



ISCB

ANNUAL REPORT

2023



A Presidential Reflection

Christine Orengo, Ph.D., President (2021-2023), Professor of Bioinformatics
University College London



It has been a huge privilege and a pleasure to serve as your ISCB President for the 3 years since January 2021. I took the reins just as the COVID-19 virtual conference era was coming to an end. ISMB continued to be virtual again that year as it was hard to predict whether venues would remain open. ISMB is a major source of funding for ISCB and the years we ran ISMB virtually resulted in a considerable financial loss to the society. ISMB profits support many of our society activities, so a major concern going forward was to ensure the society remained solvent.

We are proud of being a truly international society that supports ISCB associated conferences and meetings all around the world. There is a whole team of dedicated people without whom the society could not function. The ISCB Chief Executive Officer, Diane Kovats and her team work hard to manage and promote our

conferences and many other important ISCB activities e.g. student networks etc. Diane and her team do a fantastic job of balancing projects and finances and are to be congratulated for having kept the society on track during the tough financial times brought on by COVID-19. Strategic decisions are made by the Executive Team, a small, dynamic group of highly committed people who meet every month and discuss ways of shaping and improving ISCB activities. In addition, good ideas are collected from the ISCB Board, a larger group of equally committed people who meet four times a year and are responsible for endorsing all major decisions of the society.

Thanks to innovative solutions from all of this team ISCB was able to weather the pandemic financial challenge and we moved to hybrid ISMB conferences to future proof the society. The last two years brought considerable funds from these meetings, especially last year when more than 2100 people attended ISMB in France with another 419 online. It was wonderful to hear the talks and see each other in person again! This year is already promising to be another successful conference. The smooth transition to hybrid meetings has been a silver lining to the pandemic cloud, as it means many more members can enjoy ISMB even in years when they don't have funds to join in person, extending the global reach of our society.

Another major contribution to ISCB funds has come from our new journal *Bioinformatics Advances*, introduced by the Publications Committee in 2021 and successfully steered by Chief Editors Alex Bateman, Thomas Lengauer and more recently Aida Ouangraoua as Senior Editor. *Bioinformatics Advances* is proving popular for publishing papers from our conferences and also for reporting other exciting new developments in our field. This not only brings funds but also raises the profile of ISCB.

Other ways in which we have endeavored to expand ISCB reach and grow members is through our Communities of Special Interest (COSIs). These are organized by highly committed ISCB volunteers who run the scientifically themed COSI tracks within our ISMB conference. It has been good to watch the expansion of these Communities (there are now 21) and see them thriving as they evolve their governance and outreach. From the beginning they have been encouraged to run year-round activities to keep their communities networked. In particular, twinning with meetings of other societies. Last Autumn the 3D-SIG community joined with the Europe-wide ELIXIR 3D-BioInfo Community in Structural Bioinformatics and held a successful meeting in Prague. This will be repeated in Barcelona in 2025. ISCB leadership has plans to continue these meeting partnerships. You can learn more at <https://www.iscb.org/affiliate-conference-form>.

Our society is more than just meetings though. Whilst we highlight major new tools and biological discoveries through our conferences, newsletter and scientific journal, we also identify and award the scientists who have been pioneers in their respective fields. Along with the ISCB awards given at ISMB each year (Overton, Innovator, Senior Scientist), we annually recognize up to .5% of our members as Fellows. As with other scientific

societies these distinguished scientists are beacons of scientific endeavor and rigor, driving some of the most exciting discoveries in our field. It's important that the selection of these distinguished individuals fairly reflects the demographics of our society. So, in 2022, we established a Fellows Selection Committee which over the last two years, together with assistance from ISCB Fellows, appointed another 27 Fellows. Whilst thoughtfully reviewing our nominations and ensuring all proposed Fellows demonstrate excellence in scientific achievements, the Selection Committee have endeavored to ensure that these new Fellows fairly reflect our society's demographics. Advice from the Board and Fellows have significantly aided and modified this process. This is also overseen by a new Fellows Council which we introduced this year. The Fellows Council provides a new forum for introducing special scientific sessions at ISMB together with Fellows workshops at which Fellows work up whitepapers commenting on transformative new technologies and outstanding biological discoveries. We have 140 Fellows in total now. They are important ambassadors for our society and we hope to see their increasing involvement in ISCB.

