



PERSPECTIVE

# International Combined Orthopaedic Research Societies: A model for international collaboration to promote orthopaedic and musculoskeletal research



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**Summary** In October 2013, the International Combined Orthopaedic Research Societies (ICORS; <http://i-cors.org>) was founded with inaugural member organisations from the previous Combined Orthopaedic Research Society, which had sponsored combined meetings for more than 2 decades. The ICORS is dedicated to the stimulation of orthopaedic and musculoskeletal research in fields such as biomedical engineering, biology, chemistry, and veterinary and human clinical research. The ICORS seeks to facilitate communication with member organisations to enhance international research collaborations and to promote the development of new international orthopaedic and musculoskeletal research organisations. Through new categories of membership, the ICORS represents the broadest coalition of orthopaedic research organisations globally.

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Representatives of the International Combined Orthopaedic Research Societies<sup>1</sup>:

AO Foundation: R. Geoff Richards, PhD

ASEAN Orthopaedic Research Society (ASEAN ORS): Suresh Sivananthan, MD

Australian and New Zealand Orthopaedic Research Society (ANZORS): Jiake Xu, MD, PhD

British Orthopaedic Research Society (BORS): Andrew McCaskie, MD; Gordon Blunn, PhD

Canadian Orthopaedic Research Society (Canadian ORS): John Antoniou, MD, PhD; Steven Boyd, PhD

Chinese Orthopaedic Research Society (Chinese ORS): Ling Qin, PhD; Tingting Tang, MD, PhD

European Orthopaedic Research Society (EORS): Nicola Baldini, MD; Bernd Grimm, PhD

Indian Orthopaedic Research Group (IORG): Gautam Shetty, MS

International Chinese Musculoskeletal Research Society (ICMRS): X. Edward Guo, PhD

Japanese Orthopaedic Association (JOA): Nobuo Adachi, MD

Korean Orthopaedic Research Society (KORS): Gun-Il Im, MD, PhD

Orthopaedic Research Society (ORS): Theodore Miclau, MD

Taiwan Orthopaedic Research Society (TORS): Je-Ken Chang, MD; Oscar K. Lee, MD, PhD

Turkish Orthopaedic Research Council (TORC): Feza Korkusuz, MD

## History of the Combined Orthopaedic Research Societies

In 1992, the first Combined Meeting of the Orthopaedic Research Societies was held in Banff, Alberta, Canada. The meeting was organised and held to promote collaboration among members of the orthopaedic research societies from around the globe. The founding member societies included the Canadian Orthopaedic Research Society (Canadian ORS), the European Orthopaedic Research Society (EORS), the Japanese Orthopaedic Association (JOA), and the Orthopaedic Research Society (ORS).

In 2006, the founding member societies agreed to include additional organisations: the Australian and New Zealand Orthopaedic Research Society (ANZORS), the British Orthopaedic Research Society (BORS), the Korean Orthopaedic Research Society (KORS), and the Taiwan Orthopaedic Research Society (TORS). All organisations joined the organising committee of the Combined Meeting and met at the 2007 Combined Meeting in Honolulu, Hawaii, which was hosted by the ORS. In 2011, the Chinese ORS was invited to join the organising committee. The Combined Meeting had now grown to a total of nine societies that included a broad representation of organisations from around the world [1].

## Development of the International Combined Orthopaedic Research Societies

At the ORS 2013 Annual Meeting in San Antonio, TX, USA, the ORS hosted an international summit and invited many of its partner organisations to a strategic session devoted to discussions with regard to its international efforts, creating a

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**Figure 1** The International Combined Orthopaedic Research Societies (ICORS) representatives at the Inaugural Charter Signing at the 8<sup>th</sup> Combined Orthopaedic Research Societies Meeting. The representatives are (from left to right) Chinese Orthopaedic Research Society, Ling Qin, PhD; Canadian Orthopaedic Research Society, John Antoniou, MD, PhD; British Orthopaedic Research Society, Gordon Blunn, PhD; Australian and New Zealand Orthopaedic Research Society, Jiake Xu, MD, PhD; Combined Orthopaedic Research Societies 2013 Chairmen Nicola Baldini, MD and Bernd Grimm, PhD; European Orthopaedic Research Society, Enrique Gomez-Barrena, MD, PhD; Japanese Orthopaedic Association, Nobuo Adachi, MD; Korean Orthopaedic Research Society, Gun-Il Im, MD; and Orthopaedic Research Society, Theodore Miclau, MD. Missing: Taiwan Orthopaedic Research Society, Je-Ken Chang, MD.

more formal alliance, and increasing global collaborations and partnerships. All societies in attendance at the summit agreed that it was important to formalise an alliance that included additional related societies and organisations to work together to achieve a global mission. One important change was that a new name was suggested: the International Combined Orthopaedic Research Societies (ICORS) [2].

