THE NEWS BULLETIN OF THE INTERNATIONAL SOCIETY FOR HEART RESEARCH

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THE COUNTDOWN is continuing towards the next World Congress to be held in Brisbane, Australia, from August 7-11 this year. This exciting meeting has many dimensions – an outstanding scientific programme featuring internationally recognised experts in many areas of cardiovascular science, the traditional award lectures and a focus on participation by young investigators. In addition, many tours are available to showcase Queensland’s many tourist attractions such as the Gold and Sunshine Coasts, the Great Barrier Reef, tropical rain forests and the vast Outback of Australia. Make the most of your visit “down-under” by allowing extra time to experience the beauty of the rest of Australia as well as New Zealand and the Pacific Islands such as Fiji and Samoa!

The scientific program will highlight 6 topical areas: generating and regenerating the heart; myocardial frameworks; excitation-contraction coupling and ion channels; nature and nurture, injury and immunity; responses to ischaemic, oxidative and metabolic stress; and neurohumoral influences and growth signalling.

Our congress will be an integrated meeting with the Cardiac Society of Australia and New Zealand allowing a full discussion of cardiovascular science from bench to bed-side. The 8th World Congress of Clinical Pharmacology and Therapeutics immediately precedes our meeting (www.cpt2004.com) while the International Congress on Clinical Nutrition follows our meeting. That gives you even more reasons to come to Brisbane in August!

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TWO THOUSAND AND FOUR is a congress year and the ISHR is in full swing getting ready for that tri-annual bash we call the World Congress. The venue, of course, is Brisbane, Australia and the conference is being organized by Lindsay Brown and Salvatore Pepe. Brisbane is a lovely city. Several years ago Lindsay organized a Section Meeting in Brisbane and I had the privilege of attending. Brisbane is a thoroughly modern city but still retains some of its old colonial-era charm. At that time the US dollar was strong, which meant that the beer was cheap and plenty good. The dollar seems to be taking a slide against most currencies at present, but at least for non-Americans the Australian exchange rate will still be pretty favorable. For us Americans the prices will simply approach American standards.

I took a day off while in Brisbane and rented a motorbike for a day and rode up to see the Australia Zoo where Steve Irwin hangs out. It is about 60 miles north of Brisbane. Steve Irwin stars in that smash hit TV series “The Crocodile Hunter”. Each week I watch Steve do things that no sane human should ever do with an animal. I was getting to think Australia might be a pretty hostile place with all of the man-eating crocodiles and poisonous snakes he seems to wrestle. That was until I saw a program where he visited the gulf coast of Florida where he wrestled man-eating alligators, rattlesnakes and highly venomous water moccasins. Pretty scary stuff considering he was just 50 miles from my house. Still it’s hard to think of Mobile Alabama as very scary. Fortunately, I was not attacked by any dangerous fauna on my ride to the Australia Zoo, but I did see some spectacular mountains and beautiful scenery. Actually, crocodiles are not found in the wild this far south in Australia and the snakes, if present, were well hidden. I did encounter some rather dodgy traffic, however, as they all seemed to be driving on the wrong side of the road. If you want to see some pictures of my trip go on line to http://204.29.80.50/restore/australia/. All of this is leading up to the fact that Steve Irwin will be a featured speaker at the Brisbane meeting and I for one am looking forward to meeting him. Of course we expect to have some good science as well. Sal Pepe and Ed Lakatta worked hard on the program committee and some outstanding scientists have been invited to speak.

If Brisbane does not satisfy your travel lust there is more on tap with the congress satellites. Four satellite meetings are scheduled, all in fantastic spots. I have elected to attend the South African satellite located in Kruger national park. Not because of the wild game safaris or anything like that. I will attend strictly for the science which happens to be on ischemia. You can learn more about the African meeting at http://ishr.sun.ac.za/. If elephants and lions are not exotic enough, how about IGUAZU Falls in South America? The Falls are on the border between Argentina and Brazil and the theme will be heart failure. You can contact Alicia Mattiazzi for details Fax: +54 221 4 834 833 or e-mail: ramattia@atlas.med.unlp.edu.ar. Not the outdoors type? Why not try Ricky Mann’s satellite in romantic Hong Kong? The subject will be endothelial factors and coronary artery disease. Their web site is http://www.ishr-satellite.hku.hk/. Finally, you could see a different side of Australia by visiting the booming metropolis of Melbourne, located South of Brisbane where Savatore Pepe will organize a satellite on aging in the heart and blood vessels. In addition to all of the above, Section Meetings are scheduled for North America in Cancun, Mexico in May, for Europe in Dresden, Germany in June and Japan will meet in Kofu in November. All in all, 2004 is shaping up to be a great meetings year for the ISHR. A complete listing of all ISHR meetings can be found at www.ishrworld.org.

