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Commentary



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2018 ISSCR Strategic Planning: Looking to the Future

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In 2018, the ISSCR underwent a strategic planning process to identify current priorities and plan for future initiatives. Key recommendations will help the society better serve its members and fulfill its mission of promoting excellence in stem cell science and applications to human health.

The International Society for Stem Cell Research (ISSCR) was founded in 2002, as the study of stem cells matured into a field of its own. As the field has grown, so too has the society, both in membership and vision. During this period of scientific growth, the society has remained at the forefront of the field by constantly surveying the evolving landscape and responding strategically.

In 2018, the ISSCR leadership held its fourth iteration of strategic planning to review the society's aims and priorities and set a path for the future. The strategic planning focused on five issues important to the society. Each area was assigned a working group to discuss how the society should meet the following challenges and opportunities as they emerge and remain at the forefront of an ever-changing field:

- (1) promoting international excellence in stem cell science;
- (2) supporting clinical translation and commercialization;
- (3) advocating globally for scientifically based policy decisions;
- (4) enhancing education, communication, and outreach; and
- (5) ensuring sound fiscal health and responsible management.

ISSCR Strategic Vision

The ISSCR Core Values were ratified by all working groups:

- Continue a tradition of scientific excellence, rigor, and integrity.
- Raise the visibility of stem cell research.
- Encompass the breadth of stem cell research.
- Support inclusivity and diversity.
- Show value to patients and
- Provide value to our members in terms of networking and collab-

Importantly, the ISSCR mission statement was updated as follows: "The ISSCR mission is to promote excellence in stem cell science and applications to human health."

As the co-chairs of this initiative, we are pleased to share the primary findings and common themes that emerged during the 2018 ISSCR strategic planning sessions (Table 1).

Promoting International Excellence in Stem Cell Science

At the core of the ISSCR is the society's mission to "promote excellence in stem cell science and applications to human health," and strategic planning must align society activities in support of this directive. Among the core activities that further this ISSCR mission are the annual meeting, international symposia, policy activities, the development of international guidelines, and the society journal, Stem Cell Reports. The strategic plan-

ning committee developed several targeted recommendations to enhance some of these society activities.

The ISSCR Annual Meeting is the main conduit for promoting scientific rigor and excellence, as well as connecting with members and networking. It is important that the meeting format reflect the most current and effective means of sharing exciting scientific advancements and engaging attendees.

- To ensure that the science presented at the meeting remains at that highest level and that we retain attendees, a task force has been formed to explore updating the programming and format. The task force will assess the effectiveness of the current format and make recommendations to provide the best meeting experience possible to all attendees.
- In geographic areas where stem cell science is growing rapidly, such as Asia, the ISSCR would like to see the involvement of rising leaders and more representation in speaking roles at meetings and within committees. A task force on Asian engagement, led by Haifan Lin, has been established to pursue these efforts.
- The society is interested in engaging and mentoring early and mid-career scientists who





Number	Recommendation
1	Establish a task force to explore potential changes to the annual meeting format and programming to reflect the evolving stem cell field.
2	Establish a task force on Asian engagement on how best to engage with global stem cell communities in Asian countries at the science, society leadership, clinical and commercial translation, and policy levels.
3	Establish a regularly scheduled Next Generation of Leaders Retreat program to promote involvement of emerging independent stem cell investigators in the society's issues and future leadership.
4	Engage the Junior Investigator Committee in surveying young scientists and developing recommendations for attracting and retaining the next generation of scientists.
5	Explore creating online education modules aimed specifically at physicians.
6	Develop a how-to section on the ISSCR website for reporting disreputable clinics to regulatory bodies.
7	Maintain support for policy outreach and advocacy as a key activity and provide appropriate resources to increase international impact.
8	Establish an Education Committee with a mandate to explore and collate existing online education materials suitable for different audiences, oversee and regularly review the ISSCR website content, and develop new educational resources for ISSCR members teaching stem cell science.
9	Reconfirm the society's commitment to holding one in three annual meetings outside of North America.
10	Identify existing and new companies with direct commercial interests in the stem cell space and clear relevance to the ISSCR's mission and consolidate relationships with them.

represent the next generation of stem cell science and its future leadership. We will hold a "Next Generation Retreat" every 3 years to mentor a select group of junior investigators and provide leadership development.

Supporting Clinical Translation and Commercialization

In recent years the society has increased efforts to support the translation of stem cell science to medicine and has seen the successful engagement of clinical researchers and companies working on the translational pipeline. Activities to strengthen interactions between scientists, businesses, and investors that help drive the commercialization and advancement in biomedicine will continue to be a focus for the society.

Recent efforts have included the development of translational programming at the annual meeting and by ISSCR committees, and we will continue these efforts while adding new resources as well.

