

GENDER AND RACE IN ACADEMIC MEDICINE

ASSOCIATION OF PROFESSORS OF
DERMATOLOGY

2016 ANNUAL MEETING

Chicago

7 October 2016

Vivian W. Pinn, M.D.

Senior Scientist Emerita, Fogarty International Center, NIH
Founding Director, (Retired), NIH Office of Research on Women's Health



In the Nation's Compelling Interest

Institute of Medicine Report (2004)

- ... Minority researchers often bring a sensitivity to and understanding of minority health concerns that can significantly influence the design and interpretation of minority health research. This sensitivity can also significantly influence decisions regarding resource allocation and research priorities ...
- ... Analogously, women's health research has grown exponentially and has benefited from the increased presence of women among health researchers and policy makers. As a result, scientific knowledge of women's health (and subsequent breakthroughs in the understanding and treatment of women's health concerns) has improved dramatically over the past several decades...
- ... **This is not to suggest that women and minority scientists and clinicians should be expected to work exclusively in women's and minority health domains; rather, it suggests that gender and racial/ethnic diversity in the health research enterprise can lead to important development and expansion of these fields ...**



Diversity and Inclusion in Academic Medicine: A Strategic Planning Guide

Second Edition

Learn

Serve

Lead

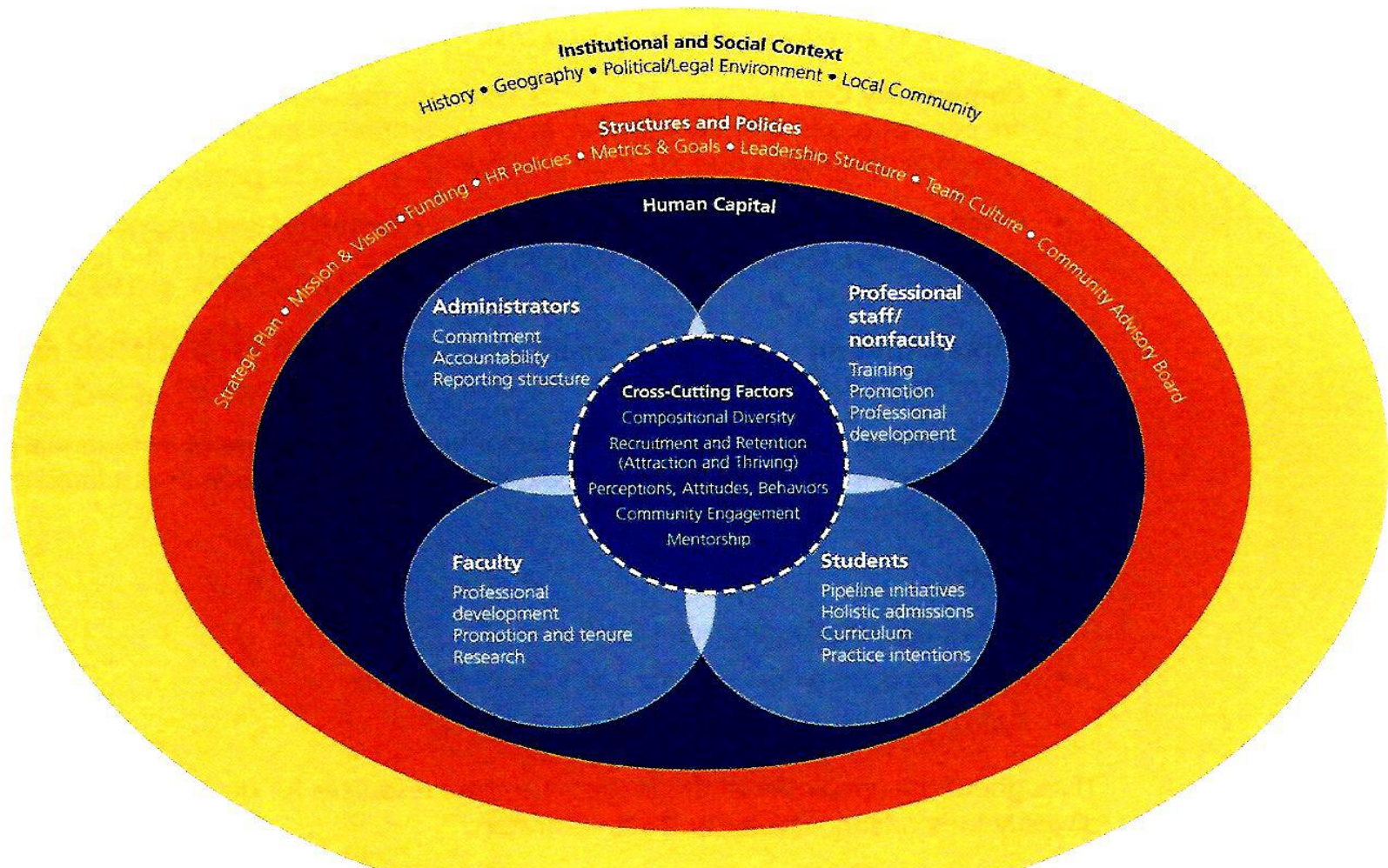
Association of
American Medical Colleges

- Diversity 3.0 is a diversity and inclusion (excellence) to Diversity 3.0, which

Competing with
Diverse people,
American Medical Colleges

CULTURE OF DIVERSITY & INCLUSION IN ACADEMIC MEDICINE

Diversity 3.0 Framework



- Diversity 3.0 is a diversity and inclusion framework spanning from Diversity 1.0 (diversity as a fairness issue competing with excellence) to Diversity 3.0, which integrates diversity into the core of an institution and acknowledges that diverse people,

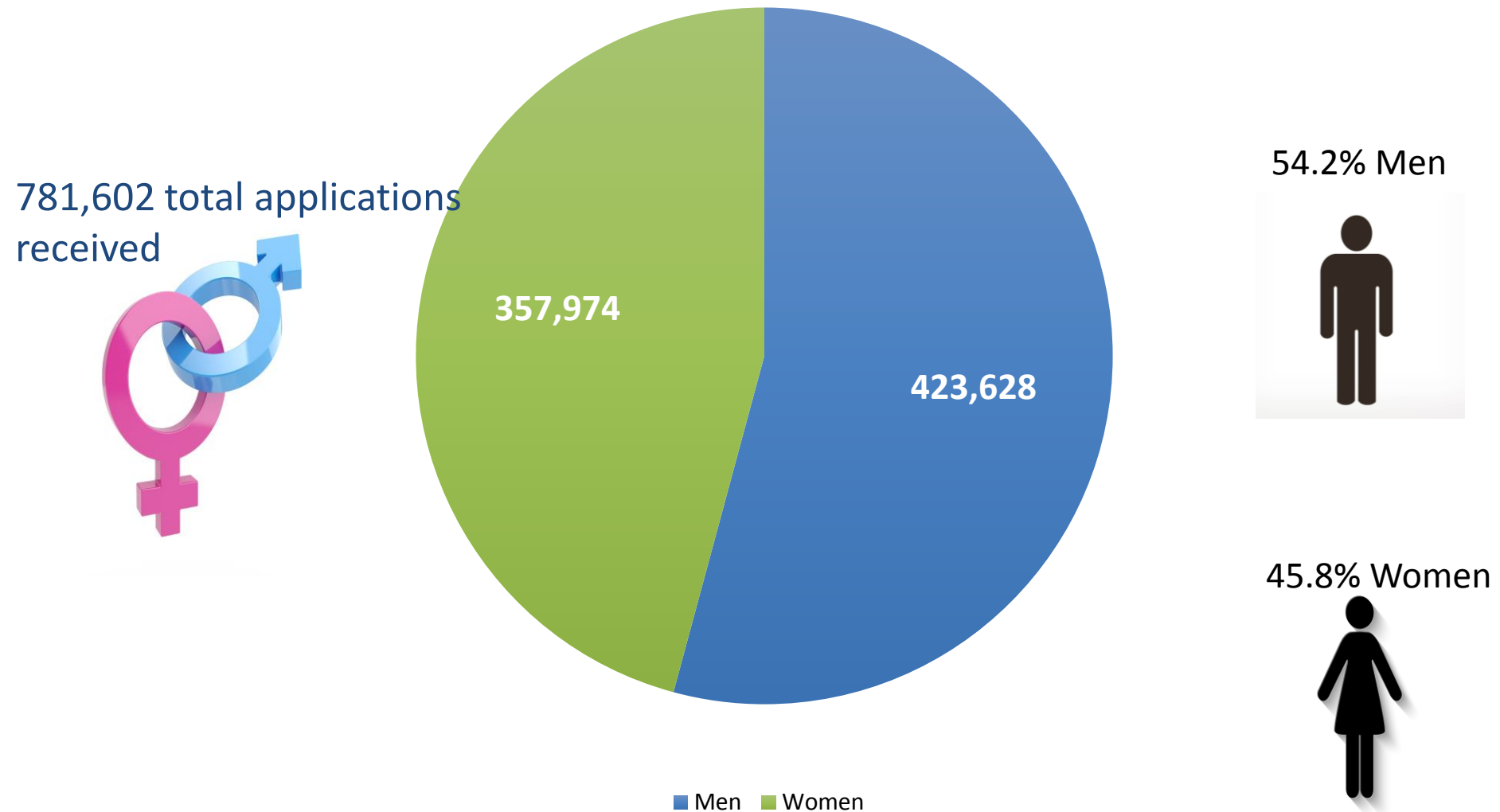
***WOMEN & MINORITIES
IN
ACADEMIC MEDICINE
&
BIOMEDICAL CAREERS***

=====

*Past to Present: Data
Barriers to Entry &
Leadership Advancement
Personal Perspectives*

