

Rising Black voices in urology — the next generation

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In 2020, *Nature Reviews Urology* made a pledge to actively work towards improving diversity in our field. As we head into 2021, Black urologists make up only 2% of the US workforce in urology; this lack of representation is detrimental to the field as a whole and to the patients it serves. In this Viewpoint, which follows on from our previous article ‘Supporting Black voices in urology’, 12 medical students who have chosen to enter the field recount their experiences, describing their reasons for entering urology and why they chose particular programmes. As well as illustrating the importance of mentorship and representation, they also offer ideas on how urology programmes can better appeal to Black students, in order to encourage and support under-represented minorities into our specialty in the future.

What made you choose urology?

Justin K. Achua. By chance, I discovered urology in my first year of medical school when I was assigned to the male health station at a local health fair. There I met Dr Desmond Adamu, a PGY-4 urology resident who came from a similar racial and ethnic cultural background to me. Talking to Dr Amadu started my interest in the field, but it wasn't until after I decided that neurosurgery wasn't my calling that I seriously considered urology. I had completed a Master's degree in neuroscience before starting medical school and believed that my knowledge of the nervous system meant that I should pursue a career in neurosurgery. However, after completing a neurosurgery elective, in my third year of medical school, I realized neurosurgery wasn't my passion. I thought back to the time I spent talking to Dr Amadu and thought that urology, or possibly ophthalmology, could be my calling. I was told by faculty and friends to choose ophthalmology as the lifestyle and salary were “fantastic”. I found a mentor in the field of ophthalmology who took me under her wing, but despite all this support I had this nagging thought asking whether I was absolutely sure that I didn't

want to be a urologist. I decided to listen to this thought and sought out mentorship in urology, where I meet Dr Chad Ritch and Dr Ranjith Ramasamy. They, along with nearly the whole urology department, grew my interest in the field. I quickly noticed that I didn't get the same nagging thought I had before and knew that I had made the right choice.

Jordan Bilbrew. Growing up a queer person of colour, I always found it in my nature to advocate for those who are marginalized. Embracing these passions inspired my interest in transgender medicine and, subsequently, urology. It did not take long into my urology clerkships to realize that this was the perfect way to combine my passions, skills and interests. My friends growing up would not have necessarily considered my inherent goofiness and quirkiness a skill; however, being comfortable with awkward moments and welcoming to all personalities has proven to be such an asset in this field. I embrace the weird with a smile on my face in the hopes of empowering folks to feel more comfortable about discussing their genitourinary health. Not only does urology socially line up with who I am, but my life in the arts lends itself well to the surgical

component. I enjoy the process of training and attempting to perfect my art because there is no such thing as perfection. You continually get better as the world of arts and technology evolve. But beyond the job description, urology is the most attractive specialty because of the people in this field. I have encountered the most talented, intelligent, supportive and hilarious humans along this journey (FIG. 1).

Keiko Cooley. I knew that I wanted to pursue a surgical career after the first day of my surgery clerkship when I touched an aorta. During my didactic education, I had only heard of urologists in the context of treating nephrolithiasis; I had no idea that they were responsible for the surgical management of the entire genitourinary tract, completing robot-assisted laparoscopic surgery as well as open abdominal procedures. I stumbled into urology as a 2-week elective and I was so impressed by the variety of surgery that my faculty completed. Moreover, in the outpatient setting I witnessed, for the first time, how a surgeon was able to positively impact the daily quality of life of their patients.

Amber Herbert. Growing up, I saw first-hand how surgeries helped to prolong my father's quality of life. I was inspired by my father's team of compassionate physicians. When I matriculated to medical school, I knew I wanted to be a surgeon. Early in my first year of medical school, I participated in a course called “Exploring Careers in Medicine”. I had the opportunity to rotate through different surgical specialties such as otorhinolaryngology, ophthalmology and urology. This rotation piqued my interest in urology and my third-year elective solidified this passion. I was captivated by the breadth and intricacies of the surgical procedures. Ultimately, urology effortlessly merged my passions of surgery, global health and research, all the while caring for underserved communities.

Asia N. Matthew-Onabanjo. I honestly chose urology on a whim. One of my good friends matched into the field in 2015 and told me to check it out. I had never given surgery a thought at that point. I ignored him

The contributors

Justin Achua is a fourth-year medical student at the University of Miami Miller School of Medicine (UMMSM), and incoming urology intern at the University of Colorado Anschutz Medical Campus. Originally from Sioux Falls, South Dakota, after his family immigrated from Cameroon, and having completed his Bachelor of Science in Biology and his Master of Science in Neuroscience at the University of South Dakota, Justin is a diversity mentor and clinical skills trainer, as well as the secretary of the Urology Interest Group and a member of the admission committee for the incoming UMMSM class of 2025. His research focuses on the effects of the SARS-CoV-2 virus on male sexual health and how racial and health disparities affect bladder cancer outcomes. You can find him on Twitter @justin_achua.

