IN THE

Supreme Court of the United States

STUDENTS FOR FAIR ADMISSIONS, INC., Petitioner,

v.

PRESIDENT AND FELLOWS OF HARVARD COLLEGE, Respondent.

STUDENTS FOR FAIR ADMISSIONS, INC., Petitioner,

v.

UNIVERSITY OF NORTH CAROLINA, ET AL., Respondents.

ON WRITS OF CERTIORARI TO THE UNITED STATES COURTS OF APPEALS FOR THE FIRST AND FOURTH CIRCUITS

Brief for Amici Curiae Applied Materials, Inc., Corteva Agriscience, Cummins Inc., DuPont de Nemours, Inc., Gilead Sciences, Inc., LinkedIn Corp., Mastercard Inc., Micron Technology, Inc., Microsoft Corp., Shell USA, Inc. & Verizon Services Corp. in Support of Respondents

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Cases

Fisher v. Univ. of Texas at Austin, 570 U.S. 297 (2013) (Fisher I)21
<i>Fisher v. Univ. of Texas at Austin,</i> 579 U.S. 365 (2016) (<i>Fisher II</i>)22
<i>Grutter v. Bollinger</i> , 539 U.S. 306 (2003)4, 21, 22, 24
Regents of Univ. of Cal. v. Bakke, 438 U.S. 265 (1978)4, 21, 23
 Students for Fair Admissions, Inc. v. President & Fellows of Harvard Coll., 397 F. Supp. 3d 126 (D. Mass. 2019)23

Other Authorities

Achieving the Promise of a Diverse
STEM Workforce: Hearing Before the
H. Comm. on Sci., Space, & Tech.,
116th Cong. 31 (2019), https://ti-
nyurl.com/4bf68bxn1, 9, 18

Alexander Amini et al., Uncovering and
Mitigating Algorithmic Bias
Through Learned Latent Structure,
AIES '19: Proceedings of the 2019
AAAI/ACM Conference on AI, Eth-
ics, and Society (Jan. 2019),
https://tinyurl.com/4kpmtvbn8
American Indian or Alaska Native,
United States Census Bureau Glos-
sary, https://tinyurl.com/3t4bjept16
Asian, United States Census Bureau Glossary
https://tinyurl.com/mv9k44es15
Black or African American, United
States Census Bureau Glossary,
https://tinyurl.com/y5dv4v4n16
Juliet Bourke, Which Two Heads are
Better than One?: How Diverse
Teams Create Breakthrough Ideas
and Make Smarter Decisions (May
2016), https://tinyurl.com/4fwn2rrx12
Brief for Amici Curiae 65 Leading
American Businesses in Support of
Respondents, Grutter v. Bollinger,
539 U.S. 306 (2003) (Nos. 02-241,
02-516), 2003 WL 3990562

 Brief for Amici Curiae Fortune-100 and Other Leading American Businesses in Support of Respondents, Fisher v. Univ. of Texas at Austin, 570 U.S. 297 (2013) (No. 11-345), 2012 WL 3418831 (Fisher I)
 Brief of DuPont, IBM, Intel, and the National Action Council for Minori- ties in Engineering in Support of Re- spondents, <i>Fisher v. Univ. of Texas</i>, 579 U.S. 365 (2016) (No. 14-981), 2015 WL 6754987
 Brief of Fortune-100 and Other Leading American Businesses as Amici Curiae in Support of Respondents, Fisher v. Univ. of Texas at Austin, 579 U.S. 365 (2016) (No. 14-981), 2015 WL 6735839 (Fisher II)
Cummins, <i>Cummins: A Global Power</i> <i>Leader</i> , https://tinyurl.com/2xhxbcdp (last visited July 27, 2022)14
Cummins, <i>Diversity, Equity, and Inclu-</i> <i>sion in Action</i> , https://ti- nyurl.com/44rdwaec (last visited July 27, 2022)
Cummins Named Best Employer for Di- versity 2022 (May 25, 2022), https://tinyurl.com/ycyhnrr25

iv

Danielle Davis, Prioritizing Patient In- clusion and Diversity in Clinical Tri- als, Biotechnology Innovation Organization (Oct. 18, 2021), https://tinyurl.com/5ehcymah9
Miroslav Dudik et al., Assessing and Mitigating Unfairness in Credit Models with the Fairlearn Toolkit, Microsoft Research (Sept. 22, 2020), https://tinyurl.com/jcxjyaxe8
Javier Escobar et al., <i>Mentoring Re- searchers from Underrepresented Mi- norities Locally and Globally: An Update on Best Practices</i> , American College of Neuropsychopharmacol- ogy 58th Annual Meeting: Panels, Mini-Panels and Study Groups (Dec. 2019), https://tinyurl.com/3bh29fmx10
Anjalie Field et al., <i>A Survey of Race, Racism,</i> <i>and Anti-Racism in NLP</i> , The Joint Confer- ence of the 59th Annual Meeting of the As- sociation for Computational Linguistics and the 11th International Joint Conference on Natural Language Processing (July 2021), https://tinyurl.com/272z9x2s
Forbes Insights, Global Diversity and Inclusion: Fostering Innovation Through a Diverse Workforce (2011), https://tinyurl.com/5x9pfa5d11, 14

