

Establishing the Asia & Pacific Bioinformatics Joint Congress: a historic milestone in regional bioinformatics collaboration

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Abstract

In response to the need for greater cohesion among regional conferences, the Asia Pacific Bioinformatics Network (APBioNET) set out in 2015 to realize a long-held aspiration—a single, unifying bioinformatics “super conference” for the Asia & Pacific community. Nearly a decade of persistence, coordination, and coalition-building led to the inaugural Asia & Pacific Bioinformatics Joint Congress (APBJC2024) in Okinawa, Japan. Now established as a triennial event, APBJC stands as a testament to the power of collective vision and shared purpose, offering a unifying platform for regional collaboration and scientific exchange.

Tagline: Bringing a Region Together: The Making of APBJC.

Keywords: Asia & Pacific; bioinformatics; community-building; computational biology; science diplomacy; and scientific collaboration

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Table 1. APBJC2024 partner organizations and conference entities

Partner Organization/Conference Entities	Website	Geographic Scope
International Society for Computational Biology (ISCB)	https://www.iscb.org	Worldwide
Global Organisation for Bioinformatics Learning, Education and Training (GOBLET)	https://www.mygoblet.org	Worldwide
Asia Pacific Bioinformatics Network (APBioNET)	https://www.apbionet.org	Asia Pacific
Asia Pacific Bioinformatics Conference (APBC)	https://dblp.org/db/conf/apbc/index.html	Asia Pacific
Association of Asian Societies for Bioinformatics (AASBi)	https://uia.org/s/or/en/1122284989	Asia
Japanese Society for Bioinformatics (JSBi)	https://www.jsbi.org/en/	Japan
Bioinformatics Club for Experimenting Scientists (BIOCLUES)	https://bioclues.org	India
Asia Pacific Bioinformatics Interaction and Networking Society (APBIans, India)	http://sciwhylab.org/apbians/	India
Masyarakat Bioinformatika Dan Biodiversitas Indonesia (MABBI)	https://mabbi.id/	Indonesia
Korean Society for Bioinformatics (KSBI)	http://www.ksbi.or.kr/en	Korea
Taiwan Bioinformatics and Systems Biology Society (TBSB)	https://www.tbsb.org.tw/	Taiwan
Australian Bioinformatics and Computational Biology Society (ABACBS)	https://www.abacbs.org/	Australia
The Chem-Bio Informatics Society	https://cbi-society.org/	Japan
Japan Association for Omics-based Medicine	http://omics.jp/	Japan
Japan Association for Medical Artificial Intelligence	https://www.japan-medical-ai.org	Japan

Bioinformatics, the computational backbone of life and health sciences, is central to advancing research and innovation across the Asia & Pacific region. In 2015, the Asia Pacific Bioinformatics Network (APBioNET; <https://www.apbionet.org>) envisioned a unified bioinformatics “super conference” to consolidate various regional conferences. The goal was to create a common platform for scientific exchange and collaboration, strengthening connections across the Asia & Pacific bioinformatics community. This vision, intended to unify a fragmented regional bioinformatics landscape, was realized in Okinawa, Japan, in 2024. Okinawa was chosen in recognition of the invaluable support provided by the Japan National Tourism Organization during the initiative’s formative years.

After a period of limited activity, APBioNET advanced the initiative in 2018, engaging leading bioinformatics organizations and conference entities across the region. An overwhelmingly positive response led to the formation of a steering committee, which later expanded to include 15 partner organizations (Table 1). The steering committee officially named the event the Asia & Pacific Bioinformatics Joint Conference (APBJC) and established it as a triennial event. In 2025, the designation was updated to Congress, which will be used henceforth to better reflect the event’s broader scope and long-term objectives. As a collaboration model, partner organizations agreed not to hold separate flagship events during APBJC years to maximize participation and resource sharing, ensuring a unified platform for scientific discourse. As a dynamic and interdisciplinary field at the interface of biology, computation, and data science, bioinformatics will benefit significantly from such a consolidated exchange of ideas and expertise across the region.