Jordan Rashaun Bilbrew is a fourth-year student at Western University of Health Sciences, College of Osteopathic Medicine of the Pacific-Northwest where he served as the Vice-President of the Student Government Association and co-founder and inaugural Program Coordinator of the first diversity-enrichment programme (DREAM Program) of the college. He has recently matched into urology at Detroit Medical Center, where he plans to use his experiences to provide exceptional patient care for marginalized and under-represented patient populations, specifically in the field of gender affirmation surgery.

Keiko Cooley is a fourth-year medical student at the University of South Carolina School of Medicine-Greenville and is an incoming urology intern at Oregon Health and Sciences University. She was born and raised in Gary, IN, and received her Bachelor of Science in Biochemistry with Honours from Claflin University in 2014. Professionally, she is interested in patient education, race- and gender-based disparities and medical education. Her personal interests include guitar playing, crocheting, photography, reading, writing and performing poetry.

Amber S. Herbert is an incoming resident at Stanford urology residency programme. She earned her Bachelor of Science in Neurobiology and Physiology from the University of Maryland, College Park, and went on to attend the University of Maryland School of Medicine, where she will earn her medical degree. She is the Class of 2021 recipient of Outstanding Achievement in Research. Her research interests include addressing health-care disparities, medical misinformation, and improving patient-centred educational resources. She is an avid home décor enthusiast, and she enjoys travelling and sampling international dishes. You can find her on Twitter @AHerbertMD.

Asia N. Matthew-Onabanjo is a native of Boston and proud alum of Xavier University of Louisiana. Asia is a graduating MD PhD student at the University of Massachusetts Medical School. She is a member of Alpha Omega Alpha Honor Society. In 2019, she received her PhD, during which she discovered a novel autophagy-independent role for Beclin 1 in the regulation of growth factor receptor signalling in breast cancer in an in vivo mouse model. Asia is an incoming urology intern at the University of North Carolina urology residency programme. You can find her on Twitter @AsiaOnabanjo.

Odinachi Moghalu is a postdoctoral research fellow in urology at the University of Utah School of Medicine. Originally from Nigeria, she left home at 16 to further her education and earned her Bachelor of Science in Engineering from Baylor University, Texas, and her Master of Science and Doctor of Osteopathic Medicine from Touro College of Osteopathic Medicine, New York. She completed a year of general surgery internship at New York Presbyterian Queens, but is passionate about urology. Her passion and dedication led her to pursue a research fellowship in urology. Her research interests are in health services, patient-reported outcomes and health disparities in reconstructive urology, and men's health. Her personal interests include reading, watching true crime shows, working out, digital and hand lettering, and practising French. You can find her on Twitter @OddieMS.

Akya Myrie, originally from Brooklyn, New York, earned a Bachelor of Science degree in Health Sciences from Stony Brook University and completed a 1-year post-Baccalaureate programme at SUNY Buffalo through the Associated Medical Schools of New York (AMSNY). She is currently a fourth-year medical student at SUNY Downstate and recently matched at The Cleveland Clinic Foundation. She is a member of the Alpha Omega Alpha Honor Society. Her professional interests include urological cancer survivorship, health services research, global health and racial disparities in urological surgery. You can find her on Twitter @AkyaMyrieMD.

Nkiruka Odeluga is a first-generation Nigerian American and a healthy lifestyle advocate for underserved populations worldwide. She spent 3 years at the University of California, Santa Barbara, earning a Bachelor of Science in Biopsychology before joining a translational oncology research team at Genentech in South San Francisco. She graduated summa cum laude with a Master of Science in Medical Science from Western University of Health Sciences (WesternU) Graduate College of Biomedical Sciences and is now an honours student at WesternU's College of Osteopathic Medicine of the Pacific. Her research interests include diversity, equity and inclusion, sustainable global urology, and gender-affirming surgery. You can find her on Twitter @_PDrSM.

Jeunice Owens-Walton is a fourth-year medical student at the Medical College of Georgia and is currently completing the Medical Research Scholars Program in the Urologic Oncology Branch of the National Cancer Institute at the National Institutes of Health. Her work focuses on hereditary kidney cancers under the guidance of Dr Mark Ball. She is passionate about diversity, equity and inclusion in medical education and in the delivery of health care. She is an avid yogi and wellness enthusiast. You can find her on Twitter @JeuniceMED.

Arriana Rieland is a future PGY-1 at the department of Urology at Kaiser Permanente in Los Angeles. Arriana is a former graduate and Division 1 college soccer player of Jackson State University in Jackson, MS. She currently attends Howard University College of Medicine. In her free time, Arriana enjoys everything fitness and outdoor related, as well as hanging out with her 4-year-old border collie, Ushi.

