

No. 14-981

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IN THE  
**Supreme Court of the United States**

ABIGAIL NOEL FISHER,  
*Petitioner,*

v.

UNIVERSITY OF TEXAS AT AUSTIN, *ET AL.*,  
*Respondents.*

**On Writ of Certiorari to the  
United States Court of Appeals  
for the Fifth Circuit**

**BRIEF OF *AMICUS CURIAE* THE  
AMERICAN PSYCHOLOGICAL ASSOCIATION  
IN SUPPORT OF RESPONDENTS**

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November 2, 2015

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<i>Fisher v. University of Texas at Austin</i> , 133 S. Ct. 2411 (2013) .....	1, 2, 5
<i>Fisher v. University of Texas at Austin</i> , 758 F.3d 633 (5th Cir. 2014) .....	23
<i>Grutter v. Bollinger</i> , 539 U.S. 306 (2003) .....	<i>passim</i>
<i>Regents of the University of California v. Bakke</i> , 438 U.S. 265 (1978) .....	4, 21, 27
<i>Schuette v. Coalition to Defend Affirmative Action</i> , 134 S. Ct. 1623 (2014) .....	2, 5
<i>Texas Department of Housing &amp; Community Affairs v. Inclusive Communities Project, Inc.</i> , 135 S. Ct. 2507 (2015) .....	11
RESEARCH STUDIES	
Christopher L. Aberson et al., <i>Implicit Bias and Contact: The Role of Interethnic Friendships</i> , 144 J. Soc. Psychol. 335 (2004) .....	18

## TABLE OF AUTHORITIES—Continued

	Page(s)
Christopher L. Aberson & Sarah C. Haag, <i>Contact, Perspective Taking, and Anxiety as Predictors of Stereotype Endorsement, Explicit Attitudes, and Implicit Attitudes, 10 Group Processes &amp; Intergroup Relations</i> 179 (2007) .....	18, 21, 33
Sigal Alon & Marta Tienda, <i>Assessing the “Mismatch” Hypothesis: Differences in College Graduation Rates by Institutional Selectivity</i> , 78 <i>Sociol. Educ.</i> 294 (2005)....	23, 29, 30
Julie R. Ancis et al., <i>Student Perceptions of Campus Cultural Climate by Race</i> , 78 <i>J. Counseling &amp; Dev.</i> 180 (2000) .....	23
Anthony L. Antonio, <i>Diversity and the Influence of Friendship Groups in College</i> , 25 <i>Rev. Higher Educ.</i> 63 (2001) .....	33
Anthony L. Antonio, <i>The Influence of Friendship Groups on Intellectual Self-Confidence and Educational Aspirations in College</i> , 75 <i>J. Higher Educ.</i> 446 (2004) .....	25
Anthony L. Antonio, <i>The Role of Interracial Interaction in the Development of Leadership Skills and Cultural Knowledge and Understanding</i> , 42 <i>Research Higher Educ.</i> 593 (2001) .....	36
Anthony L. Antonio et al., <i>Effects of Racial Diversity on Complex Thinking in College Students</i> , 15 <i>Psychol. Sci.</i> 507 (2004) .....	27

## TABLE OF AUTHORITIES—Continued

	Page(s)
Sian L. Beilock et al., <i>Stereotype Threat and Working Memory: Mechanisms, Alleviation, and Spillover</i> , 136 <i>J. Experimental Psychol.: Gen.</i> 256 (2007).....	7
Irene V. Blair, <i>The Malleability of Automatic Stereotypes and Prejudice</i> , 6 <i>Personality &amp; Soc. Psychol. Rev.</i> 242 (2002).....	13
Nicholas A. Bowman, <i>College Diversity Experiences and Cognitive Development: A Meta-Analysis</i> , 80 <i>Rev. Educ. Research</i> 4 (2010) .....	20, 22, 25, 28
Nicholas A. Bowman, <i>How Much Diversity Is Enough? The Curvilinear Relationship Between College Diversity Interactions and First-Year Student Outcomes</i> , 54 <i>Research Higher Educ.</i> 874 (2013) .....	21
Nicholas A. Bowman, <i>Promoting Participation in a Diverse Democracy: A Meta-Analysis of College Diversity Experiences and Civic Engagement</i> , 81 <i>Rev. Educ. Research</i> 29 (2011) .....	22, 34, 35
Marino A. Bruce & Michael C. Thornton, <i>It's My World? Exploring Black and White Perceptions of Personal Control</i> , 45 <i>Sociol. Q.</i> 597 (2004).....	26
Mara Cadinu et al., <i>Stereotype Threat: The Effect of Expectancy on Performance</i> , 33 <i>Euro. J. Soc. Psychol.</i> 267 (2003).....	7

## TABLE OF AUTHORITIES—Continued

	Page(s)
Mara Cadinu et al., <i>Why do Women Underperform under Stereotype Threat? Evidence for the Role of Negative Thinking</i> , 16 Psychol. Sci. 572 (2005).....	7
Mitchell J. Chang, <i>Does Racial Diversity Matter?: The Educational Impact of a Racially Diverse Undergraduate Population</i> , 40 J. College Student Dev. 377 (1999).....	23
Mitchell J. Chang, <i>Racial Differences in Viewpoints About Contemporary Issues Among Entering College Students: Fact or Fiction?</i> , 40 NASPA J. 55 (2003).....	24
Mitchell J. Chang et al., <i>Considering the Impact of Racial Stigmas and Science Identity: Persistence Among Biomedical and Behavioral Science Aspirants</i> , 82 J. Higher Educ. 564 (2011) .....	30, 32
Mitchell J. Chang et al., <i>Cross-Racial Interaction Among Undergraduates: Some Consequences, Causes, and Patterns</i> , 45 Research Higher Educ. 529 (2004) .....	20, 28
Mitchell J. Chang et al., <i>The Educational Benefits of Sustaining Cross-Racial Interaction Among Undergraduates</i> , 77 J. Higher Educ. 430 (2006) .....	26
Richard J. Crisp & Rhiannon N. Turner, <i>Cognitive Adaptation to the Experience of Social and Cultural Diversity</i> , 137 Psychol. Bulletin 242 (2011).....	28, 29

## TABLE OF AUTHORITIES—Continued

	Page(s)
Jean-Claude Croizet et al., <i>Stereotype Threat Undermines Intellectual Performance by Triggering a Disruptive Mental Load</i> , 30 <i>Personality &amp; Soc. Psychol. Bulletin</i> 721 (2004) .....	8
Nida Denson & Mitchell J. Chang, <i>Racial Diversity Matters: The Impact of Diversity-Related Student Engagement and Institutional Context</i> , 46 <i>Am. Educ. Research J.</i> 322 (2009) .....	22, 25, 26
Nida Denson & Shirley Zhang, <i>The Impact of Student Experiences with Diversity on Developing Graduate Attributes</i> , 35 <i>Studies Higher Educ.</i> 529 (2010) .....	25
John F. Dovidio et al., <i>Implicit and Explicit Prejudice and Interracial Interaction</i> , 82 <i>J. Personality &amp; Soc. Psychol.</i> 62 (2002) .....	15
Mark E. Engberg, <i>Educating the Workforce for the 21st Century: A Cross-Disciplinary Analysis of the Impact of the Undergraduate Experience on Students' Development of a Pluralistic Orientation</i> , 48 <i>Research Higher Educ.</i> 283 (2007) .....	<i>passim</i>
Mark E. Engberg & Sylvia Hurtado, <i>Developing Pluralistic Skills and Dispositions in College: Examining Racial/Ethnic Group Differences</i> , 82 <i>J. Higher Educ.</i> 416 (2011) .....	23, 34

## TABLE OF AUTHORITIES—Continued

	Page(s)
Mary J. Fischer & Douglas S. Massey, <i>The Effects of Affirmative Action in Higher Education</i> , 36 Soc. Sci. Research 531 (2007) .....	30
Sharon Fries-Britt & Bridget Turner, <i>Uneven Stories: The Experiences of Successful Black Collegians at a Historically Black and a Traditionally White Campus</i> , 25 Rev. Higher Educ. 315 (2002) .....	10
Patricia M. Gonzales et al., <i>The Effects of Stereotype Threat and Double Minority Status on the Test Performance of Latino Women</i> , 28 Personality & Soc. Psychol. Bulletin 659 (2002) .....	7
Monika K. Goyal et al., <i>Racial Disparities in Pain Management of Children with Appendicitis in Emergency Departments</i> , JAMA Pediatr. (2015).....	14
Alexander R. Green et al., <i>Implicit Bias Among Physicians and its Prediction of Thrombolysis Decisions for Black and White Patients</i> , 22 J. Gen. Internal Med. 1231 (2007) .....	12, 13, 14
Anthony G. Greenwald et al., <i>Understanding and Using the Implicit Association Test: III. Meta-analysis of Predictive Validity</i> , 97 J. Personality & Soc. Psychol. 17 (2009) .....	11, 12



## TABLE OF AUTHORITIES—Continued

	Page(s)
Patricia Gurin et al., <i>Diversity and Higher Education: Theory and Impact on Educational Outcomes</i> , 72 Harv. Educ. Rev. 330 (2002) .....	19, 20, 24
Patricia Gurin et al., <i>The Benefits of Diversity in Education for Democratic Citizenship</i> , 60 J. Soc. Issues 17 (2004) .....	34, 35
Eric Hehman et al., <i>Where the Division Lies: Common Ingroup Identity Moderates the Cross-Race Facial-Recognition Effect</i> , 46 J. Experimental Soc. Psychol. 445 (2010) .....	17, 18
Shouping Hu & George D. Kuh, <i>Diversity Experiences and College Student Learning and Personal Development</i> , 44 J. College Student Dev. 320 (2003).....	26, 34
Sylvia Hurtado, <i>Linking Diversity with the Educational and Civic Missions of Higher Education</i> , 30 Rev. Higher Educ. 185 (2007) .....	32
Sylvia Hurtado, <i>The Next Generation of Diversity and Intergroup Relations Research</i> , 61 J. Soc. Issues 595 (2005) .....	28
Uma M. Jayakumar, <i>Can Higher Education Meet the Needs of an Increasingly Diverse and Global Society? Campus Diversity and Cross-Cultural Workforce Competencies</i> , 78 Harv. Educ. Rev. 615 (2008) .....	<i>passim</i>