The inaugural APBJC2024 was held at the Naha Cultural Arts Theatre NAHArt in Okinawa from 22 to 25 October 2024 (<https://www.apbjc.asia>). The event commenced with the Asian Student Council Symposium (ASCS2024), which welcomed 116 participants. APBJC2024 attracted 682 participants, including 412 from Japan and 270 international attendees from the Asia & Pacific region (Australia, Bangladesh, China, Hong Kong SAR, India, Indonesia, Israel, Malaysia, Pakistan, Qatar, Russia, Singapore, South Korea, Taiwan, Thailand, Turkey, and Vietnam) and beyond (Belgium, Brazil, Canada, Denmark, Finland, Germany, Greece, Jamaica, Madagascar, Mexico, Poland, Romania, Spain,

Switzerland, UK, and USA). This strong international representation solidified APBJC’s position as a premier bioinformatics event in the region. The congress showcased advancements in bioinformatics and computational biology [1], underscoring their central role within the computational sciences, through keynote lectures, oral presentations, workshops, poster sessions, an open public lecture, and networking events. Beyond its scientific program, APBJC2024 provided participants with opportunities to explore Okinawa’s cultural heritage and natural landscapes, further enriching the overall conference experience.

The successful realization of APBJC2024 marks a historic milestone for the Asia & Pacific bioinformatics community—nearly a decade in the making, and born of concerted effort, shared purpose, and regional solidarity. Looking ahead, APBJC2027 will build on this success, with its location to be determined in consultation with stakeholders. The congress will continue to strengthen regional cohesion and scientific exchange. APBJC aims to serve as a catalyst for innovation across the region, with the support of the bioinformatics community.

Beyond the Asia & Pacific region, this achievement also opens the door to envisioning a global model. Once every few years, the flagship conferences from different regions could set aside their individual meetings to come together as one worldwide event, creating a unified platform for collaboration and advancing bioinformatics on a truly global scale. Such a model could be sustained through a system of rotations, with the global gathering moving between continents to ensure broad representation and shared ownership across the international community. By converging in this way, bioinformatics can move beyond regional boundaries to inspire solutions to the world’s most pressing challenges.

Key Points

- **A decade-long vision realized through collective effort:** Initiated by the Asia Pacific Bioinformatics Network and realized through the collective efforts of 15 partner organizations, the Asia & Pacific Bioinformatics Joint Congress (APBJC) represents a landmark achievement in unifying the region’s bioinformatics community under a shared platform for collaboration and exchange.

- **A collaborative model for regional unity:** Established as a triennial event, APBJC embodies a partnership model in which member organizations coordinate their efforts and refrain from holding separate flagship meetings during congress years, ensuring a consolidated focus on scientific dialog and capacity building.
- **Strengthening regional and international networks:** The inaugural APBJC 2024 in Okinawa convened 682 participants from over 30 countries and territories, reinforcing the Asia & Pacific's leadership in bioinformatics and advancing regional cohesion through science diplomacy and cultural exchange.
- **A framework for global collaboration:** Building on its regional success, the APBJC model offers a blueprint for periodic global convergence—uniting regional bioinformatics communities in rotating international congresses to accelerate worldwide scientific progress.

Conflict of interest: A number of the authors hold positions in bioinformatics professional societies, networks, conference series, and/or organizations that contributed to APBJC2024. All authors declare that the work was conducted in the absence of any commercial or financial relationships that could be construed as potential conflicts of interest.

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Data availability

No data were generated or analyzed in support of this article.

References

1. Aoki-Kinoshita KF, Goto S. Meeting report on the 1st Asia & Pacific Bioinformatics Joint Conference (APBJC 2024). *Genes Cells* 2025;**30**:4. <https://doi.org/10.1111/gtc.70038>