Dyvon Walker is a fourth-year medical student at the David Geffen School of Medicine at UCLA and an incoming urology resident to the University of Colorado Anschutz Medical Campus. He graduated with his Bachelor in Human Biology from Stanford University and subsequently spent a year conducting research at the National Institutes of Health as a recipient of the Postbaccalaureate Intramural Research Training Award. Additionally, before his fourth year of medical school, he spent a year of urological research within the Division of Andrology at UCLA. In his free time, he immerses himself in various forms of media ranging from his work as a commissioned fine artist to engaging in critiques of cinematography. You can find him on Twitter @DyvonWalker.

Aboubacar Kaba is a fourth-year medical student at Saint Louis University School of Medicine and an incoming Intern at the University of California, Los Angeles Urology Residency Program. He was raised in Atlanta, GA, after his family immigrated from Guinea, and received a Bachelor of Science in Biology from Alabama State University, a Historically Black College and University in Montgomery, AL. His professional interests include medical education, mentorship, patient and trainee advocacy, quality improvement, and addressing health-care disparities by diversifying health systems. In his free time, he enjoys volunteering in the community, staying active, and trying new restaurants. He is a member of Alpha Omega Alpha Medical Honor Society and The Gold Humanism Honor Society. You can find him on Twitter @AbouS_K.

at first, but he had always given great advice and during my PhD we could use our clinical time to explore any field. Once I operated with my mentor, Dr Pamela Ellsworth,

a paediatric urologist, I was hooked. She was infectious in the operating room and wonderful with her patients. She also took the time to mentor me in ways that no one

else had. I would say she is one the few people who 'counted me in' to a specialty as opposed to 'counting me out'. I also loved her passion for research — if you could think of a

project, she was happy to help you work on it. There are many areas in urology where I can explore, play and be innovative. In addition, many of the surgeries that we perform have a large impact on a patient's quality of life. I also love the continuity of care that you can have: once a urology patient, always a urology patient.

Odinachi Moghalu. When I transferred from England to Baylor University during my sophomore year of college, I continued with my undergraduate studies in Biomedical Engineering. During this time, I was introduced to biomaterials and stem cell research in plastic surgery. Fast forward to

the second year of medical school, I met with a faculty advisor to talk about possible interests. I told him that I was interested in surgery and mentioned my interest in doing work in stem cell research within a diverse patient population. He knew that I was also very interested in the genitourinary system and was aware of my engineering background, so he recommended that I look into urology. Going into medical school and up until this meeting, I had only heard of urology as a specialty, and did not have a sound understanding of what it really involved. When I started my research into the specialty, I was initially taken aback by the lack of diversity in the field — there

were very few female urologists and even fewer Black urologists, especially Black female urologists. I decided to organize a urology placement for my third-year elective month. Luckily for me, during my surgery rotation, the urology attending, Dr Nabil Sayegh, needed an extra hand for a case, and as I was not scrubbed into the general surgery case I volunteered to assist. Dr Sayegh took me under his wing and served as a great mentor and advocate for me. He would invite me to work on cases with him in the OR as well as in the clinic.

I enjoy the breadth and depth of surgical cases, diverse patient population and technological advancements found in



Fig. 1 | **Rising Black voices in urology; the authors.** Top row, left to right: Justin Achua, Jordan Bilbrew, Keiko Cooley, Amber Herbert. Middle row, left to right: Asia Matthew-Onabanjo, Odinachi Moghalu, Akya Myrie, Nkiruka Odeluga. Bottom row, left to right: Jeunice Owens-Walton, Arriana Rieland, Dyvon Walker and Aboubacar Kaba.

urology. Additionally, it includes a good mix of surgery and medical care that enables frequent patient visits, creating the opportunity to develop long-term relationships.

Akya Myrie. When asked this question, my response is always the same: urology chose me. I grew up with a strong familiarity with the effects of lack of access to timely medical care — it cost my brother permanent brain damage at birth in Jamaica. Although medical care is more accessible in the USA, my own under-resourced Brooklyn community faced similar challenges. I went into medical school knowing that I wanted to address these health-care gaps in my future specialty. However, these issues became even more personal during a global health trip to Jamaica, the first of many. It was there that I learned how to correctly conduct digital rectal examinations for the first time, while simultaneously losing count of the number of Black men with detectable prostatic disease on physical exam. This disparity extends to many communities within the USA, including the people treated during my third-year urology rotation. I fell in love with the skill set that comes with being a urologist to address these disparities and confirmed that I wanted to learn and master as many procedures, technologies, and techniques as possible to optimize and individualize care for every patient.