v

Selby Frame, National Conference Shows Underrepresented Researchers Mak- ing Strides, American Association for the Advancement of Science (Mar. 12, 2014), https://tinyurl.com/2n82hdts10
 William H. Frey, What the 2020 Census Will Reveal About America: Stagnat- ing Growth, an Aging Population, and Youthful Diversity, Brookings (Jan. 11, 2021), https://ti- nyurl.com/y64xfx9p
Casey Gale, <i>How Diversity and Inclu-</i> <i>sion Changed Microsoft for the Bet-</i> <i>ter</i> , Professional Convention Management Association (Sept. 16, 2021), https://tinyurl.com/42e8v2wh/6, 10
Gilead, 2021 Year in Review: Forward and Onward Together, https://ti- nyurl.com/mr3mfvuz19
Gilead, <i>Decades of Achievements: Cele-</i> <i>brating 35 Years</i> , https://ti- nyurl.com/366cacb4 (last visited July 27, 2022)
Gilead, Inclusion & Diversity at Gilead, https://tinyurl.com/492uu3w8 (last visited July 27, 2022)19, 23

vi

Gilead Launches Pharmaceutical Edu- cation Program to Increase Work- place Diversity (Oct. 4, 2021),
https://tinyurl.com/mv6m3vtr6
Boris Groysberg & Katherine Connolly, Great Leaders Who Make the Mix Work, Harv. Bus. Rev. (Sept. 2013),
Hispanic or Latino Origin, United States Census Bureau Glossary, https://tinyurl.com/3e6ru3xw16
Bas Hofstra et al., <i>The Diversity–Inno-</i> <i>vation Paradox in Science</i> , 117 The Proceedings of The National Acad- emy of Sciences (Apr. 28, 2020), https://tinyurl.com/38brzmmd
William J. Holstein, <i>Diversity is Even</i> <i>More Important in Hard Times</i> , N.Y. Times (Feb. 13, 2009)12, 17
KelloggInsight, <i>Better Decisions</i> <i>Through Diversity</i> , (Oct. 1, 2010), https://tinyurl.com/bdeesu5c13
Latino Origin, United States Census Bureau Glossary, https://tinyurl.com/3e6ru3xw16

Douglas L. Medin & Carol D. Lee, <i>Pres- idential Column: Diversity Makes</i> <i>Better Science</i> , Observer Magazine (May/June 2012), https://ti- nyurl.com/yrd96yyf7
Sarah Mervosh, <i>How Much Wealthier</i> Are White School Districts than Nonwhite Ones? \$23 Billion, Report Says, N.Y. Times (Feb. 27, 2019), https://tinyurl.com/y5j4mupo22
Microsoft, Blacks at Microsoft Scholarship, https://tinyurl.com/2e6w2f37 (last visited July 27, 2022)23
Microsoft, Diversity & Inclusion, https://tinyurl.com/2p9pdyn5 (last visited July 27, 2022)14
Microsoft, <i>Global Diversity and Inclu-</i> <i>sion</i> , https://tinyurl.com/5n7kjfh8 (last visited July 27, 2022)20
Microsoft, <i>HOLA at Microsoft Scholar-</i> <i>ships</i> , https://tinyurl.com/3b42te8j (last visited on July 27, 2022)23
Microsoft; Microsoft Corporation 2021 Annual Report, https://ti- nyurl.com/pbzde6uv14

viii

Microsoft, Women at Microsoft Scholarship,
https://tinyurl.com/3s7zwn2a.(last
visited on July 27, 2022)
visited off 5 dry 27, 2022)
National Science Board & National Science
Foundation, Science & Engineering In-
dicators: The State of U.S. Science and
Engineering 2022 (Jan. 18, 2022).
https://tinyurl.com/2bydz4mj1
National Science Board, Science &
Engineering Indicators 2018 (2018),
https://tinvurl.com/vc2ba3sx
Native Hawaiian or Other Pacific Is-
lander. United States Census Bu-
reau Glossary
https://tipyurl.com/3aak8fb9 16
Nielsen The Multicultural Edge Rising
Super Concumere (2015)
https://tipuunl.com/mn2muGy
https://tillyuri.com/htt2rpyov17
Soon F. Boardon & Ann Owong 60
Varia After Brown, There do and Cor
Tears After Brown: Trenas and Con-
sequences of School Segregation,
Ann. Rev. Soc. (June 16, 2014),
https://tinyurl.com/bdhujpc722
David Kock & Heidi Grant, Why Diverse
Teams are Smarter, Harv. Bus. Rev.
(Nov. 4, 2016)11, 12

ix

Howard Silverblatt, <i>S&P 500 2018:</i> <i>Global Sales</i> , S&P Dow Jones Indices (Aug. 2019), https://ti- nyurl.com/2p8nx82b
Stanley F. Slater et al., The Business Case for Commitment to Diversity, 51 Bus. Horizons 201 (2008)11, 13
Transcript of Oral Argument, <i>Fisher II</i> , 579 U.S. 365 (No. 14-981), https://ti- nyurl.com/2vj8fudv7
Stephen J. Ubl, An Open Letter on Eq- uity, Pharmaceutical Research and Manufacturers of America (PhRMA), https://tinyurl.com/4985cs5p (last visited July 26, 2022)
U.S. Census Bureau, Demographic Turning Points for the United States: Population Projections for 2020 to 2060 (Feb. 2020), https://ti- nyurl.com/2dhe9hky
U.S. Food & Drug Admin., <i>Clinical</i> <i>Trial Diversity</i> (May 13, 2022), https://tinyurl.com/592bkt2b13
Uncovering and Mitigating Algorithmic Bias Through Learned Latent Structure, AIES '19: Proceedings of the 2019 AAAI/ACM Conference on AI, Ethics, and Society (Jan. 2019), https://tinyurl.com/4kpmtvbn8

х

Verizon, 2021 Environmental, Social
and Governance Report, https://ti-
nyurl.com/2a6um6ra (last visited
July 27, 2022)20
Verizon, Driving Change Around the
World, https://tinyurl.com/2p8rwuzk
(last visited July 27, 2022)14
Verizon, Fact Sheet (July 22, 2022),
https://tinyurl.com/52xw4ce414

INTEREST OF AMICI CURIAE1

Amici include some of America's most successful science and technology companies. "The vibrancy and strength of the U.S. economy, and the health, security and quality of life of our citizens, are all intertwined with the health of the scientific enterprise...."² From long-established companies to those founded more recently, from makers of machines to developers of life-saving drugs, *amici* have come together to support the ingredients that unite all such enterprises: talent and teamwork.