## TABLE OF AUTHORITIES—Continued

	Page(s)
Michael Johns et al., <i>Stereotype Threat and Executive Resource Depletion: Examining the Influence of Emotion Regulation</i> , 137 J. Experimental Psychol.: Gen. 691 (2008) .....	6
Shana Levin et al., <i>The Effects of Ingroup &amp; Outgroup Friendship on Ethnic Attitudes in College: A Longitudinal Study</i> , 6(1) Group Processes & Intergroup Relations 76 (2003) .....	19
Angela M. Locks et al., <i>Extending Notions of Campus Climate and Diversity to Students' Transition to College</i> , 31 Rev. Higher Educ. 257 (2008) .....	10
Jiali Luo & David Jamieson-Drake, <i>A Retrospective Assessment of the Educational Benefits of Interaction Across Racial Boundaries</i> , 50 J. College Student Dev. 67 (2009) .....	22, 25, 36
David S. March & Reiko Graham, <i>Exploring Implicit Ingroup &amp; Outgroup Bias Toward Hispanics</i> , 18(1) Group Processes & Intergroup Relations 89 (2015).....	6
Allen R. McConnell & Jill M. Liebold, <i>Relations Among the Implicit Association Test, Discriminatory Behavior, and Explicit Measures of Racial Attitudes</i> , 37 J. Experimental Soc. Psychol. 435 (2001).....	12

## TABLE OF AUTHORITIES—Continued

	Page(s)
Rodolfo Mendoza-Denton et al., <i>Sensitivity to Status-Based Rejection: Implications for African American Students' College Experience</i> , 83 <i>J. Personality &amp; Soc. Psychol.</i> 896 (2002) .....	10
Jeffrey F. Milem et al., <i>Making Diversity Work on Campus: A Research-Based Perspective</i> (2005), <a href="http://siher.stanford.edu/AntonioMilemChang_makingdiversitywork.pdf">siher.stanford.edu/AntonioMilemChang_makingdiversitywork.pdf</a> .....	10, 24, 26
Mary C. Murphy et al., <i>Signaling Threat: How Situational Cues Affect Women in Math, Science, and Engineering Settings</i> , 18 <i>Psychol. Sci.</i> 879 (2007).....	8
Biren A. Nagda et al., <i>Learning about Difference, Learning with Others, Learning to Transgress</i> , 60 <i>J. Soc. Issues</i> 195 (2004).....	25, 33
Thomas F. Nelson Laird, <i>College Students' Experiences with Diversity and Their Effects on Academic Self-Confidence, Social Agency, and Disposition Toward Critical Thinking</i> , 46 <i>Research Higher Educ.</i> 365 (2005) .....	25
Thomas F. Nelson Laird & Amanda Suniti Niskodé-Dossett, <i>How Gender and Race Moderate the Effect of Interactions Across Difference on Student Perceptions of the Campus Environment</i> , 33 <i>Rev. Higher Educ.</i> 333 (2010) .....	23

## TABLE OF AUTHORITIES—Continued

	Page(s)
Brian A. Nosek et al., <i>Pervasiveness and Correlates of Implicit Attitudes and Stereotypes</i> , 18 <i>Euro. Rev. Soc. Psychol.</i> 38 (2007) .....	13
Andreas Olsson et al., <i>The Role of Social Groups in the Persistence of Learned Fear</i> , 309 <i>Sci.</i> 785 (2005) .....	18
Elizabeth Page-Gould et al., <i>Understanding the Impact of Cross-Group on Interactions with Novel Outgroup Members</i> , 98 <i>J. Personality &amp; Soc. Psychol.</i> 775 (2010) .....	10
Adam R. Pearson et al., <i>The Nature of Contemporary Prejudice: Insights from Aversive Racism</i> , 10 <i>Soc. &amp; Personality Psychol. Compass</i> 3 (2009)..... <i>passim</i>	
Terrance J. Pell, <i>Racial Preferences and Formal Equality</i> , 34 <i>J. Soc. Phil.</i> 309 (2003).....	29
Louis A. Penner et al., <i>Aversive Racism and Medical Interactions with Black Patients: A Field Study</i> , 46 <i>J. Experimental Soc. Psychol.</i> 436 (2010).....	11, 14
Thomas F. Pettigrew & Linda R. Tropp, <i>A Meta-Analytic Test of Intergroup Contact Theory</i> , 90 <i>J. Personality &amp; Soc. Psychol.</i> 751 (2006) .....	18, 33
Thomas F. Pettigrew & Linda R. Tropp, <i>How Does Intergroup Contact Reduce Prejudice? Meta-Analytic Tests of Three Mediators</i> , 38 <i>Euro. J. Soc. Psychol.</i> 922 (2008) .....	21, 33, 37

## TABLE OF AUTHORITIES—Continued

	Page(s)
Gary R. Pike et al., <i>Evaluating the Rationale for Affirmative Action in College Admissions: Direct and Indirect Relationships Between Campus Diversity and Gains in Understanding Diverse Groups</i> , 48 <i>J. College Student Dev.</i> 166 (2007) .....	20, 21, 34
Richard N. Pitt & Josh Packard, <i>Activating Diversity: The Impact of Student Race on Contributions to Course Discussions</i> , 53 <i>Sociol. Q.</i> 295 (2012) .....	24, 26, 27
Jennifer A. Richeson et al., <i>African Americans' Implicit Racial Attitudes and the Depletion of Executive Function After Interracial Interactions</i> , 23 <i>Soc. Cognition</i> 336 (2005)...	16
Jennifer A. Richeson et al., <i>An fMRI Investigation of the Impact of Interracial Contact on Executive Function</i> , 6 <i>Nature Neurosci.</i> 1323 (2003).....	16
Harriet E.S. Rosenthal & Richard J. Crisp, <i>Reducing Stereotype Threat by Blurring Intergroup Boundaries</i> , 32 <i>Personality &amp; Soc. Psychol. Bulletin</i> 501 (2006).....	6, 8, 9, 19
Janice A. Sabin et al., <i>Physician Implicit Attitudes and Stereotypes About Race and Quality of Medical Care</i> , 46 <i>Med. Care</i> 678 (2008) .....	12

## TABLE OF AUTHORITIES—Continued

	Page(s)
Donald A. Saucier et al., <i>Differences in Helping Whites and Blacks: A Meta-Analysis</i> , 9 Personality & Soc. Psychol. Rev. 2 (2005).....	15
Toni Schmader et al., <i>A Metacognitive Perspective on the Cognitive Deficits Experienced in Intellectually Threatening Environments</i> , 35 Personality & Soc. Psychol. Bulletin 584 (2009).....	6, 7
Toni Schmader et al., <i>An Integrated Process Model of Stereotype Threat Effects on Performance</i> , 115 Psychol. Rev. 336 (2008) ...	7, 8, 9
Toni Schmader & Michael Johns, <i>Converging Evidence that Stereotype Threat Reduces Working Memory Capacity</i> , 85 J. Personality & Soc. Psychol. 440 (2003) .....	8
Denise Sekaquaptewa et al., <i>Solo Status and Self-Construal: Being Distinctive Influences Racial Self-Construal and Performance Apprehension in African American Women</i> , 13 Cultural Div. & Ethnic Minority Psychol. 321 (2007) .....	6, 9, 24
Denise Sekaquaptewa & Mischa Thompson, <i>Solo Status, Stereotype Threat, and Performance Expectancies: Their Effects on Women's Performance</i> , 39 J. Experimental Soc. Psychol. 68 (2003) .....	9

## TABLE OF AUTHORITIES—Continued

	Page(s)
Samuel R. Sommers et al., <i>Cognitive Effects of Racial Diversity: White Individuals' Information Processing in Heterogeneous Groups</i> , 44 <i>J. Experimental Soc. Psychol.</i> 1129 (2008) .....	27
Frances K. Stage, <i>Moving from Probabilities to Possibilities: Tasks for Quantitative Criticalists</i> , 133 <i>New Dir. Institutional Research</i> 95 (2007) .....	23
Yolanda Suarez-Balcazar et al., <i>Experiences of Differential Treatment Among College Students of Color</i> , 74 <i>J. Higher Educ.</i> 428 (2003) .....	23
Hermann Swart et al., <i>Affective Mediators of Intergroup Contact: A Three-Wave Longitudinal Study in South Africa</i> , 101 <i>J. Personality &amp; Soc. Psychol.</i> 1221 (2011) .....	33
Shelly Taylor et al., <i>Categorical and Contextual Bases of Person Memory and Stereotyping</i> , 36 <i>J. Personality &amp; Soc. Psychol.</i> 778 (1978) .....	10
Jay J. Van Bavel & William A. Cunningham, <i>Self-Categorization with a Novel Mixed-Race Group Moderates Automatic Social and Racial Biases</i> , 35 <i>Personality &amp; Soc. Psychol. Bulletin</i> 321 (2009) .....	16, 17, 18
Gregory M. Walton & Geoffrey L. Cohen, <i>A Brief Social-Belonging Intervention Improves Academic and Health Outcomes of Minority Students</i> , 331 <i>Sci.</i> 1447 (2011) .....	9, 10

## TABLE OF AUTHORITIES—Continued

	Page(s)
Gregory M. Walton et al., <i>Affirmative Meritocracy</i> , 7(1) Soc. Issues & Pol’y Rev. 1 (2013) .....	7
Daniel B. Wright et al., <i>Interracial Contact and the Own-race Bias for Face Recognition in South Africa and England</i> , 17 Applied Cognition Psychol. 365 (2003).....	17
Ximena Zúñiga et al., <i>Action-Oriented Democratic Outcomes: The Impact of Student Involvement with Campus Diversity</i> , 46 J. College Student Dev. 660 (2005).....	34, 35
 OTHER AUTHORITIES	
APA, <i>Dual Pathways to a Better America: Preventing Discrimination and Promoting Diversity</i> (Final Report) (Jan. 2012), <a href="http://www.apa.org/pubs/info/reports/promoting-diversity.aspx">http://www.apa.org/pubs/info/reports/promoting-diversity.aspx</a> .....	32
Ian Ayres & Richard Brooks, <i>Does Affirmative Action Reduce the Number of Black Lawyers?</i> , 57 Stan. L. Rev. 1807 (2005) .....	30, 31
William G. Bowen & Derek Bok, <i>The Shape of the River: Long-Term Consequences of Considering Race in College and University Admissions</i> (1998) .....	29
Faye Crosby, <i>Affirmative Action is Dead; Long Live Affirmative Action</i> (2004) .....	11