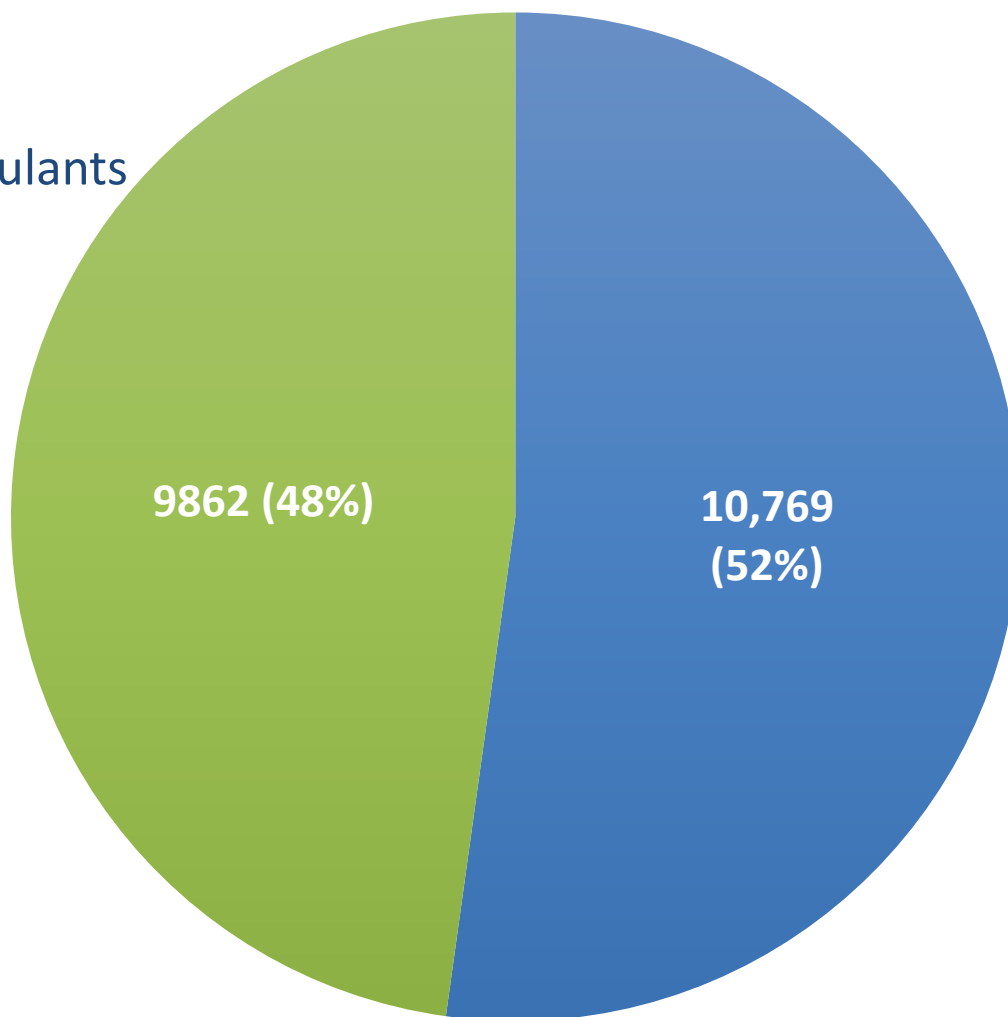


U.S. Medical School Applications Male vs. Female 2015-2016



U.S. Medical School Matriculants Male vs. Female 2015-2016

20,631 total matriculants



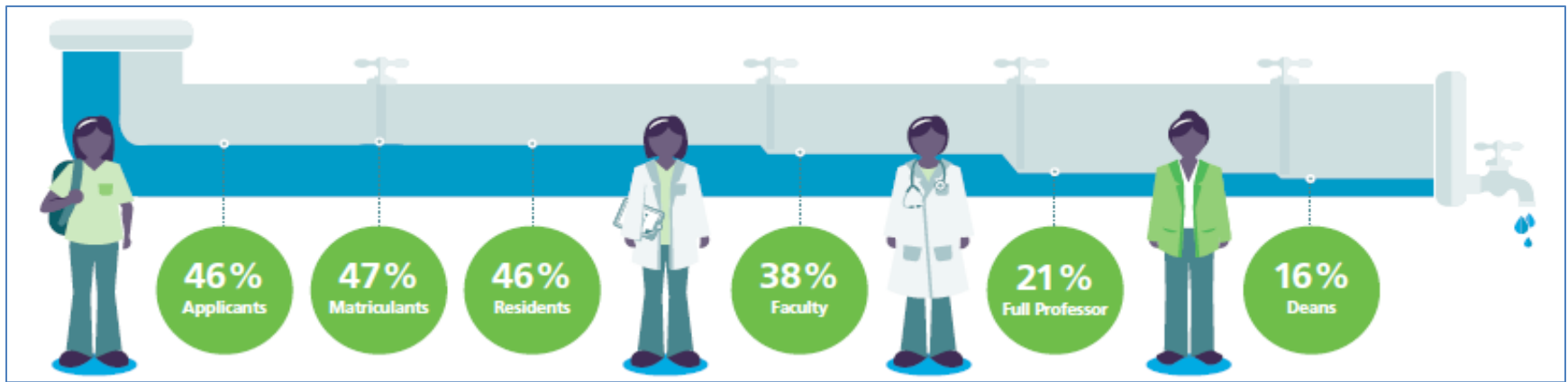
52.2% Men



47.8% Women



■ Men ■ Women



- Although the numbers of women applying to medical school have increased, the percentage has decreased...
- The numbers of women in medical school leadership positions have increased but still remain low



Faculty Workforce

Similar to the findings about women entering medicine, the percentage of women in academic medicine has remained **relatively flat** over the past five years and women still are underrepresented.

While the percentage of full-time faculty who are women has increased from 30 percent to 38 percent over a 10-year period, the proportion of full-time faculty who are women has risen only 2 percentage points in the past few years, as the *2009–2010 Women in Medicine and Science Benchmarking Report* cited 36 percent of full-time faculty were women. In looking particularly at how women are represented among higher academic ranks, the proportion of women continues to be lower when compared to male counterparts as the prestige of the position increases. For example, in 2014 women comprised 44 percent of all full-time assistant professors, 34 percent of full-time associate professors, and 21 percent of full-time full professors. Similar to women entering residency positions, full-time women faculty comprise far less of the proportion of faculty in specific departments such as surgery and radiology. Additionally, since 2008–09, the percentage of promotions to associate professor or full professor who were women has risen only slightly, and the proportion of new tenures who were woman has remained the same (30%).

Source: AAMC –
THE STATE OF
WOMEN IN
ACADEMIC
MEDICINE 2014

U.S. Medical School Faculty Trends: Percentages

FEMALE FACULTY

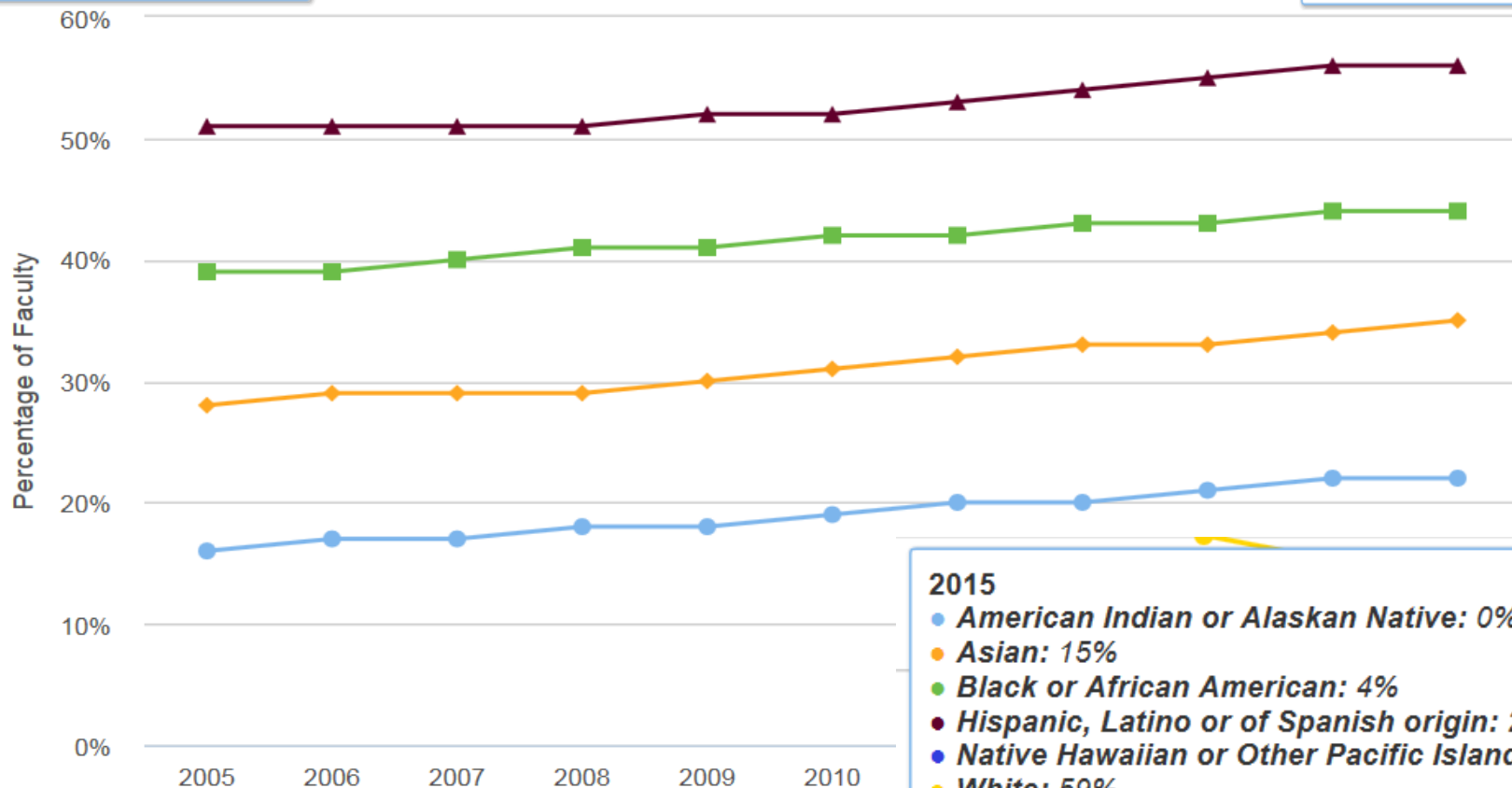
U.S. Medical School Female Faculty as a Percentage of Each Rank

