

ASH[®] MINORITY RECRUITMENT INITIATIVE ANNIVERSARY REPORT

Celebrating 20 Years of Building Pathways to Hematology



Two decades ago, ASH embarked on a mission to address disparities in hematology and support a more diverse workforce. Today, we witness the transformation that occurred in schools of medicine, hospitals, clinics, research laboratories, and patient experiences arising from ASH MRI programs and the consistent and collaborative engagement from ASH members.

Introduction

As we proudly celebrate a 20-year commitment to foster diversity and inclusion within the hematology community with the American Society of Hematology (ASH) Minority Recruitment Initiative (MRI), we reflect on the profound impact that dedicated efforts, unwavering commitment, and visionary leadership can have on reshaping an entire field.

Two decades ago, ASH embarked on a mission to address disparities in hematology and support a more diverse workforce. Today, we witness the transformation that occurred in schools of medicine, hospitals, clinics, research laboratories, and patient experiences arising from ASH MRI programs and the consistent and collaborative engagement from ASH members.

Our mentoring programs for minority medical students, residents, graduate students, fellows, and early-level faculty from underrepresented backgrounds have created a multi-generational community that improves and advances the care of children and adults with blood disorders. Through partnerships forged, mentorship extended, and opportunities multiplied, we have created an environment where diversity and inclusion are not just buzzwords, but a reality that enriches people's lives and proves the undeniable impact of diverse thought and experience on progress in this field.

The first of its kind, the ASH MRI is a testament to the collective efforts of ASH leadership, member volunteers, partners, and donors who embraced the vision of an inclusive and diverse hematology workforce reflective of the society it serves. This 20th Anniversary Report highlights the milestones achieved, the stories of those who matriculated through the MRI, and the promising pathways that lie ahead.

As leaders, we stand humbled by the impact of this initiative. These efforts allow all of us to provide more comprehensive care and advance scientific discovery. The ASH community remains resolutely committed to providing career pathways with meaningful mentorship and career support to all members across their entire careers. The journey detailed within these pages reminds us of the transformative power we hold when we work together towards a common goal.

We extend our deepest gratitude to everyone who contributed to this initiative's success through action or advocacy. Your dedication has reshaped the narrative of hematology and inspires us to continue fostering an environment where diversity and inclusion are embraced and celebrated.

We invite you to explore the stories, data, and insights that embody our 20-year journey to increase diversity, equity, and inclusion in hematology. May it ignite conversations, spark innovation, and serve as a roadmap for future endeavors as we continue our shared mission to make hematology equitable and accessible to all.

Thank you for joining us on this remarkable voyage of change.

Michael R. DeBaun, MD, MPH; Chair 2011-2014, Vanderbilt University Medical Center



Belinda R. Avalos, MD; Chair 2015-2018, Atrium Health Levine Cancer Institute



Christopher R. Flowers, MD, MS; Chair 2019-2022, MD Anderson Cancer Center



Alison Walker, MD, MPH, MBA; Chair 2023-2024, Moffitt Cancer Center

rkable voyage of change

Past and Present Chairs, ASH Committee on Diversity, Equity, and Inclusion (DEI)

Creating New Pathways to Diversity and Inclusion in Hematology

ASH has demonstrated a longstanding commitment to promoting diversity among the broader community of clinicians and investigators involved in the field of hematology. The MRI began in 2003 with the goal to increase the participation of underrepresented minority trainees in hematology-related fields and increase the number of minority hematologists with academic and research appointments. It all began with an award focused on introducing medical students from historically underrepresented communities to the field. This program has since matured into a multifaceted longitudinal initiative that supports participants throughout their training and early career.

MD/DO, PhD, or MD/DO and PhD



Christopher R. Flowers, MD, Division Head of Cancer Medicine at MD Anderson Cancer Center in Houston, Texas, the first recipient of the ASH-AMFDP Award, and Chair, ASH Committee on Diversity, Equity, and Inclusion (2019-2022)

A 13-Year Unbroken Longitudinal Pathway of Support

The MRI longitudinal pathway of awards spans medical school training, residency, and the early years of fellowship and faculty. The MRI also supports PhD candidates from graduate school to their early faculty years.

\$15M+

ASH has committed more than \$15M to the MRI since its inception, enabling over 500 unique experiences in hematology research.

MRI Total Awards



\$550,000+

ASH members have generously donated more than \$550,000 to the ASH Foundation, where 100% of their contributions were used to extend the reach of ASH's MRI programs.