## TABLE OF AUTHORITIES—Continued

	Page(s)
Sam Erman & Gregory M. Walton, <i>Stereotype Threat &amp; Antidiscrimination Law: Affirmative Steps to Promote Meritocracy &amp; Racial Equality in Education</i> , 88 S. Cal. L. Rev. 307 (2015) .....	31
Samuel L. Gaertner & John F. Dovidio, <i>Reducing Intergroup Bias: The Common Ingroup Identity Model</i> (2000).....	15
Anthony G. Greenwald & Linda H. Kreiger, <i>Implicit Bias: Scientific Foundations</i> , 94 Cal. L. Rev. 945 (2006) .....	13, 14, 18
David W. Johnson & Roger T. Johnson, <i>The Three Cs of Reducing Prejudice and Discrimination</i> , <i>Reducing Prejudice and Discrimination</i> (Stuart Oskamp ed., 2000)....	18
Thomas J. Kane, <i>Misconceptions in the Debate Over Affirmative Action in College Admissions</i> , <i>Chilling Admissions: The Affirmative Crisis and the Search for Alternatives</i> (Gary Orfield & Edward Miller eds., 1998) .....	29
Scott E. Page, <i>The Difference: How the Power of Diversity Creates Better Groups, Firms, Schools, and Societies</i> (2007) .....	36, 37
Ernest T. Pascarella & Patrick T. Terenzini, <i>How College Affects Students: A Third Decade of Research</i> (2d ed. 2005) .....	19
Daria Witt et al., <i>Introduction</i> , <i>Compelling Interest: Examining the Evidence on Racial Dynamics in Colleges and Universities</i> (Mitchell J. Chang et al. eds., 2003) .....	32

## INTEREST OF *AMICUS CURIAE*

The American Psychological Association (APA) is a voluntary, nonprofit, scientific and professional organization founded in 1892. The APA is the largest association of psychologists in the United States, with nearly 122,500 members and affiliates in 54 divisions representing every major focus within the field of psychology.<sup>1</sup>

The APA aims to advance psychology as a means of promoting human welfare, to enhance psychological knowledge, and to encourage the application of research findings to the promotion of health and public welfare. The APA places a high priority on the amelioration of stereotypes, prejudice, and discrimination among individuals and institutions. To this end, the APA has participated as *amicus curiae* in cases on diversity in education, including *Grutter v. Bollinger*, 539 U.S. 306 (2003), and *Fisher v. University of Texas at Austin*, 133 S. Ct. 2411 (2013) (*Fisher I*).

APA members research psychological causes and consequences of racial prejudice and the development of such prejudice and stereotypes in children and young adults. Thus, the APA is uniquely positioned to describe the pertinent, peer-reviewed social science studies on the empirical claims at the heart of the debate on using race as a factor in higher-education student admissions. This brief presents scientific evidence supporting the principle that institutions of

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<sup>1</sup> No counsel for a party authored this brief in whole or in part, and no party or counsel for a party made a monetary contribution intended to fund the preparation or submission of this brief. No one other than *amicus curiae* or *amicus's* counsel made a monetary contribution to the preparation or submission of this brief. Letters from the parties consenting to the filing of this brief have been filed with the Clerk of the Court.

higher education should be permitted to employ race-conscious admissions practices to promote the many educational benefits for all students associated with campus diversity.

### SUMMARY OF ARGUMENT

In *Fisher I*, petitioner did “not challenge[]” “the principle that the consideration of race in admissions is permissible.” *Schuetz v. Coalition to Defend Affirmative Action*, 134 S. Ct. 1623, 1630 (2014) (Kennedy, J., plurality op.). As a result, the only merits question remaining in this case is whether the University of Texas’s admissions practice is narrowly tailored to achieve the compelling state interest “in the educational benefits that flow from a diverse student body.” *Fisher I*, 133 S. Ct. at 2417.

Nevertheless, petitioner’s opening brief attacks the settled predicate—namely, the “conclusion that obtaining the educational benefits of ‘student body diversity is a compelling state interest that can justify the use of race in university admissions.’” *Id.* (quoting *Grutter*, 539 U.S. at 325). Petitioner now argues that “UT has *never* been clear about precisely why it needs to use racial preferences.” Pet’r Br. 20. This *amicus* brief therefore addresses the substantial, documented, and continuing need for increased diversity in higher education. Social science research confirms that the benefits of admissions policies like UT’s extend far beyond admissions. As this Court long has recognized, diversity in higher education enhances the educational experience for all students.

Underrepresentation of minority groups poses significant obstacles to effective education of both minority and nonminority students. The social isolation and stereotyping experienced by underrepresented minorities

inhibits those students' mental and emotional functioning, which leads to decreased academic performance and impaired emotional well-being. Members of majority groups, too, are hindered by persistent implicit biases that can lead to disruptions of mental function.

Social science research demonstrates that increased campus diversity is a remedy for these problems. Increasing the representation of distinct racial groups improves various aspects of intellectual performance and can improve academic achievement for both minority and nonminority students. Furthermore, campus diversity reduces prejudice, enhances leadership skills, and better prepares students to participate in modern civic society. However, these benefits accrue only when a critical mass of different minority groups is present on campus.

Arguments against the continuing need for increased racial diversity in higher education do not withstand the crucible of empirical investigation. Especially dangerous are certain superficially plausible but empirically flawed theories that often reflect the same stereotypes and biases that diversity admissions policies serve to ameliorate. One example is the "academic mismatch" theory, which hypothesizes that relatively lower graduation rates among minority students admitted under race-conscious admissions programs result from an academic curriculum too rigorous for such students. Numerous studies have debunked this myth and proven that a university's consideration of race as a factor in admissions *narrows* retention rate gaps between different student groups.

The scientific conclusions set forth in this brief are grounded in 83 peer-reviewed studies reflecting the contemporary social science research on campus diversity. Nearly all of these studies have been conducted or published since the Court's decision in *Grutter* in 2003. The studies that form the backbone of this brief, along with several articles and books by prominent scholars, represent just a sample of the evidence collected by APA members that demonstrates the value of and continuing need for diversity in higher education.

To the extent a question of compelling interest looms in this case, the Court should reaffirm that academic institutions have a compelling interest in fostering the educational benefits of student body diversity through the consideration of race in a holistic university admissions process.

## ARGUMENT

### **I. The compelling government interest in the educational benefits that flow from a diverse student body has not changed since *Grutter*.**

For over 35 years, this Court has affirmed that student body diversity is a compelling government interest that “legitimately may be served” by the consideration of race in admissions to public universities. *Regents of Univ. of Cal. v. Bakke*, 438 U.S. 265, 320 (1978); see *Grutter v. Bollinger*, 539 U.S. 306, 325 (2003). The Court explained in *Grutter* that the benefits of racial diversity in higher education are both “substantial” and “real,” and that racial diversity in higher education “promotes cross-racial understanding, helps to break down racial stereotypes, . . . enables students to better understand persons of different races, . . . promotes

learning outcomes, and better prepares students for an increasingly diverse workforce and society.” 539 U.S. at 330 (quotations omitted). In *Fisher v. University of Texas at Austin*, 133 S. Ct. 2411, 2417 (2013) (*Fisher I*), the Court accepted “as [a] given” the holdings in *Bakke* and *Grutter* “that obtaining the educational benefits of ‘student body diversity is a compelling state interest that can justify the use of race in university admissions.’” *Id.* (quoting *Grutter*, 539 U.S. at 325).

An ever-growing body of social science research confirms the Court’s conclusions and reinforces the continuing need for increased diversity in higher education today. In other words, “[t]he serious educational problems that faced Americans at the time this Court decided *Grutter* endure.” *Schuette v. Coalition to Defend Affirmative Action*, 134 S. Ct. 1623, 1649 (2014) (Breyer, J., concurring).

**A. Underrepresentation of minority groups inhibits academic performance, fosters prejudice, and hinders cognitive function.**

The government’s interest in diversity goes far beyond simply reducing “societal discrimination.” *City of Richmond v. J.A. Croson Co.*, 488 U.S. 469, 496 (1989). Underrepresented minorities face critical psychological impediments to success that are tied to their distinctiveness and isolation. Furthermore, persistent implicit prejudices divide individuals and exact a measurable cost on cognitive (mental) function. Institutions of higher education have a compelling interest in overcoming these obstacles to effective education, and diversity is a well-established tool for meeting this task and improving outcomes for all students.

1. The detrimental academic effects on underrepresented minority students are real and documented. Study after study shows that when campuses lack sufficient diversity, underrepresented minority students are especially susceptible to psychological influences that can impair academic performance.<sup>2</sup>

One of these psychological influences is a feeling of distinctiveness or unbelonging. A member of an underrepresented minority group is more conscious of her minority identity and the negative stereotypes associated with that status.<sup>3</sup> In the educational setting, this feeling of distinctiveness creates the risk that a student will conform to negative academic stereotypes.<sup>4</sup>

Research has shown the negative effects of “stereotype threat” on minority students. Stereotype threat accounts for 17–28% of the racial gap on the SAT exam between Black and White students, meaning that a “minority student who receives a combined score of 1800 on the SAT has, on average, the intellectual ability and potential of a nonminority student with a score of

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<sup>2</sup> See, e.g., Denise Sekaquaptewa et al., *Solo Status and Self Construal: Being Distinctive Influences Racial Self-Construal and Performance Apprehension in African American Women*, 13 *Cultural Diversity & Ethnic Minority Psychol.* 321, 321 (2007).

<sup>3</sup> Michael Johns et al., *Stereotype Threat and Executive Resource Depletion: Examining the Influence of Emotion Regulation*, 137 *J. Experimental Psychol.: Gen.* 691, 692 (2008); see Toni Schmader et al., *A Metacognitive Perspective on the Cognitive Deficits Experienced in Intellectually Threatening Environments*, 35 *Personality & Soc. Psychol. Bulletin* 584, 586 (2009); see also David S. March & Reiko Graham, *Exploring Implicit Ingroup & Outgroup Bias Toward Hispanics*, 18(1) *Group Processes & Intergroup Relations* 89, 98 (2015).

<sup>4</sup> Harriet E.S. Rosenthal & Richard J. Crisp, *Reducing Stereotype Threat by Blurring Intergroup Boundaries*, 32 *Personality & Soc. Psychol. Bulletin* 501, 502 (2006).

1850–1890.”<sup>5</sup> Black and Latino students also perform worse than their White peers on standardized tests when those tests are described as assessing verbal or intellectual ability. When the same tests are framed as simple exercises in problem solving, however, their performance is equivalent to that of White peers.<sup>6</sup> The stress of having to overcome a racial stereotype (whether warranted or not) inhibits performance.<sup>7</sup>

Social scientists have uncovered the cognitive dynamics underlying stereotype threat’s effects on performance. On an affective level—*i.e.*, how people experience emotions or feelings—stereotype threat activates negative thoughts,<sup>8</sup> which can decrease confidence, increase anxiety, and undermine an individual’s performance expectations.<sup>9</sup> This phenomenon is, however, more complex than basic performance anxiety.<sup>10</sup>

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<sup>5</sup> Gregory M. Walton et al., *Affirmative Meritocracy*, 7(1) Soc. Issues & Pol’y Rev. 1, 11 (2013).