2005

● Professor: 16%
 ● Associate Professor: 28%
 ● Assistant Professor: 39%
 ● Instructor: 51%

2015

● Professor: 22%
 ● Associate Professor: 35%
 ● Assistant Professor: 44%
 ● Instructor: 56%



Click to add or remove line from report

● Professor
 ● Associate Professor
 ● Instructor

● Associate Professor

2015

● American Indian or Alaskan Native: 0%
 ● Asian: 15%
 ● Black or African American: 4%
 ● Hispanic, Latino or of Spanish origin: 2%
 ● Native Hawaiian or Other Pacific Islander: 0%
 ● White: 59%
 ● Multiple Race - Hispanic: 2%
 ● Multiple Race - Non-Hispanic: 3%
 ● Other or Unknown Race: 14%

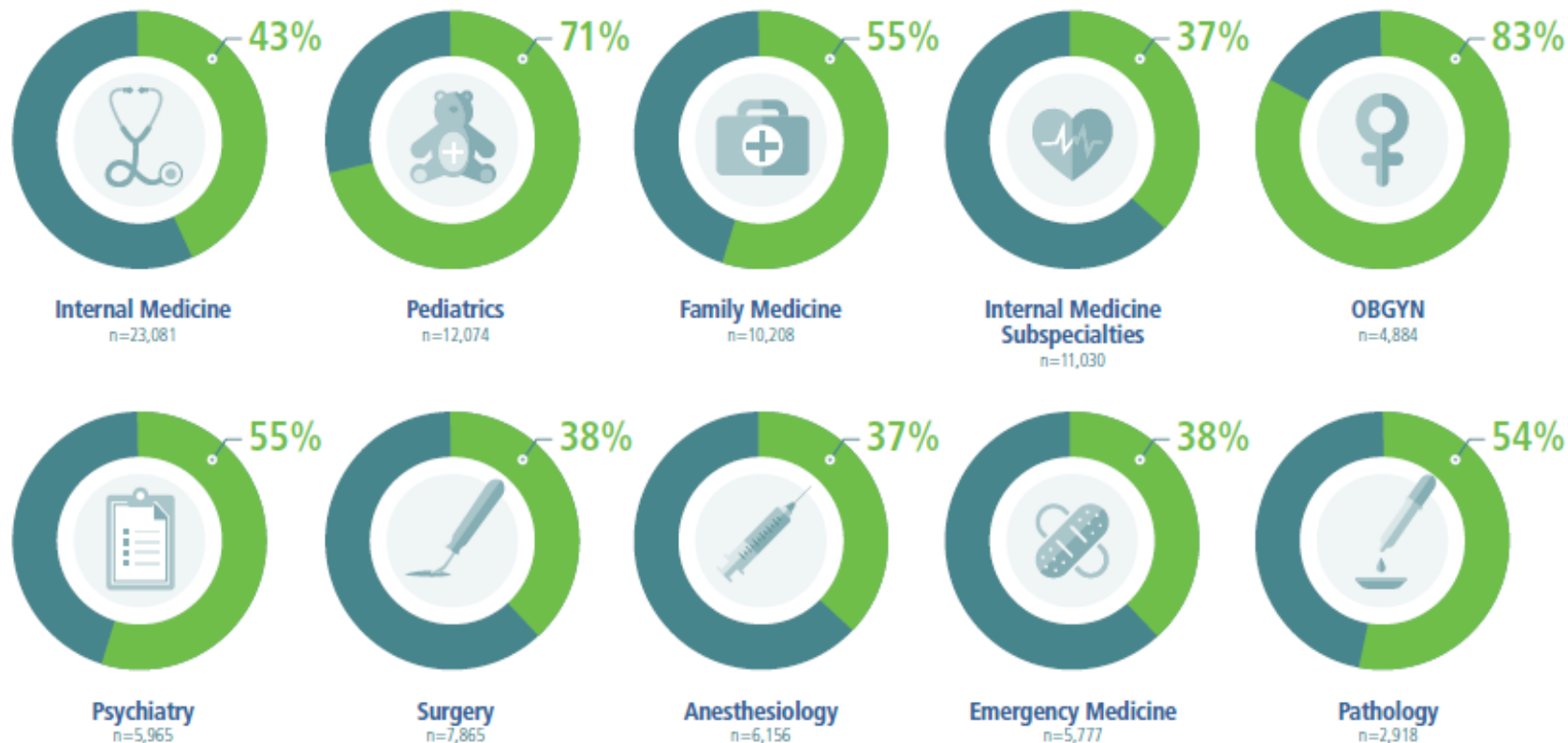


Entering the Pipeline—Applicants, Students & Residents

Women Men

FIGURE 2

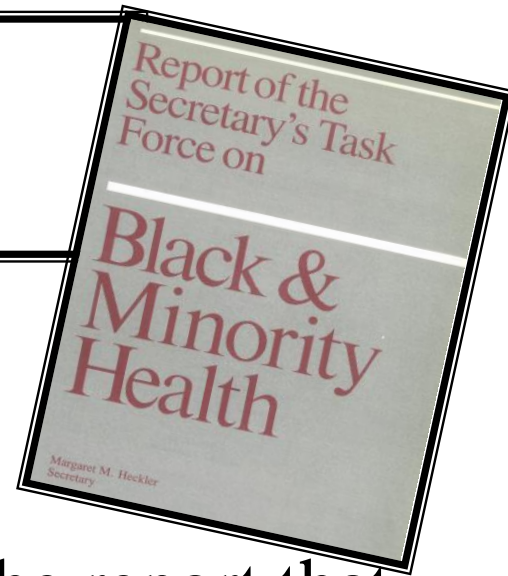
Top 10 Specialties for Women Residents in 2013–14*



*The numbers in this figure show the total number of residents in each specialty. Specialties are shown in order of the highest number of women residents. The specialties above account for 85% of all women residents (n=44,596/52,521). See [Table 2](#) for more information.

Inequality in Healthcare...

Addressing Health Disparities



- ▶ DHHS Secretary Heckler's Task Force on Black and Minority Health released the report that documented excess deaths in 1984.
- ▶ An evaluation of USA morbidity and mortality rates & other data, resulted in a focus on the need to recruit and retain a diverse workforce to address the high morbidity and mortality rates among minority and ethnic populations.

SPECIAL ARTICLE

EFFECTS OF AFFIRMATIVE ACTION IN MEDICAL SCHOOLS

A Study of the Class of 1975

STEPHEN N. KEITH, M.D., ROBERT M. BELL, PH.D., AUGUST G. SWANSON, M.D.,
AND ALBERT P. WILLIAMS, PH.D.

Abstract In the early 1970s, affirmative-action programs were introduced to accomplish a number of social goals, including increasing the supply of minority physicians and improving the health care of the poor. To assess the success of such programs, we analyzed data on people who graduated from U.S. medical schools in 1975 to determine how specialty choice, practice locations, patient populations served, and board-certification rates differ between minority and nonminority graduates. A larger proportion of minority graduates (55 per cent vs. 41 per cent, $P < 0.001$) chose the primary-care specialties of family practice, general internal medicine, general pediatrics, and obstetrics-gynecology. Significantly more minority physicians (12 per cent vs. 6 per cent, $P < 0.01$) practiced in locations designated as health-manpower shortage areas by the federal government and had more Medicaid recipients in their patient populations (31 per cent for

blacks, 24 per cent for Hispanics, 14 per cent for whites; $P < 0.001$). Physicians from each racial or ethnic group served disproportionately more patients of their own racial or ethnic group ($P < 0.001$), but minority physicians did not serve significantly more persons from other racial or ethnic minority groups than did nonminority physicians. Many minority physicians served patient populations much like those of their nonminority colleagues, which indicates that substantial integration of the medical marketplace has taken place. Significantly fewer minority graduates had become board-certified by 1984 (48 per cent vs. 80 per cent, $P < 0.001$), and most of this disparity was associated with differences in premedical-school characteristics and in the patient populations they served. Our analysis shows that minority graduates of the medical school class of 1975 are fulfilling many of the objectives of affirmative-action programs. (N Engl J Med 1985; 313:1519-25.)