Talent is everywhere. It is not located exclusively or disproportionately in any one particular corner of humanity. If universities are not educating a diverse student body, then they are not educating many of the best.

¹ The parties have consented to the filing of this *amicus* brief. No counsel for a party authored the brief in whole or in part. No party, counsel for a party, or any person other than *amici curiae* and their counsel made a monetary contribution intended to fund the preparation or submission of the brief.

² Achieving the Promise of a Diverse STEM Workforce: Hearing Before the H. Comm. on Sci., Space, & Tech., 116th Cong. 31 (2019) (statement of Shirley Malcom, Senior Advisor and Director of SEA Change at the American Association for the Advancement of Science), https://tinyurl.com/4bf68bxn; see also National Science Board & National Science Foundation, Science & Engineering Indicators: The State of U.S. Science and Engineering 2022 (Jan. 18, 2022), https://tinyurl.com/2bydz4mj ("The State of U.S. Science and Engineering shows that strengthening the U.S. [science and engineering] enterprise is critical to maintaining the U.S. position as a lead performer and collaborator of [science and technology] activities globally.").

Yet science and technology companies need more than just talented individuals. Research and development is a team endeavor. The same can be said of other pursuits essential to the success of science and technology companies. Today's markets require capitalizing on the racial and other diversity among us. *Amici* invest significantly in programs and practices that encourage a diverse group of talented people to join and stay with their companies, and that create inclusive cultures where teamwork arises from those individuals working together productively.

Businesses have repeatedly affirmed the importance of a race-conscious, holistic university admissions program. See Brief of Fortune-100 and Other Leading American Businesses as Amici Curiae in Support of Respondents, Fisher v. Univ. of Texas at Austin, 579 U.S. 365 (2016) (No. 14-981), 2015 WL 6735839 (Fisher II); Brief for Amici Curiae Fortune-100 and Other Leading American Businesses in Support of Respondents, Fisher v. Univ. of Texas at Austin, 570 U.S. 297 (2013) (No. 11-345), 2012 WL 3418831 (Fisher I); Brief for Amici Curiae 65 Leading American Businesses in Support of Respondents, Grutter v. Bollinger, 539 U.S. 306 (2003) (Nos. 02-241, 02-516), 2003 WL 399056. In this case, another amicus brief filed on behalf of businesses reaffirms that continuing importance.

Amici here endorse that filing, but submit this brief to emphasize the unique perspective of science and technology companies. To ensure the optimal success of their technologies and products, *amici* depend on universities admitting talented students from all backgrounds, and helping each student learn how to thrive in a diverse setting.

Importantly, this brief is grounded in the realworld of winning in the ever more competitive global economy. To illustrate how leading science and technology companies depend on diversity and inclusion efforts, this brief points to the actions of several *amici*—Cummins, Gilead, Microsoft, and Verizon. Among other things, these companies have undertaken initiatives that openly acknowledge and embrace the diversity of their employees while at the same time helping to create a more unified and effective workforce. All the signatories to this brief devote significant resources to achieving these same critical goals.

Amici urge the Court not to overrule Grutter v. Bollinger. Policies like those the Court approved in Grutter are essential to amici's ongoing efforts to attract and retain the best possible talent and achieve optimal teamwork. Those efforts, in turn, contribute to the broader health of our nation's economy.

SUMMARY OF THE ARGUMENT

I. A diverse pipeline of graduates in disciplines such as science, technology, engineering, and mathematics ("STEM") is not only a worthy goal in itself, it is also essential to the success of science and technology companies. Racial and other diversity improves scientific endeavors and the innovation of new technologies. A racially diverse workforce also helps guard against the possibility that science and technology companies will be out of touch with their increasingly diverse and global customer base.³ A diverse workforce likewise helps science and technology companies recruit the most talented people from a diverse range of backgrounds, and ensure that those individuals work together inclusively. Diversity in this context is thus not only part of an equitable society, it is a competitive imperative.

II. For science and technology companies to achieve those competitive advantages, universities must admit racially diverse classes of students and foster inclusive cultures. As this Court recognized nearly twenty years ago, "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. Indeed, "the 'nation's future depends upon leaders trained through wide exposure' to the ideas and mores of students as diverse as this Nation of many peoples." Regents of Univ. of Cal. v. Bakke, 438 U.S. 265, 313 (1978) (opinion of Powell, J.). That remains true today. In the absence of workable race-neutral alternatives, universities must be able to employ raceconscious, holistic admissions practices to create the best recruiting classes for science and technology companies.

³ Diversity refers here to the workforce and the population as a whole, not to any individual. And it includes but is not limited to racial diversity. Diversity may encompass, for example, people of different genders, people with different ethnicities, straight and LGBTQ+ people, people with and without disabilities, and people with a range of religious beliefs.

ARGUMENT

I. Racial diversity is essential to the success of science and technology companies.

Assembling diverse teams is both the right thing to do and a competitive imperative for today's science and technology companies. As more fully described below, science and technology companies with heterogeneous workforces are more successful than those with homogeneous workforces.