The next steps included (1) the creation of a charter that would outline requirements for membership in the ICORS and (2) guidelines for each member organisation. In October 2013, the ICORS was officially established at the 8<sup>th</sup> Combined Meeting of the Orthopaedic Research Societies, which was hosted by the EORS in Venice, Italy and chaired by Bernd Grimm and Nicola Baldini. The charter was adopted and nine founding members were approved and selected as members of the ICORS: the Orthopaedic Research Society, the ANZORS; the BORS, the Canadian ORS, the Chinese ORS, the EORS, the JOA, the KORS, and the TORS (Fig. 1).

In addition, the founding member societies suggested new categories of ICORS membership to include "Associate Scientific Member" and "Candidate Member". By establishing these new categories of membership, the ICORS would represent a broad spectrum of orthopaedic and musculoskeletal research organisations that range from well-

established organisations to developing organisations. A "Constituent Member" is an organisation that is the principal body representing orthopaedic and musculoskeletal research in its country or region (there should be no double representation from any country, and regional and multinational societies take precedence over individual groups). Constituent members must possess a mission consistent with that of the ICORS; be representative of a nation or region; be a legal entity (e.g., an incorporated organisation); consist of membership that also includes individuals who participate internationally through meeting attendance and/or publication in international journals; promote science and engineering that are of appropriate international quality (as indicated by the quality of domestic meetings, publications, etc.); be financially viable (and contribute financially to ICORS); and have a stable membership. An "Associate Scientific Member" is an organisation that has significant regional overlap with an existing constituent member society but is able to contribute significantly to the ICORS. A "Candidate Member" is a newly formed organisation that does not satisfy all requirements for Constituent membership or Associate Scientific membership, but is likely to qualify for membership within 3 years of its application, which is the term-limit for their membership.

The overall ICORS structure is as a “committee of peers” with each constituent organisation possessing a single vote. Each ICORS member organisation is represented by one representative who is appointed by the president or board of directors of that member organisation. These representatives form a steering committee with a chairman selected from one of the members of the committee. The ORS representative, Theodore Miclau, MD, was elected as the first chairman of the ICORS steering committee.

The purposes and responsibilities of the ICORS were established and included the following:

- Stimulation of orthopaedic and musculoskeletal research in fields such as biomedical engineering, biology, chemistry, and veterinary and human clinical research.
- Allocation of venues for the triannual ICORS Meeting.
- Determination of organisational progress and educational content and success of the triannual meetings.
- Organisation of a face-to-face meeting at each triannual meeting and each ORS annual meeting.
- Interaction with the ORS and other member organisations to enhance international collaboration and programming, including the ORS annual meeting.
- Promotion of the development of new orthopaedic research organisations globally and young investigators.

### International Combined Orthopaedic Research Societies Developments in 2014

The ICORS steering committee met for the first time face-to-face in March 2014 at the ORS annual meeting in New Orleans, LA, USA. At this meeting the steering committee continued to work on the governance of the ICORS and, more importantly, to develop priorities and goals for the organisation such as programs that will provide opportunities for increased collaboration, education, and dissemination of research knowledge. The ICORS steering committee also selected a logo (Fig. 2), voted to move forward with the development of a web-site (<http://i-cors.org>), and approved the election of the following new members: the AO Foundation and the International Chinese Musculoskeletal Research Society [as affiliate members (now called Associate Scientific Members)]; and the Indian Orthopaedic Research Group, the ASEAN Orthopaedic Research Society, and the Turkish Orthopaedic Research Council as Candidate Members. A logo was presented and approved. It was designed to represent growth and development, and was created by a team led by EORS representatives Nicola Baldini and Bernd Grimm, Kaohsiung, Taiwan (Fig. 2).

### Future International Combined Orthopaedic Research Societies Meetings

At the steering committee meeting in New Orleans, LA, USA, the next two ICORS meeting sites were selected. In 2016, the meeting will be held in Xian, People’s Republic of China; in 2019, the meeting will be held in Montreal, Canada. The 2016 Meeting will be supported by the Chinese ORS, the Chinese Orthopaedic Association and Orthopaedic



**Figure 2** The International Combined Orthopaedic Research Societies (ICORS) logo.

Hospital, and the Fourth Military Medical University (Xian, China). The 2019 Meeting will be hosted by the Canadian ORS and the Canadian Orthopaedic Association.

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## Conflicts of interest

The authors certify that they have no affiliations with or involvement in any organization or entity with any financial interest or non-financial interest in the subject matter or materials discussed in this manuscript.

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