#### **EDITORIAL**

# Women's Health Research: Road Map to the Future

女性健康研究: 通往未来的线路图

Investigación sobre la salud de las mujeres: una hoja de ruta hacia el futuro

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or more than 20 years, the US National Institutes of Health (NIH) Office of Research on Women's Health (ORWH) has promoted the NIH's research agenda on women's health and sex and gender issues. Important biological and behavioral differences between women and men influence health and wellbeing, affecting normal function as well as the manifestations, epidemiology, and response to treatment of many illnesses. This special issue is dedicated to reaching across the globe to increase awareness of the importance of women's health research and to stimulate consideration of sex and gender differences in research at institutions around the world.

The ORWH's mission is to develop new strategies for women's health research to address gaps in knowledge and further emerging scientific opportunities. As a result of this commitment, a strategic plan for women's health and sex and gender differences research for the decade was developed. This plan, Moving Into the Future With New Dimensions and Strategies for Women's Health Research: A Vision for 2020 for Women's Health Research, provides a framework for women's health research.

For this issue of Global Advances in Health and Medicine, "Women's Health Research: Road Map to the Future," we invited experts in women's health and sex and gender-based research to contribute original articles and editorials focused on the ORWH's strategic plan and vision. Contributors include researchers, program directors, and scholars for ORWH's two premier interdisciplinary research programs: Building Interdisciplinary Research Careers in Women's Health (BIRCWH), a mentored career development program, and Specialized Centers of Research (SCOR) on Sex Differences.

Accounting for sex and gender differences in health research not only provides new knowledge, it improves the questions we ask and answer, advances our research approaches, and increases the usefulness of the insights gained. Health inequalities and disparities between men and women continue to impact individuals and communities in myriad ways. Disparities persist among women as well, on the basis of race, ethnicity, socioeconomic class, immigration status, sexual orientation, and gender identity. Addressing sex and gender differences and disparities requires a renewed focus on women's health research and the inclusion of consideration of these variables in all biomedical research.

The contributions in this issue address the overarching themes and goals of the ORWH strategic plan for women's health and sex and gender differences research. For example, the articles consider women's health across the life span, one of the overarching themes of the ORWH strategic plan, including a discussion by Croisant et al of gender differences in risk behaviors in high school students<sup>1</sup> and investigations by Gilbert et al of the impact of urinary tract infections on pregnancy complications.2 Several of the articles highlight health disparities, another of the ORWH strategic plan overarching themes, such as the analysis by Haider et al of racial disparities in reproductive health<sup>3</sup> and the investigations by Vanderpool et al of socioeconomic disparities on receipt of guideline-recommended therapy for breast cancer.4 Edwards et al discuss an exciting project called "WHISK" that aims to increase awareness of women's health research issues through innovative use of theater expression and creative art.5 Sarto et al provide an overview of racial and ethnic inequities related to women's health.6

The potential for personalized medicine strategies to transform healthcare is highlighted in the article by Nelson et al7 that discusses actualizing personalized care for women though the use of connected data systems to improve breast cancer screening and diagnosis. Brawner et al propose optimizing HIV prevention for women and girls with the use of personalized biobehavioral approaches.8

We live in a globalized world, and we must learn from the experiences of people who move across borders to better meet their needs. de Leon Siantz et al examine the health status of Latino immigrant women in the United States and the consequent policy implications,9 and in an accompanying editorial, Dr de Leon Siantz discusses the global health implications of the feminization of migration.<sup>10</sup>

The success of women's health research depends upon the creation of successful programs around the world and the training of a talented workforce dedicated to this field. A distinctive career development program, the ORWH's BIRCWH program supports interdisciplinary mentoring to develop a cadre of women's health researchers. Tingen et al discuss the development of the toolkit used to monitor implementation of the NIH strategic plan for women's health research.<sup>11</sup> Miller and Bahn discuss the importance and challenges of mentoring interdisciplinary research teams who will address the study of sex and gender differences in health and disease. 12 Finally, Dr Vivian Pinn provides

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### Citation Global Adv Health Med. 2013:2(5):5-6. DOI: 10.7453/gahmj.2013.069

### **Key Words** Women's health research, NIH, ORWH, BIRCWH, SCOR

an overview of the current state of the art of women's health research and the implications for programmatic and workforce development.<sup>13</sup>

A robust and innovative approach to women's health research is key to improving health for women around the world. As highlighted by Perkins et al, we have too often failed to meet the needs of those whom we have the opportunity to serve. As she points out, the United States can "do better than last place." Similar challenges face communities across the globe. Our hope is that this issue will spur researchers around the world to develop innovative women's health research strategies and workforce training programs so that we achieve our goal of improved health for all.