- The ISSCR Clinical Translation Committee has recently released a guidebook, "Stem Cell Based Clinical Trials: Practical Advice for Physicians and Ethics/ Institutional Review Boards," and they are currently developing online fact sheets for physicians regarding the current state of stem cell research for various diseases.
- By highlighting clinical translation and facilitating the interaction and education of members involved in translational research. including clinicians, scientists,

and industry members, the ISSCR is committed to helping advance the field.

Discouraging the proliferation of clinics offering unapproved stem cell treatments is also of utmost importance to the society. Several recommendations emerged to improve the society's interface with clinicians and to discourage unscrupulous stem cell clinics and unproven treatments.

• In addition to continued policy initiatives aimed at encouraging regulatory agencies around the world to enforce regulations against the use of unapproved stem cell treatments, the society will also develop a how-to section on the ISSCR website for reporting disreputable clinics to regulatory bodies.

Advocating Globally for Scientifically Based Policy Decisions

Influencing policy has been a strategic priority of the ISSCR for many years. The ISSCR has established itself as a trusted voice worldwide when complex ethical and public policy issues related to stem cell research and therapeutic interventions arise. The ISSCR positioned itself as a leader in promoting the safe and responsible use of stem cells with the Guidelines for Stem Cell Research and Clinical Translation. These guidelines are utilized by researchers, clinicians, regulators, and institutions worldwide to help ensure that stem cell science progresses with scientific and ethical integrity.

• Through its strategic planning the ISSCR has confirmed its commitment to taking a leadership role in setting the standards for stem cell research and translation.

The ISSCR also recognizes the importance of being nimble in response to emerging issues and has established a robust policy and advocacy

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program as directed by the Public Policy Committee. The ISSCR is developing relationships with policy makers worldwide who can help advance effective and responsible regulation of stem cell research and clinical translation.

- The ISSCR will engage with policy makers to support stem cell science globally, continuing to support all forms of stem cell research, including embryonic and fetal tissue research, and informing policy makers about the proliferation of unproven therapies around the world.
- The ISSCR will consider carefully taking a leadership role in establishing guidelines and best practices for research in the areas of artificial embryos, germline editing, the 14-day rule, gametogenesis in culture, and xenografting of human cells.
- It is essential that the ISSCR identify and nurture the next generation of science policy leaders. The ISSCR will develop policy engagement events at annual meetings, international symposia, and other local forums.

By reaffirming our commitment as the global leader in stem cell science policy and adding new programming, the ISSCR will continue to be a leading voice in the field, helping to set standards and responding to emerging issues.

Enhancing Education, Communication, and Outreach

A key mission of the society is to educate multiple and varied constituencies, including scientific members, patients, doctors, policy makers, and the general public. The society provides many educational resources on the main ISSCR website and on the A

Closer Look at Stem Cells website, the society's website for public education.

Our strategic planning included a review of a recent task force report suggesting that the ISSCR establish a new Education Committee to expand society efforts to support members in their communications, teaching, and outreach efforts, while also taking into consideration the society's resources and investments needed to generate and regularly update high-quality educational material.

A new Education Committee
has been established that will
focus on developing educational
resources regarding stem cells,
updating ISSCR educational
materials on our websites, and
providing resources on stem cell
science to support our members
who teach undergraduate, graduate, and medical students.

Ensuring Sound Fiscal Health and Responsible Management

In order to stay at the forefront of stem cell science and sustain a growing base of members, the society is committed to maintaining a global presence, increasing the diversity of its leadership, and cultivating the next generation of scientists. These activities require a sound financial base and strong fiscal management, both of which were considered to be well under control by management and the board of directors.

However, there are always possible challenges to financial stability. The ISSCR will continue to focus on consolidating existing resources and seeking new opportunities that align with the ISSCR mission.

 We will identify existing and new companies with direct commercial interests in the stem cell space and clear relevance to our

- mission and consolidate relationships with them.
- We renewed our commitment to hold one in three annual meetings outside of North America to be inclusive of an international community.
- The society will also continue to grow its international symposia programming.

The society will also endeavor to engage and retain members at different career stages by enhancing career resources, initiating advocacy and communication programming, and encouraging involvement in society activities.

Conclusion

The 2018 strategic planning session was an effective way to focus the society on the needs and priorities of our membership and the field of stem cell research. Over the course of the next few years the ISSCR will work to strengthen the impact of this work by refreshing the annual meeting, enhancing global engagement, increasing efforts in education and policy, and promoting the next generation of stem cell scientists. Through these mechanisms, the ISSCR will continue its leadership role in the field and improve on its ability to promote worldwide excellence in stem cell science and its applications to human health.

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