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# The International Liaison Committee on Resuscitation (ILCOR)—Past and present

Compiled by the Founding Members of the International Liaison Committee on Resuscitation

This brief overview of ILCOR is dedicated to the late Peter Safar and to the scientists, researchers, trainers, and individuals worldwide who strive to develop the science and to improve the practice of resuscitation medicine.

The creation of the International Liaison Committee on Resuscitation (ILCOR) has produced a unique opportunity for worldwide collaboration in resuscitation guidelines and practice for the past 15 years. Below is a brief outline of the landmark events and progress of this organization, which has become the authoritative voice on the consensus on science behind national and international guidelines on resuscitation.

**1990:** In June 1990, representatives from the American Heart Association (AHA), European Resuscitation Council (ERC), Heart and Stroke Foundation of Canada (HSFC), and the Australian Resuscitation Council (ARC), attended a meeting, hosted by the Laerdal Foundation, at the Utstein Abbey on the remote Island of Mosteroy in Norway. The purpose of this meeting was to discuss the problems of resuscitation nomenclature and the lack of standardised language in reports relating to adult out-of-hospital cardiac arrest. This was the first important collaborative venture involving existing Resuscitation Councils from around the

world. A follow-up meeting was held in December 1990 in Surrey, England, where the decision was made to adopt the term 'Utstein-style' for the uniform reporting of data from out-of-hospital cardiac arrests [1].

Following this first landmark meeting in the Utstein Abbey, over the following years many additional 'Utstein-style' international consensus statements were published, including the uniform reporting of neonatal [2] and paediatric advanced life support [3], laboratory CPR research [4], in-hospital resuscitation [5], and CPR registers [6].

**1992:** The Fifth National Conference on Cardiopulmonary Resuscitation (CPR) and Emergency Cardiac Care (ECC) was held in Dallas, Texas, USA in February 1992. Through the generosity of the AHA, over 25% of the delegates came from outside the USA, representing more than 25 countries and 53 international organisations. This offered an ideal opportunity to discuss international issues, building on the cooperation already achieved at the first Utstein meeting. The Conference addressed three international issues: (1) the desirability of international support for countries to develop effective ECC; (2) the creation of a permanent infrastructure for international cooperation; (3) the desirability of common international guidelines and an international conference on CPR and ECC. An

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*Abbreviations:* AHA, American Heart Association; ARC, Australian Resuscitation Council; ECC, Emergency Cardiac Care; ERC, European Resuscitation Council; HSFC, Heart and Stroke Foundation of Canada; IAHF, Inter-American Heart Foundation; CoSTR, Consensus on Science and Treatment Recommendations

International CPR and ECC Panel Discussion, co-chaired by Richard Cummins and Douglas Chamberlain included speakers from the USA, Canada, Europe, Australia and Southern Africa. The report states:

"The conference recommended that the existing major organizations with a responsibility for guidelines in CPR and ECC aim to synchronize their review of guidelines, with the objective of publishing updates in the same year. With such a schedule, the organizations could create international working groups with a worldwide membership of the principal experts in their fields. These groups could offer international reviews of the literature and, based on the shared science and experiences, could make suggestion for modifications in guidelines. The proposed modifications, supported by the science that generated them, would be offered as evidence to the major international organizations for their own meetings and deliberations: to the AHA, the Canadian Heart and Stroke Foundation, the European Resuscitation Council, the associations or societies in Latin America, Australia, Africa, and Asia, i.e. to all countries or multinational organizations that might wish to participate. The proposed modifications would be considered by these organizations. If the science was unassailable, the modifications would likely be adopted with or without change, taking into consideration local needs and realities.

Such a plan for international cooperation would have appreciable advantages over existing arrangements: (1) the world's leading experts would achieve fruitful communication and cooperation; (2) advice for guidelines would be less likely to be tainted by habit, tradition, or peer pressure; (3) guidelines generated in this way should be widely accepted within existing organizations; (4) a great similarity (or even identity) of guidelines would likely be achieved without the fear that one group was being subverted by another; (5) the potential would exist for eventual universal guidelines; (6) existing organizations would not perceive a risk to their independence or autonomy."