Nkiruka Odeluga. My interest in surgery and urology was piqued by experiences with a Black general surgeon in high school and a Black urologist in medical school. It was unbelievably refreshing to look up and see a representation of myself, a hope for what I want to achieve. Yet, simultaneously, curious as to why meeting a Black surgeon would be notable, a rarity. Urology is the perfect combination of the critical thinking of medicine and the technical skill of surgery and every time I deep dive into one of my interests I end up in urology. That speaks volumes to me. Covering everything from disorders of sexual dysfunction to complex conduit bladder reconstruction, from paediatrics to geriatrics, the breadth and depth within our specialty is unparalleled. Urology is a specialty that ages well, leaving room to centre personal values and interests that might evolve as we age, and ultimately pairs well with life, enabling balance. Urology makes sense of all my seemingly disparate interests in global health, LGBTQ+ health, nutrition, sexual health and surgery, encouraging each to thrive under one umbrella. Urology chose me. As steep a

climb as it has been for me, I hope to flatten that curve for future queer, non-traditional and osteopathic applicants.

Jeunice Owens-Walton. During my first year of medical school I attended a lunchtime presentation for the Medical College of Georgia Urology Interest Group. To be completely honest I only attended for the free food (a girl has to eat, right?).

This particular meeting was educating students about implantation of penile prostheses. As my classmates balked at the idea of this surgery, I was captivated; I was excited to ask questions and learn more about what urologists do. The following year I attended the same interest group talk, but this time the experience was very different. The speaker was a Black woman, Dr Sherita King, someone whom I could wholeheartedly relate with. She was powerful, confident, and most importantly she clearly loved the work that she did. As I explored urology deeper and became more involved with my home department, I realized that the field has such breadth in the way it is practised, and this is what I love the most.

Arriana Rieland. Starting early in medical school, I had the full intention of becoming an emergency medicine physician. It wasn't until mid-way through the third year, after completing my surgery rotation, that I even considered becoming a surgeon. I knew urology was a surgical subspecialty, but without a home urology programme, I had a poor understanding of what urology was. Fortunately, I connected with Dr Adam Metwalli, one of the two urologists at Howard at the time, who allowed me to observe his robotic cases. Watching the complexity and the skill required to complete these robotic urological cases is what ignited my interest in pursuing a career in urology.

Dyvon Walker. Since I was a kid, I have always been interested in becoming a surgeon. I came into medical school with the intent of pursuing neurosurgery and had a lot of research and clinical experience in that particular field throughout my undergraduate degree and during a research year at the National Institutes of Health afterwards. During my second year of medical school, I was first exposed to urology during a genitourinary clinical skills workshop. This particular workshop was hosted by the andrology fellow at the time, and after hearing her enthusiastically talk about how great a

field urology is, the breadth of the clinical and surgical experiences within it, the upbeat personalities of urologists, and the state-of-the-art technologies being used, I was hooked. I was then able to shadow Dr Jesse Mills, who would later become a research mentor along with Dr Sriram Eleswarapu, and I continued to delve deeper into the field.

Aboubacar Kaba. I was introduced to the field of urology through my own personal experience, as I was born with a congenital urological condition that was treated through surgical intervention during my first year of medical school. However, it was through the mentorship and dedication to education exhibited by my mentor, Dr McDonough, that the field truly caught my eye when I was in my second year of medical school exploring various specialties. The first case I shadowed was a buccal onlay urethroplasty, and from that literally jaw-dropping moment, I knew I had to learn more about this incredible field. As I continued to shadow, I was able to appreciate the breadth of surgical and medical intervention that patients were able to receive. Additionally, when I discovered that urologists could be trained in gender-affirming surgery for transgender patients, I realized that this would afford me the opportunity to continue advocating for the transgender community. Shortly after beginning my 2-week elective in my third year, and working closely with our team of residents, I realized that there was no other specialty I'd be more fulfilled pursuing, as I had found 'my people' (FIG. 1).

Q *What do you think can be done to increase the number of Black urologists?*

J.K.A. The most important thing to do is to increase exposure of Black students to the field of urology. If it had not have been for my chance meeting with Dr Desmond Adamu during my first year of medical school, I doubt I would have considered urology as a specialty to which I would apply. Although not true for every academic institution, at my home programme there was no official urology classroom course in the first 2 years, and no required urology clinical clerkship in the third or fourth years. Without initial interest or recruitment events from Urology Interest Groups, it is difficult for medical students in institutions such as these to learn about the field of urology and gauge their interest in it as a potential career. Equally as important is racial and/or ethnic representation in the field.

Meeting and learning from Black urologists such as Dr Amadu, Dr Chad Ritch and Dr Nehizena Aihie helped me to believe that I too could join this competitive field. Furthermore, when I began interviewing and saw Black urologists in leadership positions, such as Dr Cheryl Lee, it helped me to believe that a career in urology wouldn't limit any leadership goals I have for the future. More physicians from under-represented minorities (URMs) in a field, especially those in positions of power, means more recruitment of URM students that feel welcomed and believe that they can succeed in said field.

