

# Childcare Options, Accommodations, Responsible Resources, Inclusion of Parents in Decision-making, Network Creation, and Data-driven Guidelines (CARING) at Infectious Disease Week (IDWeek): Parental Accommodations and Gender Equity

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Despite increasing parity in the infectious disease (ID) workforce, gender inequity persists in our clinical specialty. Inadequate accommodations for young parents at national conferences like Infectious Disease Week (IDWeek) contribute to these inequities by disproportionately excluding young women from career advancement opportunities. We propose the Childcare Options, Accommodations, Responsible Resources, Inclusion of Parents in Decision-making, Network Creation, and Data-driven Guidelines (CARING) framework to improve equitable access to major academic conferences.

**Keywords.** parental accommodations; gender equity; career advancement; medical conferences; IDWeek.

## GENDER INEQUITY IN INFECTIOUS DISEASES

In 2019, women outnumbered men for the first time as 50.5% of medical school matriculants; despite this, the Association of American Medical Colleges reports that only 35% of practicing physicians are women [1, 2]. Within the Infectious Diseases Society of America (IDSA), women represent over 40% of the workforce; nevertheless, there is gender inequity in other areas that needs attention. For example, Manne-Goehler et al [3] reported that women in academic ID are less likely than men to be promoted to full professor. Additionally, women represent only 30% of clinical practice guidelines authors (22% of first authors and 19% of last authors) [4, 5]. Women are similarly underrepresented on the IDSA's flagship journals: at present, women editors or associate editors comprise 38% of *Clinical Infectious Diseases*, 33% of *Open Forum Infectious Diseases*, and 14% of *Journal of Infectious Diseases'* editorial boards [6]. IDSA compensation surveys report that women ID physicians earn an average of \$6000 less than their male peers in their 30s, \$12 000 less by their 40s, and \$45 000 less by their 50s [7]. Across all age groups and practice types, the median pay gap between men and women ID physicians was \$43 850.

Received 1 July 2020; editorial decision 25 August 2020; accepted 4 September 2020; published online 8 September 2020.

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**Clinical Infectious Diseases**® 2021;72(12):2220–4

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 DOI: 10.1093/cid/ciaa1357

## GENDER INEQUITIES AFFECTING CAREER DEVELOPMENT

Societal expectations about gender roles outside of the workplace may influence gender inequity in academic medicine. For women, success in academic medicine does not come with domestic equality. Among K23 and K08 grant recipients (ie, highly motivated and successful researchers), women spend 8.5 hours per week more than men on parenting and other duties in the home [8]. Academic institutions have failed to respond to this reality: in 1 assessment of female medical faculty's perceived obstacles to career success and satisfaction, 38% cited meetings held after 5:00 PM and on weekends, 30% the absence of emergency child care at work, 23% the absence of on-site childcare, and 19% inadequate formal parental leave policies [9]. Early-career women physicians who leave an academic institution often cite work-life balance as 1 of their motivations [10]. Most telling, women in academic medicine with children have fewer publications, slower self-perceived career progress, and lower career satisfaction than men with children, whereas these outcomes are similar between men and women without children [11]. Summarizing over a decade of her own research, gender equity expert Dr Mary Ann Mason writes, “family formation negatively affects women's—but not men's—academic careers. For men, having children can be a slight career advantage and, for women, it is often a career killer” [12].

The gender disparity in academic medicine also stems from structural inequities in the research environment itself. Reviewing over 5.4 million research publications, Larivière and colleagues

found that women were less likely than men to be recruited into international scientific collaborations resulting in publication, and that papers received fewer citations when a woman was given a prominent authorial position (ie, first or last authorship) [13]. This citation disparity manifests as lower research productivity as measured by the h-index for female academic physicians, a gap that widens with successive academic rank and contributes to a paucity of women in leadership positions [14].