James M. Downey
ABOVE MY DESK hangs the photograph of a man with sideburns and a bow tie. The sideburns suggest that the picture was taken at the latter part of the 19th century. What puzzled me in this photo is the inscription “to my friend Berthold Bing, from Emmanuel Nobel.” Berthold Bing was my grandfather.

Who was Emmanuel Nobel? Was he related to Alfred Nobel, the inventor of dynamite who left his fortune for the benefit of scientists, poets, and peacemakers? In researching the story of Emmanuel Nobel, I became familiar with the life of Alfred Nobel, the tortuous history of the Nobel Foundation, and the origin of the Nobel Prize.

Emmanuel Nobel, the bearded man in my photograph, was the nephew of Alfred Nobel. He deserves great credit together with Ragnar Sohlman, an executive of the will of Alfred Nobel, for bringing Nobel’s legacy to fruition. It seems strange today when the Nobel Prize is hailed as the ultimate sign of recognition and honor, that Nobel’s legacy was bitterly contested not only by his family but also by Swedish scientific institutions and by the King of Sweden. Nobel’s family attempted to get their hands on the considerable amount of money. Family members fought bitterly amongst themselves and it needed the diplomacy and patience of Emmanuel Nobel and Ragnar Sohlman to settle the estate. But the opposition of the scientific institutions which had been entrusted to administer Alfred Nobel’s bequest is difficult to understand. Different academic institutions were involved in Nobel’s will: The Swedish Academy of Sciences, Stockholm University, and the Karolinska Institute. None of these institutions showed any eagerness to take over the authority to administer and distribute the awards. Fears were even voiced that the participation in such a task would be detrimental to Swedish science and to the prize giving institutions. Dispute between these scientific organization became very bitter. Members of the Karolinska Institute even opted for complete reorganization of Nobel’s donation, suggesting that each institute use a share of the money for its own purpose. Some of the scientific administrators doubted that the members of these organizations were capable of choosing a winner. It needed the patience and arbitration of Ragnar Sohlman and Emmanuel Nobel to come to an agreement. Alfred Nobel’s family finally accepted the will. Yet, there was still the King of Sweden who had to

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There will be four interesting satellites, two before and two after the Brisbane meeting. Look at the options. Discuss heart failure at the magnificent Iguazu Falls or the ageing heart and blood vessels in beautiful Melbourne on the way to Brisbane! Consider ischaemic injury in the impressive Kruger National Park or endothelial dysfunction in exciting Hong Kong on the way home!

Keep up-to-date with the conference by bookmarking the congress web-site www.heart2004.com.

The dates to remember are:
- World Congress of Clinical Pharmacology and Therapeutics: July 31-August 6, 2004
- Pre-conference satellites:
  - Iguazú Falls (Argentina / Brazil) August 1-3, 2004
  - Melbourne (Australia) August 3-5, 2004
- XVIII ISHR World Congress: Saturday, August 7 - Wednesday, August 11, 2004
- Annual Meeting of the Cardiac Society of Australia & New Zealand: August 8-11, 2004

Post-conference satellites:
- Hong Kong (China) August 13-15, 2004

We are looking forward to your active participation in the Brisbane ISHR World Congress!

Lindsay Brown
Convenor

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approve these arrangements. Emmanuel Nobel was summoned by the king who pronounced that the bequest of his uncle could only cause trouble, telling him: “Your uncle was talked into this by fanatic womenfolk mostly;” he also called it a “nonsensical idea.” Today the King of Sweden proudly hands the Nobel diploma to winners to the glory of Sweden.

Matters were also difficult because of the dispersion of various enterprises of Alfred Nobel in Italy, Russia, and France. To get these valuable stocks out of France into Sweden, Sohlman had to remove them secretly from a bank in Paris and bring them to the Swedish embassy in a horse drawn carriage, with Sohlman carrying a pistol to ward off any attempted robbery.

What was Alfred Nobel like? He was an ingenious inventor. Aside from nitroglycerine, he worked on the use of guided rocket missiles and of the production of artificial gems, ideas which were truly visionary. But a man’s character cannot be summarized in a paragraph. Life is a mosaic, defying simple definition. It is known that Nobel was a lonely man. From his earliest years he searched in vain for tenderness and love, and he was thwarted by skepticism and self-doubt. As he wrote, “I personally find the conversation of Parisian ladies. Unfortunately they have an aversion to soap – but one must not expect too much.” While on a vacation to Austria, the 50-year-old Nobel met a 20-year-old Viennese girl who worked in a flower shop. There could not have been a more incompatible couple, but Nobel loved her and cared for her. In the course of time he wrote her over 200 letters. Then the relationship cooled, and they drifted apart. Nobel died a lonely man, surrounded only by his servants. Nobel died from coronary heart disease, which handicapped him through his adult life. As he wrote, “Isn’t it the irony of fate that I have been prescribed nitroglycerine to be taken internally? They call it Trinitrin, so as not to scare the chemist and the public.”