New England Journal of Medicine: December 12, 1985

AN AFFIRMATION OF MINORITIES IN MEDICINE

THE article by Keith and his colleagues in this issue of the *Journal*¹ provides a statistical comparison of data on minority and nonminority physicians who graduated from medical school in 1975. It evaluates specialty choice, practice patterns, and board certification in terms of undergraduate performance and socioeconomic status. The study provides documentation of the contributions of minority and nonminority students who were admitted to medical schools during the time that affirmative-action programs were being most strongly implemented. It also provides evidence (at least for the 1975 graduates) that a larger proportion of minority physicians are contributing to the health care of underserved and minority populations. Such a contribution is relevant to concerns that affirmative-action programs were intended to address and that are still recognized as health care problems in our society.

In spite of the retrenchment in the governmental, community, and institutional commitment to furthering the cause of racial justice and affirmative-action programs, the health status of minorities should still provide an ethical impetus for medical schools to encourage, admit, and graduate minority students. It is time for medical educational institutions to reaffirm their commitment to addressing the inequities in access to quality health care. If affirmative-action programs are now receiving less emphasis because of the fear of litigation or the lack of data demonstrating that such programs are addressing societal needs and the mission of medical schools, then Keith and his associates have provided a valuable study that reinforces the urgency of continuing to provide opportunities for minority groups in medicine.

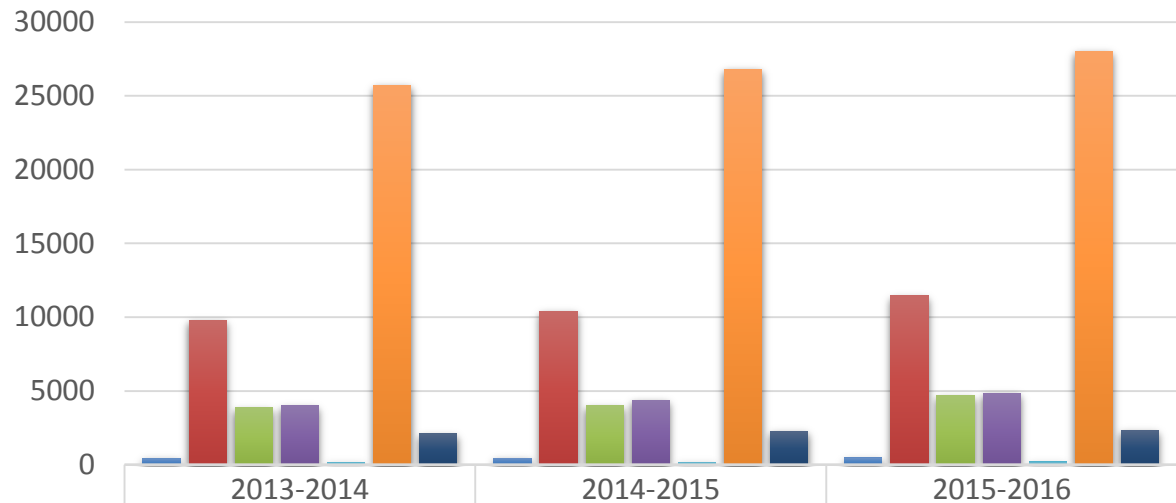
Howard University
College of Medicine
Washington, DC 20059

VIVIAN W. PINN-WIGGINS, M.D.

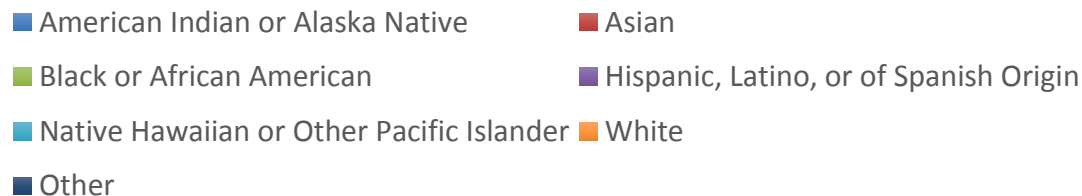
"The report by Secretary Heckler's task force states that the availability of well-trained health care providers to minority groups may be crucial in reducing disparities in overall health status, and that resources for minority health care may be less available than distribution statistics on health care services suggest. It also indicates that most minority patients receive health care from providers who do not share their ethnic or cultural backgrounds"



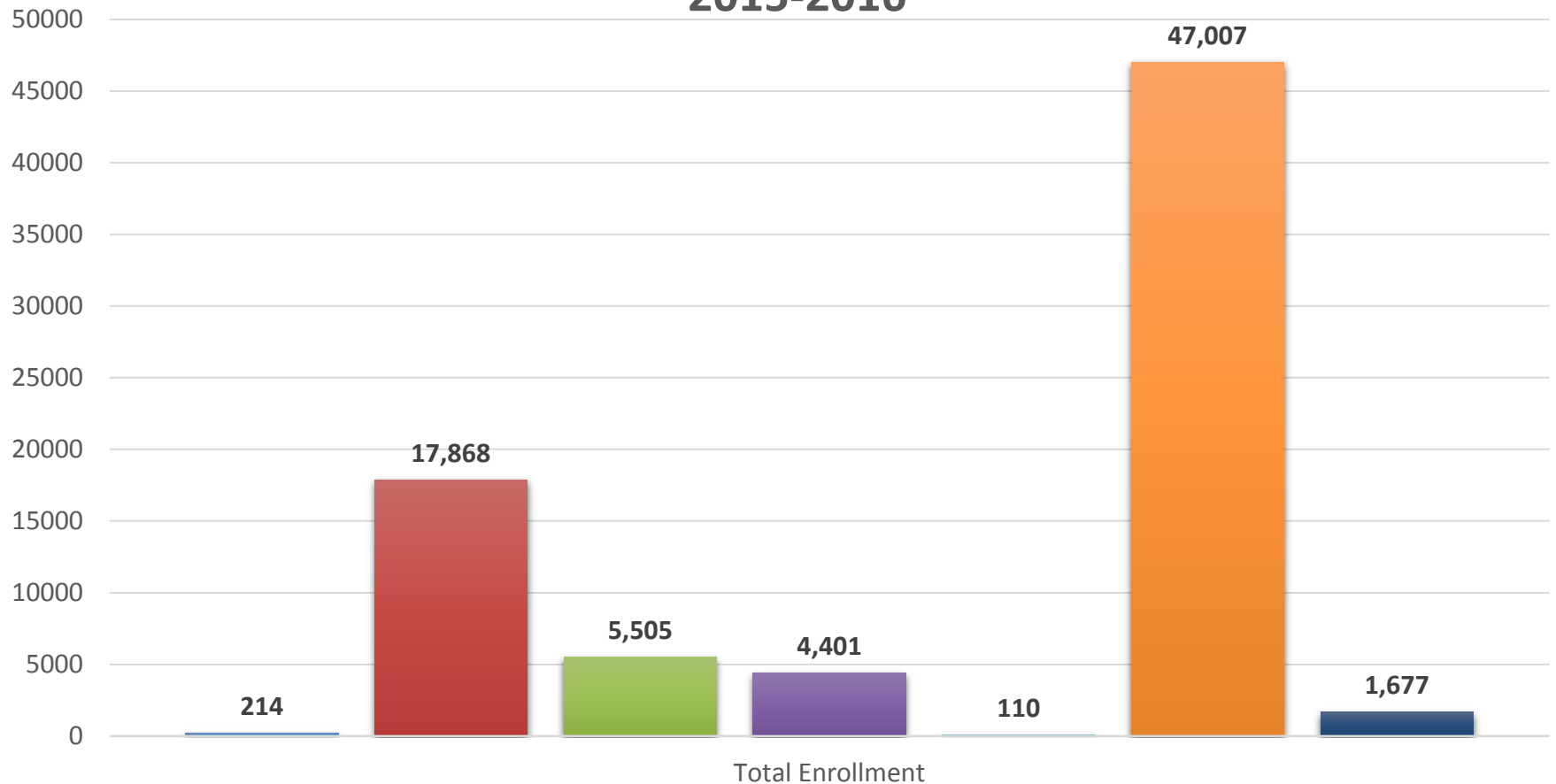
Race/Ethnicity of Applicants to U.S. Medical Schools, 2013-2014 through 2015-2016



American Indian or Alaska Native	425	449	463
Asian	9,793	10,415	11,454
Black or African American	3,865	3,990	4,661
Hispanic, Latino, or of Spanish Origin	3,999	4,386	4,839
Native Hawaiian or Other Pacific Islander	165	177	192
White	25,729	26,800	28,025
Other	2,118	2,276	2,345



U.S. Medical School Total Enrollment by Race/Ethnicity 2015-2016



■ American Indian or Alaska Native ■ Asian
■ Black or African American ■ Hispanic, Latino, or of Spanish Origin
■ Native Hawaiian or Other Pacific Islander ■ White
■ Other