J.B. As an active member of the social justice community for 10 years, I truly believe that we must reframe the perspective from quantitative values to qualitative values if we want true change. What this means is that we should consider impact goals that always support better access and quality of care to all patients. The field of urology must take a deep dive into self-development and identity exploration to truly understand why the deficit exists and how we all play our part to keep it this way. Once our field sincerely accepts and works against our inherently racist infrastructure, we can apply the fuel of purpose and intention to pipeline programmes and clinics that we make available for Black people of all ages — especially our youth. The distrust that the Black community has towards the health industry as patients is becoming more apparent, but the concept isn't applied to those same Black people pursuing careers in medicine. We must expose our Black communities to the system of health to make receiving health care and pursuing careers in health care more palatable and realistic experiences.

K.C. General urology and its subspecialties are hidden gems; the best thing we can do to increase the number of Black urologists is increase their exposure to the field. Many institutions have student interest groups that interface with residents, fellows and attendings. This interaction can be a valuable way for students to receive mentorship, foster meaningful relationships and gain sponsors, complete research and more. The Minority Association of Pre-Medical Students (MAPS), the undergraduate section of the Student National Medical Association (SNMA), also provides an opportunity for urology residency leadership and graduate medical education offices to engage and capture pre-medical students' interest early.

Mentorship was also very important on my journey to selecting urology — junior faculty members, Drs Elizabeth Dray and Ryan Wernitz, availed themselves to me to ask about their lives, the most common procedures they complete, patient population and why they chose their respective fellowships.

A.H. A multifaceted approach is needed to increase the 2% of Black urologists in the workforce¹. First, institutions must recognize the paucity of Black urologists within the field and understand the value of diversifying their workforce. Next, we need STEM mentorship programmes between medical institutions and local primary and secondary schools. Personally, I was a mentor for [CURE Scholars Program](#) in Baltimore, which is a pipeline partnership between local middle schools and University of Maryland School of Medicine. This programme develops the confidence and scientific curiosity of vulnerable students in inner Baltimore. Additionally, efforts should be made to expand the recruitment and retention of Black urologists in academic medicine and in leadership positions². Minority faculty members can serve as mentors and role models to the rising generation of Black urologists — studies have shown that concordance within the mentor-mentee relationship can improve the mentorship provided to URMs^{2,3}. Furthermore, institutions should strive to create equitable opportunities for away rotations for low-income URMs. Travel scholarships and local stipends can help trainees to gain access to strong letters of recommendations and exposure to a variety of programmes⁴.

A.N.M.-O. That only 2% of the urology workforce is Black is not surprising; it's a disappointing statistic that must be improved. Throughout this match cycle, many applicants had to work extremely hard to find minority mentors who have been through this process. However, my twin sister matched in the 2019–2020 cycle, so I had her opinion to help guide me. Additionally, the support available through the R. Frank Jones Urology Interest Group helped many of us applicants to polish our CVs, applications and interview appearances.

Viable options are available to increase representation in urology. First, we must emphasize the value that URMs bring to the medical field. Often times, residency programmes tend to recruit Black candidates from medical school, but the number

of Black applicants who are accepted yearly is declining⁵. Early intervention pipeline programming that starts in college and prioritizes recruitment and retention of minority medical students can help to increase the number of Black doctors in general. Historically Black Colleges and Universities (HBCUs) have pipeline-programming partnerships in which students can gain early admission into medical school. Urology programmes can reach out to those programmes that are already in place to encourage and mentor students to pursue a career in urology.

O.M. Increasing the number of Black urologists is an issue that will require a systematic approach on different levels. First, we need early introduction and mentorship in urology. Many students going into medical school do not know about urology. There needs to be a means to connect with pre-medical students even before they get into medical school and start mentorship programmes that are targeted towards Black students. Simultaneously, a strong emphasis on increasing the representation amongst academic faculty is needed. Institutions need to actively incorporate formal diversity, equity and inclusion training and see that they are not only employing Black faculty members, but are also creating an environment where they can thrive and succeed. You cannot become what you do not see — having a role model or representation of what you can become in someone that looks like you is a very strong attractant to any field. Finally, we need to have a more comprehensive approach to the selection process. For far too long, we have relied upon measures that indirectly end up rewarding wealth, social class and privilege, which creates a challenge for students from disadvantaged and low-income homes, who are disproportionately people of colour.

A.M. Deciding on a career in urology became easy when I had the opportunity to rotate with one of New York's few Black uro-oncologists, Dr Brian McNeil. Seeing truly is believing, and having a mentor who looked like me demonstrated that surpassing the goals I had set for myself was possible; in fact, it made all the difference. This experience is why we not only need to recruit more Black faculty into academic urology but also to provide them with the mentorship and sponsorship to help mitigate some of the barriers that exist to promotion and advancement. Additionally, recruitment efforts must extend to the college and preclinical year levels.