<sup>6</sup> See Toni Schmader et al., *An Integrated Process Model of Stereotype Threat Effects on Performance*, 115 Psychol. Rev. 336, 336-37 (2008); see also Patricia M. Gonzales et al., *The Effects of Stereotype Threat and Double Minority Status on the Test Performance of Latino Women*, 28 Personality & Soc. Psychol. Bulletin 659, 665-66 (2002).

<sup>7</sup> See Schmader et al., *supra* note 3, at 586.

<sup>8</sup> Sian L. Beilock et al., *Stereotype Threat and Working Memory: Mechanisms, Alleviation, and Spillover*, 136 J. of Experimental Psychol.: Gen. 256, 257 (2007); Mara Cadinu et al., *Why do Women Underperform under Stereotype Threat? Evidence for the Role of Negative Thinking*, 16 Psychol. Sci. 572, 573 (2005)

<sup>9</sup> Mara Cadinu et al., *Stereotype Threat: The Effect of Expectancy on Performance*, 33 Euro. J. Soc. Psychol. 267, 269, 283 (2003).

<sup>10</sup> Schmader et al., *supra* note 6, at 349.



Stereotype threat disrupts cognitive function.<sup>11</sup> “Activating negative stereotypes about a social identity one possesses motivates individuals to try to combat that stereotype.”<sup>12</sup> This effect, in turn, generates increased mental effort in the form of heightened stress, increased monitoring of how one’s behavior reflects the stereotypes at issue, and active efforts to push negative stereotypic thoughts and anxieties from the mind.<sup>13</sup> In combination, these coping mechanisms interfere with mental performance and leave an individual with a deficit of cognitive resources to complete the intellectual task at hand.<sup>14</sup>

The effects of stereotype threat can extend beyond discrete tasks. Ultimately, the threat may lead individuals to remove themselves from the classroom or campus altogether.<sup>15</sup>

Increasing minority representation reduces stereotype threat. In general, stereotype threat is “less likely to occur if the categories that embody the stereotype become less salient.”<sup>16</sup>

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<sup>11</sup> Jean-Claude Croizet et al., *Stereotype Threat Undermines Intellectual Performance by Triggering a Disruptive Mental Load*, 30 *Personality & Soc. Psychol. Bulletin* 721, 728-29 (2004).

<sup>12</sup> Schmader et al., *supra* note 6, at 337; see Toni Schmader & Michael Johns, *Converging Evidence that Stereotype Threat Reduces Working Memory Capacity*, 85 *J. of Personality & Soc. Psychol.* 440, 450-51(2003).

<sup>13</sup> Schmader et al., *supra* note 6, at 337-38.

<sup>14</sup> *Id.*

<sup>15</sup> Rosenthal & Crisp, *supra* note 4, at 502; see Mary C. Murphy et al., *Signaling Threat: How Situational Cues Affect Women in Math, Science, and Engineering Settings*, 18 *Psychol. Sci.* 879, 883-84 (2007).

<sup>16</sup> Rosenthal & Crisp, *supra* note 4, at 509.

Removing circumstantial reminders—by bringing different groups together and emphasizing overlapping characteristics—can reduce the salience of racial group identity and, thus, diminish stereotype threat.<sup>17</sup> Coordinated efforts to encourage students to confront diversity issues with diverse peers and to reappraise stereotypes can remove the inhibitory effects of stereotype threat.<sup>18</sup>

2. Social isolation also makes underrepresented minorities vulnerable to psychological impediments to performance. Empirical studies demonstrate the dangers of “solo status,” or “being the only member of one’s social category present in a group.”<sup>19</sup> For example, Blacks in otherwise all-White groups underperform as compared to when they are in groups with increased representation of their race.<sup>20</sup> Solo status “lead[s] racial minorities to construe the self in terms of race and to perceive being seen as a race representative,” which can hinder intellectual performance.<sup>21</sup>

Isolated members of minority groups also “experience relatively greater uncertainty about their belonging in school.”<sup>22</sup> This uncertainty can be detrimental to “well-

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<sup>17</sup> *Id.*

<sup>18</sup> Schmader et al., *supra* note 6, at 351-52.

<sup>19</sup> Sekaquaptewa et al., *supra* note 2, at 321.

<sup>20</sup> *See id.*; see also Denise Sekaquaptewa & Mischa Thompson, *Solo Status, Stereotype Threat, and Performance Expectancies: Their Effects on Women’s Performance*, 39 *J. Experimental Soc. Psychol.* 68, 68-69 (2003).

<sup>21</sup> Sekaquaptewa et al., *supra* note 2, at 326.

<sup>22</sup> Gregory M. Walton & Geoffrey L. Cohen, *A Brief Social-Belonging Intervention Improves Academic and Health Outcomes of Minority Students*, 331 *Sci.* 1447, 1448 (2011).

being and performance,”<sup>23</sup> and it can ultimately discourage students from persisting in an academic setting.<sup>24</sup> However, when minority students experience a greater sense of belonging and less sensitivity to racial rejection, their interpersonal relationships improve and they achieve higher grade point averages throughout college.<sup>25</sup>

Isolation also increases the likelihood that underrepresented students will be viewed as “tokens.”<sup>26</sup> Tokenism heightens the undue attention paid to minorities, fosters stereotyping, and reduces perceptions of individuality.<sup>27</sup> Further, tokenism can foment social stigma and inhibit student achievement.<sup>28</sup>

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<sup>23</sup> *Id.*; see Elizabeth Page-Gould et al., *Understanding the Impact of Cross-Group on Interactions with Novel Outgroup Members*, 98 *J. Personality & Soc. Psychol.* 775, 788-89 (2010).

<sup>24</sup> Angela M. Locks et al., *Extending Notions of Campus Climate and Diversity to Students' Transition to College*, 31 *Rev. Higher Educ.* 257, 260 (2008).

<sup>25</sup> Rodolfo Mendoza-Denton et al., *Sensitivity to Status-Based Rejection: Implications for African American Students' College Experience*, 83 *J. Personality & Soc. Psychol.* 896, 913-14 (2002); see Walton & Cohen, *supra* note 22, at 1448.

<sup>26</sup> Jeffrey F. Milem et al., *Making Diversity Work on Campus: A Research-Based Perspective*, at 4, 6 (2005), available at [siher.stanford.edu/AntonioMilemChang\\_makingdiversitywork.pdf](http://siher.stanford.edu/AntonioMilemChang_makingdiversitywork.pdf).

<sup>27</sup> *See id.*

<sup>28</sup> *Id.*; see Sharon Fries-Britt & Bridget Turner, *Uneven Stories: Successful Black Collegians at a Black and a White Campus*, 25 *Rev. Higher Educ.* 315, 322 (2002); see also Shelly Taylor et al., *Categorical and Contextual Bases of Person Memory and Stereotyping*, 36 *J. Personality & Soc. Psychol.* 778, 791 (1978).

Thus, UT's goal of increasing the number of Black and Latino students on campus in order to minimize the number of classes with a single member of a minority group properly recognizes the negative effects associated with stereotype threat and social isolation.

**B. Subconscious racial bias continues to interfere with the effective education of nonminority students.**

The negative effects associated with insufficient racial diversity extend to members of nonminority groups. The most notable effect is the persistence of implicit bias that interferes with the educational process.

Behavior toward members of other races, whether positive or negative, flows from both explicit and implicit racial attitudes.<sup>29</sup> Over the past several decades, the United States has seen a “dramatic decrease” in explicit bias.<sup>30</sup> However, research overwhelmingly indicates that subtler forms of prejudice persist. *Cf. Tex. Dep't of Housing & Comm. Affairs v. Inclusive Comms. Proj., Inc.*, 135 S. Ct. 2507, 2522 (2015) (acknowledging the value of disparate impact analysis in “uncovering” and “counteract[ing] unconscious prejudices”). These implicit biases may produce discriminatory behavior, and they can disrupt cognitive function for members of both the majority and minority. Proactive efforts to increase campus diversity can significantly reduce implicit bias and its detrimental effects.

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<sup>29</sup> Louis A. Penner et al., *Aversive Racism and Medical Interactions with Black Patients: A Field Study*, 46 J. Experimental Soc. Psychol. 436, 437 (2010); Anthony G. Greenwald et al., *Understanding and Using the Implicit Association Test: III. Meta-analysis of Predictive Validity*, 97 J. Personality & Soc. Psychol. 17, 18 (2009).

<sup>30</sup> Faye Crosby, *Affirmative Action is Dead; Long Live Affirmative Action* 202 (2004).

Subconscious bias has been assessed with a variety of cognitive tasks, with converging conclusions. The most prominent test social scientists use to measure the magnitude of unconscious stereotyping is the Implicit Association Test (IAT). The IAT measures the time it takes to pair a given subject, such as a person's face in the case of a race-focused test, with an evaluative concept, such as "awful" or "joyful."<sup>31</sup> The test maps reaction time in milliseconds, thus measuring an automatic associative process that is likely beyond conscious control.<sup>32</sup> Since this test was devised in 1998, it has been used in over 200 studies, and over 5 million individual study sessions have been completed.<sup>33</sup> The collective data made available by these studies have enabled social scientists to verify that the IAT is a valid predictor of social behavior and judgment.<sup>34</sup>

The results of IAT studies show that most participants hold implicit preferences for White individuals relative to Black individuals.<sup>35</sup> These results are by no means exclusive to Whites. Asians, Latinos, and Native Americans exhibit similar automatic responses

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<sup>31</sup> Adam R. Pearson et al., *The Nature of Contemporary Prejudice: Insights from Aversive Racism*, 10 Soc. & Personality Psychol. Compass 3, 6 (2009).

<sup>32</sup> See *id.*; Greenwald et al., *supra* note 29, at 22.

<sup>33</sup> Alexander R. Green et al., *Implicit Bias Among Physicians and its Prediction of Thrombolysis Decisions for Black and White Patients*, 22 J. Gen. Internal Med. 1231, 1231-32 (2007).

<sup>34</sup> Greenwald et al., *supra* note 29, at 32; Allen R. McConnell & Jill M. Liebold, *Relations Among the Implicit Association Test, Discriminatory Behavior, and Explicit Measures of Racial Attitudes*, 37 J. Experimental Soc. Psychol. 435, 440 (2001).