A diverse workforce is a more talented workforce because it draws from a broader pool of the population, and it is a more effective workforce because it brings different perspectives to solving complex problems. Indeed, one of the many benefits of inclusion and diversity is that they inspire innovation. As Cummins President and Chief Executive Officer Jennifer Rumsey has explained, "[Cummins] firmly believe[s] that because today's societal and environmental challenges impact all of us, we must all have a role in addressing them.... Creating inclusive environments where employees can bring their full selves to work is key to ensuring we have the best, most diverse solutions to these problems."⁴

As Mary Ellen Smith, Corporate Vice President of Microsoft Business Operations, has similarly expressed, "Microsoft is stronger when we expand opportunity and we have a diverse workforce that

⁴ Cummins Named Best Employer for Diversity 2022 (May 25, 2022), https://tinyurl.com/ycyhnrr2.

represents our customers."⁵ Likewise, Gilead has articulated "a societal need to accelerate the growth of scientists from underrepresented parts of society into the pharmaceutical sector."⁶

A diverse workforce is also necessary for a science and technology company to succeed in the global marketplace. Diversity is of particular importance in the STEM fields, "given the increasingly international and collaborative nature of virtually all advanced research."⁷ Recognizing the competitive need to establish a diverse and inclusive workforce, *amici* have adopted specific programs and practices to help them create and maintain such teams.

A. Diversity promotes technological innovation and enhances scientific advancement.

Neither the scientific method nor technological innovation is practiced in a societal vacuum. To ensure that no avenue of research is overlooked, it is important that team members bring different

⁵ Casey Gale, *How Diversity and Inclusion Changed Microsoft for the Better*, Professional Convention Management Association (Sept. 16, 2021), https://tinyurl.com/42e8v2wh/.

⁶ Gilead Launches Pharmaceutical Education Program to Increase Workplace Diversity (Oct. 4, 2021), https://tinyurl.com/mv6m3vtr.

⁷ Brief of DuPont, IBM, Intel, and the National Action Council for Minorities in Engineering in Support of Respondents, *Fisher v. Univ. of Texas*, 579 U.S. 365 (2016) (No. 14-981), 2015 WL 6754987, at *10.

perspectives to the work.⁸ As the then-president of the Association for Psychological Science explained (along with a co-author), "attention to cultural membership and cultural practices is central to equity goals and national needs, but also equally important for the construction of knowledge and for the enterprise of science itself."⁹ Indeed,

[v]alidity in the sciences involves much more than attending to canons about the need for proper controls, replicability, and the like. It involves choices about what problems to study, what populations to study, and what procedures and measures should be used. In making these choices, diverse perspectives and values are important.¹⁰

As Microsoft Research, together with scholars in the field of computational linguistics, put it, "[r]esearch is ... carried out by people who determine what projects to pursue and how to approach them."¹¹

⁸ See Transcript of Oral Argument at 55:16-23, Fisher II, 579 U.S. 365 (No. 14-981), https://tinyurl.com/2vj8fudv ("[W]hat unique perspective does a minority student bring to a physics class?") (question posed by Chief Justice Roberts).

⁹ Douglas L. Medin & Carol D. Lee, *Presidential Column: Diversity Makes Better Science*, Observer Magazine (May/June 2012), https://tinyurl.com/yrd96yyf.

 $^{^{10}}$ Id.

¹¹ Anjalie Field et al., A Survey of Race, Racism, and Anti-Racism in NLP, The Joint Conference of the 59th Annual Meeting of the Association for Computational Linguistics and the 11th International Joint Conference on Natural Language

As a result, companies whose workforces are racially and otherwise diverse will be better equipped to identify and address any number of scientific and technological challenges. For example, algorithmic bias can infect facial recognition software¹² and the credit models used by the financial services industry.¹³ Racial bias can also hinder the development of natural language processing (the process of creating machines that respond to text or voice data).¹⁴ And there is a pressing need to enroll more people of color in clinical trials to ensure the efficacy and safety of pharmaceutical products for all patients.¹⁵ There are

¹³ Miroslav Dudik et al., Assessing and Mitigating Unfairness in Credit Models with the Fairlearn Toolkit, Microsoft Research (Sept. 22, 2020), https://tinyurl.com/jcxjyaxe (describing how Microsoft's Fairlearn toolkit mitigates the disparate impact that financial services algorithms—e.g., models that predict the probability of default for loan applicants—can otherwise have).

¹⁴ Field et al., *supra* note 11 (explaining that natural language processing systems encode racial bias).

¹⁵ Stephen J. Ubl, *An Open Letter on Equity*, Pharmaceutical Research and Manufacturers of America (PhRMA), https://tinyurl.com/4985cs5p (last visited July 26, 2022) (noting that the

Processing (July 2021), https://tinyurl.com/272z9x2s; *see also id.* ("It is difficult to envision reducing or eliminating racial differences in NLP systems without changes in the researchers building these systems.").

¹² Alexander Amini et al., Uncovering and Mitigating Algorithmic Bias Through Learned Latent Structure, AIES '19: Proceedings of the 2019 AAAI/ACM Conference on AI, Ethics, and Society, 289-95 (Jan. 2019), https://tinyurl.com/4kpmtvbn (describing proposal to solve the problem that facial recognition algorithms trained with biased data—i.e., data in which certain segments of society are underrepresented—result in algorithmic discrimination).

many more examples—and many yet to be identified and tackled.