You cannot recruit from an applicant pool that does not reflect that which you are aiming to increase and expect consistent improvement. Organizations such as MAPS and the SNMA provide platforms for minority groups to enter the workforce, increasing numbers of physicians of colour, namely Black doctors. Aligning AUA diversity efforts with these initiatives will allow students to contemplate a future career in urology earlier, equip them with the resources needed to navigate a competitive match, and provide access to support from those directly involved in the decision-making process.

N.O. The primary step is personal and institutional introspection. Be really, really honest with yourself by asking “What am I doing and what are we doing to uphold the current system and the status quo”? Then — and this is not an oversimplification — do not do those things. Instead, be a disruptor to be the change. In the time elapsing during our unnecessarily unhurried transition towards equity⁶ (represented by a significantly lower proportion of URM trainees in urology than in other surgical fields⁷) are cohorts of Black students, from elementary to medical school, ready to be primed for urology. We know that personality, procedures and pathology attract candidates⁸ so early exposure to the field is key.

Next, support existing pipeline programmes before starting your own programme. If your programme is up and running, collaborate with existing programmes, such as the R. Frank Jones Urologic Society, SNMA and Latino Medical Student Association, to drive forwards the underlying mission to increase the number of Black urologists.

Finally, promote and support Black urologists. We know the power of representation from mentorship to sponsorship to positions of leadership⁹. Although not an anomaly, an especially timely example is the case of Dr Princess Denny^{10,11}, whose lawsuit outlining racial discrimination at a major US medical institution serves as a reminder that inclusion begets the success of diversity efforts. The importance of intentional mentorship and sponsorship continues throughout one’s career to ensure that Black urologists thrive and advance.

J.O.-W. My personal experience of urology has been star studded with mentors, both those who look like me and those who don’t. I believe that mentorship is absolutely key for this specialty given that urology is such

a small and close-knit field. However, an actionable set of steps needs to be in place to provide opportunities (early and often) to those who might never come into contact with the field otherwise. One simple way of providing these opportunities to students is through summer research opportunities targeting BIPOC. We’ve seen in other specialties that these programmes can be successful. The Nth Dimensions programme in orthopaedic surgery does extremely well at creating and maintaining a pipeline to and through orthopaedic training. As these students reach their goals of matching, they continually reach back and help the next generation of orthopaedists. Urology deserves a similar opportunity.

I also believe that the call to action to create more Black urologists cannot fall solely on the shoulders of practising Black urologists. Although I was fortunate enough to have a Black, female academic urologist within my reach, this is not the case for many students. Black urologists make up just 2% of the urology workforce, and Black women are even fewer and farther between. Our numbers are simply not enough. This is where the role of active allyship from the majority is absolutely necessary in both mentorship and sponsorship.

A.R. I think that the most important way we can increase the number of Black urologists is through exposure and mentorship. I went to an HBCU for my undergraduate degree, which lacked mentorship and guidance for those who were interested in getting into medical school. Similarly, at Howard, we lacked a home urology programme, which meant that exposure to the field occurred late compared with those who did have a home urology programme. With that being said, I think that residency programmes need to take initiative and reach out not only to HBCUs but also to local schools in under-represented areas. Through this connection, exposure to urology and medicine can start early, which would enable stronger mentorship and guidance to Black students who are seeking to become physicians.

D.W. One of the most important lessons that I’ve learned throughout both undergraduate and medical school is the value of mentorship. One of the best ways to increase the number of Black urologists is to establish strong, continuing mentorship programmes with Black students interested in medicine, starting from the last 2 years of their undergraduate career. Not only would this help to provide them with guidance

during both the transition into medical school and throughout medical school, it would also enable earlier exposure to urology. The first time that I truly learned about urology was not until my second year in medical school, and so exposing Black students — potentially with a focus on HBCUs — to the field earlier on would be beneficial. Additionally, the establishment of urology residency programmes at HBCUs would undoubtedly tackle both issues of mentorship and field exposure in order to create more Black urologists.

A.K. In addition to continuing the excellent mentorship and early exposure the field has provided to all applicants, I believe that programmes should be intentional about recruiting students from HBCUs. This outreach is especially important because none of the current HBCU medical schools has their own affiliated urology residency programme. Additionally, in order to recruit under-represented students from non-HBCUs, institutions should partner with URM organizations such as the SNMA, the Latino Medical Student Association and Urology Unbound to strengthen the pipelines that already exist for those communities. The combined efforts of my mentors at my home institution and community of Black urologists in SNMA and Urology Unbound enabled me to build a competitive application to successfully match into urology. Finally, I think it is important to increase the number of urology training programmes and positions across the country. Per the 2021 AUA Match Statistics¹², 481 applicants submitted rank lists competing for 357 spots: resulting in a match rate of 74%. As exposure and interest in the field continues to grow, our ability to meet the demand for training positions is increasingly important.

