Timely Themes Inspired by the Michigan Women’s Surgical Collaborative

FROM THE GUEST EDITORS

Emilie K. Johnson, MD, MPH¹ and Kate H. Kraft, MD²

¹Assistant Professor of Urology, Ann & Robert H. Lurie Children’s Hospital of Chicago and Northwestern University Feinberg School of Medicine
²Associate Professor, University of Michigan Department of Urology

The Michigan Women’s Surgical Collaborative (MWSC), comprised of diverse women surgeons across various surgical subspecialties, launched in 2016 at the University of Michigan with a mission of supporting women to realize their goals. Each year the MWSC hosts a 2-day leadership conference facilitated by some of the most renowned women leaders in surgery and centered around themes such as parity, equity, and empowerment. This creates a conversation that spans across surgical fields, practices, and genders. At the end of the conference, this rich dialogue continues as attendees, men and women, form partnerships to hold each other accountable in exercising key concepts they have absorbed from this energetic gathering. We wish to share a few of these with you now.

In this issue of Dialogues in Pediatric Urology, surgeons who attended the most recent MWSC conference reflect on three topics inspired by the conference sessions. In the first piece, Dr. Lauren Corona shares key thoughts and take-aways about identifying bias in medicine, focusing on two concepts: the myth of meritocracy, and tokenism. In teaching us about these concepts, Dr. Corona highlights two potential pitfalls that we should aim to avoid in our professional (and personal) lives. Next, Drs. Giulia Lane and Jane Lewis educate the pediatric urology community about intersectionality. In discussing a patient with multiple interwoven identities, we begin to consider this important aspect of our patients’ backgrounds. In the final piece, Dr. Chelsea Harris shares her experience with crafting Visual Abstracts that are inclusive, yet not overly reliant on stereotypic depictions of women and people of a range of ethnicities. Dr. Harris created and shared Visual Abstracts via Twitter for the entire MWSC, and we are in awe of the thoughtful creativity behind her public work.

In closing, we hope you enjoy reading these reflections of the 2019 MWSC conference and will consider attending a future meeting – all are welcome! The concepts discussed, and connections made, were truly unique, and we look forward to building on these in years to come.

FROM THE EDITOR

Elizabeth B. Yerkes, MD

I want to thank Guest Editors Kate Kraft and Emilie Johnson and each contributor for sharing several topics from the Michigan Women’s Surgical Collaborative conference that were instructive for attendees across gender, race, age, level of experience and specialty. I attended the MWSC conference for the first time in December, introduced to it and accompanied by Emilie Johnson. The conference is well attended by surgeons and trainees from outside of the Midwest as well. There was a tremendous amount of information presented the first day to an engaged audience of men and women. The energy and excellent presentations provided opportunity for education (I still have so much to learn and had to quietly look up a few terms during the sessions), introspection, and inspiration to effect change. At times both the education and

(continued on page 4)
Identifying Bias in Medicine

The third annual MWSC leadership and development conference was well attended by more than 150 physicians from all over the country. Residents, fellows, and faculty from all stages of training piled into The Graduate Hotel in Ann Arbor, Michigan, eager to partake in discussions on a variety of topics pertinent to this year’s theme of “creating an impact and shaping the future,” with presentations from several influential speakers both in and outside of medicine.

The program on Friday started off with a session on bias in medicine, with Dr. Lesly Dossett introducing us to the myth of meritocracy. Meritocracy is defined as a system in which success is allocated to those with the most ability, the myth therefore being that the simple formula of talent plus hard work equals success. This is a myth because success actually has a lot to do with luck and/or advantage, but people, especially successful people, have a hard time accepting this.