A Dual Mentor Model

One factor in the success of the ASH MRI is its dual mentor model, which includes research mentors as well as individual career development mentors specifically for trainee recipients.

The dual mentorship component of the MRI award program has contributed significantly to the initiative's success. Dual mentorship is important because it provides a more comprehensive and

well-rounded mentoring experience that enhances a mentee's academic, research, and career development while also promoting diversity in the mentoring relationship.

MRI award recipients benefit from a research mentor who oversees their project and facilitates valuable research experiences, often serving as the mentee's initial introduction to the field of hematology. They are also guided by a career development mentor who helps them navigate their career throughout and beyond their research training.

These mentors remain actively engaged with mentees throughout their programs. They offer guidance and assistance as mentees contemplate their next steps within the field of hematology and often accompany them to the ASH annual meeting. The meeting is a valuable recruitment strategy as it provides a platform for networking, showcasing opportunities, and inspiring mentees to explore and pursue hematology. "Making a career in academic medicine is very difficult if you're by yourself. If you don't get promoted, if you're not productive, then you'll be eased out. Having the mentorship, the role models, and the support is what keeps you in the field so that you can develop your program and your status to its highest level. That is one of the most important aspects of these kinds of programs."

> Cage Johnson, MD, University of Southern California, MMSAP Mentor



"My mentorship relationship has taught me a lot about which qualities I would like to carry forth in my future lab. I have valued having a handsoff approach, but a critical eye to the final products of my science. It prepared me well for my postdoc where I can enjoy independence and being treated as a scientific equal."

Virginia Camacho, PhD, Harvard Medical School, MHFA Recipient, 2023



"Mentorship is the key to any training. I feel that I was successful in graduate school because of my mentor. Without her mentorship and guidance, I doubt that I would be where I am today. I am incredibly grateful."

Marcus Florez, PhD (MD Candidate), Baylor College of Medicine, MGSAAA recipient, 2019-2021, MHGA recipient, 2020



"My research mentor, Dr. Anna Eiring, has changed my life. She helped me become a member of ASH and introduced me to the world of hematology. She also promotes diversity and inclusion throughout graduate school and medical school."

Joshua Lara, Texas Tech University Health Science Center El Paso, MMSAP Recipient, 2021



"I get so much gratification in seeing my mentee's progress. It is good to expose the mentee to a research environment and very good for the rest of my team as it gives them an opportunity to mentor a junior colleague as well."

Swee Lay Thein, B.S., F.R.C.P., F.R.C.Path., D.Sc., FMedSci, National Heart, Lung, and Blood Institute, MMSAP Mentor



"I was excited to formulate a research question and develop a successful project from it with the help of the ASH MRI award. The mentorship and networking opportunities were priceless."

Christopher Wanjiku, MD, Duke University Hospital, MRHAP Recipient, 2021



"The ASH MRHAP award provided me with the opportunity to connect with life-long mentors and be able to share our work with other hematologists through an oral presentation on a national stage at the ASH conference."

Miriam Osei, MD, Brigham and Women's Hospital, MRHAP Recipient, 2022, 2020

Fostering Future Leaders of the Field

One of the unique aspects of the MRI is the emphasis placed on what an applicant can bring to the field. This begins during the whole file review process, where an applicant's leadership skills, resilience, creativity, or diverse range of experiences are also part of their evaluation. As a result of including these considerations in the review and selection process, ASH sees MRI participants and alumni advancing science and serving in leadership roles through the Society. This intentional approach brings value to the field, supports an inclusive Society, and provides career advancing opportunities for members of the MRI community.



MRI Pathway Alumni & Participants



Alumni of the MRI remain deeply engaged in ASH through volunteer leadership.

Forty-five MRI alumni have served in 353 unique volunteer leadership roles within ASH, ranging from junior reviewers in an ASH study section and contributing editors for ASH publications, to standing committee members and chairs, to serving on ASH's governing body, the ASH Executive Committee.

The initiative further fosters career advancement through unique programming opportunities, including a series of career development meetings, networking with both peers and leaders in the field of hematology, and oral scientific presentations at the ASH annual meeting.

MRI Pathway Alumni & Participants

The MRI provides longitudinal support and encourages recipients to stay on the pathway and apply for progressive awards with the anticipated outcome of increased likelihood of retention in the field.



Of the 77 individuals who have received two or more MRI awards, 25 have received progressive awards in hematology extending beyond medical school. This number is expected to increase as more recipients matriculate along the pathway.

Minority Medical Student Award Program – By the Numbers



97.8%

Completed Medical School Almost all 2004-2018 MMSAP Awardees completed medical school.