Resuscitation '92', held in Brighton, England in November 1992, was the first international conference held by the ERC. At the end of the conference, representatives from guidelines-producing organisations, i.e. the European Resuscitation Council, the American Heart Association, the Heart and Stroke Foundation of Canada, the Australian Resuscitation Council, and the Resuscitation Council of Southern Africa held the first

meeting of the International Liaison Committee. Chaired by Douglas Chamberlain, the meeting proposed that there should be continuing international cooperation through a permanent liaison committee, comprising active, well-established organisations that were currently producing guidelines and were generally multinational or multidisciplinary in nature.

**1993:** Following the Update in Sudden Cardiac Death Congress in Vienna, Austria in March 1993, the newly formed "Liaison Committee on CPR" held its second meeting, at which a formal Mission Statement was adopted:

"To provide a consensus mechanism by which the international science and knowledge relevant to emergency cardiac care can be identified and reviewed. This consensus mechanism will be used to provide consistent international guidelines on emergency cardiac care for Basic Life Support (BLS), Paediatric Life Support (PLS) and Advanced Life Support (ALS). While the major focus will be upon treatment guidelines, the steering committee will also address the effectiveness of educational and training approaches and topics related to the organisation and implementation of emergency cardiac care. The Committee will also encourage coordination of dates for guidelines development and conferences by various national resuscitation councils. These international guidelines will aim for a commonality supported by science for BLS, ALS and PLS".

It was agreed that, wherever possible, meetings would be held in conjunction with international resuscitation events, being cost-effective, and allowing leaders in the field of resuscitation to meet and share information and expertise on a regular basis, with a wide multinational and multidisciplinary audience (Table 1). At the third meeting, co-chaired by Douglas Chamberlain and Richard Cummins, formal BLS, ALS and PLS Working Groups were established, tasked with reviewing scientific data in their respective area of expertise.

**1994:** When the ERC published its resuscitation guidelines, the Chairman, Peter Baskett, reported that "The ERC has not worked in isolation, and has enjoyed cordial and productive cooperation with the American Heart Association's Emergency Cardiac Care Committee, the Australian Resuscitation Council, the Heart and Stroke Foundation of Canada, the Resuscitation Council of Southern Africa and many Resuscitation Councils and authorities throughout Europe. Our aim in the

**Table 1** Meetings of the international liaison committee on resuscitation

#	Associated International Event	Date	Host	Venue
1	Resuscitation '92 Congress	November 1992	ERC	Brighton, UK
2	Sudden Cardiac Death Congress	March 1993	ERC	Vienna, Austria
3	AHA Scientific Sessions	November 1993	AHA	Dallas, USA
4	CPR & ECC Update'94 Congress	May 1994	AHA	Richmond, USA
5	Resuscitation '94 Congress	October 1994	ERC	Mainz, Germany
6	In-Hospital Utstein Consensus	June 1995	ERC	Mosteroy, Norway
7	ASA Congress	October 1995	AHA	Atlanta, USA
8	CPR & ECC Update'96 Congress	May 1996	HSFC	Montreal, Canada
9	AHA Scientific Sessions	November 1996	AHA	Dallas, USA
10	CPR '97 Congress	April 1997	ERC	Brighton, UK
11	CPR & ECC Update 98 Congress	May 1998	AHA	Orlando, USA
12	AHA Meetings	March 1999	AHA	Dallas, USA
13	Resuscitation 2000 Congress	June 2000	ERC	Antwerp, Belgium
14	Education Utstein Consensus	June 2001	ERC	Mosteroy, Norway
15	Spark of Life 2002 Congress	April 2002	ARC	Melbourne, Australia
16	Resuscitation 2002 Congress	October 2002	ERC	Florence, Italy
17	AHA Meetings	April 2003	AHA	Dallas, USA
18	IAHF Meetings	September 2003	IAHF	Recife, Brazil
19	AHA Meetings	March 2004	AHA	Dallas, USA
20	Resuscitation 2004 Congress	September 2004	ERC	Budapest, Hungary
21	CoSTR Congress	January 2005	AHA	Dallas, USA
22	CoSTR Editorial Board	April 2005	AHA	Jersey City, USA

future is to collaborate with our colleagues to produce guidelines, which will have worldwide acceptance. There is an active International Liaison Committee currently addressing this goal, so that we can enter the 21st century with unanimity."

**1995:** A proposal by John Kattwinkel of the American Academy of Pediatrics to establish a Neonatal Subgroup of the Paediatric Working Group was considered. Consensus was reached on recommended guidelines for reviewing, reporting, and conducting research on in-hospital resuscitation [5]. One representative made an observation that captured the prevailing spirit of cooperation: "In the seven meetings of the International Liaison Committee, the Committee has never needed to take a vote on any question."