A striking example is the story of the Mona Lisa by Leonardo da Vinci. Despite its popularity today, this was not always the case. In fact, for the first four centuries of its existence, it hung in solitude in the Louvre in Paris. It gained rapid popularity in the year 1911, when it was stolen from the Louvre. Because of this theft, images of the painting were plastered around the world. It took almost 2 years for the painting to be located when its thief, Vincenzo Peruggia, attempted to sell it to the Uffizi in Florence. It then gained a second round of publicity with the arrest of Peruggia, once again spreading images of the painting around the world. If it had never been stolen, it would not have the notoriety that it has today. Robert Frank tells this story in his book *Success and Luck: Good Fortune and the Myth of Meritocracy* and writes, “Like Kim Kardashian, apparently, the Mona Lisa is famous largely for being famous.”

Another surprising example Frank explores of the role of luck in success, is the importance of birth month. Research has shown that those born in summer months (and are therefore the youngest members of their school class) are much less likely to hold leadership positions in high school. In addition, the probability of becoming a chief executive later in life is 1/3 less likely than by chance alone if one is born in June or July. In his book, *Outliers*, Malcolm Gladwell discusses the importance of birth month in achieving athletic success. Hockey players are grouped by birth year starting at a young age, making those born in January one full year of physical development ahead of those born in December. The result: in any elite group of hockey players, approximately 40% will have been born between January and March. Au contraire, the international soccer calendar year used to begin in August, and in one recent junior world championship tournament, 135 players were born in August, September, and October and just 22 in May through July. The cutoff then changed to the calendar year for international soccer, and look at this example of the Czech national junior team from 2007 (See Table 1).

So why does this matter?

Frank argues that this myth of believing that one’s success is entirely secondary to self-made hard work is dangerous, yielding a much more tenacious sense of entitlement to those that hold it. The myth of meritocracy fosters the attitude that “if I work hard for my money, I should have the right to do what I want with that money, and to tax it is to rob me of my hard-earned dollar.” To accept this view is also to accept the view that lack of success is therefore because one is “deficient” in some way. However, we don’t choose our parents, our genes, or our environment, and these factors that are out of our control are critical to our future success. Look for example at this map of the global income distribution in 2011:
Identifying Bias in Medicine (continued from previous page)

To believe in meritocracy is to believe that these differences do not exist, the role of luck in success is negligible, and everyone starts from equal footing.

In the above cartoon, (From Dr. Dossett’s talk: https://www.chieflearningofficer.com/2019/05/07/debunking-the-meritocracy-myth/) the woman on the left has a more challenging climb up the ladder than the man on the right given ulterior circumstances over which she has no control. Acknowledging that such circumstances not only exist, but that they are omnipresent, is not an easy feat for many that are privileged. However, we must not only acknowledge them, but find ways to combat them to provide the diversity necessary to the workforce from which the whole world will benefit. Frank argues that to do this, we must support environments that allow everyone to succeed without demanding overtly painful sacrifices from anyone.

Talent can’t overcome the advantages that exist for someone who has been given the chance to work harder. We must acknowledge this role of luck.

This transitioned us nicely into Dr. Paula Ferrada’s talk on the burden of tokenism.

Merriam Webster defines tokenism as “the practice of doing something (such as hiring a person who belongs to a minority group) only to prevent criticism and give the appearance that people are being treated fairly.” Creating a figurehead for diversity allows the diversity box to be successfully ticked, and the company can rest easy that they have contributed to a favorable public profile.

Tokenism is problematic in that it does not achieve any of the economical or work life benefits that true representation has the potential to. For diversity to be successful it requires inclusion.

The transition from diversity (hiring a heterogenous group) to equity (giving each member equal access to resources) to inclusion (allowing each member to be welcomed and feel valued) is critical. This is the transformation from boasting a statistic, to giving everyone a voice, to valuing every voice.

When tokenism is at play, the output of the group will reflect this. When we instead shift to representation, we see a result of better performance both as individuals and as a group. When we eliminate tokenism and cultivate representation, we can draw from a variety of strengths to make an even better product than the sum of its parts. We must strive to do so.

In summary, the session on bias in medicine fostered insightful discussion on important themes regarding bias in the workforce, including the myth of meritocracy and the burden of tokenism. These biases, from which medicine is certainly not immune, must be recognized and understood to be overcome, so that success for all and workplace productivity can be maximized.