Importantly, those "from underrepresented groups have origins, concerns, and experiences that differ from groups traditionally represented, and their inclusion ... diversifies ... perspectives."¹⁶ "In fact, historically underrepresented groups often draw relations between ideas and concepts that have been traditionally missed or ignored."¹⁷ As Dr. Shirley Malcom of the American Association for the Advancement of Science explained in testimony before Congress, "the lenses that diverse people bring to scientific research and discovery improve the inputs and the outcomes."¹⁸ Indeed, she added,

industry must "address[] the systemic challenges and skepticism that keep Black and Brown communities from participating in clinical trials because of historic wrongs"); see also Danielle Davis, Prioritizing Patient Inclusion and Diversity in Clinical Trials, Biotechnology Innovation Organization (Oct. 18, 2021), https://tinyurl.com/5ehcymah.

¹⁶ Bas Hofstra et al., *The Diversity–Innovation Paradox in Science*, 117 The Proceedings of The National Academy of Sciences, 9284-91, at 9284-85 (Apr. 28, 2020), https://ti-nyurl.com/38brzmmd.

¹⁷ *Id.*; see also id. ("[T]his paper finds demographically underrepresented students innovate at higher rates than majority students, but their novel contributions are discounted and less likely to earn them academic positions. The discounting of minorities' innovations may partly explain their underrepresentation in influential positions of academia.").

¹⁸ Statement of Shirley Malcom to Congress, *supra* note 2 at 116th Cong. 33.

There is no more fertile ground for innovation than a diversity of experience. And that diversity of experience arises from a difference of cultures, ethnicities, and life backgrounds. A successful scientific endeavor is one that attracts a diversity of experience, and cultivates those differences, acknowledging the creativity they spark.¹⁹

Underrepresented "researchers are adding knowledge to underresearched topics as they bring more inclusive cultural relevance to their fields of study."²⁰ In addition, "underrepresented populations continue to face health and mental health disparities and increasing the number of minority researchers may help expand research focusing on these populations."²¹ For example, "[i]ncluding more diverse talent within Microsoft has ... led to some major company breakthroughs," "including innovations such as Eye Control in Windows 10, Seeing AI, Learning Tools for OneNote, and Xbox Adaptive Controllers."²²

¹⁹ *Id.* (quoting inventor Joseph DeSimone).

²⁰ Selby Frame, National Conference Shows Underrepresented Researchers Making Strides, American Association for the Advancement of Science (Mar. 12, 2014), https://tinyurl.com/2n82hdts.

²¹ Javier Escobar et al., *Mentoring Researchers from Underrepresented Minorities Locally and Globally: An Update on Best Practices*, American College of Neuropsychopharmacology 58th Annual Meeting: Panels, Mini-Panels and Study Groups (Dec. 2019), https://tinyurl.com/3bh29fmx.

²² Gale, *supra* note 5.

In addition to improving the work of science and technology companies by presenting different experiences, ideas, and needs, diverse workforces also contribute to the success of such companies through their ability to innovate. Tech companies work on unconventional problems that require creative solutions, and diverse groups consistently outperform homogenous groups on exactly that type of problem solving. As noted, diversity in this context refers to the workforce collectively, not to any particular individual. Teams composed of people with different backgrounds perform better because of their broad range of thoughts and ideas. "Diverse teams ... are more likely to have access to the breadth of information necessary to solve complex problems."23 Those diverse perspectives drive innovation: "Multiple and varied voices have a wide range of experiences, and this can help generate new ideas about products and practices."24 Indeed, "[t]here's no doubt that racially/culturally diverse groups will generate a broader read of the environment (and therefore the problem they are trying to

²³ Stanley F. Slater et al., *The Business Case for Commitment to Diversity*, 51 Bus. Horizons 201, 203 (2008).

²⁴ Forbes Insights, *Global Diversity and Inclusion: Fostering Innovation Through a Diverse Workforce* 5 (2011), https://tinyurl.com/5x9pfa5d; *see also* David Rock & Heidi Grant, *Why Diverse Teams are Smarter*, Harv. Bus. Rev. (Nov. 4, 2016) (results of one study "revealed that businesses run by culturally diverse leadership teams were more likely to develop new products than those with homogenous leadership").

resolve), than one generated by a racially/culturally homogenous group." 25

Diverse teams tend to engage in a more rigorous and thoughtful decision-making process. Because different viewpoints are more common in diverse groups than in their homogeneous counterparts, disagreements are also more common in diverse groups. By contrast, homogeneous groups tend to resort to "groupthink."²⁶ Differences in opinion push individuals to think critically. In addition, "visible diversity can trigger positive behaviors of listening, questioning and diligent thinking in the visibly dominant majority."27 Diverse teams are thus "more likely to constantly reexamine facts" and "remain objective," and "may also encourage greater scrutiny of each member's actions."28 In essence, diverse teams "process information more carefully."29 Accordingly, although homogeneous groups may reach decisions more quickly, diverse groups tend to drive better outcomes

²⁵ Juliet Bourke, Which Two Heads are Better than One?: How Diverse Teams Create Breakthrough Ideas and Make Smarter Decisions 7 (May 2016), https://tinyurl.com/4fwn2rrx.

²⁶ See William J. Holstein, *Diversity is Even More Important in Hard Times*, N.Y. Times (Feb. 13, 2009) ("[I]t's difficult, if not impossible, for [a] homogenous board[] to challenge and offer different perspectives, unique experiences and the broad-based wisdom that makes the board, and therefore the company, as effective as they can be.").

²⁷ Bourke, *supra* note 25 at 12.

 $^{^{\}rm 28}$ Rock & Grant, supra note 24.