<sup>35</sup> Janice A. Sabin et al., *Physician Implicit Attitudes and Stereotypes About Race and Quality of Medical Care*, 46 Med. Care 678, 682 (2008).

favoring Whites over Blacks.<sup>36</sup> Indeed, even many Blacks display the same reactions, with roughly half favoring Whites while the remaining half shows pro-Black implicit bias.<sup>37</sup>

A growing consensus has emerged regarding the basic cognitive processes that underlie implicit bias as it relates to social assessments. In addition to making explicit judgments about the surrounding world, we categorize knowledge actively on an implicit level.<sup>38</sup> This is cognitively beneficial because it enables us to process knowledge and make judgments efficiently.<sup>39</sup> A natural by-product of this cognitive process, however, is the formation of stereotypes and biases based on different categories.<sup>40</sup> These assessments form independent of conscious attitudes, beliefs, and perceptions.<sup>41</sup>

When we process information relating to race or ethnic status, such social categorization activates more positive feelings about members of the same racial group (“ingroup”) and more negative feelings and stereotypes about “outgroup” members.<sup>42</sup> Certainly,

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<sup>36</sup> Brian A. Nosek et al., *Pervasiveness and Correlates of Implicit Attitudes and Stereotypes*, 18 *Euro. Rev. Soc. Psychol.* 38, 55 (2007).

<sup>37</sup> Anthony G. Greenwald & Linda H. Kreiger, *Implicit Bias: Scientific Foundations*, 94 *Cal. L. Rev.* 945, 956 (2006); *see also* Nosek et al., *supra* note 36, at 55.

<sup>38</sup> Irene V. Blair, *The Malleability of Automatic Stereotypes and Prejudice*, 6 *Personality & Soc. Psychol. Rev.* 242, 242 (2002).

<sup>39</sup> *Id.*

<sup>40</sup> *See, e.g.*, Nosek et al., *supra* note 36, at 65, 70.

<sup>41</sup> Green et al., *supra* note 33, at 1236; Pearson et al., *supra* note 31, at 6.

<sup>42</sup> Pearson et al., *supra* note 31, at 5.

some individuals' implicit racial attitudes are consistent with their explicit attitudes about race, either positive or negative.<sup>43</sup> Nonetheless, there are many who “sympathize with victims of past injustice, support principles of racial equality, and genuinely regard themselves as non-prejudiced, but at the same time possess conflicting, often non-conscious, negative feelings and beliefs about Blacks that are rooted in basic psychological processes.”<sup>44</sup>

Implicit bias leads to concrete discriminatory behaviors, which can extend long past college.<sup>45</sup> For example, one study tested whether racial bias affected physicians' treatment of patients with symptoms of a myocardial infarction, revealing that physicians with greater implicit bias were much less likely to recommend appropriate treatment for minority patients.<sup>46</sup>

The same effect may extend to pediatric care. A September 2015 study found that ER doctors were *five times* less likely to administer opioid pain medication to Black children suffering from appendicitis compared to White children at the same pain threshold.<sup>47</sup> While this study did not attempt to link the disparity to implicit bias, the results are consistent with that hypothesis.

Whereas traditional forms of racial prejudice can produce “a direct and overt pattern of discrimination,”

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<sup>43</sup> Penner et al., *supra* note 29, at 441.

<sup>44</sup> Pearson et al., *supra* note 31, at 5.

<sup>45</sup> Greenwald & Kreiger, *supra* note 37, at 961.

<sup>46</sup> Green et al., *supra* note 33, at 1237.

<sup>47</sup> Monika K. Goyal et al., *Racial Disparities in Pain Management of Children with Appendicitis in Emergency Departments*, JAMA Pediatr. (2015).

implicit bias often generates inconsistent effects, depending upon whether an individual manifests implicit negative attitudes or explicitly held egalitarian beliefs.<sup>48</sup> Typically, where “right and wrong are clearly defined,” discrimination is minimal.<sup>49</sup> By contrast, where “the guidelines for appropriate behavior are unclear, the basis for social judgment is vague, or when one’s actions can be justified or rationalized on the basis of some factor other than race,” discriminatory behavior may be present.<sup>50</sup>

In a seminal study of this phenomenon, White college students were asked to provide hiring recommendations for selective campus positions. “[W]hen the candidates’ credentials clearly qualified or disqualified them for the position,” no discrimination occurred.<sup>51</sup> But “when candidates’ qualifications for the position were less obvious . . . White participants recommended the Black candidate significantly less often than the White candidate with exactly the same credentials.”<sup>52</sup> Social scientists have observed similar behavioral effects in various circumstances.<sup>53</sup>

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<sup>48</sup> Pearson et al., *supra* note 31, at 7.

<sup>49</sup> *Id.*

<sup>50</sup> *Id.*

<sup>51</sup> *Id.* at 9-10; see Samuel L. Gaertner & John F. Dovidio, *Reducing Intergroup Bias: The Common Ingroup Identity Model* (2000).

<sup>52</sup> Pearson et al., *supra* note 31, at 10.

<sup>53</sup> See, e.g., Donald A. Saucier et al., *Differences in Helping Whites and Blacks: A Meta-Analysis*, 9 *Personality & Soc. Psychol. Rev.* 2 (2005); John F. Dovidio et al., *Implicit and Explicit Prejudice and Interracial Interaction*, 82 *J. Personality & Soc. Psychol.* 62, 66-67 (2002).



Implicit bias is also associated with interference of cognitive function. When faced with interracial interaction, explicitly well-intentioned individuals often exert significant mental effort “in order to combat the expression of stereotypes and negative attitudes that are often activated automatically and unintentionally.”<sup>54</sup>

The effort to manage negative thoughts inhibits mental capacity by occupying the brain’s executive function.<sup>55</sup> An examination of the neurological activity generated by this response suggests further that it depletes cognitive resources relating to attention and control.<sup>56</sup> Evidence of such a response to implicit bias is found in members of both majority and minority groups.<sup>57</sup>

Exposure to diversity, which can challenge the importance of social categorization along racial lines, can reduce implicit racial bias, along with the discriminatory behavior and cognitive impairment it causes.<sup>58</sup> Although “[p]eople are remarkably adept at dividing up the world into *us* and *them*,”<sup>59</sup> individuals are not rigidly predisposed to draw these lines based

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<sup>54</sup> Jennifer A. Richeson et al., *African Americans’ Implicit Racial Attitudes and the Depletion of Executive Function After Interracial Interactions*, 23 Soc. Cognition 336, 337 (2005).

<sup>55</sup> *Id.* at 337-38.

<sup>56</sup> Jennifer A. Richeson et al., *An fMRI Investigation of the Impact of Interracial Contact on Executive Function*, 6 Nature Neurosci. 1323, 1326 (2003).

<sup>57</sup> Richeson et al., *supra* note 54, at 338-40, 349.

<sup>58</sup> Jay J. Van Bavel & William A. Cunningham, *Self-Categorization with a Novel Mixed-Race Group Moderates Automatic Social and Racial Biases*, 35 Personality & Soc. Psychol. Bulletin 321, 322 (2009).

<sup>59</sup> *Id.*

on race. The lines are malleable: “by changing the basis of categorization from race to an alternative, inclusive dimension, one can alter who ‘we’ is and who ‘they’ are,” in a way that undermines the mental processes that engender bias.<sup>60</sup>

A diverse campus provides an environment in which group membership is unrelated to racial categories. For example, students of all races at the University of Texas might feel a closer affiliation with UT students of another race than, say, a student of the same race at the University of Oklahoma. This shared affiliation can help shift automatic evaluations away from implicit racial biases and toward the inclusive attitudes associated with the college ingroup.<sup>61</sup>

A recent study demonstrated the strength of ingroup affiliation by measuring students’ abilities to recognize the faces of peers.<sup>62</sup> When faces were grouped simply by race, participants had superior recall for faces of those in their own racial group.<sup>63</sup> However, when faces were grouped by university, students had superior recall for faces of those who attended their own university and race had no effect.<sup>64</sup> Expanding the ingroup to

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<sup>60</sup> Pearson et al., *supra* note 31, at 14.

<sup>61</sup> Van Bavel & Cunningham, *supra* note 58, at 333.

<sup>62</sup> Eric Hehman et al., *Where the Division Lies: Common Ingroup Identity Moderates the Cross-Race Facial-Recognition Effect*, 46 *J. Experimental Soc. Psychol.* 445, 447 (2010).

<sup>63</sup> *Id.*; see also Daniel B. Wright et al., *Interracial Contact and the Own-race Bias for Face Recognition in South Africa and England*, 17 *Applied Cognition Psychol.* 365, 371 (2003).

<sup>64</sup> Hehman et al., *supra* note 62, at 447.

include members of different races thus diminished automatic social categorization based on race.<sup>65</sup>

Forming personal connections with members of an outgroup may reduce implicit bias even more.<sup>66</sup> Individuals who have dated a member of another race or whose children have married a member of another race may replace negative implicit bias with favorable implicit attitudes.<sup>67</sup> Furthermore, prolonged contact between members of different racial groups reduces implicit negative attitudes and stereotyping.<sup>68</sup> As these and other studies show, the creation of a more inclusive campus, which provides opportunities for forming personal connections across races, reduces both the likelihood and effects of implicit bias.<sup>69</sup>

Underrepresentation of minority students leads to well-documented academic impediments for all students. Colleges and universities thus have a compelling

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<sup>65</sup> *Id.* at 448; Van Bavel & Cunningham, *supra* note 58, at 333.

<sup>66</sup> Andreas Olsson et al., *The Role of Social Groups in the Persistence of Learned Fear*, 309 *Sci.* 785, 785 (2005); Christopher L. Aberson et al., *Implicit Bias and Contact: The Role of Interethnic Friendships*, 144 *J. Soc. Psychol.* 335, 340, 343 (2004).

<sup>67</sup> *See id.*; Greenwald & Kreiger, *supra* note 37, at 964-65.

<sup>68</sup> Christopher L. Aberson & Sarah C. Haag, *Contact, Perspective Taking, and Anxiety as Predictors of Stereotype Endorsement, Explicit Attitudes, and Implicit Attitudes*, 10 *Group Processes & Intergroup Relations* 179, 195 (2007).

<sup>69</sup> Thomas F. Pettigrew & Linda R. Tropp, *A Meta-Analytic Test of Intergroup Contact Theory*, 90 *J. Personality & Soc. Psychol.* 751, 766-67 (2006); David W. Johnson & Roger T. Johnson, *The Three Cs of Reducing Prejudice and Discrimination*, *Reducing Prejudice and Discrimination* 239, 247 (Stuart Oskamp ed., 2000).

interest in increasing campus diversity that leads to corresponding academic benefits.

