Perspectives

Lauren M. Ronsse

Postal: 1110 South 67th Street Omaha, Nebraska 68182-0816 **USA**

> Email: lronsse@unl.edu

Tracianne B. Neilsen

Postal: **Brigham Young University N311 ESC** Provo, Utah 84097 **USA**

> Email: tbn@byu.edu

Twenty-Five Years of the ASA Women in **Acoustics Committee**

It has been 25 years since the inception of the Acoustical Society of America (ASA) Women in Acoustics (WIA) Committee (WIAC). To commemorate the 25-year anniversary, this Sound Perspectives article provides a brief historic overview of the WIAC and describes some of the initial goals and ongoing initiatives. Sound Perspectives articles in future issues of Acoustics Today will talk about other aspects of the WIAC and its role in the Society.

Women have always been a minority in the Society. There was at least one woman charter member of the ASA, Katherine Frehafer of the Goucher College Physics Department (1925-1952). (It was common at that time to list people by their initials so there may have been others.) Some of the earliest records on ASA member demographics are from 1973 when women only comprised 4% of the Society's membership. By the early 1990s, the percentage of women membership in the ASA had increased to just 12% (Figure 1), with women comprising 10% or less of most technical committees (TCs; Table 1). In 1992, Alexandra (Alex) Tolstoy solicited Herman (Hank) Medwin, president of the ASA, about the formation of a committee for women in the ASA. With his support, Alex founded the WIA ad hoc committee and was the first chair. The original ad hoc committee had a female representative from each technical area of the ASA. The WIAC was accepted as a full administrative committee of the ASA in 1996. "It was an auspicious beginning," recalls Alex Tolstoy.

The original goals of the WIAC were aimed at increasing women involvement in the ASA and improving visibility of women in the Society. Specific goals were to (1) increase women attendance at TC meetings and the number of women fellows in the Society, (2) organize sessions at ASA meetings, (3) initiate a women's luncheon at ASA meetings, (4) establish a mentoring program, and (5) investigate

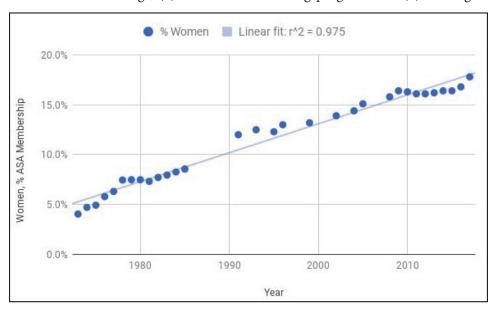


Figure 1. Plot of the percentage of women in the ASA membership

Table 1. Percentage of women in each technical committee

Technical Committee	1995	2007	2017
Acoustical Oceanography	5	17	18
Animal Bioacoustics	20	35	42
Architectural Acoustics	4	10	14
Biomedical Acoustics	13	13	15
Engineering Acoustics	10	6	7
Musical Acoustics	11	12	13
Noise	7	8	12
Physical Acoustics	5	5	8
Psychological and Physiological Acoustics	25	26	24
Signal Processing	13	11	13
Speech Communications	32	39	42
Structural Acoustics and Vibration	5	6	6
Underwater Acoustics	7	9	12

childcare at ASA meetings. Under the leadership of the WIAC Chairs (**Table 2**), the WIAC has made progress on each these goals.

Progress has been made in increasing women involvement and visibility in the ASA. The percentage of women in the ASA membership has steadily increased, as shown in **Figure 1**, to where women make up about 17% of ASA members today and a far higher percentage in a number of the TCs (**Table 1**). The percentage of women members on each TC from 1995, 2007, and 2017 (**Table 1**) shows that although the percentage of women in most of the TCs has increased, some TCs still have relatively few women.

Another indicator of increased involvement can be seen in the number of women leaders in the Society. ASA has had seven female presidents, starting with Patricia Kuhl in 1999 and continuing with our current president (Marcia Isakson) and president-elect (Lily Wang). Also, since the inception of the WIAC, 37% of the ASA Executive Council members have been women compared with 16% over the previous 25 years (1968-1992). Before the creation of the WIAC, the only woman TC chair was Katherine Harris in speech communications (1963-1965). Since 1993, 8 of the 13 TCs have had at least 1 woman chair, and currently there are 5 women TC chairs. Progress in the original goal to increase the participation of women in the TCs and the number of women fellows is reflected in the increase in women in these leadership positions.