 $^{^{29}}$ Id.

because their decision-making process is more rigorous. $^{\rm 30}$

For all of these reasons, *amici* agree that a diverse and inclusive workforce provides a significant competitive advantage in research and development and other problem solving essential to their success.

B. A diverse workforce helps science and technology companies compete globally and serve their increasingly heterogeneous customer base.

"A diverse workforce ... prevents an organization from becoming too insular and out of touch with its increasingly heterogeneous customer base."³¹ The pharmaceutical context is one example, as "people of different ages, races, and ethnicities may react differently to certain medical products."³² In this context, building and growing a workforce that is fully representative of its customers and the communities it serves is paramount to a company's success.

As Microsoft has put it, "We design for all human experiences and needs. So, we strive to gather, listen

³⁰ See KelloggInsight, Better Decisions Through Diversity, (Oct. 1, 2010), https://tinyurl.com/bdeesu5c; see also Slater, supra note 23, at 203 ("Opinions of a culturally diverse workforce can lead to higher quality decisions.").

³¹ Boris Groysberg & Katherine Connolly, *Great Leaders Who Make the Mix Work*, Harv. Bus. Rev. (Sept. 2013), https://ti-nyurl.com/4hxzt46n.

³² U.S. Food & Drug Admin., *Clinical Trial Diversity* (May 13, 2022), https://tinyurl.com/592bkt2b.

to, and include as many perspectives as possible."³³ What is more, "[a] diverse and inclusive workforce can ... help ensure that a company's products and services are respectful of their clients' cultures."³⁴

Understanding the diverse needs of customers is particularly important for *amici*, given that they operate globally in the market for their goods and services. Verizon, for example, has 150 offices around the world and nearly 1,500 retail locations; Cummins has more than 500 company-owned and independent distributor facilities and more than 7,500 dealer locations in over 190 countries and territories; Microsoft has offices in more than 100 countries; and Gilead has operations in nearly 40 countries.³⁵ More generally, in 2018, sales in foreign countries accounted for 42.9% of sales made by the American companies included in the S&P 500 index.³⁶

And within America, the customer base is increasingly heterogenous. Indeed, minority populations are

³⁶ Howard Silverblatt, S&P 500 2018: Global Sales, S&P Dow Jones Indices 3 (Aug. 2019), https://tinyurl.com/2p8nx82b.

³³ Microsoft, Diversity & Inclusion, https://tinyurl.com/2p9pdyn5 (last visited July 27, 2022).

³⁴ Forbes Insights, *supra* note 24, at 5.

³⁵ Cummins, Cummins: A Global Power Leader, https://tinyurl.com/2xhxbcdp (last visited July 27, 2022); Verizon, Driving Change Around the World, https://tinyurl.com/2p8rwuzk (last visited July 27, 2022); Verizon, Fact Sheet (July 22, 2022), https://tinyurl.com/52xw4ce4; Microsoft; Microsoft Corporation 2021 Annual Report, https://tinyurl.com/pbzde6uv; Gilead, Decades of Achievements: Celebrating 35 Years, https://tinyurl.com/366cacb4 (last visited July 27, 2022).

growing significantly faster than non-minority populations.³⁷ Latinos or Hispanics³⁸ contributed to more than half of the nation's population growth between 2010 and 2019, while Asian Americans, Black Americans, and persons of two or more races accounted for 47 percent of the nation's growth during that time period.³⁹ And younger generations are more diverse than older generations.⁴⁰ The non-Hispanic White population is expected to be just 44.3 percent of the American population by 2060, with the group of people who are two or more races expected to grow by 200 percent in that time.⁴¹ By 2060, the Asian⁴² population in the United States is expected to have doubled,

³⁷ U.S. Census Bureau, *Demographic Turning Points for the United States: Population Projections for 2020 to 2060*, at 6-7 (Feb. 2020), https://tinyurl.com/2dhe9hky.

³⁸ This brief uses the language in the relevant cited source to designate different racial and ethnic groups.

³⁹ William H. Frey, What the 2020 Census Will Reveal About America: Stagnating Growth, an Aging Population, and Youthful Diversity, Brookings (Jan. 11, 2021), https://tinyurl.com/y64xfx9p.

 $^{^{40}}$ Id.

⁴¹ U.S. Census Bureau, *Demographic Turning Points, supra* note 37, at 6, 7.

⁴² As used in the census, "Asian" is an expansive term that refers to "[a] person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent, including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam." *Asian*, United States Census Bureau Glossary, https://tinyurl.com/mv9k44es.

the Hispanic⁴³ population to have nearly doubled, and the American Indian and Alaska Native,⁴⁴ Black or African American,⁴⁵ and Native Hawaiian and Other Pacific Islander⁴⁶ populations to each have increased by approximately 40 percent. And the country's foreign-born population is expected to increase from 44 million in 2016 (14 percent of the population) to 69 million in 2060 (17 percent of the population).⁴⁷

Meanwhile, the buying power of multicultural consumers (i.e., those identifying by a census category other than non-Hispanic White) has increased exponentially in recent decades, from \$661 billion in 1990

⁴⁵ The census uses "Black or African American" to mean "[a] person having origins in any of the Black racial groups of Africa." *Black or African American*, United States Census Bureau Glossary, https://tinyurl.com/y5dv4v4n.

⁴³ The census uses "Hispanic" to mean "a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin regardless of race." *Hispanic or Latino Origin*, United States Census Bureau Glossary, https://tinyurl.com/3e6ru3xw.