The disproportionate caregiving expectations women face and their lower citation rates may be related, and a possible early contributing factor is disparity in medical conference attendance between men and women with young children [15]. Attending major conferences confers specific advantages in academic medicine, particularly in promoting networking across institutions, which produces multicenter collaborations. Medical conferences provide an opportunity for junior faculty to gain national and international recognition (and cultivate early academic “star power” to drive future citation of their research), and allows early-career attendees to find mentors, sponsors, and advocates to bolster their careers. A survey of 248 academic oncologists found that while both men and women felt that attending conferences is important to advancing one’s academic career, women were more likely than men to indicate that having children (48% vs. 35%, respectively;  $P = .04$ ) or conflicting childcare responsibilities (31% vs 17%, respectively;  $P = .01$ ) significantly influenced their decisions to attend conferences [15]. Furthermore, women’s reporting of significantly lower mean career satisfaction than men (7.2 vs 7.7, respectively;  $P = .03$ ) was independently associated with conference attendance after multivariable adjustments [15]. Almost 3 times as many women as men rated on-site conference childcare as “extremely important” (28% vs 10%, respectively;  $P = .045$ ) for facilitating their ability to attend conferences [15].

IDWeek is the largest annual ID conference in the United States, cosponsored by the IDSA, Society for Healthcare Epidemiologists of America (SHEA), Human Immunodeficiency Virus Medical

Association, Pediatric Infectious Diseases Society (PIDS), and new in 2020, Society for Infectious Diseases Pharmacists (SIDP). The conference attracts over 8000 attendees annually from all over the world. To the extent that academic medical conferences such as IDWeek do not adopt policies that accommodate parents of young children, they disproportionately disadvantage early-career women by shutting them out of these important opportunities for career development. Some medical societies have recognized this and have pledged to provide on-site childcare for their attendees; as an example, the American Society of Clinical Oncologists, American Society of Hematologists (ASH), and American Society for Radiation Oncology provide on-site childcare, with ASH providing free childcare services for attendees with children aged 6 months to 12 years [16–18]. The American College of Physicians and several other internal medicine subspecialty organizations have arranged to provide on-site childcare services at a reasonable cost (Table 1).

The IDSA has identified inclusion, diversity, access, and equity as core values [19]. Accordingly, the IDSA has taken steps to promote gender equity at IDWeek: not only did IDWeek 2019 feature multiple sessions on women in ID and promoting gender equity in ID but, for the first time, over 50% of invited speakers at the conference were women (personal communication, Dr Cesar Arias, chair of IDWeek Program Committee). However, structural barriers to attendance continue to exist at IDWeek, which speaks to the “access” portion of the values. In September 2019, we conducted an informal poll of our ID colleagues about childcare via social media [20]. Of the 165 respondents, 23 indicated that they would not be able attend IDWeek 2019 due to a lack of childcare. While we are not able to stratify poll respondents, subsequent communications (about childcare barriers to attending IDWeek) via social media comments or emails were overwhelmingly from women. In comments, they shared that they would not be able to attend IDWeek 2019 due to childcare, an inability to attend prior IDWeek events, or needing to make special arrangements for childcare (eg, flying a relative in to the conference site).

**Table 1. Childcare Policies at Selected Major Internal Medicine and Medical Subspecialty Conferences**

Conference	Children permitted in the conference/exhibit hall?	Childcare available via meeting website?	Is childcare on site?	Cost per day: full-day for an infant with meal included
ACP 2020, American College of Physicians	Yes, with parent	Yes	Yes	\$148
ACC 2020, American College of Cardiology	Unclear from website review	Yes	Yes	Unclear from website review
Digestive Disease Week 2020, American Gastroenterological Association	Infants <6 mo and children >12 yr only	Yes	Yes	\$115
ATS 2020, American Thoracic Society	No	Yes	Yes	\$115
Kidney Week 2020 American Society of Nephrology	Yes	No	NA	NA
ACR Convergence, American College of Rheumatology	Unclear from website review	Yes	Yes	Unclear from website review

Data were collected 12 March 2020. Several other internal medicine subspecialty associations’ national conferences are not listed either because the meeting website had no information about childcare policies at the time of data collection or because the meetings had been canceled due to the coronavirus disease 2019 pandemic. Subsequent to data collection, ACP 2020, ACC 2020, Digestive Disease Week 2020, and ATS 2020 were also either canceled or moved to an online format. Abbreviation: NA, not applicable.