References

Key Points- Bias in Medicine

1. Believing that talent + hard work = success without acknowledging the role for luck or advantage is accepting the myth of meritocracy.

2. We must acknowledge the role of luck in success by supporting diverse environments that allow everyone to succeed (without demanding critical sacrifices from anyone).

3. Tokenism is the practice of doing something only to prevent criticism and give the appearance of fair treatment of all.

4. Tokenism ≠ Representation

5. We must strive for representative inclusion, and not tokenism, in our groups to maximize productivity and output.
Intersectionality through a Pediatric Urology Lens

Giulia Lane, MD1; Jane Lewis, MD2
1Urology and Health Services Research Fellow, University of Michigan
2Associate Professor of Urology, University of Minnesota

The term ‘intersectionality’ was first coined in 1989 by Kimberlé Crenshaw in her doctrine describing how black women are marginalized by both the feminist theory and anti-racist policy.1 Intersectionality in this original sense described the overlap of race and gender which can create a unique experience of discrimination. However, more recently this term has been broadened beyond race and gender.2 Merriam Webster defines it as “the complex, cumulative way in which the effects of multiple forms of discrimination combine, overlap or intersect, especially in the experiences of marginalized individuals or groups.”3 In a 2017 Interview, Crenshaw described Intersectionality as a “lens through which you can see where power comes and collides, where it interlocks and intersects. It’s not simply that there’s a race problem here, a gender problem here, and a class or LBGTQ problem there. Many times that framework erases what happens to people who are subject to all of these things.”4

Clarissa Love, Ph.D. provided clinicians a clear approach to intersectionality during the 2019 Michigan Women’s Surgical Collaborative Conference. Dr. Love discussed that the first step is to recognize that one person may possess multiple ‘identities’ that shape their unique experience (positive or negative, empowerment or discrimination). Next, recognizing these identities empower and marginalize different people based on their intersectional groups and that combining these identities may lead to ‘blind spots’ where diversity, equity and inclusion policies may not provide protections. Through sharing her own story as someone shaped by multiple identities – woman, person of color, person with a disability, and academic, among others – Dr. Love provided concrete suggestions for incorporating the concepts of intersectionality into interactions with patients, and each other.

As our communities diversify, it is important to understand how intersectionality applies to pediatric urology. Intersectionality is something that urologists, and specifically pediatric urologists, may be well accustomed to taking into account, even before they were aware of the term. In pediatrics, intersectionality is a construct of both individual and family identities. Ecklund presents an interesting psychiatric case report of the use of the intersectionality framework in the evaluation of a child with gender variant identity in the context of enculturation and ethnic socialization. Ecklund describes how children’s identities may be divergent from one another and this may lead to conflict and stress.5

One can draw many parallels between the case presented by Ecklund and a pediatric urologists’ clinical practice. For example, the decision to operate on a child with distal hypospadias may be significantly influenced by the diverse identity of families. Perhaps the intersectionality framework, identifying each key identity for the family and patient that is salient to a medical decision, could provide clarity and guidance during decision making.

Dr. Love pointed out methods that help recognize and support intersectionality in our communities. A safeguard against ‘echo-chambers’ is actively learning about the experiences of those with diverse identities and to support the notion that the whole person is more than the sum of each identity. As urologists, we have the opportunity to ask each of our patients how their urologic diagnoses impact their ability to succeed and help provide solutions that will fit within their unique identity.

References

Key Points - Intersectionality

1. Intersectionality was originally described as the intersection of race and gender.

2. More globally, this term describes how multiple marginalized identities interact and combine to affect an individual’s experience in the world.

3. Pediatric urologists should appreciate how intersectional identities may impact our patient’s experiences in healthcare, and in the world.

FROM THE EDITOR (continued from page one)

introspection were a bit uncomfortable, but within a supportive and collaborative environment. I believe this is what is supposed to happen to us as we confront difficult issues together. The second day was meaningful in a different way, with attendees enhancing leadership skills through challenges and successes shared candidly by academic leaders.