I'd like to end by encouraging you, as members, to get more involved in ISCB committees and activities. With the recent expansion in quantitative biology and advanced data science in most research institutes around the world, our community and therefore ISCB will gain higher visibility and become more influential in scientific strategy discussions. ISCB works hard to ensure that the composition of the committees reflects the demographics of our society. But that depends on you too. You belong to a vibrant growing society, that is continuously shaped by its committees. Become a part of that and make sure ISCB reflects the perspectives of your community and introduces the activities you feel are missing. Speaking

personally, I have hugely enjoyed working with the Executive Team, Board, ISCB COSIs and Committees. Also, with Diane and her team, who are truly inspiring in their long term commitment, creativity and rigor. They have all been great fun to

work with and I've found my time as president immensely enjoyable and interesting. ISCB is one big team which is in very good hands with our new President. I encourage you to get involved and join in the fun!

WHERE WE ARE NOW

Welcome to the 2023 Annual Report of the
International Society for Computational Biology (ISCB)

ISCB Annual Report: A Year of Growth and Challenges

As a leading organization in computational biology and bioinformatics, the International Society for Computational Biology (ISCB) is committed to reporting annually on its progress, membership, and financials.

The society relies heavily on volunteers who chair and participate in committees and communities. Without our engaged members and their significant contributions, ISCB would not have seen the organizational success that was achieved in 2023 without the strong support of its members and volunteers.

Key Achievements

- ISMB 2023, collaboration with ECCB, saw record-breaking attendance 2150 in person, a total of 2479 from 50 countries
- 10 Affiliate conferences, Regional and Student Council meetings
- ISCB Nucleus platform delivered science to 1100 participants around the world
- The Bioinformatics Advances journal, launched in 2021, has seen over 500 submissions and 200 publications, contributing to the society's financial stability and scientific impact.

- The Affiliates Committee and Communities of Special Interest (COSIs) play a crucial role in organizing local meetups, workshops, and webinars, extending ISCB's reach and engagement.

The society remains in a healthy position, thanks to prudent financial management and investments made before the pandemic. Despite operating at a deficit in recent years due to the pandemic, the return to face-to-face meetings and successful hybrid models have helped stabilize finances.

ISCB membership has grown to its highest levels, with significant student involvement. However, retaining members as they transition from student to professional roles remains a challenge. We still see large variations in regional membership retention, with North America maintaining strong membership, while Europe shows more fluctuation.

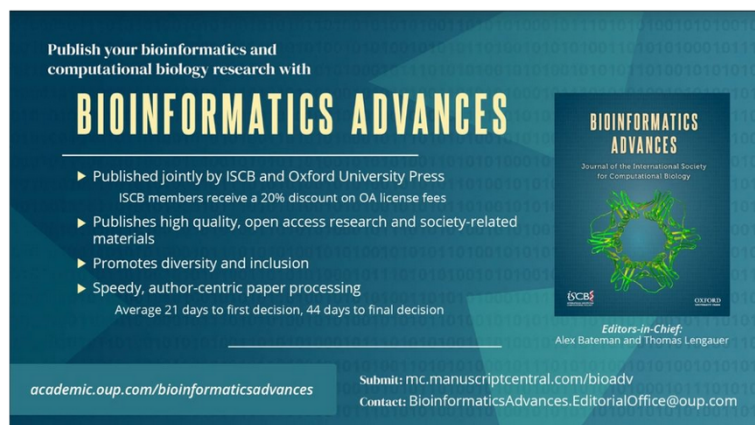
Initiatives and Future Directions

The Green Task Force is focused on sustainability, including choosing eco-friendly conference venues and initiatives like the ISCB Grove for tree planting. The society also emphasizes the importance of communicating science to the public, addressing ethical issues, and supporting diversity and inclusion through various awards and fellowships.

The society aims to maintain high member numbers with a focus on satisfaction and explore new ways to serve its community effectively. Members are urged to participate in surveys, provide feedback, and get involved in ISCB's initiatives. The success and growth of the society depend on active member participation and the continuous influx of new ideas and leaders.

***Bioinformatics Advances* Journal Report**

Bioinformatics Advances, a joint venture between ISCB and OUP. The journal aims to represent all areas of ISCB science, including emerging fields and society content. Our goals are to encourage diversity at all levels and maintain an author-centric approach to the publication process. Our editorial process strives to make the publication journey smooth and supportive, averaging a 27-day time to first decision.