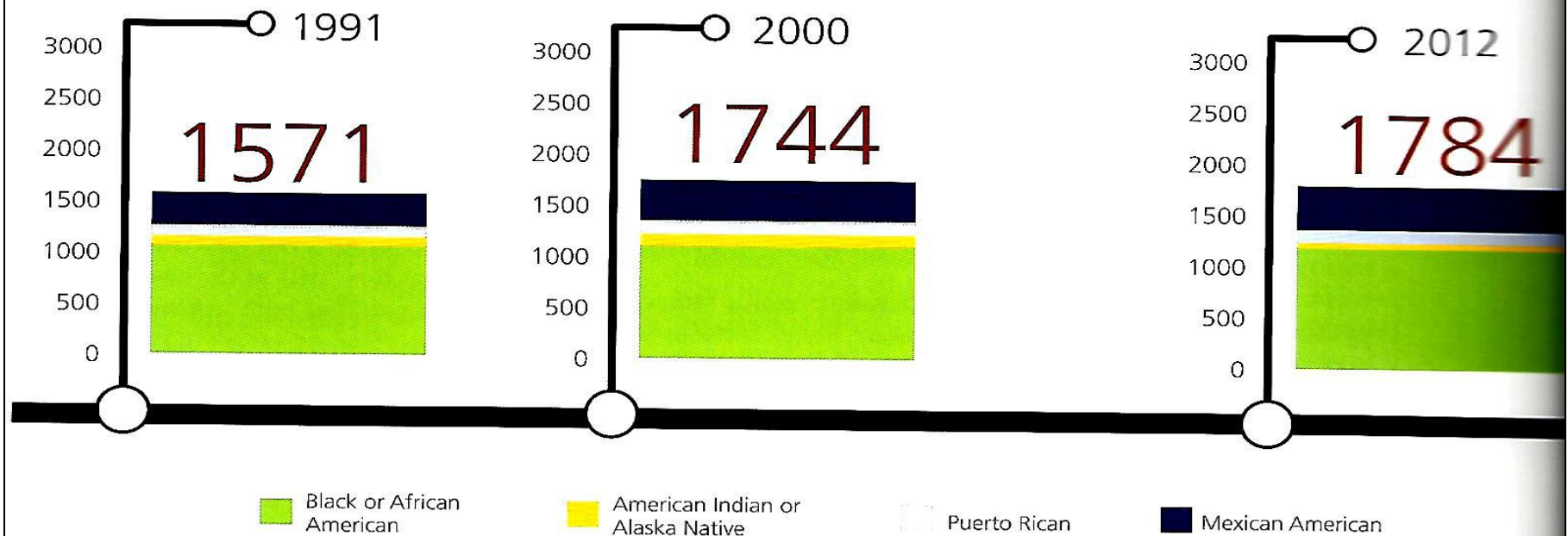
Source: AAMC
11/25/2015



Changes In the Numbers

While data alone do not show the full breadth and depth of advances in diversity and inclusion, statistics do document some of the progress that has been made. “If we talk in terms of progress over the past 50 or 60 years, it’s very clear that we have made tremendous strides in improving the diversity of the nation’s institutions of higher education in general and medical schools more specifically,” says Marc Nivet. “However, if we look at the data in medical schools over a shorter time horizon, say from the 1990s to now, we have not made as much progress as hoped for. I think the time is now to redouble our efforts to find and develop the talent pool of underrepresented students.”

URM Matriculants and the 3000 by 2000 Goal



Data show 3000 by 2000 goals based on its intent to increase the number of African American/Black, American Indian and Alaska Native, Mexican American and Mainland Puerto Rican matriculants to medical school.



Tuesday, September 27, 2016 | by Alicia Gallegos, special to *AAMCNews*

Tuesday, September 27, 2016

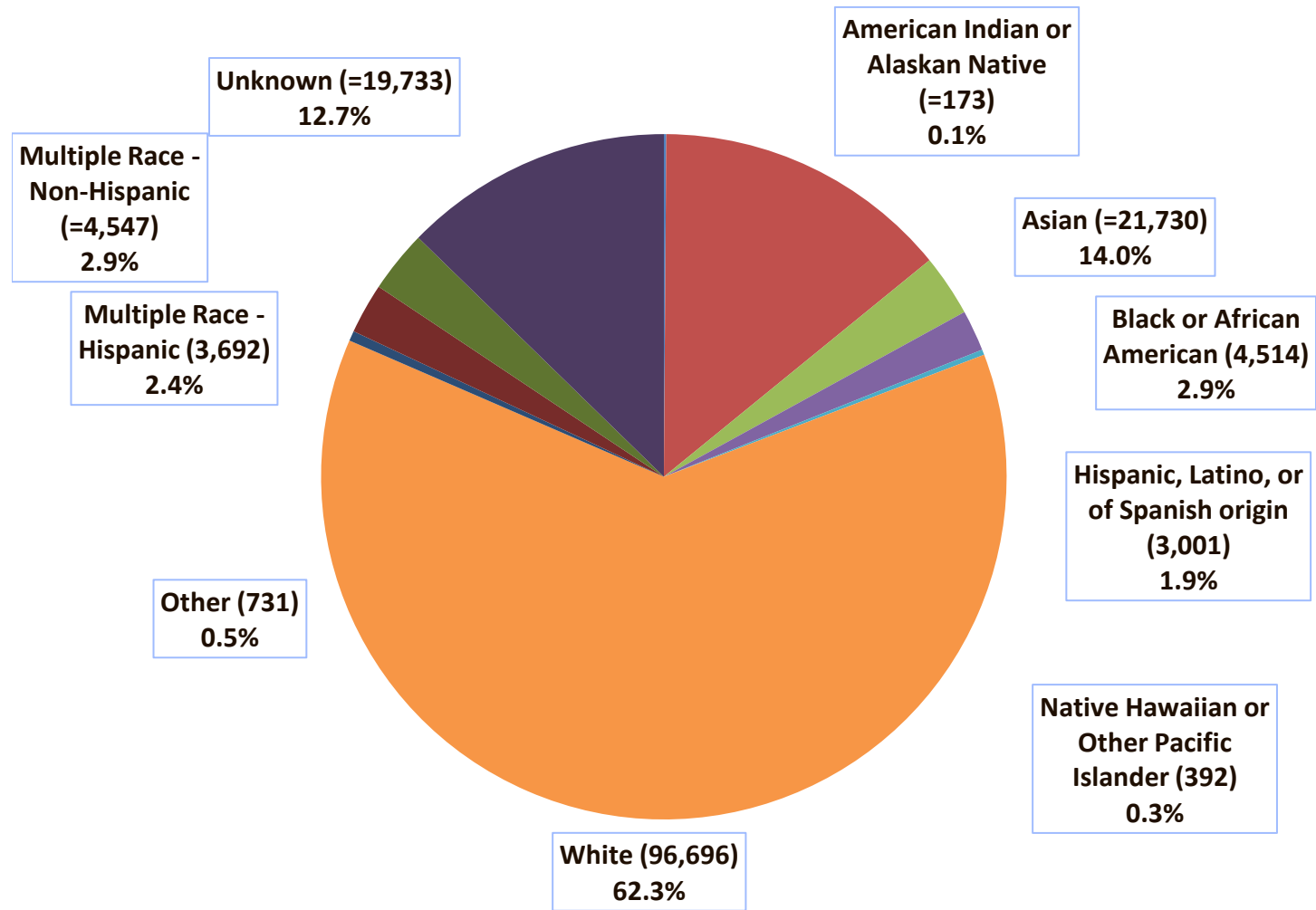
AAMC Report Shows Decline of Black Males in Medicine

Despite efforts by medical schools to increase diversity among applicants, the numbers for one demographic—black men—have remained stagnant for nearly 40 years. In 1978, 1,410 black men applied to U.S. medical schools. In 2014, that number was 1,337, according to a new AAMC report, *Altering the Course, Black Males in Medicine*.

