# Perspective

# Women Empowering Women in Heart Transplantation and Mechanical Circulatory Support

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The Women in Heart Transplantation and Mechanical Circulatory Support (MCS) Network officially began with a virtual reception at the 2021 International Society of Heart Lung Transplant (ISHLT) meeting. At the outset, a small network of women heart failure cardiologists and cardiothoracic surgeons started to hold monthly meetings. Through social media efforts and word of mouth, this network has grown to include more than 300 women in the last 11 months. The

network is composed of approximately 93% advanced heart failure cardiologists and 7% cardiothoracic surgeons, with 94% members from the United States and around 6% from Canada, with representation from all career stages. This perspective piece serves to introduce our network to the heart failure community, highlight the existing gender disparity within the advanced heart failure leadership, and summarize the organization's vision and objectives.

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## **Gender Disparity in the Advanced Heart Failure** Community

Women account for more than 50% of medical students in the United States and more than 40% of internal medicine resident physicians. Despite this robust pipeline of women trainees, there continues to be a profound under-representation of women in cardiology and cardiovascular subspecialities, with women accounting for only 12.6% of practicing cardiologists.1 The advanced heart failure community in the United States has better representation as 35.6% of trainees are women.<sup>2</sup> Large disparities exist, however, with respect to leadership positions in advanced heart failure.<sup>3</sup> For example, only 3 of 15 (20%) presidents of the Heart Failure Society of America and 5 of 37 (14%) presidents of the ISHLT have been women. Recent analyses have demonstrated this low representation of women in lead authorship positions for guidelines and clinical trials (12%-18%) and these numbers have remained stagnant over time.<sup>4</sup> The highest impact MCS clinical trials<sup>5</sup> over the last 10 years have had no women as principal investigators. At the institutional level, there are measurable disparities by gender. A recent survey of 236 international heart failure cardiologists noted that 70% of women responders reported gender inequity in annual salary, leadership roles, and academic promotion.<sup>6</sup>

Multiple factors likely contribute to this disparity. Women cardiologists are less likely to be promoted, be appointed as department chairs, or lead professional societies resulting in fewer women in leadership positions.<sup>7</sup> This leaky pipeline precludes gender-based parity at the highest academic ranks in cardiology. Women are often provided with less departmental and institutional support while being asked to perform the invisible work that is necessary for the organization, but may not contribute to career advancement.<sup>7</sup> Gender bias, microaggressions, a greater burden of domestic responsibilities among women, and workplace discrimination all likely play a role. If we desire a balanced and diverse leadership within our community, structural and cultural changes will be needed.

#### **Current Vision and Aims**

This network envisions a professional environment providing equal opportunity in clinical and research endeavors and diverse leadership (Fig. 1). Specifically, this network is designed to help women support women, by providing needed partnership within the community to achieve equity. The idea is to implement system-based and cultural changes that lead to lasting change, starting with the following concepts.

1 Provide mentorship and sponsorship to women. This network provides connections between members, not limited by geography. These



Fig. 1. Goals and vision of the Women in Heart Transplantation and Mechanical Circulatory Support Network.

- connections have already brought academic, clinical, and leadership opportunities. Increasing women representation in leadership has the downstream effect of recruiting more talented women into the field and can help women to be in a position to promote other women.
- 2 Facilitate research collaboration. We are providing a platform for women to share research ideas formulate multicenter collaborations, advancing science and the representation of women in academics.

3 Expand membership. Expanding our network nationally and internationally has the potential to increase opportunities and representation of women in heart transplantation and MCS more broadly.

### **Subcommittees Within the Group**

The organization is subdivided into the following subcommittees which are co-chaired by both early and mid/late career women to facilitate a platform for learning for early career members from more senior members (Fig. 2).

- 1 Education Oversees the creation of symposia for national and international meetings to both disseminate research and knowledge and improve diversity (racial, gender) in participation at academic meetings. As a group, we had 11 symposia partially selected for ISHLT's Annual Meeting and Scientific Sessions 2022, 2 for the American Transplant Congress 2022, and 23 symposia were submitted to the Heart Failure Society of America's Annual Scientific Meeting 2022.
- 2 Advocacy Works to decrease gender bias in our field. This committee identifies policies and concerns affecting its members and develops action

- plans and develops connections to help women promote women.
- 3 Social Media (@Womenintxp\_mcs) Creates a unified social media platform, promotes member work, and generates opportunities for speaking invitations or other traditional career-enhancing opportunities.
- 4 Mentorship Women tend to be disadvantaged when it comes to mentorship and opportunities at various levels. This committee develops a structure and process to foster connections to align mentors and mentees, to help promote success at different career stages.
- 5 Academic Creates a platform for sharing research proposals, ideas and writing scientific papers. Four multicenter studies are currently underway with early career women or fellows in training working closely with more experienced middle or late career mentors.
- 6 Fellows in Training Provides a network of fellows and educational content for fellows within the advanced heart failure community.
- 7 Early Career Serves members beginning their careers in the field of heart transplantation and MCS in conjunction with the mentoring committee. This committee has developed content addressing negotiation skills, fellow to attending

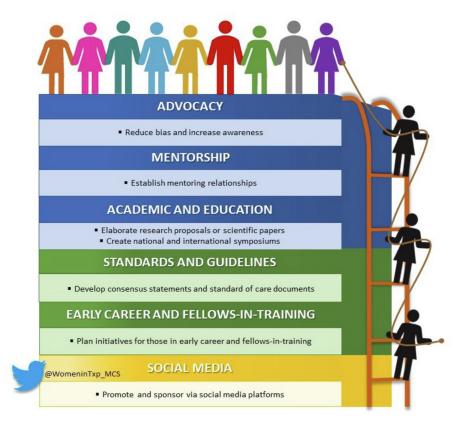


Fig. 2. Women in Heart Transplantation and Mechanical Circulatory Support Network Committees.

- transition, burnout, imposter syndrome, time management, and financial planning.
- 8 Standards, Guidelines, and Clinical Practice: Drafts consensus statements and standard of care documents. Proposals are discussed, reviewed, and prioritized. In a short span, we have submitted 1 major review on advanced heart failure in women. Six other projects are being developed.

With this perspective piece we have outlined (1) the unmet needs for women in the field of advanced heart failure, heart transplantation, and MCS, (2) the aims, long-term, goals and structure of the network, and (3) the rapid gain in momentum of this initiative with participation of a diverse group of women. It is noteworthy that our network is inclusive of all women physicians in the advanced heart failure space, irrespective of institutions or type of practice, and is essentially welcoming for all comers. We are not exclusionary and ensure that our talented male colleagues are involved in the symposia we create and in the multicenter projects we are developing. Our network is action oriented and less hierarchal in structure, where everyone can express their vision and opinions freely in a supportive, collaborative environment.

In summary, disparities by gender within the advanced heart failure community are quantifiable and persistent. The Women in Heart Transplantation and MCS Network is working together to be a part of the solution. We have a vision of diverse and balanced leadership within our field where talent is recruited and retained, and hard work is promoted.

We invite your support and look forward to partnering with our community to shape our future.

Fig. 2

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