This contributions in this Edition, as introduced by our Guest Editors, are a representative taste of the topics featured at the 2019 conference. The visual abstracts created in real time are an engaging summary of key messages from each of the sessions. Be sure to appreciate both craft and content at https://mwsc.med.umich.edu/past-conferences!

It is not clear yet how the pandemic will affect the 2020 Conference, but I highly recommend this conference to you for the future.
**Equity in Imagery: My Experience with Visual Abstracts in Diversity, Equity, & Inclusion Initiatives**

Chelsea Harris, MD, MS,  
General Surgery Resident, University of Maryland

Crafting a memorable message is a substantial challenge for modern scientists. In the information era, audiences are constantly bombarded with new studies, new data, and new opinions. In this context, finding a way to not only break through the noise, but to generate a concept that sticks, is almost as important as the scholarship itself. After all, excellent science serves little purpose if it is never read. Visual Abstracts, that is infographics depicting key study findings in a single snapshot, have emerged as a tool to make science sticky. However, like any new tool, the growing ubiquity of Visual Abstracts is not without its pitfalls; thus, several aspects of their creation and use warrant scrutiny, particularly in the Diversity, Equity & Inclusion space.

Visual Abstracts were first developed by Dr. Andrew Ibrahim during his time as Creative Director at *Annals of Surgery*. In his original design (which is still among the most common formats used today), he utilized a three-panel format that paired an eye-catching icon with a succinct description of a core study finding. Large banners above and below the panels prominently display the manuscript title, first author, and publishing journal. Completed Visual Abstracts were then shared on social media (predominantly Twitter), along with a link to the article (Figure 1). This concept proved to enormously successful. Since its inception, over 100 journals have incorporated Visual Abstracts into their online portfolios, with several now employing graphic designers specifically for this purpose. Moreover, in a case-control crossover study examining research dissemination, Ibrahim et al. found that tweets with Visual Abstracts had nearly 8 times as many impressions as tweets with manuscript title alone, and perhaps even more crucially, 2.7 times as many visits to the article itself.

In my tenure as Creative Director at *Annals of Surgery*, I expanded the Visual Abstract application to include the live context, meaning I started creating them in real time during conferences as speakers presented. Much like standard Visual Abstracts, the goal of Live Visual Abstracts is to summarize key points in an artistically compelling manner, and disseminate them on social media to raise the profile of the content, speaker, and event. The Michigan Women’s Surgery Collaborative (MWSC) has been integral in this evolution. Thanks to the vision and sponsorship of Dr. Dana Telem and MWSC leadership team, the 2017 meeting was the first conference that created a platform for me to make content for every session. In the years since, our partnership has continued to flourish. Although the draw of the MWSC annual meeting is undeniably access to insight provided by the surgical luminaries that attend, Live Visual Abstracts have helped amplify their message to a global audience, and because the content is readily shareable, help it persist long after the meeting’s conclusion. Furthermore, by providing the space to hone my technique, the MWSC meeting has served as a springboard to include Live Visual Abstracts at other prominent surgical meetings including the American Surgical, SAGES, and the Association of Women Surgeons. However, because the MWSC meeting is always deeply rooted in Diversity, Equity, and Inclusion, what has proved most meaningful to me, is how it has helped me critically examine how I can better achieve equity in imagery.

In reflecting how to best use Visual Abstracts to further diversity, equity, and inclusion it is critical to understand why they have been so successful. Although some of their initial appeal likely stemmed from novelty, Visual Abstracts maintain relevance because they hone in on... (continued on next page)
the most important aspects of both research and dissemination. Well-crafted Visual Abstracts are very succinct: they distill what is often complex and highly technical work to an easily digestible one-liner. Moreover, instead of relying on graphs or diagrams for visual interest, they use bold simple icons to rapidly orient the reader to the subject material. This combination makes it easy for the casual observer to both understand and recall the gist of the study.