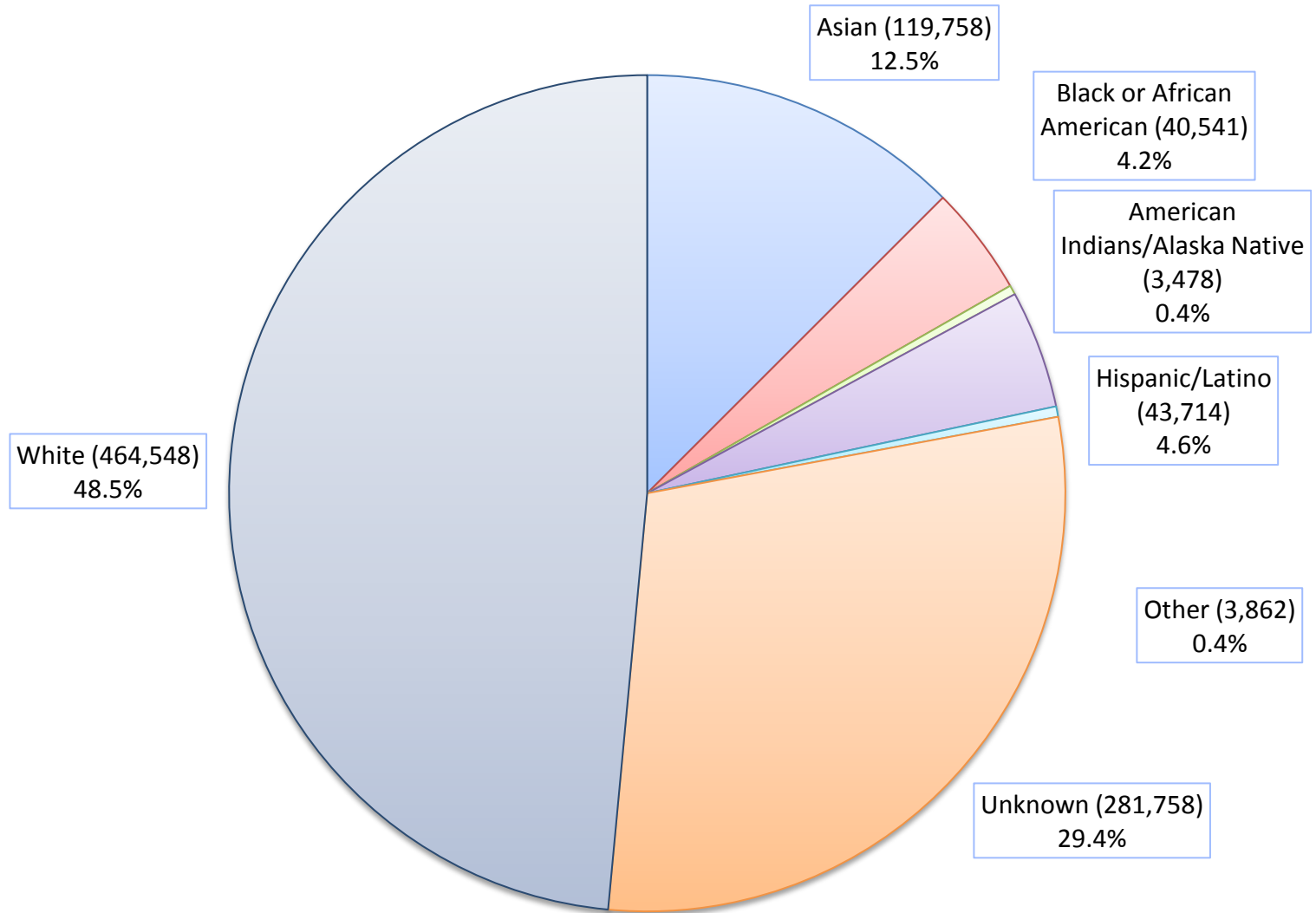
Presented Aug. 3, 2015, at the National Medical Association's (NMA) 112th Convention in Detroit, the report details the decline of black men in medicine, analyzes reasons for the low volume, and addresses strategies that could increase the nation's black male doctors.

“We’ve actually lost ground in terms of the number of black men in medical school,” said Marc Nivet, EdD, AAMC chief diversity officer. “We’re suffering from continued challenges that black men face up and down the continuum of education. Even though we have more black men in college and graduating college than we’ve ever had, we don’t have enough of them studying in disciplines that traditionally lead to medicine.”

U.S. Medical School Faculty by Race and Ethnicity, 2014



U.S. Physicians by Race and Ethnicity, 2013



Note: The data excludes inactive physicians.

Source: AAMC Data warehouse: Minority Physician data, AMA master file, and other AAMC data sources, as of 1/22/2014.

Original Investigation

Minority Faculty Development Programs and Underrepresented Minority Faculty Representation at US Medical Schools

James P. Guevara, MD, MPH; Emem Adanga, BA; Elorm Avakame, BS; Margo Brooks Carthon, PhD

IMPORTANCE Diversity initiatives have increased at US medical schools to address underrepresentation of minority faculty.

OBJECTIVE To assess associations between minority faculty development programs at US medical schools and underrepresented minority faculty representation, recruitment, and promotion.

DESIGN Secondary analysis of the Association of American Medical Colleges Faculty Roster, a database of US medical school faculty.

PARTICIPANTS Full-time faculty at schools located in the 50 US states or District of Columbia and reporting data from 2000-2010.

Original Investigation

Minority Faculty Development Programs and Underrepresented Minority Faculty Representation at US Medical Schools

James P. Guevara, MD, MPH; Emem Adanga, BA; Elorm Avakame, BS; Margo Brooks Carthon, PhD

IMPORTANCE Diversity in the medical workforce is important for patient care and research.

underrepresented

OBJECTIVE To assess the representation of underrepresented minority faculty in US medical schools and to identify factors associated with their promotion.

medical school
promotion.

DESIGN Secondary analysis of a national database of US medical schools.

PARTICIPANTS Faculty members who were underrepresented minorities and reporting their demographic characteristics.

Minority physicians and scientists have been inadequately represented among medical school faculty when compared with their representation in the US population.^{1,2} Although their representation has increased over time, underrepresented minority faculty are less likely to be promoted and spend a longer period in a probationary rank.^{3,4} In addition, underrepresented minority faculty have been less likely to hold senior faculty and administrative positions⁵ and less likely to receive National Institutes of Health research awards.⁶ Moreover, minority faculty report lower career satisfaction and higher social isolation and attrition than faculty who are not underrepresented minorities.⁷⁻⁹ As a result, the Institute of Medicine has advocated for institutional support to address the challenges that underrepresented minority faculty face in academic medicine.¹⁰

*Women in Biomedical Careers:
The Successes and Challenges of the 21st Century*

- While the 'pipeline' is often blamed for the lack of women in advanced or leadership positions, that argument does not hold after many years of talented women in fields of medicine who provide more than enough experienced and accomplished women for positions of leadership and advancement.
- Similar observations hold for URM.

NEWS

THE NATIONAL ACADEMIES
Advisers to the Nation on Science, Engineering, and Medicine

NATIONAL ACADEMY OF SCIENCES • NATIONAL ACADEMY OF ENGINEERING • INSTITUTE OF MEDICINE • NATIONAL RESEARCH COUNCIL

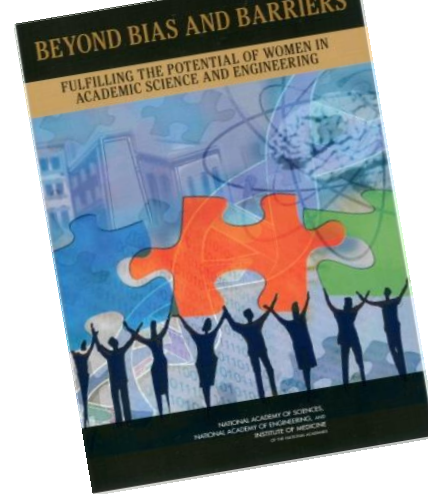


FOR IMMEDIATE RELEASE
September 18, 2006

Broad National Effort Urgently Needed To Maximize Potential of Women Scientists and Engineers in Academia

WASHINGTON -- Women face barriers to hiring and promotion in research universities in many fields of science and engineering -- a situation that deprives the United States of an important source of talent as the country faces increasingly stiff global competition in higher education, science and technology, and the marketplace, says a new report from the National Academies. Eliminating gender bias in universities requires immediate, overarching reform and decisive action by university administrators, professional societies, government agencies, and Congress.

Beyond Bias and Barriers: Fulfilling the Potential of Women in Academic Science and Engineering



“For women to participate to their full potential across all science and engineering fields, they must see a career path that allows them to reach their full intellectual potential. Much remains to be done to achieve that goal.”

“It is not lack of talent, but unintentional biases and outmoded institutional structures that are hindering the access and advancement of women.”

“A substantial body of evidence establishes that most people hold implicit biases”



Barriers to/Factors for Success: Biomedical Science Careers for Women

- Recruiting women & girls into scientific careers
- Lack of female role models & mentors
- Career paths/rewards (salaries, promotions, etc.)
- Family responsibilities/dual roles
- Need for reentry into biomedical careers
- Sex discrimination and harassment
- Gender sensitivity
- Racial bias/special needs
- Research initiatives on women's health

*Implicit Bias & Growing Recognition
Of Sexual Harassment in Academia
And/or Workplace...*

Women & Minorities in Biomedical Careers: The Successes and Challenges of the 21st Century

Many Successes, BUT!!! - Many challenges remain:

➡ There are still barriers to 'success', i.e., advancement in their chosen endeavors for women and minorities in medicine & science careers

➡ The issues surrounding the 'dual responsibilities' of profession and family continue to be of concern, and too often affect career advancement or opportunities for women

Implicit Bias



➡ Gender and/or racial biases, both individual and institutional, continue as factors that can influence the progression or the benefits of a career in medicine or science for talented individuals

Gender bias in biomedical research

James S. Economou, MD, PhD, Los Angeles, CA

From the Department of Surgery, University of California, Los Angeles

SURGERY, Nov. 2014 Volume 156, Issue 5, Pages 1061–1065 ; Published Online: September 25, 2014
<http://dx.doi.org/10.1016/j.surg.2014.07.005>

“Women have been achieving near parity in MD and MD/PhD training, but their advancement in academic biomedical science is reduced at every career milestone thereafter. Women are significantly under-represented even at the earliest points in the PhD pipeline, particularly in fields outside of biology. This is a troubling statistic that negatively impacts the talent pool and exacerbates career inequity in all areas of biomedical research.”

“There are *implicit biases*---often subtle discrimination based on cultural stereotypes that may be outside of conscious awareness (*unconscious bias*)---that can affect decisions about one’s career at every level...Women might be viewed as having more communal and nurturing traits, whereas men might be expected to have more of a self promoting, leadership phenotype.”

Gender bias in biomedical research

James S. Economou, MD, PhD, *Los Angeles, CA*

From the Department of Surgery, University of California, Los Angeles

SURGERY, Nov. 2014 Volume 156, Issue 5, Pages
1061–1065 ; Published Online: September 25, 2014
<http://dx.doi.org/10.1016/j.surg.2014.07.005>

“In summary, there will be substantial social, economic and scientific costs if we cannot improve the diversity of our biomedical research workforce. Although this essay has focused on gender disparity, the inequities and their adverse impact apply as well to racial and ethnic disparities in workforce representation...”