Q *What factors influenced which programmes you chose to apply to, and subsequently which you elected to rank the highest?*

J.K.A. I initially considered a programme’s proximity to my family and my spouse’s family, as well as a programme’s research opportunities and operative case load and autonomy to decide which programmes to apply to. However, after the murder of George Floyd and the subsequent protests, I began to note which programmes instituted diversity, equity and inclusiveness (DEI) initiatives and which supported resident learning of racial disparities. I was especially impressed by the DEI townhalls that UCSE, UCLA, and the University of Washington

held during the interview season. Similarly, after learning that there has been a decrease of almost 50% in the number of URM's applying to urology over the past 10 years, I began taking note of programmes that either already had a diverse department or acknowledged their lack of diversity and made statements on how they plan to improve¹³. I also reached out to URM residents at programmes I was interested in and asked how they felt they were treated as a URM and if they believed that their programme had any shortcomings or improvements. I used all of this information to help me to decide which programmes to apply to and how to structure my rank list.

J.B. As mentioned previously, one cannot discount the distrust between Black people and medicine, even pertaining to those pursuing careers in medicine. When starting medical school, I was promised a certain level of support and advocacy that unfortunately I did not receive. This played a role in my residency selection process because — regardless of what a programme can offer on paper or verbally — the proof is in resident experience. Leaning on the experiences of current Black physicians was vital in steering me towards or away from programmes. Two other key factors in my process were my direct personal perceptions of individual sincerity and the history, willingness and ability of the programmes to make positive sustainable changes. I tend to trust my judgement of character and honesty, so it means a lot to hear people genuinely interested and ready to work together. It means even more to have seen recent concrete progress at each programme because my fellow Black colleagues and I have callings as Change Agents and we need the space and support to build up ourselves and our workspaces.

K.C. I wish that I could have considered programmes on the basis of their outward commitment to URM's that could be appreciated by reviewing their site for past DEI initiatives or faculty, fellow and resident racial demographics, but the number of urologists belonging to the African diaspora is sparse. Becoming an exceptionally proficient surgeon is my greatest concern; thus, I was most interested in programmes with very high clinical volume that afforded residents a significant, but appropriate, amount of autonomy. Furthermore, I wanted a medium-to-large programme with a front-loaded call schedule. As finding programmes with Black and/or African American residents or faculty is difficult,

I also looked for programmes that were diverse in gender among residents and faculty. My medical college does not have a formal office of diversity, so it was also important to me to see this available in their infrastructure.

A.H. Being able to see a programme's dedication to diversity, equity and inclusion within both their programme and their surrounding community was important to me. I also valued racial and gender diversity among the faculty, as it creates an inclusive environment for prospective residents from different backgrounds. In addition, the way in which institutions addressed recent social injustices was important to me. I appreciated institutions that worked to educate faculty and residents on implicit biases and mechanisms to dismantle them. Moreover, I valued programmes that were honest about their past pitfalls related to inadequate representation of different groups of people. However, it was crucial for me to see tangible ways that the programme is working to improve those areas of weakness.

A.N.M.-O. Choosing a residency programme that you feel will train you appropriately, but also be a safe space for you is a difficult feat. When looking into residency, my first pass at making my list was to examine each residency programme for five characteristics: Black urology faculty or residents; female representation; diversity initiatives (away rotation dedicated to supporting minority medical students, medical and/or college programming); a family-friendly environment; and research opportunities. Where each one of these intersected were the programmes for which I accepted interview offers and subsequently ranked more highly. Quite often, residency programmes didn't have Black representation; thus, their plans for diversity initiatives and their ability to clearly articulate their future plans during my interview process became very important. For example, if I was going to be their first Black resident, surely a plan should be in place for further diversification of the programme to prevent a feeling of isolation. Additionally, it was important for residency programmes to acknowledge the lack of diversity in the field and be inspired to make change. Last, if there was no Black representation, female diversity and family friendliness became very important, as I am both a mom and a future surgeon.

O.M. A few factors influenced where I applied. First, as a reapplicant, I made

sure to apply to programmes where I had already made connections through organizations or mentorship; training in a place where I have someone who understands my journey and is invested in my success and career in urology is important to me. For this same reason, I was interested in institutions that were actively working to create an inclusive and equitable environment, which was evident in the diversity of residents and faculty at that institution. Additionally, some programmes had open houses or events that were aimed specifically at URM's — the event organized by the University of Michigan comes to mind. While I was not a part of the Academy, I heard amazing things from my co-applicants, and I think that this left a lasting impression on them.

A.M. Most of the programmes I applied to fulfilled one of three criteria I set for myself: first, that the programme currently has or has graduated a Black resident; second, that it has Black faculty; and third, that the programme has a dedicated DEI section on their website and/or within their department. It was vital for me to know that the programme was actively making efforts to cultivate an environment that supports people who look like me. Furthermore, speaking to individuals at the institutions about their unique experiences provided insight into whether this environment translated into practice. The people in the department are the programme's biggest advocates, and the language used when describing its DEI efforts needed to be transparent and inclusive. Additionally, I was attracted to programmes that included fellowship-trained urologists in most subspecialties to maximize my learning opportunities. Ultimately, the majority of urology programmes will provide adequate training; so, with this in mind, I elected to rank programmes that prioritized and supported their residents' clinical and investigative interests, prided themselves on departmental collegiality, and — importantly — maintained a balance conducive to resident wellness.