## **II. The curative benefits of diversity in higher education require a critical mass of students from different backgrounds.**

1. Students typically enter college at a “time[] when a sense of personal and social identity is formed.”<sup>70</sup> They “begin to think for themselves . . . and take ownership of their ideas,” and they “possess the developmental maturity to gain a greater understanding of themselves and how they fit into the world around them.”<sup>71</sup> For these reasons, college students of all races and backgrounds “are ideally situated to benefit from racial diversity.”<sup>72</sup>

To achieve the benefits of diversity, however, colleges and universities must enroll a critical mass of minority students. Increased diversity is a well-established method for removing psychological obstacles and improving minority student development.<sup>73</sup> “Diversity

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<sup>70</sup> Patricia Gurin et al., *Diversity and Higher Education: Theory and Impact on Educational Outcomes*, 72 Harv. Educ. Rev. 330, 334 (2002).

<sup>71</sup> Uma M. Jayakumar, *Can Higher Education Meet the Needs of an Increasingly Diverse and Global Society? Campus Diversity and Cross-Cultural Workforce Competencies*, 78 Harv. Educ. Rev. 615, 621 (2008).

<sup>72</sup> *Id.*; Ernest T. Pascarella & Patrick T. Terenzini, *How College Affects Students: A Third Decade of Research* 60-61 (2d ed. 2005).

<sup>73</sup> Rosenthal & Crisp, *supra* note 4, at 502-03, 509; *see also* Shana Levin et al., *The Effects of Ingroup & Outgroup Friendship on Ethnic Attitudes in College: A Longitudinal Study*, 6(1) *Group Processes & Intergroup Relations* 76, 87 (2003) (outgroup contact, and friendship in particular, are important for improving ethnic attitudes).

enables students to perceive differences both within groups and between groups.”<sup>74</sup> “[W]hen the minority group is not too small relative to the majority group,” students who interact with diverse peers develop more sensitive, complex views of minority individuals.<sup>75</sup> Such interaction reduces negative treatment toward minorities and increases openness for members of the majority.<sup>76</sup>

Social scientists widely agree that “students’ interpersonal interaction with peers is one of the most powerful educational resources in higher education.”<sup>77</sup> Both formal, classroom-based interaction and informal, everyday interaction contribute to achieving various academic benefits, in particular where interactions are positive.<sup>78</sup>

In order for these “crucial encounters” to occur, a sufficiently diverse student body must be present.<sup>79</sup> Social science evidence indicates that student-body diversity leads to increased interracial interaction, thus firmly establishing the “relationship between numbers

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<sup>74</sup> Gurin et al., *supra* note 70, at 360.

<sup>75</sup> *Id.* at 360-61.

<sup>76</sup> *See id.*

<sup>77</sup> Mitchell J. Chang et al., *Cross-Racial Interaction Among Undergraduates: Some Consequences, Causes, and Patterns*, 45 *Research Higher Educ.* 529, 530 (2004).

<sup>78</sup> Nicholas A. Bowman, *College Diversity Experiences and Cognitive Development: A Meta-Analysis*, 80 *Rev. Educ. Research* 4, 6 (2010); Gary R. Pike et al., *Evaluating the Rationale for Affirmative Action in College Admissions: Direct and Indirect Relationships Between Campus Diversity and Gains in Understanding Diverse Groups*, 48 *J. College Student Dev.* 166, 167 (2007).

<sup>79</sup> Chang et al., *supra* note 77, at 545.

and achieving the benefits to be derived from a diverse student body.” *Bakke*, 438 U.S. at 323.<sup>80</sup>

Importantly, increased interracial interactions are positively associated with educational benefits, but only when a critical threshold is reached. A recent longitudinal study found that “gains in leadership skills, psychological well-being, intellectual engagement, and intercultural effectiveness during the first year of college” are positively associated with “higher frequencies of diversity engagement.”<sup>81</sup> In contrast, “[s]tudents who rarely—or even sometimes—engaged in interracial and overall diversity interactions have, if anything, slightly less growth in leadership skills and psychological well-being than students who virtually never had diversity interactions.”<sup>82</sup> The researchers concluded that “colleges and universities must promote a *highly* diverse student body” to reap these benefits.<sup>83</sup>

Empirical evidence also shows that increased contact fosters greater positive interactions over time, which serves to ensure that the benefits of diversity accrue.<sup>84</sup> Institutional efforts to improve the racial

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<sup>80</sup> Pike et al., *supra* note 78, at 177; Mark E. Engberg, *Educating the Workforce for the 21st Century: A Cross-Disciplinary Analysis of the Impact of the Undergraduate Experience on Students’ Development of a Pluralistic Orientation*, 48 *Research Higher Educ.* 283, 286-87 (2007).

<sup>81</sup> Nicholas A. Bowman, *How Much Diversity Is Enough? The Curvilinear Relationship Between College Diversity Interactions and First-Year Student Outcomes*, 54 *Research Higher Educ.* 874, 886-87 (2013).

<sup>82</sup> *Id.* at 887.

<sup>83</sup> *Id.* at 889.

<sup>84</sup> Thomas F. Pettigrew & Linda R. Tropp, *How Does Intergroup Contact Reduce Prejudice? Meta Analytic Tests of Three Mediators*,

climate on campus by exposing students to content about race also provide a critical resource for maximizing the potential of interracial interaction.<sup>85</sup> Nonetheless, because meaningful interaction “cannot be replaced by teaching about diversity abstractly in courses or workshops,”<sup>86</sup> colleges must be permitted to attain the critical mass of students necessary to foster diverse interactions.<sup>87</sup>

2. In order to maximize the educational benefits of diversity, colleges must enroll a heterogeneous student body in which racial minority groups are independently and sufficiently represented. Petitioner nevertheless conflates independent racial groups no fewer than 12 times in her opening brief. *See* Pet’r Br. 5, 6, 9, 10, 46, 47.

Petitioner’s approach wrongly assumes that certain “non-White” groups are interchangeable for purposes of diversity. This assumption ignores a central aspect of the government’s interest in diversity: “a diverse student population creates a richer learning environment because students learn most from those who have very different life experiences from theirs”—even

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38 Euro. J. Soc. Psychol. 922, 922, 929 (2008); Aberson & Haag, *supra* note 68, at 195.

<sup>85</sup> Bowman, *supra* note 78, at 6, 20; Nida Denson & Mitchell J. Chang, *Racial Diversity Matters: The Impact of Diversity-Related Student Engagement and Institutional Context*, 46 Am. Educ. Research J. 322, 327 (2009).

<sup>86</sup> *See* Nicholas A. Bowman, *Promoting Participation in a Diverse Democracy: A Meta-Analysis of College Diversity Experiences and Civic Engagement*, 81 Rev. Educ. Research 29, 49 (2011); *see* Bowman, *supra* note 78, at 21-22.

<sup>87</sup> *See* Jayakumar, *supra* note 71, at 632, 637; *see also* Jiali Luo & David Jamieson-Drake, *A Retrospective Assessment of the Educational Benefits of Interaction Across Racial Boundaries*, 50 J. College Student Dev. 67, 80-81 (2009).

among distinct minority groups.<sup>88</sup> The Fifth Circuit rightly rejected petitioner's aggregate numerical arguments, which "treat[ed] minority students as fungible commodities that represent a single minority viewpoint." *Fisher v. Univ. of Tex. at Austin*, 758 F.3d 633, 656 (5th Cir. 2014).

Social scientists employ methodologies that disaggregate students by race, recognizing that "[d]ifferences in peoples' experiences require closer focus on racial or ethnic groups."<sup>89</sup> Numerous studies have contrasted the educational outcomes and experiences of White, Black, Hispanic, and Asian students.<sup>90</sup> Researchers have found that certain groups experience more discrimination in college than do their peers<sup>91</sup> and that students of different races perceive the supportiveness of campus environments in different ways.<sup>92</sup> It follows

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<sup>88</sup> Mitchell J. Chang, *Does Racial Diversity Matter? The Educational Impact of a Racially Diverse Undergraduate Population*, 40 J. College Student Dev. 377, 383, 385 (1999).

<sup>89</sup> Frances K. Stage, *Moving from Probabilities to Possibilities: Tasks for Quantitative Criticalists*, 133 New Dir. Institutional Research 95, 99 (2007).

<sup>90</sup> Sigal Alon & Marta Tienda, *Assessing the "Mismatch" Hypothesis: Differences in College Graduation Rates by Institutional Selectivity*, 78 Sociol. Educ. 294, 299 (2005); Mark E. Engberg & Sylvia Hurtado, *Developing Pluralistic Skills and Dispositions in College: Examining Racial/Ethnic Group Differences*, 82 J. Higher Educ. 416, 417, 422 (2011).

<sup>91</sup> Julie R. Ancis et al., *Student Perceptions of Campus Cultural Climate by Race*, 78 J. Counseling & Dev. 180, 184 (2000); see Yolanda Suarez-Balcazar et al., *Experiences of Differential Treatment Among College Students of Color*, 74 J. Higher Educ. 428, 438 (2003).

<sup>92</sup> Thomas F. Nelson Laird & Amanda Suniti Niskode-Dossett, *How Gender and Race Moderate the Effect of Interactions Across*



that critical mass is a variable concept among different racial groups. Indeed, UT has recognized as much by tailoring a critical mass for each group to the university's unique educational environment.

Independent and sufficient representation of each group broadens the range of perspectives on campus and in the classroom.<sup>93</sup> The differing viewpoints offered by students of different races have positive effects in the classroom setting, and sufficient representation of each set of views is necessary to realize the full potential of diversity.<sup>94</sup>

Conversely, a lack of independent and sufficient representation of each group can negatively affect the campus environment by increasing stereotyping and inhibiting academic performance.<sup>95</sup> Whereas increasing the representation of an individual's group can ameliorate those outcomes, the presence of minority students of a *different* race does nothing to temper these effects.<sup>96</sup>

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*Difference on Student Perceptions of the Campus Environment*, 33 Rev. Higher Educ. 333, 347 (2010).

<sup>93</sup> Mitchell J. Chang, *Racial Differences in Viewpoints About Contemporary Issues Among Entering College Students: Fact or Fiction?*, 40 NASPA J. 55, 67 (2003).

<sup>94</sup> *Id.* at 66; Richard N. Pitt & Josh Packard, *Activating Diversity: The Impact of Student Race on Contributions to Course Discussions*, 53 Sociol. Q. 295, 312-13 (2012).

<sup>95</sup> Milem et al., *supra* note 26, at 6; Gurin et al., *supra* note 70, at 360.