81.7-84.1% National Average

The national average of students completing medical school within four years is comparable to that of the MMSAP Awardees.¹

81.3% Graduated Within 4 years

A high proportion of the MMSAP awardees graduated from medical school within four years.

The proportion of MMSAP awardees graduating from medical school within four years (i.e., within three years after receiving the award) of 81.3% (95% confidence interval (CI) 74.7%, 86.7%) was similar to the national average of completing medical school within four years (range 81.7%-84.1%.) (AAMC Data Snapshot, 2022).¹

1 American Association of Medical Colleges Data Snapshot October 2022 Graduation Rates and Attrition Rates of U.S. Medical Students.





67.1% of the MMSAP awardees self identify as female

of MMSAP awardees 67.9% self-identified as African American, African, or Black.

Minority Medical Student Award Program



Nguyen et al. (JAMA, 2022) reported that underrepresented in medicine (URiM) students have 2x the attrition compared to non-Hispanic white students.²

In the MMSAP, the overall attrition was 2.2%, which is descriptively similar to the attrition reported for white non-Hispanic students.

When looking at medical school attrition by race, Nguyen et al. (JAMA, 2022)² studied a cohort of medical students who matriculated in 2014-2015 and 2015-2016 and reported that URiM students have twice the attrition compared to non-Hispanic white students (5.6% vs 2.3%, p<0.001). In the MMSAP program, the overall attrition was 2.2% (95% CI 0.61%-5.6%), which is descriptively like the attrition reported for white non-Hispanic students although not statistically different than what was reported for URiM students.

> 2 Mytien Nguyen, MS et al. Association of Sociodemographic Characteristics with US Medical Student Attrition: JAMA Internal Medicine 2022; 182(9):917-924. doi:10.1001/jamainternmed.2022.2194

Minority Medical Student Award Program

Retention of the MMSAP awardees into hematology is significantly greater than national estimates of hematology faculty from underrepresented backgrounds.



MMSAP Awardees

Of the 2004-2014 MMSAP awardees, 16% have been retained in hematology.



National Average Only 5.7% of hematologyoncology faculty are part of a minority group.³ Retention into hematology is a key goal of the MRI. When looking at MMSAP awardees from 2004-2014, 16% (95% CI 9.3%, 25.2%) are board certified/board eligible in hematology. Comparatively, nationwide only 5.7% of hematology-oncology faculty are part of a minority group (IJROBP 2015)³. While this is not an ideal comparison, it represents the most reliable published data currently available. Based on this comparison, the retention of the MMSAP awardees into hematology is significantly greater than national estimates of minority faculty in hematology.

3 Ahmed, AA et al. Diversity in the Oncological Workforce: Losing ground and Narrowing the Gap Comparison of Radiation Oncology and Hematology Oncology: International Journal of Radiation Oncology Poster Viewing Abstract 2015; 93 (3) Supplement, E375. doi:10.1016/j.ijrobp.2015.07.1504

Minority Graduate Student Abstract Achievement Award – By the Numbers

The goal of the MGSAAA is to attract minority PhD students to the field of hematology and retain them.



54 Are MGSAAA Alumni (2011-2021)

39 Remained in Academic Medicine

14 Were Post-doctoral Fellows

5 Hold Assistant Professor Positions

Minority Graduate Student Abstract Achievement Award

MGSAAA alumni have joined prominent institutions, including:

- Boston University
- Duke University
- Johns Hopkins University
- Keck Medicine of USC
- Massachusetts Institute of Technology
- National Institutes of Health

- MD Anderson Cancer Center
- Stanford University
- University of Chicago
- Walter Reed National Military Medical Center
- Washington University School of Medicine



Conclusion

While these demonstrations of impact, inclusion, and influence are important, time is needed to see how the unbroken pathway of support affects retention of minority hematologists and their success in hematology. Despite growing awareness of the value and necessity of a diverse biomedical research workforce, considerable barriers persist, and there remains a need for ASH to continue this work to shape hematology into a field that is enriched by a diversity of perspective and experience and is representative of its patients. The Minority Recruitment Initiative would not be possible without the support and contributions of the ASH Health Equity Collective, a cooperative enterprise of organizations seeking to minimize the impact of health care inequality and ultimately put an end to inequitable health care practices.

Learn more at hematology.org/diversityequity-and-inclusion/ health-equity-collective.



Visit the MRI Anniversary web page hematology.org/awards/ minority-recruitment/ mri-anniversary





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