When tackling topics in diversity, equity, and inclusion, this relative disregard for nuance can be highly problematic. Visual Abstracts are, by their very nature, reductive, whereas issues of identity concepts such as intersectionality or cultural humility are often expressly centered on how to inject intricacy into how we understand one another. Of course, every scientist will argue that their work is more complex than a Visual Abstract, and that is true. The purpose of the medium, much like a movie trailer, is not to tell whole story, but rather pique interest in the feature length version. However, topics in diversity, equity, and inclusion are particularly susceptible to the shortcomings of the Visual Abstract format, and creators must be highly mindful of how they can maintain nuance.

Visual Abstracts have also been tremendously powerful because their creation is egalitarian. Excepting journals that employ trained graphic designers, most Visual Abstracts are made in PowerPoint either by lay people appointed by the journal, or by the authors themselves. Dr. Ibrahim and contributors have facilitated this process by publishing an open source primer. The primer walks newcomers through the process and points users toward icon databases, such as thenounproject.com, which sources vector icons from multiple designers. This low barrier to entry certainly has the potential to diversify the articles that get Visual Abstracts, as it may remove gatekeepers such as journal editors or designers who may preferentially select content. However, novices may be prone to relying on tools that already exist. This is concerning because icon libraries fall victim to the same biases that exist in society writ large. For example, when I first searched ‘professor’ in thenounproject.com, there were more scholarly owls than women. Searches for ‘executive’, ‘surgeon’, and ‘boss’ yielded similar results.

To circumvent this ‘men as default’ phenomenon, I have become adept at creating dresses by adding triangles to suits, using squirrel tails to transform a crew cut into a ponytail, and tacking on long eyelashes faces (Figure 2). Yet, I suspect that users attempting to make their first Visual Abstract may not yet have the skill or time to make these modifications, and this is more challenging to do in the live setting. Moreover, my experience highlights real imperfections with vector icons as a whole. This form of illustration, which tends toward simple, blocky design, often relies heavily on stereotypes. Notably, all the modifications I leveraged to make women more visible, utilized a femme presentation: in the world of vector icons, there is little concept of women who prefer short hair or pants suits.

The options grow even dimmer when trying to depict aspects of identity beyond gender, and are also very vulnerable to the biases of each creator. Embarrassingly, while I was busy congratulating myself for feminizing male icons, it took me much longer to recognize that I was doing this by adding stereotypically white hair. Alternatives, like natural hair or a hijab didn’t initially exist in my vector database, which meant I had to make my own, and with no formal training, my attempts didn’t look as polished as original icons. I also had to remake the modifications every time I changed scale or color scheme, which defeated many of the advantages using vector icons in the first place. One possible remedy is to purposely select icons that are devoid of identity (e.g. blob figures) but linguistics data examining bias suggests that unless the female is made visible in language, default mental imagery is male, and I suspect a similar process occurs for visuals.

So where does this leave the conscientious creator? Accepting that perfection is impossible is a good start, but here are some of the practical strategies I have found useful. 1) I evaluate whether I can capture core concepts without using human icons (e.g. could I use a scalpel instead of a surgeon?) 2) If I am depicting humans, I try to avoid icons that depict lower bodies, as this often signals gender unintentionally 3) When depicting people in positions of power, I vary representation by searching icons for hair, religious garb, or clothing and adding them to my icons 4) If depicting varied races or ethnicities I try to use colors that don’t represent real skin tones 5) After each draft I examine the finished product for additional opportunities to depict diverse figures and where possible, solicit feedback from colleagues 6) In the live setting, where I am more pressed for time, I try to download diverse icons I might need ahead of time.

Ultimately, the best way to increase representation in Visual Abstracts may be to increase the cadre of people creating them. Visual Abstracts are a powerful tool that have a lot of potential to elevate concepts in Diversity, Equity and Inclusion and the medium will certainly benefit from more and more people trying their hand. Furthermore, careful attention to topics, language, and imagery will benefit Visual Abstracts outside strict diversity, equity, and inclusion boundaries. The opportunity and potential are great, and I look forward to the field’s continual evolution.
Equity in Imagery (continued from previous page)

References