Brief Opinion

WeWhoCurie: An Initiative to Advocate for Those Underrepresented in Radiation Oncology



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Abstract

Purpose: An initiative to advocate for those underrepresented in radiation oncology.

Methods and Materials: Inspired by the success of the #ILookLikeAnEngineer and #ILookLikeASurgeon campaigns, this initiative aimed to break down stereotypes in traditionally male-dominated fields. In honor of Marie Curie's birthday, on November 7, 2018, the Society for Women in Radiation Oncology launched a social media campaign called #WomenWhoCurie day. However, as the popularity of the social media campaign increased, it become evident that members of the wider radiation community, in particular women of color, nonbinary and transgender people did not feel supported by the #WomenWhoCurie movement. In November 2021, after consultation with diversity and inclusion leaders and members of other national radiation oncology organizations, Society for Women in Radiation Oncology launched #WeWhoCurie alongside the #WomenWhoCurie campaign for women and gender minorities in radiation oncology. Radiation oncologists, physicists, dosimetrist, therapists, nurses, and other professionals from around the world gathered and shared photos and social media posts throughout the day on multiple platforms including Facebook, Instagram, and Twitter.

Results: In the year #WeWhoCurie, #WomenWhoCurie, #_____ WhoCurie campaign launched, we saw an increase in participation across the globe from 9 countries: the United States, Canada, Mexico, Brazil, Italy, Spain, China, New Zealand, and Australia. There were over 720 tweets contributing to the campaign with over 2000 messages, representing 3,365,444 "potential impacts", or the number of times someone saw the hashtag.

Conclusions: Through this campaign we aim to celebrate the incredible women, gender minorities, and allies who are "Curie-*ing*" patients with cancer and conducting cutting edge research to improve cancer care across the globe. As an organization we believe

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adding our voices to the masses will foster a culture of inclusion for everyone. Afterall, what good is the practice of radiation oncology if all are not equally welcome?

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While there were several discoveries that expanded the diagnostic and therapeutic possibilities of medicine at the turn of the 20th century, the discovery of radioactivity by Marie Curie served as a fundamental turning point in the field of oncology.¹ Since then, scientists and oncologists have built on her groundbreaking work, leading to continuous improvements through technological progress within radiation therapy. She was an extraordinary scientist and a devoted physicist, paving the way for women to enter fields previously exclusive to men. As a result of her pioneering work, she has become an icon for many women scientists. In honor of Marie Curie's birthday, on November 7, 2018, the Society for Women in Radiation Oncology (SWRO) launched a social media campaign called #WomenWhoCurie Day.

Inspired by the success of the #ILookLikeAnEngineer and #ILookLikeASurgeon campaigns, this initiative aimed to break down stereotypes in traditionally male-dominated fields. The campaign encouraged radiation professionals to share pictures of themselves with the new hashtag #WomenWhoCurie. Radiation oncologists, physicists, dosimetrist, therapists, nurses, and other professionals from around the world gathered together and shared photos and social media posts throughout the day on multiple platforms including Facebook, Instagram, and Twitter. A total of 2000 photos were shared by 720 contributors, representing 3,365,444 "potential impacts", or the potential number of times someone saw the hashtag.^{2,3} For the years following, the #WomenWho-Curie campaign grew with increased participation from radiation professionals across the globe.

However, as the popularity of the social media campaign increased, it become evident that members of the wider radiation community, in particular women of color, did not feel supported by the #WomenWhoCurie movement. Additionally, nonbinary and transgender people were not necessarily included in the initial #WomenWhoCurie campaign. This was in stark opposition to the initial mission of championing equality and removing barriers to the advancement of all who faced gender inequities within our field. In November 2021, after consultation with diversity and inclusion leaders and members of other national radiation oncology organizations, SWRO launched #WeWhoCurie alongside the #WomenWhoCurie campaign for women and gender minorities in radiation oncology.

For some in the radiation oncology community, this may be perceived as diluting the #WomenWhoCurie campaign, given the history of suppression endured by women in society. After all, there is a reason why women's history month transformed from a week-long to a monthlong celebration, reminding ourselves of the accomplishments of women trailblazers.⁴ However, as history has taught us, gender as a construct is ever evolving, and as an organization, we have chosen to embrace gender diversity, knowing that advocating for all who face gender inequities within our field is paramount.

A poll of US adults between the ages of 18 and 34 showed that 50% of millennials see gender as a spectrum instead of binary.⁵ Another study revealed that 56% of Generation Z knows someone who uses gender neutral pronouns.⁶ As an organization, SWRO aims to continuously grow and advocate for colleagues who have been traditionally underrepresented in our field of practice. In recent years, it has become evident that certain individuals, especially those who are racially underrepresented and those who are gender minorities, have not felt supported by the #WomenWhoCurie campaign or movement because, historically, these groups have been excluded from women's movements. It is estimated that among active physicians, only 5% identify as Black or African American, 5.8% as Hispanic, and 17.1% identify as Asian whereas 56.2% identified as White.⁷ We must be careful to include and amplify the voices of our minority and Black, Indigenous, and People of Color colleagues so that those who have been traditionally excluded from the field of medicine because of systematic racism now have a "seat at the table." Similarly, the statistics are no better in the field of physics.⁸

#WomenWhoCurie holds a special role in the foundational years of SWRO, and those who identify with its message are welcome to use the hashtag and campaign. However, the #WeWhoCurie and #____WhoCurie (eg, #TransWhoCurie, #biWhoCurie, etc) campaign has given us a platform to create a more inclusive environment and give individuals the opportunity to fill in the blank with the words that best represent their identities. Aside from promoting inclusivity, we aim to break the gender stereotypes in radiation oncology.