Lastly, with the vision of a more personalized approach to healthcare, there will likely be increased opportunities to learn from individual case reports. The Consensus-based Case Reporting (CARE) Guidelines, written with the goal of publishing case reports that are complete and transparent, will help improve the comparability and interpretation of these reports and provide early signals of effectiveness and adverse events.<sup>15</sup>

We believe this special issue on women's health highlights the best and the brightest of the work of ORWH in promoting a greater understanding of women's health and the importance of the study of sex and gender similarities and differences. We hope you enjoy it.

#### REFERENCES

- I. Croisant SAP, Laz TH, Rahman M, Berenson AB. Gender differences in risk behaviors among high school youth. Global Adv Health Med. 2013;2(5):16-22.
- Gilbert NM, O'Brien, VP, Hultgren S, Macones G, Lewis WG, Lewis AL. Urinary tract infection as a preventable cause of pregnancy complications: opportuni-

- ties, challenges, and a global call to action. Global Adv Health Med. 2013;2(5):59-69.
- Haider S, Stoffel C, Donenberg G, Geller S. Reproductive health disparities: a focus on family planning and prevention among adolescent and minority women. Global Adv Health Med. 2013;2(5):94-9.
- Vanderpool RC, Swanberg JE, Chambers MD. A narrative review of the confluence of breast cancer and low-wage employment and its impact on receipt of guideline-recommended treatment. Global Adv Health Med. 2013;2(5):75-85.
- Edwards LV, Dennis S, Weaks F. The WHISK (Women's Health: Increasing the Awareness of Science and Knowledge) Pilot Project: recognizing sex differences in women's health and wellness. Global Adv Health Med. 2013;2(5):54-8.
- Sarto GE, Brasileiro J, Franklin DJ. Women's health: racial and ethnic health inequities. Global Adv Health Med. 2013;2(5):50-3.
- Nelson HD, Weerasinghe R. Actualizing personalized healthcare for women through connected data systems: breast cancer screening and diagnosis. Global Adv Health Med. 2013;2(5):30-6.
- Brawner BM, Teitelman AM, Webb AL, Jemmott LS. Personalized biobehavioral HIV prevention for women and adolescent girls. Global Adv Health Med. 2013;2(5):100-8.
- de Leon Siantz ML, Castaneda X, Benavente V, Peart T, Felt E. The health status of Latino immigrant women in the United States and future health policy implications of the Affordable Care Act. Global Adv Health Med. 2013;2(5):70-4.
- de Leon Siantz ML. Feminization of migration: a global health challenge. Global Adv Health Med. 2013;2(5):12-14.
- 11. Tingen C, Nagel JD, Clayton JA. Monitoring the implementation of the National Institutes of Health strategic plan for women's health and sex/gender differences research: strategies and successes. Global Adv Health Med. 2013;2(5):44-9.
- Miller VA, Bahn RS. Mentoring interdisciplinary research teams for the study of sex and gender differences in health and disease. Global Adv Health Med. 2013;2(5):109-12.
- Pinn V. Women's health research: current state of the art. Global Adv Health Med. 2013;2(5):8-10.
- 14. Perkins RB, Sherman BJ, Silliman RA, Battaglia T. We can do better than last place: improving the health of US women. Global Adv Health Med. 2013;2(5):86-93.
- Gagnier JJ, Kienle G, Altman DG, Moher D, Soz H, Riley D. The CARE guidelines: consensus-based clinical case report guideline development. Global Adv Health Med. 2013;2(5):38-43.