MESSAGE FROM THE CHAIR

For the past year and a half, it has been a pleasure to serve as chair of the 3CPR Council of the American Heart Association. It has been a spectacular year beginning with an extraordinary 42 percent increase in Council membership.

At Scientific Sessions 2010, we celebrated the 50th anniversary of cardiopulmonary resuscitation and the publication of the 2010 AHA Guidelines for CPR & ECC in Circulation (October 2010) with a well-attended plenary session. Other Sessions highlights included Stephen Archer’s Dickinson Richards Lecture and the 2010 Cournand and Comroe Young Investigator Award competition.

The 2010 Resuscitation Science Symposium, held just before Sessions, was also very successful with 1,306 participants, a nearly 19 percent increase from 2009. ReSS is jointly sponsored and supported by our Council and the Emergency Cardiovascular Care Committee. ReSS Program Committee members include 3CPR Council members Ben Abella, Lance Becker (co-chair), Raina Merchant, Evangelos Michelakis and Graham Nichol (co-chair).

I am also pleased to report that our Council-sponsored scientific statement, “Venous Thromboembolic Disease: Management of Massive Pulmonary Embolism, Iliofemoral DVT, and Chronic Thromboembolic Pulmonary Hypertension,” was published online in March 2011. A writing group has been assembled for a second Council-sponsored scientific statement on pediatric pulmonary hypertension, which also represents a collaboration between AHA and the American Thoracic Society. One of the most exciting aspects of these statements is that they originated with suggestions from (and are being led by) young members of the Council! Our Council is co-sponsoring additional scientific statements on diverse subjects of interest to the Council membership.

The success of our Council is critically dependent on the efforts of our members. I encourage all of you to become involved in our activities including:

1. Member recruitment: Encourage your colleagues to join our Council. Please use the Member Get a Member tool at my.americanheart.org/membercampaign.

2. Scientific Sessions (scientificsessions.org):
   a. Please be sure to send abstracts for presentation at the 2011 ReSS and Scientific Sessions. Abstracts open April 13, 2011 and close on June 1, 2011. ReSS and 3CPR both sponsor Best Abstract awards.
   b. Please submit entries for the Council’s Cournand and Comroe Young Investigator Award competition. Deadline is June 3, 2011, at 5:00 PM CT.
   c. Please apply for travel awards for young investigators presenting abstracts at Scientific Sessions (supported by the 3CPR). Deadline is Aug. 24, 2011, at 5:00 PM CT. Please see the AHA Award website councilawards.heart.org for details.
   d. ReSS Late-Breaking (Hot Topic) submissions open Aug. 8, 2011 and close Aug. 29, 2011. Please see the AHA Award website councilawards.heart.org for details.

3. New ideas: Please let us know if you would like to participate in any of the Council’s activities by completing the 3CPR Council Committee Involvement Form at my.americanheart.org. If you have suggestions for additional scientific statements or other Council activities, please do not hesitate to e-mail Council Manager Dena Thomas at dena.thomas@heart.org.

Finally, please permit me to acknowledge the efforts of the all of the members of the 3CPR Council Leadership Committee, including Karl Kern, the Council’s vice chair; Stephen Archer, immediate past chair and chair of the Nominating Committee; and Evangelos Michelakis, chair of the Program Committee. On behalf of the Council, I would like to thank Dana Edelson, chair of the Council’s Communications Committee, for her efforts on this newsletter, as well as Dena Thomas and Cheryl Perkins for their support.

I hope all of you have a spectacular spring and summer. I look forward to seeing you at ReSS (Nov. 12–13) and Scientific Sessions (Nov. 12–16) in sunny Orlando this fall. Visit scientificsessions.org for more information.

P.S. Check out AHA’s Professional Online Network at networking.americanheart.org. It’s a great place to stay in touch, post information, discuss and more among your peers.
New CPR Guidelines

This year marks the 50th anniversary of the first peer-reviewed medical publication documenting survival after closed-chest compression for cardiac arrest.1 Resuscitation experts and providers remain dedicated to reducing death and disability from cardiovascular diseases and stroke. Bystanders, first responders and healthcare providers all play key roles in providing CPR for victims of cardiac arrest. In addition, advanced providers can provide excellent periarrest and postarrest care. Studies published before and since 2005 have demonstrated that: 1) the quality of chest compressions continues to require improvement, although implementation of the 2005 AHA Guidelines for CPR and ECC has been associated with better CPR quality and greater survival; 2) there is considerable variation in survival from out-of-hospital cardiac arrest across emergency medical services (EMS) systems; and 3) most victims of out-of-hospital sudden cardiac arrest do not receive any bystander CPR. The changes recommended in the 2010 AHA Guidelines for CPR and ECC attempt to address these issues and also make recommendations to improve outcomes from cardiac arrest.

Key Updates:
1. The 2010 AHA Guidelines for CPR and ECC once again emphasize the need for high-quality CPR, including:
   - A compression rate of at least 100/min. (a change from “approximately” 100/min.)
   - A compression depth of at least 2 inches (5 cm) in adults and a compression depth of at least one-third of the anterior-posterior diameter of the chest in infants and children (approximately 1.5 inches [4 cm] in infants and 2 inches [5 cm] in children). Note that the range of 1.5 to 2 inches is no longer used for adults, and the absolute depth specified for children and infants is deeper than in previous versions of the AHA Guidelines for CPR and ECC.
   - Allowing for complete chest recoil after each compression
   - Minimizing interruptions in chest compressions
   - Avoiding excessive ventilation
2. The 2010 AHA Guidelines for CPR and ECC recommend a change in the BLS sequence of steps from A-B-C (Airway, Breathing, Chest Compressions) to C-A-B (Chest Compressions, Airway, Breathing) for adults, children and infants (excluding the newly born; see Neonatal Resuscitation section). Chest compressions can be started almost immediately, whereas positioning the head and achieving a seal for mouth-to-mouth or bag-mask rescue breathing all take time. Initiation of CPR with chest compressions ensures that the victim receives this critical intervention early, and any delay in rescue breaths should be brief.
3. “Look, listen and feel” was removed from the CPR sequence. After delivery of 30 compressions, the lone rescuer opens the victim’s airway and delivers two breaths. With the new “chest compressions first” sequence, CPR is performed if the adult is unresponsive and not breathing or not breathing normally. (Note that lay rescuers will be taught to provide CPR if the unresponsive victim is “not breathing or only gasping”). The CPR sequence begins with compressions (C-A-B sequence). Therefore, breathing is briefly checked as part of a check for cardiac arrest; after the first set of chest compressions, the airway is opened and the rescuer delivers two breaths.

In the years since the publication of the 2005 AHA Guidelines for CPR and ECC, many resuscitation systems and communities have documented improved survival for victims of cardiac arrest. However, too few victims receive bystander CPR. We know that CPR quality must be high and that victims require excellent post-cardiac arrest care by organized teams with members who function well together. Education and frequent refresher training are likely the keys to improving resuscitation performance. In this 50th year since the publication of the landmark Kouwenhoven, Jude and Knickerbocker description of successful closed-chest compression,1 we must all rededicate ourselves to improving the frequency of bystander CPR and the quality of all CPR and post-cardiac arrest care.

The links in the new AHA ECC Adult Chain of Survival are as follows:
1. Immediate recognition of cardiac arrest and activation of the emergency response system
2. Early CPR with an emphasis on chest compressions
3. Rapid defibrillation
4. Effective advanced life support
5. Integrated post-cardiac arrest care

Reference