N.O. I reflected on my personal mission and vision in order to organize my rank list. The most difficult part of putting together my rank list was discerning which programmes were performing and which programmes were for the culture. I researched programmes that championed DEI and inquired about the outcomes of their DEI programming. Where URM clinicians were already present, I engaged

with under-represented faculty and residents to inquire about their experiences working within and matching to the programme. We like to think of match as this elusive or mysterious process, but the algorithm is straightforward: if you rank a Black applicant high enough, they will match at your programme. Ultimately, this information coalesced into a rank order that reflected my values.

As a proud osteopathic Black woman, I have been at the intersection of a litany of bias, prejudice and subsequent discrimination. In my experience, we hide our biases, owing to the guilt they elicit. Yet this guilt is also a source of power: put your shame to use in order to root out bias. I vocalize discrimination and I do not concern myself with or live in fear of bias, because that is how you change bias — by refusing to reinforce it — and how you campaign for equity — by shining light on discrimination. If I can offer any advice to the next generation of Black urologists ... do not box yourself.

J.O.-W. I am currently completing a research year and applying in the 2022 application cycle, so my response is based on the knowledge I currently have of this process. I had the pleasure to become close with the recently matched applicants; I am so fortunate to have built lifelong friendships and also learned a great deal by watching their application cycle and match experiences from the sidelines. I have learned that I will probably receive quality training at almost any programme, but that fit is crucial. Most importantly, I learned that there will be a programme that will accept me for all of me, for both my achievements and my flaws, for my passions and hobbies; that will support me in achieving my personal and professional goals and because I bring something unique to their programme. I watched my friends be their truest selves during this process, and I plan to do the same. Nobody can be Jeunice quite like Jeunice, and that's my superpower.

A.R. Before the interview process, I didn't have any factors that influenced which programmes I chose to apply to. I was recommended to apply broadly, which is what I did. It wasn't until during the interview process that I learned what factors were going to play a role in ranking. The main factor that influenced me was location: I wanted to be in a place where I felt comfortable and that I would be happy living. For instance, I would ask

myself questions such as 'is the city diverse? What's the weather like? Will there be things for me to do?' Other factors that influenced my ranking decision were my interactions with faculty and residents as well as their response to DEI. Last but not least, I considered the overall educational experience and whether exposure was adequate for all fields of urology.

D.W. My choices regarding which programmes to apply to were somewhat influenced by geographical location as well as programme reputation, but in general I had a strategy of applying far and wide. In making my ranking decisions, I graded each programme for which I received an interview on a five-point rating system for nine different categories. Those categories, in order of decreasing priority, were: first, interview, which included aspects such as resident camaraderie, faculty friendliness, interview organization and gut feeling; second, residents, including resident happiness, diversity and wellness; third, location, including city diversity, climate and cost of living; fourth, workload, including call schedule and support from attendings and senior residents; fifth, rank, including the programme's ranking; sixth, faculty, including faculty diversity, availability and friendliness; seventh, benefits, including vacation time and salary; eighth, education, including exposure to subspecialties and focus on DEI; and ninth, facilities, including hospital reputation, diversity of sites, and county exposure.

A.K. When it came to deciding which programmes to apply to, the biggest factors for me were my mentors' perceptions of various programmes, strong representation in reconstructive urology, location, and the previous trainees who had been through the programme. As I progressed through the pre-interview cycle, I was able to identify factors that were necessities for me to have in my training institution, and thus affected my overall rankings. These factors included the ability to engage in research, the emphasis on resident wellness and the diversity of the department. Emphasis on resident wellness was especially important, as it has been well documented that Black and female surgical residents more often experience discrimination, abuse, harassment and subsequent burnout during residency¹⁴⁻¹⁶. It was imperative for me that wellness be a core value of the programmes that I ranked higher, whether formally through a curriculum or informally, to help mitigate this increased

risk of burnout. With urology being one of the least diverse fields in medicine — behind only orthopaedics, dermatology, plastic surgery and otolaryngology — the diversity of a department was the hardest aspect to be critical about¹⁷. However, after attending the [Michigan Urology Academy](#) in 2020, I was provided with many tools to affectively assess a programme's "dedication to diversity," even if it wasn't necessarily reflected in their department. One important aspect of this evaluation was the Chair and Programme Director's ability and comfort with discussing the lack of diversity in the field and how they believe their institution was specifically working to address it.

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<https://doi.org/10.1038/s41585-021-00461-5>

Published online 4 May 2021

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Competing interests

The authors declare no competing interests.

Publisher's note

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