Sexual Orientation? 200 Participants Reporting a Change from Homosexual to Heterosexual Orientation, 32 Archives of Sexual Behav. 403 (2003).

CONCLUSION

Scientific research does not support a genetic origin for sexual orientation.

From a scientific perspective, homosexuality is not analogous to race or gender

since it is not an accident of birth and because it often changes over time through conscious choice. As a result,

[T]he reality remains that no law can successfully be drafted that is calculated to burden or penalize, or to benefit or protect, an unidentifiable group or class of individuals whose identity is defined by subjective and unapparent characteristics such as innate desires, drives, and thoughts. Those persons having a homosexual 'orientation' simply do not, as such, comprise an identifiable class. Many homosexuals successfully conceal their orientation. Because homosexuals generally are not identifiable 'on sight' unless they elect to be so identifiable by conduct . . . they cannot constitute a suspect class or a quasi-suspect class because 'they do not [necessarily] exhibit obvious, immutable, or distinguishing characteristics that define them as a discrete group.'

Equality Found. v. City of Cincinnati, 54 F.3d 261, 267 (6th Cir. 1995) (quoting Bowen v. Gilliard, 483 U.S. 587, 602 (1987)).

Respectfully submitted, this 24th day of September 2010

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CERTIFICATE OF COMPLIANCE

This brief complies with the type-volume limitation of Fed. R. App. P. 32(a)(7)(B) because this brief contains 6,890 words, excluding the parts of the brief exempted by Fed. R. App. P. 32(a)(7)(B)(iii).

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CERTIFICATE OF SERVICE

I hereby certify that on September 24, 2010, I have electronically filed the foregoing Brief *Amicus Curiae* of Paul R. McHugh, M.D. in the case of *Perry v. Schwarzenegger*, No. 10-16696, with the Clerk of the Court for the United States Court of Appeals for the Ninth Circuit by using the appellate CM/ECF system.

I certify that all participants in the case are registered CM/ECF users and will be served by the appellate CM/ECF system.

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