**1996:** At the suggestion of Walter Kloeck from South Africa, the name 'International Liaison Committee on Resuscitation (ILCOR)' was formally adopted in May 1996. This was a deliberate play on words relating to developing treatment guidelines for a sick heart – 'ill cor'! It was determined that there was a significant need to develop 'Advisory Statements', and each Working Groups was tasked with producing updated consensus statements.

**1997:** In April 1997, the 'Consejo Latino–Americano de Resucitación (CLAR)', representing the countries of Latin America, became the Seventh official member organisation of ILCOR. ILCOR Advisory Statements on Single Rescuer Basic Life Support [7], a Universal ALS Algorithm [8], Early Defibrillation [9], Paediatric Life Support [10], and Special Resuscitation Situations [11] were published worldwide.

**1998:** The New Zealand Resuscitation Council and the Australian Resuscitation Council joined to form a multinational resuscitation entity. Petter Steen of the ERC was appointed Co-chair of ILCOR, together with Richard Cummins, following the resignation of the Founding Co-Chairman, Douglas Chamberlain. A decision was made that guidelines development will try and move from the use of expert opinion and consensus discussions, to a much more explicit, evidence-based process, and the use of 'levels of evidence' and 'classes of recommendation.'

**1999:** Representatives from China, Taiwan, Thailand, Japan and Malaysia were welcomed to ILCOR meetings as observers. It was agreed that the administrative secretariat of ILCOR would be managed by the Australia and New Zealand Committee on Resuscitation (ANZCOR). ILCOR published an Advisory Statement on Resuscitation

of the Newly Born Infant [2], and an Evidence Evaluation Conference, preceding the 'Guidelines 2000 Conference' was held in Dallas in September 1999.

**2000:** The Guidelines 2000 Conference, held in Dallas in February 2000 was the world's first international conference assembled specifically to produce international resuscitation guidelines [12]. Bill Montgomery of the AHA was elected Co-chair of ILCOR, together with Petter Steen of the ERC.

**2001:** The first ILCOR symposium on Education in Resuscitation was held at Utstein Abbey in June 2001 [13], with the support of the Laerdal Foundation. A formal Constitution for ILCOR was drawn up at this meeting.

**2002:** ILCOR hosted a meeting in Melbourne, Australia to update and simplify the Utstein templates for reporting cardiac arrests in and out of hospital, and to develop recommendations for resuscitation registries. Jerry Nolan of the ERC was elected Co-chair of ILCOR, together with Bill Montgomery of the AHA. It was agreed that ILCOR would be an advisory group for the Cochrane Heart Group, and Ian Jacobs was appointed as the official coordinator. A Neonatal Task Force, as well as an Interdisciplinary Task Force, looking at issues such as epidemiology, education and ethics in resuscitation, was established.

**2003:** ILCOR published Advisory Statements on Uniform Reporting of Data from Drowning [14], Therapeutic Hypothermia after Cardiac Arrest [15], and the use of AEDs for children [16]. The Inter-American Heart Foundation (IAHF) replaced CLAR as the official member organisation representing Central and South American countries. Intense planning for the 2005 Consensus on Resuscitation Science started at an ILCOR meeting in Brazil.

**2004:** An update of the Utstein-style templates for resuscitation research, that were first created by representatives of international Resuscitation Councils in 1990, was published under the aegis of ILCOR [6]. An official ILCOR logo was approved and adopted, and plans are made for ILCOR to be formally incorporated as a Non-Profit Association. Preparations continue at meetings in Dallas and Budapest for the publication in 2005 of the updated consensus on the science of resuscitation, using dedicated systematic evidence evaluation tools.

**2005:** The 2005 International Consensus on ECC and CPR Science with Treatment Recommendations (CoSTR) Conference, hosted by the AHA, represents the most intense review of resuscitation science ever held, and involved the greatest degree of international cooperation that ILCOR has ever experienced.

As can be seen from the 22 official meetings that ILCOR has held from 1992 to 2005, the associated international events linked to each meeting (Table 1), and the accompanying landmark co-publications [1–16], a spirit of sincere cooperation and genuine desire to raise the standard of practice of emergency care will result in many additional lives being saved. The Founding Members of ILCOR salute all those that have contributed to this process.

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<sup>1</sup> Most of these articles appeared in several national and international journals. Only the references for *Circulation* and *Resuscitation* have been given.

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