Publish your bioinformatics and computational biology research with

BIOINFORMATICS ADVANCES

- ▶ Published jointly by ISCB and Oxford University Press
ISCB members receive a 20% discount on OA license fees
- ▶ Publishes high quality, open access research and society-related materials
- ▶ Promotes diversity and inclusion
- ▶ Speedy, author-centric paper processing
Average 21 days to first decision, 44 days to final decision

Editors-in-Chief:
Alex Bateman and Thomas Lengauer

academic.oup.com/bioinformaticsadvances

Submit: mc.manuscriptcentral.com/bioadv
Contact: BioinformaticsAdvances.EditorialOffice@oup.com

The journal has grown significantly, doubling its publications from about 50 papers in 2021 to 100 in 2022, and by year-end 2023 the journal published 197 papers. The journal achieves as a high acceptance rate of 62%, driven by a strategy of accepting high-quality papers transferred from other journals and conferences. Transfers from other journals, which often include existing reviews, which allow the editorial team to make quick publication decisions, typically within three working days.

Our editorial team comprises 12 associate editors who, along with Thomas and Alex, manage the editorial workload. The journals editorial team represents a strong gender-balanced and

geographically diversity.

As the journal continues to grow, the editors in chief will expand the editorial board to better represent the diversity of science and perspectives within ISCB. ISCB encourages direct submissions of new papers and is actively seeking to increase society-related content, including perspectives and reviews from various COSIs.

ISCB Student Council Activities

The Student Council (SC), created in 2004, is coordinated by an executive committee and includes regional steering groups across the globe. The Student Council has a presence in 25 countries, organizing symposia, workshops, hackathons, and virtual events. In 2023, the SC supported 29 events through three funding calls. Notably, they organized a global roundtable in May, involving all 25 regional student groups, to discuss their needs and future growth within ISCB.

The SC regional student groups (RSGs) have expanded, with new groups recognized in Finland, Iran, and Uruguay. These groups are essential for fostering local engagement and activities.

In 2023, the SC supported various virtual and in-person events, including the Latin American Symposium and the Second Asian Symposium. Despite limited budgets, the SC also successfully funded events in Bangladesh, Norway, India, and Spain. The event in Bangladesh was particularly inspiring, gathering 250 participants for keynotes, workshops, and more.

A driving initiative in 2023 was the establishment of the Inclusion, Diversity, and Equity Committee to ensure the SC activities reflect ISCB's commitment to these values. The committee, led by Wisdom Akurugu, is seeking volunteers to help promote inclusivity within the society.

The Education and Internship Committee has been working on a podcast project to promote bioinformatics education, featuring senior scientists discussing their journeys. Additionally, the Anna Tramontano Internship Program supports female researchers from developing countries. We encourage PIs interested in hosting interns to reach out.

Our web team, led by Wim Cuypers, maintained our event websites and ensures email security. The Webinars Committee, in collaboration with COSIs, continues to develop virtual events. We have successfully organized bi-monthly webinars in structural bioinformatics and plan to expand this