*Women & Minorities in Academic Medicine
& Healthcare Careers:
The Successes and Challenges of the 21st Century*

*Facing and overcoming
historical and traditional
stereotypical attitudes,
both overt or subtle,
unconscious and
intentional...*



Overcoming Institutional Barriers for Women & Minorities

- **Unconscious (implicit, inherent) gender-based assumptions and minority stereotypes** are deeply embedded in the patterns of thinking of both men and women.
- The effect has impeded progress toward academic success or other career opportunities in medicine.
- In the past, gender & racial biases were more open; today, more subtle or ‘underground’ so more difficult to overcome.

(examples: blind reviews or letters of recommendation, etc.)

- **Need to understand best ways to change unconscious (or conscious) institutional and/or individual biases,** and first step is to *recognize it exists...*



Overcoming Barriers to Success

*Speak up **or** Hold up???*

- *Speaking out about changing institutional traditions or processes or procedures or expectations in a way that can bring about positive change;*
- *Addressing implicit biases on individual and institutional levels;*
- *When to confront need for change for a colleague??? For yourself???*

‘...Advocates of women’s participation in science and engineering need to understand that some beliefs regarding the intellectual inferiority of women still exist.

Confronting the bias is always difficult,
but women and men should be willing to stand up to it... ‘

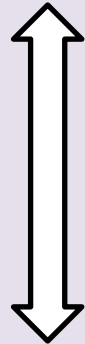
Shirley Malcom, Head of the Directorate for Education and Human Resources Programs, AAAS

We have been living in a context where the jobs and the education have been structured to fit males’ lives. So what does that [structure] look like ... if we imagined the lives of people who want to have a life? I think that imagining a different kind of context is what is hanging us up. We have the current models and we cannot imagine other models.

–Shirley Malcom



Work-Life Balance in Health-Related Careers



'Credit' or 'Blame'
often given to women...

Overcoming Barriers to Success: Female Friendly vs. Family Friendly Options???

- Are there options for family leave or for maternity leave – including for adoption?
- What are the pros – and cons – about taking advantage of flexible options?
- Policies should be seen as facilitating work-life balance for BOTH males and females...

A PERSPECTIVE ON PROMOTING DIVERSITY IN THE BIOMEDICAL RESEARCH WORKFORCE: THE NATIONAL HEART, LUNG, AND BLOOD INSTITUTE'S PRIDE PROGRAM

Josephine E.A. Boyington, PhD, MPH, CNS¹; Nita J. Maihle, PhD²; Treva K. Rice, PhD³; Juan E. Gonzalez, PhD⁴;
Caryl A. Hess, PhD⁵; Levi H. Makala, DVM, MBA, PhD⁶; Donna B. Jeffe, PhD⁷;
Gbenga Ogedegbe, MD, MS, MPH⁸; Dabeeru C. Rao, PhD⁹; Victor G. Dávila-Román, MD¹⁰;
Betty S. Pace, MD¹¹; Girardin Jean-Louis, PhD⁸; Mohamed Boutjdir, PhD¹²

Aspiring junior investigators from groups underrepresented in the biomedical sciences face various challenges as they pursue research independence. However, the biomedical research enterprise needs their participation to effectively address critical research issues such as health disparities and health inequities. In this article, we share a research education and mentoring initiative that seeks to address this challenge: Programs to Increase Diversity among Individuals Engaged in Health Related Research (PRIDE), funded by the National Heart, Lung, and Blood Institute (NHLBI). This longitudinal research-education and mentoring program occurs through summer institute programs located at US-based academic institutions. Recruited participants are exposed to didactic and lab-based research-skill enhancement experiences, with year-round mentoring over the course of two years. Mentor-mentee matching is based on shared research interests to promote congruence and to enhance skill acquisition.

Program descriptions and sample narratives of participants' perceptions of PRIDE's impact on their career progress are showcased. Additionally, we highlight the overall program design and structure of four of seven funded summer institutes that focus on cardiovascular disease, related conditions, and health disparities. Mentees' testimonials about the value of the PRIDE mentoring approach in facilitating career development are also noted.

Meeting the clinical and research needs of an increasingly diverse US population is an issue of national concern. The PRIDE initiative, which focuses on increasing research preparedness and professional development of groups underrepresented in the biomedical research workforce, seeks to address these

INTRODUCTION

Similar to Mr. Thomas, today's aspiring investigators from racial and

Aspiring junior investigators from groups underrepresented in the biomedical sciences face various challenges as they pursue research independence. However, the biomedical research enterprise needs their participation to effectively address critical research issues such as health disparities and health inequities. In this article, we share a research

¹Psychiatry, Washington University School of Medicine, St. Louis, Mo.

²School of Natural Sciences & Mathematics, University of Texas at Dallas, Tx.

³Office of Leadership Development, Augusta

Augusta University, Augusta, Ga.

¹²Department of Medicine, State University of New York, Brooklyn, N.Y.

Address correspondence to Josephine E.A.



Are Race, Ethnicity, and Medical School Affiliation Associated With NIH R01 Type 1 Award Probability for Physician Investigators?

Donna K. Ginther, PhD, Laurel L. Haak, PhD, Walter T. Schaffer, PhD,
and Raynard Kington, MD, PhD

Academic Medicine, Vol. 87, No. 11 / November 2012

Abstract

Purpose

To analyze the relationship among National Institutes of Health (NIH) R01 Type 1 applicant degree, institution type, and race/ethnicity, and application award probability.

Method

The authors used 2000–2006 data from the NIH IMPAC II grants database and other sources to determine which individual and institutional characteristics of applicants may affect the probability of applications being awarded funding. They used descriptive statistics and probit models to estimate correlations between race/ethnicity, degree (MD or PhD), and institution type (medical school or

other institution), and application award probability, controlling for a large set of observable characteristics.

Results

Applications from medical schools were significantly more likely than those from other institutions to receive funding, as were applications from MDs versus PhDs. Overall, applications from blacks and Asians were less likely than those from whites to be awarded funding; however, among applications from MDs at medical schools, there was no difference in funding probability between whites and Asians, and the difference between blacks and whites decreased to 7.8%. The inclusion of

human subjects significantly decreased the likelihood of receiving funding.

Conclusions

Compared with applications from whites, applications from blacks have a lower probability of being awarded R01 Type 1 funding, regardless of the investigator's degree. However, funding probability is increased for applications with MD investigators and for those from medical schools. To some degree, these advantages combine so that applications from black MDs at medical schools have the smallest difference in funding probability compared with those from whites.

Sex Differences in Application, Success, and Funding Rates for NIH Extramural Programs

Academic Medicine, Vol. 86, No. 6 / June 2011



Gender Issues

Sex Differences in Application, Success, and Funding Rates for NIH Extramural Programs

Jennifer Reineke Pohlhaus, PhD, Hong Jiang, PhD, Robin M. Wagner, PhD, MS, Walter T. Schaffer, PhD, and Vivian W. Pinn, MD

Abstract

Purpose

The authors provide an analysis of sex differences in National Institutes of Health (NIH) award programs to inform potential initiatives for promoting diversity in the research workforce.

Method

In 2010, the authors retrieved data for NIH extramural grants in the electronic Research Administration Information for Management, Planning, and Coordination II database and used statistical analysis to determine any sex differences in securing NIH funding, as well as subsequent success of researchers

who had already received independent NIH support.

Results

Success and funding rates for men and women were not significantly different in most award programs. Furthermore, in programs where participation was lower for women than men, the disparity was primarily related to a lower percentage of women applicants compared with men, rather than decreased success rates or funding rates. However, for subsequent grants, both application and funding rates were generally higher for men than for women.

Conclusions

Cross-sectional analysis showed that women and men were generally equally successful at all career stages, but longitudinal analysis showed that men with previous experience as NIH grantees had higher application and funding rates than women at similar career points. On average, although women received larger R01 awards than men, men had more R01 awards than women at all points in their careers. Therefore, while greater participation of women in NIH programs is under way, further action will be required to eradicate remaining sex differences.

Sex Differences in Application, Success, and Funding Rates for NIH Extramural Programs



Academic Medicine, Vol. 86, No. 6 / June 2011

Conclusions



- Most award programs show equal or better performance for women compared to men
- The proportion of women in the applicant pool declined with increasing career stage in cross-sectional analysis
- R01 application rates were higher for men than women in longitudinal studies
- Success and funding rates were higher for experienced men submitting renewal R01 awards
- More men had multiple R01 awards than women at every age
 - Men had a higher funding rate but an equal success rate compared to women, which means they applied more often, so they had more of a chance of being successful
- Women received more direct costs than men for R01 awards because they requested more



Sexual Harassment Seems Rampant Today

or

Just Finally Getting the Attention it has Needed

Many reports in current news – on campuses primarily, but also related to scientists, especially post-docs and junior faculty; not as much info on physicians;

Workshop in May 2016, held by the CWSEM of the National Academies of Science, Engineering and Medicine, examined S.H. in and its effects on careers of women in science and medicine, academia, engineering and industry... *in preparation for major study of effects on women in STEM to begin this fall...*



Sexual Harassment Seems Prevalent

Faculty Perceptions of Gender Discrimination and Sexual Harassment in Academic Medicine

Ann Intern Med. 2000;132:889-896.