⁴⁴ The census uses "American Indian or Alaska Native" to mean "[a] person having origins in any of the original peoples of North and South America (including Central America) and who maintains tribal affiliation or community attachment." *American Indian or Alaska Native*, United States Census Bureau Glossary, https://tinyurl.com/3t4bjept.

⁴⁶ The census uses "Native Hawaiian or Other Pacific Islander" to mean "[a] person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands." *Native Hawaiian or Other Pacific Islander*, United States Census Bureau Glossary, https://tinyurl.com/3aak8fb9.

⁴⁷ U.S. Census Bureau, *Demographic Turning Points, supra* note 37, at 3-4.

to \$3.4 trillion in 2014.⁴⁸ And multicultural consumers' share of buying power will only grow: Hispanics, Asian-Americans, and African-Americans already significantly outstrip non-Hispanic Whites in years of effective buying power, which takes into account median age and average lifespan.⁴⁹ To succeed, then, *amici* must be poised to understand and appeal to people among all segments of a diverse population, or be rendered irrelevant.⁵⁰

C. Science and technology businesses that hire a diverse workforce and foster an inclusive culture are best able to attract, retain, and benefit from top talent.

Science and technology companies devote significant resources to build a workforce that draws from all and allows all employees to reach their potential to the company's benefit. Otherwise, the talented people will go elsewhere, and the business itself will suffer. Indeed, "demographic groups with lower rates of S&E [science and engineering] participation represent an underutilized source of human capital for

⁴⁸ Nielsen, *The Multicultural Edge: Rising Super Consumers* 9 (2015), https://tinyurl.com/mr2rpy6v (representing a percentage increase of 415%, more than double the 204% overall increase in U.S. buying power).

⁴⁹ *Id.* at 11 (years of effective buying power for African-Americans, Asian-Americans, and Hispanics exceed that of non-Hispanic whites by 5.6, 15.6, and 19.8 years, respectively).

⁵⁰ See Holstein, supra note 26 (Chairman and CEO of the Pepsi Bottling Group stating: "In the United States, the multicultural consumer today is over a third of the population So making sure we have a diverse board and a diverse work force helps us understand the needs of the marketplace.").

S&E work," which "negatively impact[s] productivity and innovation."⁵¹ As Dr. Shirley Malcom of the American Association for the Advancement of Science explained to Congress:

At each successive level there are losses from the talent pool for STEM for all women as well as for African American, American Indian/Alaska Native and Hispanic/Latinx men. This affects our national ability to compete in the global economy, our need to diversify our faculties and K-12 STEM educators, and to address global challenges such as climate change, health and national security.⁵²

Amici's actions reflect the business imperative of attracting diverse candidates to ensure that they attract and retain the top talent. Many *amici* have established employee groups that foster a sense of community not only among those groups, but across all employees, by encouraging dialogue and amplifying a range of perspectives and experiences. And as explained above, a company's success is not just about assembling the most talented individuals—it also, critically, relies on those individuals coming together as a team that is then greater than the sum of its parts.

⁵¹ National Science Board, *Science & Engineering Indicators* 2018, at 106 (2018), https://tinyurl.com/yc2ba3sx.

 $^{^{52}}$ Malcom statement to Congress, supra note 2 at 116th Cong. 35.

For example, Cummins has established employee resource groups where differences are embraced in keeping with the company's vision of an inclusive and equitable work environment. Cummins has more than 150 active chapters worldwide across six different dimensions of diversity.⁵³ Cummins has also created a Global Inclusion Leadership Council enabling those groups to effect positive change within the company by breaking down barriers, thereby enhancing job satisfaction, teamwork, and productivity.⁵⁴

Similarly, Gilead has established six employee resource groups to foster a sense of belonging and inclusion at the company and thus help create a more unified and cohesive workforce. Nearly 60% of Gilead employees belong to at least one of those groups, which include, for example, Gilead Leadership of Black Employees, Latinos at Gilead Sciences, and Women at Gilead.⁵⁵

Likewise, Microsoft has nine employee resource groups to enable Microsoft to engage and connect to communities inside and outside the company. For example, Microsoft's Blacks at Microsoft group has spearheaded an annual outreach event to educate students on careers in the tech industry. And the Disability at Microsoft group collaborates with product

⁵³ Cummins, *Diversity, Equity, and Inclusion in Action*, https://tinyurl.com/44rdwaec (last visited July 27, 2022).

 $^{^{54}}$ See id.

⁵⁵ Gilead, Inclusion & Diversity at Gilead, https://tinyurl.com/492uu3w8 (last visited July 27, 2022); see also Gilead, 2021 Year in Review: Forward and Onward Together, https://tinyurl.com/mr3mfvuz.

teams to design, develop, and build more broadly accessible and inclusive products. 56

A foremost objective for Verizon as well is to create an inclusive environment that empowers employees as vital contributors. Verizon has ten employee resource groups that champion diversity and support corporate engagement while solving complex challenges within and outside the workplace. These efforts complement Verizon's unconscious bias training for employees and conscious inclusion and anti-racism training for those in leadership positions, designed to mitigate bias and drive behavioral change that improves well-being and performance.⁵⁷

Crucially, these kinds of initiatives, while helping and supporting individual employees, benefit the entire workforce and enhance company productivity. As *amici*'s actions illustrate, science and technology companies devote great effort to creating a workforce that not only draws from all, but also fosters a culture where all work well together. It is only through this diverse and inclusive setting that science and technology companies can innovate and perform at their best.

⁵⁶ Microsoft, *Global Diversity and Inclusion*, https://ti-nyurl.com/5n7kjfh8 (last visited July 27, 20220).