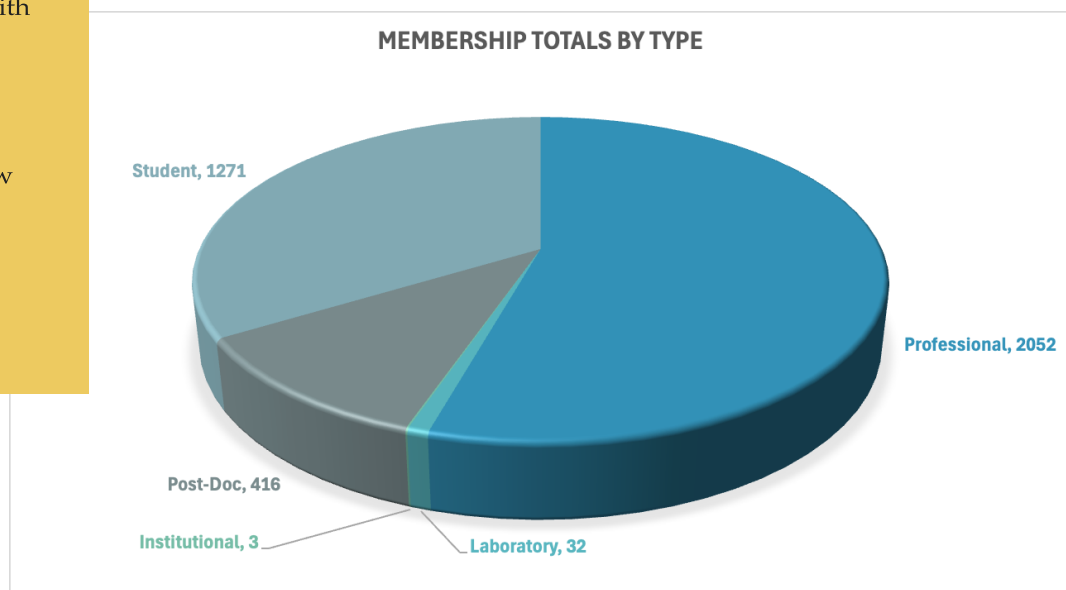
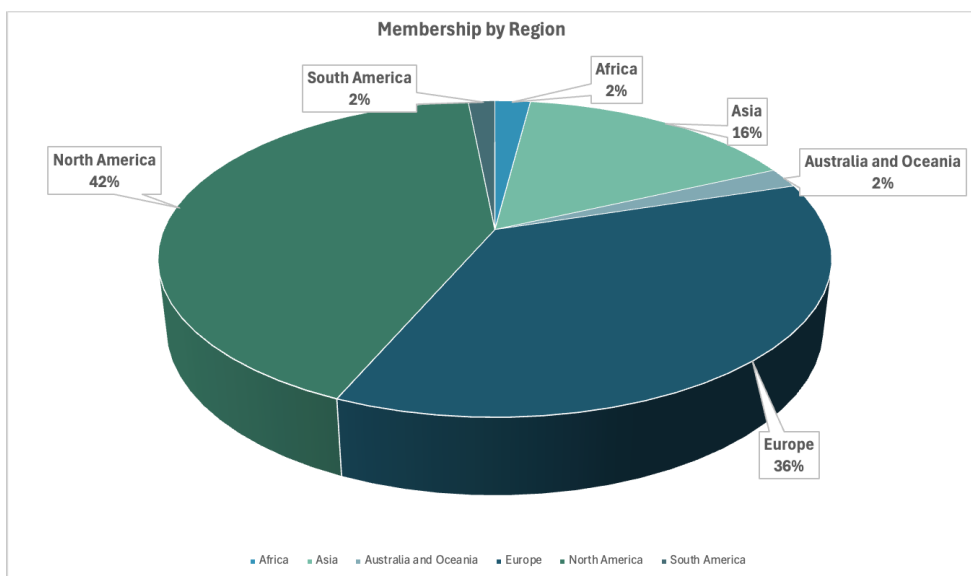
model to other COSIs.

We invite you to collaborate in our upcoming events and activities. Your participation and ideas are crucial for our continued success. Thank you for your support and involvement.

STATE OF MEMBERSHIP

ISCB has experienced significant growth & resilience in the face of challenges over the past years. Despite the impact of the COVID-19 pandemic on in-person events and membership engagement, the society has emerged stronger, with a record number of members (3,774) in 2023.

This section provides an overview of the society's membership dynamics, and financial health.



Membership Trends and Growth

ISCB's membership has reached an all-time high of nearly 3,800 members in 2023, showcasing the society's expanding influence and the growing interest in computational biology. This growth is a testament to the society's ongoing efforts to provide value to its members through various initiatives, including the successful transition to hybrid meeting formats that accommodate both in-person and virtual participation.

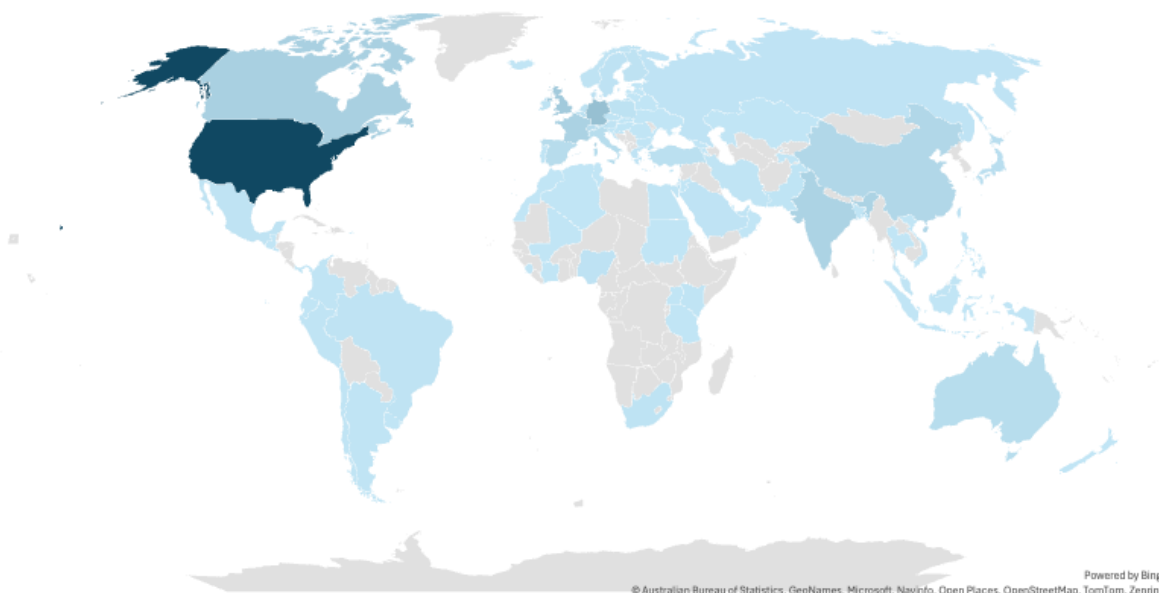
The membership composition reveals a healthy mix of students, postdocs, and professionals, with professionals constituting the largest demographic. This highlights the society's appeal to early-career scientists and the potential for sustained growth as these members progress in their careers.