Phyllis L. Carr, MD; Arlene S. Ash, PhD; Robert H. Friedman, MD; Laura Szalacha, EDM;
Rosalind C. Barnett, PhD; Anita Palepu, MD, MPH; and Mark M. Moskowitz, MD

Background: Gender-based discrimination and sexual harassment are common in medical practice and may be even more prevalent in academic medicine.

Objective: To examine the prevalence of gender-based discrimination and sexual harassment among medical school faculty and the associations of gender-based discrimination with number of publications, career satisfaction, and perceptions of career advancement.

Design: A self-administered mailed questionnaire of U.S. medical school faculty that covered a broad range of topics relating to academic life.

Setting: 24 randomly selected medical schools throughout the United States.

Participants: A random sample of 3332 full-time faculty, stratified by specialty, graduation cohort, and gender.

Measurements: Prevalence of self-reported discrimination and harassment, number of peer-reviewed publications, career satisfaction, and perceptions of career advancement.

Women now account for slightly more than one quarter of U.S. medical school faculty (1). However, it has been reported that female physicians in academic settings encounter more gender discrimination and sexual harassment than do female physicians in the community (2-5). Female medical school faculty, even those in positions of authority in medical schools, perceive a considerably more hostile environment than their male colleagues, and gender discrimination and sexual harassment contribute substantially to these perceptions (6). Gender-based behaviors, pol-

Conclusion: Despite substantial increases in the number of female faculty, reports of gender-based discrimination and sexual harassment remain common.

Sexual Harassment Seems Rampant Today

or

2120 JAMA May 17, 2016 Volume 315, Number 19

Sexual Harassment Finally Getting Serious

RESEARCH LETTER

Sexual Harassment and Disciplinary Action of Academic Medical Faculty

Recent high-profile cases of sexual harassment such as those involving Dr. Robert M. Calvey, MD, such experiences still occur in academic medicine. Little is known about how many women experience such behavior. Most studies have



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faculty women reported harassment compared with 5% of men. These women were more likely to report harassment when women constituted a minority in the class; less is known about the prevalence among more recent faculty cohorts.

Methods | After approval from the Institutional review board and waiver of informed consent, in 2014 we conducted a postal survey of faculty who received new K08 and K23 career development awards (after referred to as K-awards) from the National Institutes of Health from 2006-2009. Items on gender bias in the environment and personally experienced advantage, and sexual harassment were included in the questionnaire evaluating career and personal experiences. Those who had experienced sexual harassment in their professional careers were asked to report the frequency and confidence and career advancement in the experience using 5 levels⁴: 1, general

Discussion | In this sample of clinician-researchers, 30% of women reported having experienced sexual harassment compared with 4% of men. Although a lower proportion reported these experiences than in a 1995 sample, the difference appears large given that the women began their careers after the proportion of female medical students exceeded 40%.

Limitations include nonresponse bias, which could inflate estimates of prevalence if those who experienced harassment were more motivated to respond; to minimize this risk, we placed these questions at the end of a 12-page instrument that otherwise focused on general career experiences. Our estimates were based on self-report, not documented cases.

Recognizing sexual harassment is important because perceptions that such experiences are rare may, ironically, increase stigmatization and discourage reporting. Efforts to mitigate the effect of unconscious bias in the workplace and eliminate more overtly inappropriate behaviors are needed.

Reshma Jaggi, MD, DPhil
Kent A. Griffith, MS
Rochelle Jones, MS
Chithra R. Perumalswami, MD
Peter Ubel, MD
Abigail Stewart, PhD

...difference, 57%
... $P < .001$) of gender bias in their careers
(Table 1). Women were more likely to report having personally experienced sexual harassment (30% [95% CI, 26%-35%])

Advancing Women & Minorities in Academic Medicine

Gender Equity

&

Diversity



Institutional Transparency,
Fairness and Accountability

WORKING LIFE

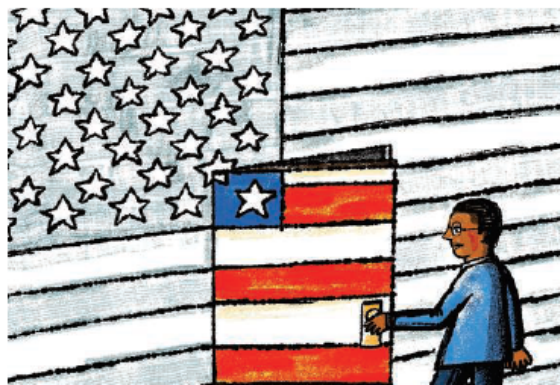
By Edward J. Smith

Edward Smith is a professor of comparative genomics at Virginia Polytechnic Institute and State University in Blacksburg

Doing science while black

When I was 11 years old, my older brother left our village in Sierra Leone to study physics in the West. After completing his degree, he returned home to contribute to development. I followed his lead, though I studied genetics—and I never returned to live in Africa. Instead, I established a career in research and research education in the United States. Being an academic scientist in this country with my skin color and accent has not been easy, but I hope that my resilience amid significant challenges offers a path for younger minority scientists.

I experienced my first brush with bias in the virology lab where I started my Ph.D. Every time I left the photography room, the principal investigator (PI) was there to check on my results. He didn't do this for other students; it was clear that he didn't trust me to do the procedure correctly. At lab meetings, the PI called on every other group member for a progress report. But



and other encounters imply that, no matter how productive my research is or how professionally I present myself, I and other black scientists do not belong in academia's hallowed halls.

In contrast, when I have visited Kenya, Tanzania, and Zambia, I have always received an enthusiastic welcome from the scientists there, who are excited to hear from

WORKING LIFE

By Edward J. Smith

Despite the hostility, both blatant and subtle, that I have experienced in the corridors of science, and still encounter, I'm glad that I stayed here. I believe that the career I have carved out for myself will help pave the way for future generations of underrepresented minority (URM) scientists to thrive, and for all members of the scientific community to be more culturally sensitive than those who came before them. I have spent much of my professional life focused on training URM scientists, and I am as proud of these researchers as anything else in my life. As all of us strive to increase the critical mass of URM scientists, encounters with black scientists will become more commonplace until, hopefully, none of us is ever mistaken for a delivery person. ■

...visited
...Zambia, and Zambia, I
have always received an enthusiastic welcome from the scientists there, who are excited to hear from

A Diversity 3.0 Update: Are We Moving the Needle Enough?

Marc A. Nivet, EdD, MBA

Acad Med. 2015;90:1591–1593

...It also required a new role for diversity and inclusion as a solution to our problems, rather than continuing to see it as just another problem to be fixed.

Abstract

Five years ago, in a previous *Academic Medicine* Commentary, the author asserted that the move toward health reform and a more equitable health system required a transformation of more than how we finance, deliver, and evaluate health care. It also required a new role for diversity and inclusion as a solution to our problems, rather than continuing to see it as just another problem to be fixed. In this update, the author assesses the collective progress made by the nation's medical schools and teaching hospitals in integrating diversity into their core strategic

activities, as well as highlighting areas for continued improvement.

The author identifies five new trends in diversity and inclusion within academic medicine: broader definitions of diversity to include lesbian, gay, bisexual, and transgender people and those who have disabilities; elevated roles for diversity leaders in medical school administration; growing use of a holistic approach to evaluating medical school applicants; recognition of diversity and inclusion as a core marker of excellence; and appreciation of the

significance of subpopulations within minority and underrepresented groups.

More work remains to be done, but institutional initiatives to foster and prioritize diversity and inclusion coupled with national efforts by organizations such as the Association of American Medical Colleges are working to build the capacity of U.S. medical schools and teaching hospitals to move diversity from a peripheral initiative to a core strategy for improving the education of medical students and, ultimately, the care delivered to all of our nation's people.

A Diversity 3.0 Update: Have We Hit the Needle Enough?

Marc A. Nivet, EdD, MBA

Acad Med. 2015;90:15

Abstract

Five years ago, in a previous *Academy of Medicine* Commentary, the author asserted that the move toward health care reform and a more equitable health system required a transformation of more than how we finance, deliver, or evaluate health care. It also required a new role for diversity and inclusion as a solution to our problems, rather than continuing to see it as just another problem to be fixed. In this update, the author assesses the collective progress made by the nation's medical schools and teaching hospitals in integrating diversity into their core strategic

Leaders are becoming more sophisticated in the questions they ask about diversity efforts. They are no longer looking only at the number of minorities recruited but are also looking inward to ask tough, but essential, questions such as

- Why are we not attracting the diverse talent we desire?
- What is the risk of being perceived as a chilly climate for minorities, women, or individuals who are LGBT?
- Are we a provider of choice for all community members? If not, why?
- How can we begin to ensure equitable care for all patients, given the universal tendency toward unconscious bias?

...nation's people.

Overcoming Institutional Barriers for Women & Minorities

- Many institutions have implemented faculty or search or admissions or promotions committee workshops to better understand implicit (unconscious) bias in an attempt to reduce their effects on gender and racial inequities.
- Support is needed **from the top down** (institutional or corporate leadership) if these efforts are to be taken seriously.
- Networking and addressing these issues through professional organizations or faculty/administrative collaborations can be helpful for learning paths and priorities for success within a discipline, institution or organization.

Gender & Race in Academic Medicine

Assuring the diversity of health care professionals who understand, who are dedicated to, and who will contribute to the elimination of health disparities and provision of equitable health care through research, practice, legislation and innovative public health policy...

Gender & Race in Academic Medicine

Making progress depends on each of us taking action

- within our institutions
 - within our professions
 - within our personal interactions and attitudes,
- &
- acknowledging and alleviating unconscious bias