<sup>96</sup> *See supra* Part I.A.2; Sekaquaptewa et al., *supra* note 2, at 321.

### III. Admissions policies that increase campus diversity continue to advance the government's interests.

#### A. Increased racial diversity improves intellectual and academic performance for minority and nonminority students.

1. Social science literature at the time of *Grutter* demonstrated “that student body diversity promotes learning outcomes.” *Grutter*, 539 U.S. at 330. Since *Grutter*, social scientists have rigorously put these precepts to the test on campus and in the classroom, and the evidence supporting the academic benefits of college diversity is stronger than ever.<sup>97</sup>

Research clearly demonstrates that exposure to diversity enhances critical thinking and problem-solving ability.<sup>98</sup> Campus diversity also improves several other attributes related to academic success, including student satisfaction and motivation,<sup>99</sup> general knowledge,<sup>100</sup> and intellectual self-confidence.<sup>101</sup> Moreover, these

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<sup>97</sup> Bowman, *supra* note 78, at 22-23.

<sup>98</sup> Nida Denson & Shirley Zhang, *The Impact of Student Experiences with Diversity on Developing Graduate Attributes*, 35 *Studies Higher Educ.* 529, 540 (2010).

<sup>99</sup> Biren A. Nagda et al., *Learning about Difference, Learning with Others, Learning to Transgress*, 60 *J. Soc. Issues* 195, 208 (2004).

<sup>100</sup> Denson & Chang, *supra* note 85, at 325; Luo & Jamieson-Drake, *supra* note 87, at 70.

<sup>101</sup> Thomas F. Nelson Laird, *College Students' Experiences with Diversity and Their Effects on Academic Self-Confidence, Social Agency, and Disposition Toward Critical Thinking*, 46 *Research Higher Educ.* 365, 382-83 (2005); see Anthony L. Antonio, *The Influence of Friendship Groups on Intellectual Self-Confidence and Educational Aspirations in College*, 75 *J. Higher Educ.* 446, 455 (2004).

benefits are not exclusive to students who engage actively in diversity programs. Students on diverse and diversity-promoting campuses share in these benefits even where their own level of engagement in diversity measures is less than that of their peers.<sup>102</sup> In other words, everyone benefits.

These academic advantages flow largely from interaction with the “broader collection of thoughts, ideas, and opinions held by” more diverse student bodies.<sup>103</sup> According to empirical research, individuals differ to a great degree, by race, on experiences, values, and viewpoints.<sup>104</sup> “Not only are their actual experiences different, but their perceptions of those experiences differ as well.”<sup>105</sup> Accordingly, contributions to formal and informal discussion on many issues “are significantly correlated with student race.”<sup>106</sup>

Consider, for example, a classroom discussion on the Black Lives Matter movement. Participants in such a dialogue benefit from a diversity of perspectives, particularly when the topic of discussion and the experiences of the participants are closely tied to race.

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<sup>102</sup> Denson & Chang, *supra* note 85, at 343; Mitchell J. Chang et al., *The Educational Benefits of Sustaining Cross-Racial Interaction Among Undergraduates*, 77 *J. Higher Educ.* 430, 447 (2006).

<sup>103</sup> Milem et al., *supra* note 26, at 7.

<sup>104</sup> Pitt & Packard, *supra* note 94, at 299, 312-13; Marino A. Bruce & Michael C. Thornton, *It's My World? Exploring Black and White Perceptions of Personal Control*, 45 *Sociol. Q.* 597, 607-08 (2004).

<sup>105</sup> Pitt & Packard, *supra* note 94, at 299.

<sup>106</sup> *Id.* at 313; Shouping Hu & George D. Kuh, *Diversity Experiences and College Student Learning and Personal Development*, 44 *J. College Student Dev.* 320, 321, 331 (2003).

Diverse perspectives also create “an atmosphere of speculation, experiment and creation, [which is] essential to the quality of higher education.” *Bakke*, 438 U.S. at 312 (quotation omitted). Comparing homogeneous and heterogeneous discussion groups, one study showed that the presence of minority individuals stimulates an increase in the complexity with which students—especially members of the majority—approach a given issue.<sup>107</sup> Members of homogeneous groups in this study exhibited no such cognitive stimulation.<sup>108</sup>

As this research shows, “the mere inclusion of different perspectives, and especially divergent ones, in *any* course of discussion leads to the kind of learning outcomes (*e.g.*, critical thinking, perspective-taking) that educators, regardless of field, are interested in.”<sup>109</sup> Furthermore, while informal interactions produce important gains, “the formal interactions that take place in a course discussion offer the most potential for educators to extract the benefits of structural diversity on college campuses.”<sup>110</sup> Thus, UT properly seeks to ensure these educational benefits for all students by achieving diversity in every classroom as well as campus-wide.

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<sup>107</sup> Anthony L. Antonio et al., *Effects of Racial Diversity on Complex Thinking in College Students*, 15 *Psychol. Sci.* 507, 509 (2004).

<sup>108</sup> *Id.*; Samuel R. Sommers et al., *Cognitive Effects of Racial Diversity: White Individuals' Information Processing in Heterogeneous Groups*, 44 *J. Experimental Soc. Psychol.* 1129, 1134-35 (2008).

<sup>109</sup> Pitt & Packard, *supra* note 94, at 298.

<sup>110</sup> *Id.* at 315.

Social scientists have gone beyond simply documenting enhancements to critical thinking skills, and have studied how such academic benefits result from increased diversity. “[W]hen a student is exposed to thoughts and ideas different from his or her own, it tends to produce cognitive disequilibrium, dissonance, or incongruity.”<sup>111</sup> Resetting cognitive equilibrium requires complex processing and gathering of data, as well as consideration of revised viewpoints.<sup>112</sup> This process often causes students to develop a preference for “effortful” thinking and to seek nuanced explanations for human behavior.<sup>113</sup>

Interactions with diverse peers inspire deeper information processing “not just because of what [those peers] are saying but because of how they are categorized and because that categorization presents them as inconsistent with the norm.”<sup>114</sup> In other words, members of different races often confront each other with surprising attributes or opinions that challenge stereotypes.<sup>115</sup> Processing such “surprising category combinations” requires more generative or creative thinking than simply relying on preconceived stereotypes.<sup>116</sup> Over time, individuals adapt to this generative

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<sup>111</sup> Chang et al., *supra* note 77, at 545.

<sup>112</sup> *Id.*

<sup>113</sup> Bowman, *supra* note 78, at 6; Sylvia Hurtado, *The Next Generation of Diversity and Intergroup Relations Research*, 61 *J. Soc. Issues* 595, 598-599 (2005).

<sup>114</sup> Richard J. Crisp & Rhiannon N. Turner, *Cognitive Adaptation to the Experience of Social and Cultural Diversity*, 137 *Psychol. Bulletin* 242, 248 (2011).

<sup>115</sup> *Id.*

<sup>116</sup> *Id.* at 249, 250, 259.

process, which leads to enhanced cognitive flexibility and intellectual self-confidence.<sup>117</sup>

2. Attending selective universities generally prepares minority students, like all students, for success. Nonetheless, opponents of race-conscious admissions policies, including *amici* supporting petitioner,<sup>118</sup> continue to advance the “academic mismatch” hypothesis. According to this theory, students with lower academic preparation fare worse in the university setting, and “lower average graduation rates of ‘affirmative admits’ result from a mismatch between their academic preparation . . . and the scholastic requirements of the schools that admitted them by taking race into account.”<sup>119</sup> Numerous empirical studies have effectively discredited the validity of the “academic mismatch” hypothesis.

Over a decade ago, two seminal studies demonstrated that graduation rates of all students, including minority students, rise as the selectivity of the institution increases.<sup>120</sup> More recently, research has reaffirmed that “the mismatch hypothesis is empirically groundless for black and Hispanic (as well as for white and

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<sup>117</sup> *Id.* at 244, 257-58, 261.

<sup>118</sup> Br. of Richard Sander at 16–28; Br. of Heriot & Kirsanow at 20–33.

<sup>119</sup> Alon & Tienda, *supra* note 90, at 295; see Terrance J. Pell, *Racial Preferences and Formal Equality*, 34 *J. Soc. Phil.* 309, 310 (2003).

<sup>120</sup> William G. Bowen & Derek Bok, *The Shape of the River: Long-Term Consequences of Considering Race in College and University Admissions* 53, 59 (1998); Thomas J. Kane, *Misconceptions in the Debate Over Affirmative Action in College Admissions*, *Chilling Admissions: The Affirmative Crisis and the Search for Alternatives* 17, 17-18 (Gary Orfield & Edward Miller eds., 1998).

Asian) students.”<sup>121</sup> A recent national study found that “[i]n no case did . . . having an SAT score below the institutional average undermine[] the performance or well-being of individual minority students. If anything minority students who benefited from affirmative action earned higher grades and left school at lower rates than others.”<sup>122</sup>

In fact, race-conscious admissions programs narrow retention rate gaps between different student groups and “broaden educational opportunities for minority students and enable minority students to realize their full potential.”<sup>123</sup> Research shows that across all SAT ranges, graduation rates of black students increase as institutional selectivity rises, and there is a consistent positive association between institutional selectivity and several postgraduation outcomes, including “the completion of advanced degrees, earnings, and overall satisfaction with college experiences.”<sup>124</sup>

Careful studies of student performance in law school and specific undergraduate majors further illustrate that lower rates of academic success for minorities are not the product of race-conscious admissions policies.<sup>125</sup> Studies supporting the academic mismatch hypothesis

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<sup>121</sup> Alon & Tienda, *supra* note 90, at 309.

<sup>122</sup> Mary J. Fischer & Douglas S. Massey, *The Effects of Affirmative Action in Higher Education*, 36 Soc. Sci. Research 531, 544 (2007).

<sup>123</sup> Alon & Tienda, *supra* note 90, at 309.

<sup>124</sup> *Id.* at 296.