Regional Membership Insights

ISCB membership spans 92 countries. The membership distribution indicates a strong presence in North America, accounting for about 42% of the total membership. However, membership trends vary significantly by region, with notable fluctuations corresponding to the location of ISCB conferences. European membership, in particular, shows considerable variation, suggesting the need for targeted strategies to maintain and grow membership outside of conference cycles.

Conversely, membership in Asia has seen encouraging growth, likely influenced by joint meetings and collaborations with Asian societies. Membership numbers in Africa, Australia, and South America have remained stable, indicating a solid foundation on which to build further engagement and growth.

ISCB Global Membership, Spanning 92 Countries

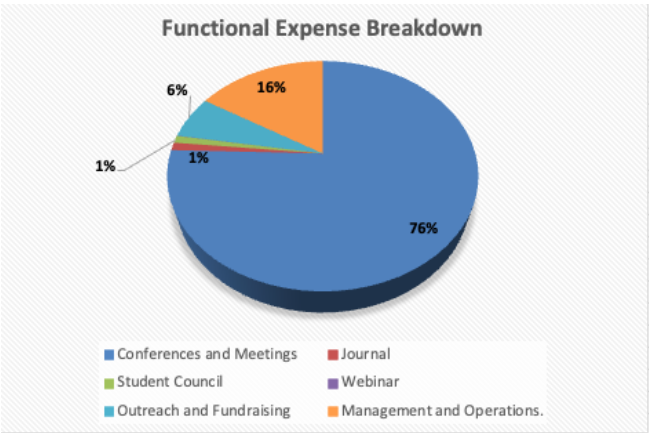
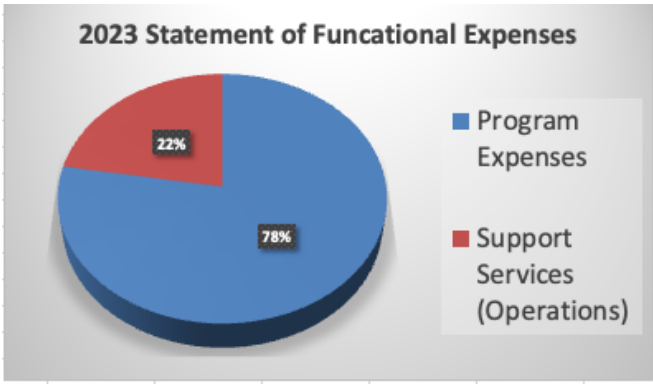


2023 SOCIETAL FINANCIAL REPORT

Despite operating at a deficit in recent years due to the pandemic, the return to face-to-face meetings and successful hybrid models have helped stabilize finances. A highlight of the year was achieving a net profit, which has enabled the allocation of funding new programs in 2024. This financial success also enabled us to increase the travel fellowship amounts for ISMB 2024, further supporting our community's growth and participation.

ISCB piloted several new programs with great success. The ISCB Conference Collaborations initiative, which included ISCB membership as part of the registration package, was well received. Additionally, we provided virtual streaming services for the Australian Society and GIW, expanding our reach and impact. Our regional and topical conferences were managed efficiently, fulfilling our mission without straining our finances.

As we look ahead to 2024, we do so with optimism and excitement. The foundation we have built positions ISCB well for continued success and innovation. Thank you once again to everyone who has contributed to our achievements. Together, we will continue to advance the field of computational biology and serve our global community.