The #WeWhoCurie, #WomenWhoCurie, and #____WhoCurie campaign has featured photographs of women and gender minorities in their natural element working on a linac, preparing for a brachytherapy procedure, working on a treatment plan—in radiation oncology departments. Highlighting and celebrating diversity in our field on social media is incredibly important as research shows that Americans on average spend 3 hours a day watching television or consuming media on the internet. What we see in marketing, ads, and images shapes how we view our world and the people within it. When media images lack diversity, this can perpetuate stereotypes, tokenize individuals, and erase or marginalize entire groups of people. By showing a skewed view of the world, this fails to accurately reflect reality and may lead to internalized skewed perceptions. For example, 15% to 20% of the world's population live with some kind of disability, yet only 2% of media images show people with disabilities.9,10 Another study shows that watching television boosts the self-esteem of White men but decreases the self-esteem of Black men and women, perhaps due to a lack of (positive) imagery of their own race compared with others. SWRO aims to combat this by showing positive media examples of our Black, Indigenous, and People of Color colleagues to inspire and accurately portray our field to others.¹¹ Additionally, the campaign has allowed us to acknowledge the contributions of our male colleagues who serve as allies in gender equity and have been featured in the media during this movement as well. As our male colleagues compose a majority of our field and an even greater majority of those in leadership, it is essential to have allyship and strong support for equity.

In the year that the #WeWhoCurie, #WomenWho-Curie, and #_____ WhoCurie campaign launched, we saw an increase in participation across the globe from 9 countries: the United States, Canada, Mexico, Brazil, Italy, Spain, China, New Zealand, and Australia. Over 720 tweets contributed to the campaign, with over 2000 messages spreading the word. Through this campaign we aim to celebrate the incredible women, gender minorities, and allies who are "Curie-*ing*" patients with cancer and conducting cutting edge research to improve cancer care across the globe. Through our inclusive campaign, we celebrate all team members and increase awareness of radiation oncology and other oncologic specialties.

We strongly believe as an organization, adding our voices to the masses will help create safe workplaces and continue to foster the culture of inclusion for everyone in the field. Afterall, what good is the practice of radiation oncology if all are not equally welcome?

References

- Kułakowski A. The contribution of Marie Skłodowska-Curie to the development of modern oncology. *Anal Bioanal Chem.* 2011;400: 1583-1586.
- Knoll M, Albert A. Celebrating Marie Curie's birthday with #WomenWhoCurie. ASCO Connection. Available at: https://connection. asco.org/blogs/celebrating-marie-curie-birthday-womenwhocurie. Accessed December 30, 2022.
- Albert AA, Knoll MA, Doke D, et al. #WomenWhoCurie: Leveraging social media to promote women in radiation oncology. Adv Radiat Oncol. 2019;4:218-225.
- Women's History Month. March is women's history month. Available at: https://womenshistorymonth.gov/about/. Accessed December 30, 2022.
- Huffpost. 50 percent of millennials believe gender is a spectrum, fusion's massive millennial poll finds. Available at: https://www.huff post.com/entry/fusion-millennial-poll-gender_n_6624200. Accessed December 30, 2022.
- Wunderman Thompson. Gen Z goes beyond gender binaries in new Innovation Group data. Available at: https://www.wunderman thompson.com/insight/gen-z-goes-beyond-gender-binaries-in-newinnovation-group-data. Accessed December 30, 2022.
- Association of American Medical Colleges. Diversity in medicine: Facts and figures. Available at: https://www.aamc.org/data-reports/ workforce/interactive-data/figure-18-percentage-all-active-physi cians-race/ethnicity-2018. Accessed December 30, 2022.
- American Physical Society. Women and minorities in physics statistics. Available at: https://aps.org/programs/. Accessed December 30, 2022.
- World Health Organization. World report on disability 2011. Available at: https://www.who.int/teams/noncommunicable-diseases/sen sory-functions-disability-and-rehabilitation/world-report-on-disabil ity. Accessed December 30, 2022.
- Forbes. Changing how the world sees disability one photo at a time. Available at: https://www.forbes.com/sites/denisebrodey/2019/03/ 20/changing-how-the-world-sees-disability-one-photo-at-a-time/? sh=185c88ea2a5b. Accessed December 30, 2022.
- Martins N, Harrison K. Racial and gender differences in the relationship between children's television use and self-esteem: A longitudinal panel study. Sage J. 2011;39:338-357.