## THE CARING FRAMEWORK FOR CONFERENCE PARENTAL ACCOMMODATIONS

Childcare information for IDWeek 2020 is currently listed as “information coming soon” [21]. Below, we adapt the CARE framework (Childcare, Accommodate Families, Resources, and Establish Social Networks) proposed by Calisi et al [22] to suggest specific changes that the IDSA (and other medical societies) leadership can implement to make IDWeek and other academic conferences a more hospitable environment for parents of young children. The CARING framework we propose (Figure 1; Childcare Options, Accommodations, Responsible Resources, Inclusion of Parents in Decision-making, Network Creation, and Data-driven Guidelines) provides reasonable goals that would contribute to addressing the gender disparity in academic ID.

### Childcare Options

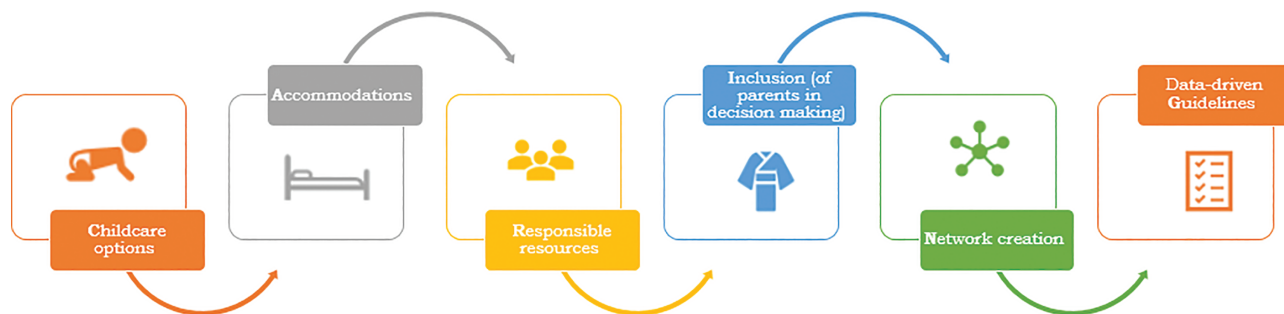
We applaud the IDSA for approaching vendors to provide on-site childcare for IDWeek 2020 and beyond (personal communication, Patsy Guerrero, Kiddie Corp). IDWeek should offer childcare within the conference center and contract with a bonded childcare company that allows attendees to preregister to ensure their children have a spot in the program. This care should extend through all hours that IDWeek events take place, accommodate children with special needs, provide meals, and appeal to children of all ages. The IDSA should insist that the vendor offer flexible care options and pricing (eg, permitting drop-in/-out care and hourly vs daily or half-day pricing), and subsidize the cost of this care or provide grants as needed to ensure it is affordable for trainees and early-career faculty with limited incomes. In addition to contracted childcare services, need-based grants for caregivers to join attendees should be distributed preferentially to parents of children who cannot use IDWeek’s contracted childcare services (ie, who have very young infants or children with highly specialized medical needs). Finally, baby-wearing and breastfeeding should be explicitly permitted throughout convention center premises, including during abstract and lecture sessions.