ISCB SERVES COMMUNITY WITH STRONG CONFERENCE PORTFOLIO

ISCB served its global community by providing a platform to present research, collaborate, and network through its conferences program. ISCB staff and scientific volunteers conducted four conferences – GLBIO 2023, ISMB/ECCB 2023, GIW ISCB-Asia, and RSG DREAM 2023. All four conferences were offered in the hybrid format giving participants the opportunity to join in-person or virtual.

In addition to the official conference program, ISCB collaborated with the Australian Bioinformatics and Computational Biology Society (ABACBS) to support the virtual component of their annual conference.

Furthermore, through the ISCB Conference Collaboration program, ISCB members received discounts to eleven other scientific conferences.

Conference scientific content from ISCB official conferences and the collaboration with ABACBS can be found in the content library within ISCB Nucleus, ISCB's online center for science, collaboration and training. ISCB Nucleus is an open-access platform designed to allow for ongoing learning, networking, and scientific dissemination.



ISCB WELCOMES TWO NEW AFFILIATED GROUPS

The ISCB Affiliates program is designed to forge links between ISCB and regional non-profit membership groups, centers, institutes and networks that involve researchers from various institutions and/or organizations within a defined geographic region involved in the advancement of bioinformatics. In 2022, ISCB was able to relaunch the affiliated groups incentive program which provides funding to ISCB affiliates. In 2023, ISCB welcomed two new groups to its affiliates program:



Bioinformatics.ca

<https://bioinformatics.ca/>

Bioinformatics.ca and the Canadian Bioinformatics Workshops (CBW) were established in 1999 by Francis Ouellette and colleagues to address the need for a skilled computational science workforce in Canada. Since then, Bioinformatics.ca has become an integral component in the national bioinformatics and computational biology community with CBW being recognized as an international leader in bioinformatics skills dissemination. Under a mission to accelerate the use of bioinformatics as a tool in health and life sciences through education, networking and outreach, CBW has trained 5500+ scientists (1999-2023) in basic and advanced bioinformatic topics over 200+ workshops.



SFBI - French Society of Bioinformatics

<https://www.sfbi.fr/>

SFBI was founded on June 1, 2005. SFBI is an association (under the French law of 1901) independent of supervisory bodies, institutes and companies, representing the entire bioinformatics community, whatever the scientific field and laboratory (private or public). SFBI represents the entire Bioinformatics community: researchers, students, lecturers, engineers, laboratories and platforms, and covers all disciplinary fields (interface with Molecular Biology, Computer Science, Maths and Statistics, Physics). SFBI is administered by a board of members elected for a 3-year term. It comprises an elected president, one or two elected vice-presidents and a treasurer. Board members work in groups: communications (website, mailing lists, networks, etc.), JOBIM management, awards and grants, training and professions (REBIF/METBIF), etc.

To ensure a smooth transition of functions, the board is renewed every year. As a reminder, only members can vote in the elections held every year in June/July. Since 2021, SFBI has been a founding, active and associate member of the Collège des Sociétés Savantes Académiques de France (CoSSAF).

Bioinformatics.ca and SFBI join the other 21 affiliated groups that compose the ISCB Affiliated Groups Program. To learn more about the program and the groups involved visit <https://www.iscb.org/affiliated-groups>.

REGONIZING THOSE WHO SERVED ISCB

We extend our heartfelt gratitude to all the dedicated volunteers who contributed their time, effort, and expertise to make the ISCB conferences a resounding success. Your tireless dedication and commitment to excellence played a crucial role in ensuring the smooth operation of the events, from planning and organization to execution and follow-up. Your passion for advancing the field of computational biology and bioinformatics shines through in every task you undertake, whether it's assisting supporting the planning and scientific programme of a conference, executing one of ISCB programs, moderating sessions, providing technical support, or extending a warm welcome to participants. Your selfless contributions have created a vibrant and inclusive environment where researchers, students, and professionals from around the world can come together to share knowledge, collaborate, and inspire one another. On behalf of the entire ISCB community, we express our deepest appreciation for your invaluable support and unwavering enthusiasm. ***Thank you for your outstanding service and dedication to advancing computational biology and bioinformatics.***



Thank you to our generous donors and all those involved in making 2023 another banner year for ISCB!

Kayode Adeyemi

Didier Barradas-Bautista

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Natalie Davidson

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Peter Ebert

Jeffrey Fisk

Satavisha Ghorui

Andrew MacBride

Khalid Mahmood

Bertrand Marchand

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