Another way in which the visibility of women in the Society has been improved is through the WIAC website (http://www.womeninacoustics.org). The first version of this website was created by Barbara Sotirin in 1997. This website was

Table 2. Chairs of the Women in Acoustics Committee

Chair	Term	
Alexandra I. Tolstoy	1992-1996	
Dianna F. McCammon	1996-1997	
Barbara Sotirin	1997-1998	
Ellen Livingston	1998-1999	
Nancy S. Timmerman and Zoi-Heleni Michalapoulou	1999-2003	
Peggy B. Nelson	2003-2006	
Lisa M. Zurk	2006-2009	
Marcia J. Isakson	2009-2012	
Erica E. Ryherd	2012-2015	
Lauren M. Ronsse	2015-Present	

updated by David T. Bradley in 2003 and renovated again in 2011 by Kyoko Nagao, who maintains it today.

Recognizing that the transition from student to nonstudent member of ASA can be challenging, the WIAC began the Young Investigator Travel Grant, which is a competitive grant that provides funding for early-career acousticians (men and women) to attend ASA meetings. The WIAC was also instrumental in getting the Society to provide reduced conference registration fees for early-career acousticians. These efforts and the open WIAC meetings have helped to increase the participation of women in ASA.

The WIAC periodically organizes roundtable discussion and outreach sessions at ASA meetings. The roundtable discussion sessions allow mentors to lead small-group discussions on a variety of topics related to women and early-career acousticians. Another roundtable session is planned for the upcoming Spring 2018 ASA meeting in Minneapolis.

The WIAC also sponsors Girl Scout outreach sessions at ASA meetings. Traci Neilsen and Marcia Isakson initiated this program, called "Listen Up! and Get Involved!" in April 2010. At these sessions, local Girl Scout troops are invited to attend hands-on learning sessions at the ASA meetings. ASA members have enjoyed helping the Girl Scouts explore acoustics.

A WIA luncheon was started during the initial formation of the WIAC under the leadership of Alex Tolstoy, and this continues at each ASA meeting. The luncheon is open to both men and women. The attendees who are in leadership positions of the ASA and who are active in the TCs are recognized at the luncheon. Beginning in June 2013, at the request of Mary Florentine to honor Rhona Hellman, each luncheon has also been used to recognize a woman acoustician. This program, which was featured in a recent *Acoustics Today* article (Ronsse and Neilsen, 2017), honors prominent women in acoustics who have demonstrated excellence in teaching,



Figure 2. Women in Acoustics Committee Meeting in Honolulu, November 2016

research, and/or service to the field. The WIA luncheon is a highly successful and well-attended event.

A mentoring program was established within the first few years of the committee's founding and is currently coordinated by Ana Jaramillo. The mentoring program is open to anyone (men and women) in acoustics; students and earlycareer ASA members are especially encouraged to participate. Ana matches mentees with mentors in the same technical area. The mentors encourage the mentees to participate in ASA activities and help them network within the Society. Requests for mentors may be submitted through the WIAC website, and we are always accepting new mentor volunteers.

Various ideas for providing childcare at ASA meetings have been investigated over the years. Because legal and logistical hurdles make it difficult for the ASA to provide on-site childcare during meetings, dependent-care subsidies were started at the Jacksonville meeting in Fall 2015 for meeting attendees to offset dependent-care cost associated with attending the meeting. Details on how to apply for the dependent-care subsidies are provided in each ASA meeting's call for papers.

Also, in part to address the difficulty of traveling with young children, ASA has started streaming online some of the technical sessions and committee meetings that occur during the national ASA meetings. Although not a WIAC initiative, this effort was led by WIAC member and ASA Strategic Plan Goal 2 Task Force Chair Lily Wang.

The efforts of the WIAC chairs and members over its first 25 years have made significant contributions to the ASA, especially in the areas of providing support and opportunities for early-career acousticians and for women throughout their careers. Although we have come a long way since the WIAC was founded, there are still unique challenges and issues that women face within the Society. As such, the WIAC is an ongoing active force within the ASA, and all are welcome to attend the open WIAC meeting held at each national ASA meeting. Figure 2 is a photo from the recent WIAC meeting in Honolulu in November 2016. New faces and ideas are always welcome!

Acknowledgments

Many thanks to the previous WIAC chairs and Judy Dubno for providing information on the history of the committee and reviewing this article, with special thanks to Alex Tolstoy for founding the committee.

References

Ronsse, L. M., and Neilsen, T. B. (2017). Women in acoustics: Honoring some of our heroes. Acoustics Today 13(2), 58-61.

ASA School 2018



Living in the Acoustic **Environment**

5-6 May 2018 Chaska, Minnesota

- Two-day program: Lectures, demonstrations, and discussions by distinguished acousticians covering interdisciplinary topics in nine technical areas
- **Participants:** Graduate students and early career acousticians in all areas of acoustics
- **Location:** Oak Ridge Hotel and Conference Center
- **Dates:** 5-6 May 2018, immediately preceding the ASA spring meeting in Minneapolis
- **Cost:** \$50 registration fee, which includes hotel, meals, course materials, transportation from Oak Ridge to the ASA meeting location
- For information: Application form, preliminary program, and more details will be available in November, 2017 at www.AcousticalSociety.org.