### Accommodations

The annual conference should take place in cities with safe and abundant public transportation (ie, not just taxi or rideshare services) that provide access between airports, the convention center, and nearby hotels to simplify planning for parents of infants and young children. Caregivers and children accompanying IDWeek attendees should receive, free of charge, badges allowing them to enter the conference premises in order to facilitate handoffs of children, breastfeeding, and family cohesion during the conference. IDWeek events, and particularly networking, meet-the-professor, and other career development-oriented sessions, should take place during the day rather than in the early morning or evening in order to maximize the likelihood that parents of young children can attend. Similarly, events of particular interest and importance to early- and mid-career faculty should not take place on the Saturday or Sunday of IDWeek, as parents of school-age children may need to return early to be ready for the following school week. Additionally, when registering for IDWeek, attendees should have the opportunity to identify specific accommodations required to facilitate their attendance at the conference.

### Responsible Resources

Lactation facilities should be adequate for the number of breastfeeding attendees and must be accurately marked on maps, have adequate signage, and be easily accessible from all conference activities. At minimum, these facilities should include a sink with soap, an electrical outlet for pumps, and a refrigerator to store milk; ideally, they would also include amenities such as a computer (for attendees to prepare for presentations or remotely view ongoing sessions), a secure locker for pump storage, and extra lactation amenities, such as milk storage bags and nipple pads. Finally, the IDWeek website should include a frequently asked questions page for parents/families that is prominently linked from the main homepage and that lists the conference’s childcare services, lactation facilities, and financial support for attendees who have children and are on limited incomes.



**Figure 1.** CARING framework for addressing parental accommodations at medical conferences. Abbreviation: CARING, Childcare Options, Accommodations, Responsible Resources, Inclusion of Parents in Decision-making, Network Creation, and Data-driven Guidelines.

### Inclusion of Parents in Decision-making

As parents ourselves who have had to make IDWeek attendance decisions with consideration for our small children, it is important that the IDSA leadership engage in robust discussions with members, and involve parents in decision-making affecting these outcomes. This could be achieved by conducting focus groups or short surveys of members so that a representative sample of members could help shape subsequent decisions. Postmeeting evaluations should inquire about ongoing areas for improvement in parental accessibility that should be addressed in subsequent IDWeek meetings.

### Network Creation

The IDWeek planning committee should make accommodations to keep attendees and their children connected. A parent's lounge, perhaps near to the childcare service, could provide a convenient place for attendees to meet while children play. In addition, the committee should consider creating a virtual space for parents attending IDWeek, such as an IDSA email listserv or a group within an existing social media platform (eg, Slack, Notion, or Twitter). Such a space would help these attendees facilitate meet-ups, arrange childcare swaps, and share knowledge about local child-friendly activities and services. Equally important, such a platform would provide early-career parents the opportunity to build their own peer collaborator network and offset the isolating effects of attending an academic conference with children.

### Data-driven Guidelines

In order to facilitate ongoing improvement, the IDSA should periodically monitor and report data on attendance of parents and utilization of childcare resources at IDWeek, and use this to inform decision-making along with input from parent members. These data should inform the development of a standard operating practice guideline assuring consistency across IDWeek meetings, regardless of who is on the planning committee. Furthermore, these guidelines can be used as a reference point for sister societies with separate meetings, such as the SHEA, SIDP, and PIDS.

### CONCLUSION

We believe that the IDSA can advance their goal of embracing inclusion, diversity, access, and equity by improving access to the career development opportunities of IDWeek for parents of young children, among whom women are disproportionately affected. It should be noted that while the scope of this article and the recommendations herein propose accommodations viewed through the lens of parenting needs, aspects of this CARING approach can and should be applied to building a more inclusive environment for attendees with disabilities, including via appropriate accommodations and the involvement

of members with disabilities in decision-making. We propose specific, measurable, and achievable changes that the IDWeek planning committee can implement in order to make IDWeek 2020 and subsequent meetings a more equitable experience for all.

### Note

**Potential conflicts of interest.** The authors: No reported conflicts of interest. All authors have submitted the ICMJE Form for Disclosure of Potential Conflicts of Interest.

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