<sup>125</sup> Ian Ayres & Richard Brooks, *Does Affirmative Action Reduce the Number of Black Lawyers?*, 57 Stan. L. Rev. 1807, 1809 (2005); Mitchell J. Chang et al., *Considering the Impact of Racial Stigmas and Science Identity: Persistence Among Biomedical and Behavioral Science Aspirants*, 82 J. Higher Educ. 564, 586 (2011).

suffer from tunnel vision, treating affirmative admits' entering credentials as the sole determinant of school choice, academic success, and, in the case of law school, likelihood of passing the bar exam.<sup>126</sup>

As a result of this singular focus on entering credentials, the academic mismatch hypothesis ignores other considerations that factor into school choice, such as legacy preferences and financial considerations. Furthermore, the analysis assumes a direct relationship between academic credentials and success that is not supported by the evidence.<sup>127</sup> By identifying and removing this flawed assumption, one study reevaluated the same law school and bar passage statistics used by academic mismatch theory proponents and found an entirely different outcome: "instead of increasing the number of black attorneys by 7.9%, the elimination of affirmative action would decrease the number of black lawyers by 12.7%."<sup>128</sup> Properly viewed, the evidence indicates that the best way to increase the number of successful black law students is to expand diversity admissions programs.<sup>129</sup>

The academic mismatch hypothesis also ignores alternative explanations for minority underperformance in certain academic settings, such as stereotype threat and uncertainty about belonging.<sup>130</sup> Phenomena such as stereotype threat may explain not only minority

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<sup>126</sup> Ayres & Brooks, *supra* note 125, at 1813-14.

<sup>127</sup> *Id.* at 1812-13.

<sup>128</sup> *Id.* at 1814.

<sup>129</sup> *Id.* at 1809.

<sup>130</sup> *Id.* at 1838-39; *see also* Sam Erman & Gregory M. Walton, *Stereotype Threat & Antidiscrimination Law: Affirmative Steps to Promote Meritocracy & Racial Equality in Education*, 88 S. Cal. L. Rev. 307, 328-29 (2015); *supra* Part I.A.



students' lower retention rates in college and graduate school generally but also in specific academic majors.<sup>131</sup>

**B. Diversity in higher education improves civic engagement and professional competency.**

1. In addition to obvious academic pursuits, colleges and universities also prepare students to be effective economic and political leaders on local, national, and global levels.<sup>132</sup> Campus diversity has been shown to help schools achieve this practical aspect of their mission.<sup>133</sup> Effective leadership begins with prejudice reduction.

Some *amici* supporting petitioner during *Fisher I* suggested that campus diversity generally feeds discord and the reinforcement of stereotypes.<sup>134</sup> That contention is alarming for two reasons. First, the hefty weight of empirical evidence shows that campus diversity *reduces* racial discord. Second, the practical import of *amici's* contention favors the reinstatement of academic segregation long since abandoned by this Court.

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<sup>131</sup> Chang et al., *supra* note 125, at 586.

<sup>132</sup> Daria Witt et al., *Introduction*, *Compelling Interest: Examining the Evidence on Racial Dynamics in Colleges and Universities* 1, 10-11 (Mitchell J. Chang et al. eds., 2003); see APA, *Dual Pathways to a Better America: Preventing Discrimination and Promoting Diversity* (Final Report), at 70, 72 (Jan. 2012), available at <http://www.apa.org/pubs/info/reports/promoting-diversity.aspx>.

<sup>133</sup> Sylvia Hurtado, *Linking Diversity with the Educational and Civic Missions of Higher Education*, 30 *Rev. Higher Educ.* 185, 186 (2007).

<sup>134</sup> See Br. of Abigail Thernstrom (No. 11-345) at 18, 23.

The “basic contention that intergroup contact typically diminishes intergroup prejudice” is “firmly established.”<sup>135</sup> Indeed, interactions with select members of a different racial group can improve attitudes toward the entire group and even toward members of entirely separate racial groups.<sup>136</sup> Prejudice reduction in this context results largely from diminished anxiety and enhanced exposure to diverse perspectives.<sup>137</sup>

Prejudice reduction naturally correlates to a greater degree with positive intergroup interactions.<sup>138</sup> Regular intergroup contact on campus over time leads to an increase in positive interactions.<sup>139</sup> In cases of prolonged positive contact and intergroup friendship, members of separate groups develop more complex views of each other, which can lead to increases in empathetic ideas and attitudes.<sup>140</sup> Moreover, coordinated institutional efforts to engage students in dialogue about diversity increase students’ confidence in taking action to reduce societal prejudice.<sup>141</sup>

2. Prejudice reduction is only the beginning of the impact diversity has on student preparation for

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<sup>135</sup> Pettigrew & Tropp, *supra* note 84, at 922.

<sup>136</sup> Pettigrew & Tropp, *supra* note 69, at 766.

<sup>137</sup> Aberson & Haag, *supra* note 68, at 195; see Hermann Swart et al., *Affective Mediators of Intergroup Contact: A Three-Wave Longitudinal Study in South Africa*, 101 *J. Personality & Soc. Psychol.* 1221, 1222 (2011).

<sup>138</sup> Swart et al., *supra* note 137, at 1223.

<sup>139</sup> Aberson & Haag, *supra* note 68, at 195; Anthony L. Antonio, *Diversity and the Influence of Friendship Groups in College*, 25 *Rev. Higher Educ.* 63, 83 (2001).

<sup>140</sup> Pettigrew & Tropp, *supra* note 84, at 923; Swart et al., *supra* note 137, at 1223.

<sup>141</sup> Nagda et al., *supra* note 99, at 200.

contemporary political and economic life. A critical mass of diverse student groups promotes “the attitudes, knowledge, and skills that prepare college students for meaningful participation in a pluralistic and diverse democracy.”<sup>142</sup> This stems from the development of a student’s cultural competence and “pluralistic orientation: the ability to see multiple perspectives; the ability to work cooperatively with diverse people; the ability to discuss and negotiate controversial issues; openness to having one’s views challenged; and tolerance of others with different beliefs.”<sup>143</sup>

Intergroup contact, which is possible only in diverse settings, generally improves cross-group interacting skills, motivates civic engagement, and promotes “greater openness to and understanding of diverse people.”<sup>144</sup>

A study conducted over the course of four years at the University of Michigan evaluated the impact of diversity on democratic attributes in the student body at large as well as a subset of Michigan students enrolled in a class on diversity.<sup>145</sup> This study found that the novel experiences students have with diverse peers in college cause them to build a “sense of commonality” with those peers and to become “more

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<sup>142</sup> Ximena Zúñiga et al., *Action-Oriented Democratic Outcomes: The Impact of Student Involvement with Campus Diversity*, 46 J. College Student Dev. 660, 661 (2005); see Bowman, *supra* note 86, at 31, 49.

<sup>143</sup> Engberg, *supra* note 80, at 285; Engberg & Hurtado, *supra* note 90, at 436; Hu & Kuh, *supra* note 106, at 324-25, 330.

<sup>144</sup> Pike et al., *supra* note 78, at 167.

<sup>145</sup> Patricia Gurin et al., *The Benefits of Diversity in Education for Democratic Citizenship*, 60 J. Soc. Issues 17, 20-22 (2004).

motivated and better able to participate in a heterogeneous and complex society.”<sup>146</sup>

As many studies have found, institutional efforts to promote cooperation and awareness greatly enhance students’ personal commitment “to promote inclusion and social justice in their communities.”<sup>147</sup>

3. The American workforce is rapidly becoming more diverse, and businesses operate on an increasingly global scale.<sup>148</sup> For these reasons, “major American businesses have made clear that the skills needed in today’s increasingly global marketplace can only be developed through exposure to widely diverse people, cultures, ideas, and viewpoints.” *Grutter*, 539 U.S. at 330. In response to these demands, colleges and universities strive to produce “empowered, informed, and responsible student[s] capable of negotiating the inevitable differences in a diverse society.”<sup>149</sup>

Campus diversity is a well-established vehicle for preparing students for the diversity they will encounter in the modern workforce. Prior to enrolling in college, most students have limited experience with racial diversity, leaving them underprepared for the marketplace.<sup>150</sup> Because college presents a critical stage in moral and intellectual development, students are positioned to build the “cross-cultural workforce competencies” that are enhanced by diversity.<sup>151</sup>

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<sup>146</sup> *Id.* at 19, 28; Bowman, *supra* note 86, at 49.

<sup>147</sup> Zúñiga et al., *supra* note 142, at 676; Gurin, *supra* note 145, at 32.

<sup>148</sup> Engberg, *supra* note 80, at 285.

<sup>149</sup> *Id.*; Jayakumar, *supra* note 71, at 617, 642.

<sup>150</sup> Jayakumar, *supra* note 71, at 642.

<sup>151</sup> *Id.* at 640.

Cross-racial interaction during college correlates to enduring benefits.<sup>152</sup> Those interactions correspond to an increase in “honest, personal, and intellectual exchanges” with peers.<sup>153</sup> Furthermore, students exposed to diverse peers build enhanced leadership skills, such as the ability to negotiate conflict.<sup>154</sup> Students unaccustomed to racial diversity especially benefit from such interactions.<sup>155</sup>

Campus diversity also provides students with opportunities to experience working in diverse teams. Research demonstrates that “cognitively diverse societies, cities, and teams perform better than more homogeneous ones.”<sup>156</sup> Furthermore, studies show that businesses benefit from diverse workforces, including seeing higher revenues.<sup>157</sup> This occurs in large part because diverse perspectives, which correlate with race, improve group predictive and problem-solving abilities.<sup>158</sup> Prior experience working in diverse teams also can ease tensions sometimes seen in heterogeneous groups.<sup>159</sup>

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<sup>152</sup> *Id.* at 639; Luo & Jamieson-Drake, *supra* note 87, at 80-81.

<sup>153</sup> Engberg, *supra* note 80, at 309.

<sup>154</sup> Jayakumar, *supra* note 71, at 636-37.

<sup>155</sup> Anthony L. Antonio, *The Role of Interracial Interaction in the Development of Leadership Skills and Cultural Knowledge and Understanding*, 42 *Research Higher Educ.* 593, 607 (2001).

<sup>156</sup> Scott E. Page, *The Difference: How the Power of Diversity Creates Better Groups, Firms, Schools, and Societies* 299, 323 (2007).

<sup>157</sup> *Id.* at 325-26.

<sup>158</sup> *Id.* at 320-27; *see also supra* Part II.

<sup>159</sup> Page, *supra* note 156, at 326-28; Pettigrew & Tropp, *supra* note 84, at 922.

“The ability to adapt to different perspectives” has become “an absolute necessity for success in an increasingly diverse and global workplace.”<sup>160</sup> Social science research shows “the compelling interest of diversity to promote a range of pluralistic abilities and dispositions that will undoubtedly help future graduates navigate a workforce and society characterized by increasing diversity and complexity.”<sup>161</sup>

Colleges and universities are justified in taking steps necessary to prepare their students—all of them—to meet these challenges and achieve success.

### CONCLUSION

The Court should affirm the judgment below.

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November 2, 2015

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<sup>160</sup> Jayakumar, *supra* note 71, at 636.

<sup>161</sup> Engberg, *supra* note 80, at 312.