

ISPOR SPEAKS

Getting the Right Science

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Have you ever wondered how our conference themes, plenaries, and sessions are determined? Does ISPOR have a scientific agenda per se, and if it does, who determines it? (And what does a Chief Science Officer really do—when he's not fiddling with his tricorder, that is?) In any scientific gathering, while getting the science right is critical, getting the “right” science may be equally important.

Fundamentally, ISPOR relies on member input for what is selected and presented under its banner. This approach is consistent with the concept of “emergence” (or “emergent order”) or “self-organization” in complex systems, or the “invisible hand” in economics. No single person makes the rules, determines the outcomes, or decides on prices or resource allocation—these result from the natural forces within the system and from the actions of all its “components.” Not to let our own members and environment drive what ISPOR does would be foolish and ultimately unsuccessful. One of my favorite quotes from Friedrich Hayek makes this point quite nicely for my own profession: “The curious task of economics is to demonstrate to men how little they really know about what they imagine they can design.” Another famous person put it more simply: “Life will find a way.”

OK, that's great in theory, you say—but someone, somehow, must put together a conference program. How does this really happen?

First, I'll mention a couple of recently developed, systematic intelligence sources on topics that generate the most interest. One is our Top 10 HEOR Trends membership survey, published last year for 2018 and this past January for 2019 (available at <http://www.ispor.org/top10trends>). ISPOR content and conference themes are also determined through the input of many including the Board of Directors, ISPOR Councils, Committees, Special Interest Groups, Task Forces and even Chapters. Other member and audience surveys are also important sources of input. Finally, one of our most senior and representative advisory bodies, the Health Science Policy Council, helps to formulate not only the Top 10 survey, but provides comment on major ISPOR themes.

For each major conference, program formation begins with the selection of 3 program co-chairs, starting roughly a year before the conference is to take place. This selection is led by a team including our CEO, Nancy Berg, the ISPOR President-elect and other senior members and staff. Conference co-chairs are selected for their expertise with important consideration to stakeholder representation as well as diversity such as gender, country, age, and so on. Co-chairs are ideally prominent members of our profession and the broader healthcare world, with a combination of scientific, policy, and international



expertise, who then help us shape the conference theme and plenaries for their invited meeting.

Perhaps of more interest to many of you is how workshop, issue panel, and research podium selection decisions are made. First, of course, you must submit your abstracts; your collective submission decisions form the topical base for the program. In consultation with the conference co-chairs, ISPOR then invites 3-4 members as co-chairs to lead the acceptance decision process for each type of session (ie, there are 3 workshop review co-chairs, 3 issue panel review co-chairs, and 4 research podium co-chairs). Again, these invitations are extended with consideration to country representation, gender and other areas of diversity. Next, over 500 volunteer reviewers are recruited to read and rate the abstracts. They each rate about 20 abstracts in one session type, giving each one scores on various criteria that result in a summary score between 5 (best) to 1 (worst). Each workshop and issue panel abstract submission are typically rated by 8 to 10 reviewers, while research abstracts are rated by 4 to 5 reviewers. The mean of the reviewers' scores is the primary determinant of whether of a given abstract gets chosen for the program. However, considered statistically, the mean score has a standard error of around 0.25 when there are 10 reviewers (based on a sample of scores I reviewed), so small differences in means can be based on random differences across reviewers.

Given the typical number of issue panel and workshop submissions versus program slots available, about 20% to 30% of those submissions can be accepted. For each type of session, the session review co-chairs and a team of qualified ISPOR staff collaborate to discuss and agree on the submissions. Their decisions are based on the reviewer ratings as well as other >

strategic considerations such as the panel representativeness (eg, issue panels need to include stakeholders, appropriately), audience participation, and overall priority and diversity of topics. While the top 10- to 15%-rated abstracts generally are selected, due to the sampling variability in scores, we do not apply an exact cutoff for acceptance based on ratings alone; that's where those other factors come into play more heavily. Inevitably, some very good abstracts do not get accepted; sometimes we encourage those submitters to resubmit a similar session for the next conference.

Selecting the research abstracts is a bit more complicated process because they not only have to be judged for acceptance as oral podium presentations (versus posters) but also must be grouped into cohesive sessions of 4. First the research cochairs select a probable set of session topics, based mainly on the number of submissions by broad topic category. They then select abstracts into appropriate session topic groupings; again, their selections are based heavily on reviewer ratings, but they apply some of their own judgment (essentially as additional reviewers) to help make final decisions. ISPOR staff play very little role here except to manage the process (which our Meetings-Program team does exceptionally well, I must say).

Out of roughly 2000 research abstract submissions, 60 to 80 get selected for oral podium presentations. Most of the remaining abstracts are selected for poster presentations, although we do carefully review the lowest tier of ratings for general acceptability; only 5% to 10% are not accepted as either podium or poster presentations, thus providing opportunities for many researchers at all levels to present their work at our conferences.

ISPOR Chapters, Special Interest, and other group work also compete for valuable session time. These member-generated group proposals are reviewed by a senior staff team and selected based on relevance and timeliness of topic.

ISPOR strives to serve as a well-functioning platform for our members' ideas and health economics and outcomes research (HEOR) in general. Member volunteers steer the extensive peer-review process and as in any endeavor, work is more innovative and engaging when more are involved. We truly value all your contributions as submitters, reviewers, attendees, and speakers. See you in New Orleans, Bogota, or Copenhagen! •