⁵⁷ See Verizon, 2021 Environmental, Social and Governance Report 39-41, https://tinyurl.com/2a6um6ra (last visited July 27, 2022).

II. Science and technology companies need universities to admit diverse classes of individuals and to foster inclusive cultures.

As this Court has consistently affirmed, a diverse student body and the benefits it brings constitute a compelling interest that can justify the consideration of race in university admissions programs. See Fisher I, 570 U.S. at 309 ("[O]btaining the educational benefits of 'student body diversity is a compelling state interest.""); Grutter, 539 U.S. at 325 ("[S]tudent body diversity is a compelling state interest that can justify the use of race in university admissions."); Bakke, 438 U.S. at 314 (opinion of Powell, J.) ("[T]he interest of diversity is compelling in the context of a university's admissions program....").

Important business interests confirm the settled view that diversity, including racial diversity, gives rise to a compelling and substantial interest for university admissions programs. University admission decisions affect where students attend university, which, in turn, affects who will graduate with the educational qualifications that *amici* believe are necessary for success in their workforce. To have the largest market of talented people prepared to join *amici*'s businesses, graduates must represent as wide a range of backgrounds as possible. And because K-12 schools in the United States are increasingly racially homogeneous, it is especially important that universities are able to create racially diverse learning environments.⁵⁸

So too, a diverse student body "prepares students for an increasingly diverse workforce and society." Fisher II, 579 U.S. at 381 (quoting *Grutter*, 539 U.S. at 330). People educated in such environments are ready to contribute to the inclusive environment amici need: They are prepared to listen to others' ideas, to build consensus, and to think expansively. They are able to integrate different perspectives, thereby approaching problem-solving in a more openminded and creative way. These cognitive benefits translate directly to the science and technology sector, where rigorous critical thinking and creative problem-solving skills are crucial. And diverse higher education environments foster not only cognitive skills, but also socio-cognitive skills such as leadership that are essential to amici's success.

To satisfy the standard for articulating a compelling interest set forth in *Fisher I* and *Fisher II*, universities need not supply target metrics or other numerical goalposts—indeed, such a measure could

⁵⁸ See Sarah Mervosh, How Much Wealthier Are White School Districts than Nonwhite Ones? \$23 Billion, Report Says, N.Y. Times (Feb. 27, 2019), https://tinyurl.com/y5j4mupo (report found that in 2016 over half of U.S. schoolchildren attended school in racially concentrated districts where over 75 percent of students are either white or nonwhite); see also Sean F. Reardon & Ann Owens, 60 Years After Brown: Trends and Consequences of School Segregation, Ann. Rev. Soc. (June 16, 2014), https://tinyurl.com/bdhujpc7 (observing that, depending on the definition used, racial segregation in schools has either increased or remained stagnant since 1980).

run afoul of the Court's prohibition on racial quotas. See Bakke, 438 U.S. at 307 (opinion of Powell, J.). Here, Respondents' interest in diversity is "real and profound," and there are substantial and specific educational benefits that flow from student body diversity. E.g., Students for Fair Admissions, Inc. v. President & Fellows of Harvard Coll., 397 F. Supp. 3d 126, 134 (D. Mass. 2019). That many of those benefits are also essential to amici's continued success further underscores the compelling and substantial nature of Respondents' interests.

Amici's efforts again provide concrete illustration of the important role universities play in advancing science and technology business interests. Microsoft provides college scholarships to Black and African American students, women and nonbinary students, and students of Hispanic and Latinx descent who want to pursue careers in science, technology, engineering, or business.⁵⁹ Similarly, Gilead funds scholarships for, and works to recruit, individuals from diverse backgrounds.⁶⁰

Likewise, Cummins actively seeks to recruit from groups that have been historically disadvantaged, including women, African Americans, Latinx and LGBTQ+ individuals, and people with disabilities.

⁵⁹ Microsoft, Blacks at Microsoft Scholarship, https://tinyurl.com/2e6w2f37 (last visited July 27, 2022); Microsoft, Women at Microsoft Scholarship, https://tinyurl.com/3s7zwn2a (last visited on July 27, 2022); Microsoft, HOLA at Microsoft Scholarships, https://tinyurl.com/3b42te8j (last visited on July 27, 2022).

⁶⁰ Gilead, Inclusion and Diversity at Gilead, supra note 55.

Early career and university hiring are a critical talent pipeline for the future of Cummins as an innovative industry leader. Cummins has longstanding partnerships with the Society of Women Engineers, Great Minds in STEM, Historically Black Colleges and Universities, the Society of Hispanic Professional Engineering, and the National Society of Black Engineers—offering scholarships through all of these channels.

Verizon also partners with numerous campus and other organizations to recruit and hire diverse talent, including partnerships with Grace Hopper, Society of Hispanic Professional Engineers, Out and Equal, and many others. And Verizon is a founding sponsor of Break Through Tech, a collaborative initiative with Cornell Tech at the City University of New York and over 100 corporate partners. The program propels women—from high school through graduate school into rewarding careers in technology with a focus on education, work experience, and community building.

In *Grutter*, Justice O'Connor wrote:

In order to cultivate a set of leaders with legitimacy in the eyes of the citizenry, it is necessary that the path to leadership be visibly open to talented and qualified individuals of every race and ethnicity.

Grutter, 539 U.S. at 332. Although *Grutter* was issued almost two decades ago, the need for a "flexible use of race as a 'plus' factor" in university admissions programs, *id.* at 335, remains. That is what the practices of today's leading science and technology companies confirm.

CONCLUSION

For the foregoing reasons, the Court should affirm.

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