It is a sign of human frailty that Nobel’s vision to create the great legacy which bears his name was opposed by many, including the scientific community. Emmanuel Nobel, his nephew, whose photograph made me write this column, fought to bring Alfred Nobel’s great dream to fruition. The award named after him is recognition of a great, noble but tragic man.

Reference:

Richard J. Bing, M.D.
SATURDAY, August 7, 1982, and northern Italy was bathed in summer sunshine. Blue skies extended from the Julian Alps in the east to the Maritime Alps in the southwest. Nick Clemente, resident in internal medicine, left his home in Padua early this morning for the Dolomites, a magnificent range of mountains named after the French geologist Deodat Dolomieu. There he and friend Ms. C. Kind, a senior medical student in St. Louis, Missouri, would begin their hiking holiday. Ms. Cruella Kind and Nick first met while hiking in the Andes of Chile last year. Seated at a hotel in Cortina d’Ampezzo, Nick sipped espresso, all aglow with the victory of Italy’s blue and white in Madrid on July 11th, its first World Cup final in 44 years, and the prospects of Cruella’s arrival. He began singing “That’s Amore” to himself. Alpine snow would be threatened by the heat of their embrace. But resolute in their plans, they set out exploring the rugged beauty of Alpe di Siusi and valleys that cut deeply into mountains. Nick noted arable soil and permanent pasturelands of valley floors provided the primary source of cattle fodder. Since cattle were an agricultural mainstay of the region, he hoped well-intentioned farmers would not plant melilots to increase their yield of fodder.

As the sun gradually set, a red hue covered the Alps creating an “Alpine glow.” Nick and Cruella made their way to a cabin owned by Nick’s friend in Padua. A nasty odor greeted them as they opened the cabin door—a problem solved by open windows and mountain air. Ensconced and entwined in bed, whose soiled pillows, dingy mattress and wooden bedstead provided little of the usual comforts of home, they managed. When they awoke early the next morning, they startled one another—their faces reverse images of one another—on Nick’s left and Cruella’s right face there had appeared an urticarial rash, a vascular reaction marked by smooth, erythematous, itchy patches that oozed blood.

What is the likely diagnosis?

They deduced these lesions were the bites of *Cimex lectularius*, gregarious, nocturnal varmints residing in wooden bedsteads and infested beddings, in this case pillows. Heavily infested areas have a pungent odor. Also known as mahogany flats, or bed bugs, these vessel feeders bite man solely for a blood meal. During feeding, inhibitors to platelet aggregation are introduced from their salivary glands to maintain mouthpart patency; they can cause local inflammation and bleeding in the victim. However with minimal tissue damage, there is little risk of a systemic coagulation disorder and no specific treatment is needed.

Distressed, but undaunted, Nick and Cruella prepared for another day’s journey. This time at higher elevations, where temperatures would be cooler. From her back pack Cruella extricated a flannel shirt, wool socks and hiking shorts. Laughingly she recounted to Nick the hours spent looking for her other—their faces reverse images of one another—on Nick’s left and Cruella’s right face there had appeared an urticarial rash, a vascular reaction marked by smooth, erythematous, itchy patches that oozed blood.

What could have caused this?

From her sock emerged a spider, a dark brown, violin-shaped mark on its back. Could this be a *Loxosceles reclusa*, a common inhabitant of the central U.S., or *Loxosceles laeta* from Chile that had readily adapted to living in her parents’ attic? In either case, it had kept “home” in Cruella’s back pack and transported transatlantic. But there was no evidence of ischemic necrosis with ulcer formation and therefore complications seemed unlikely. Nevertheless, Nick and Cruella sought medical attention to confirm that necrotic arachnidism had been avoided and systemic loxoscelism was unlikely. With their diagnosis and prognosis confirmed and treatment confined to local wound care, they found a hotel to rest and recover. Over dinner and with Cruella’s foot elevated on a chair, Nick and Cruella recalled biting encounters of earlier in the day. Nick could not resist drawing analogies with several patients, where disproportionate levels of provocateur or inhibitor had created an imbalance in the cast of characters contributing to the coagulation cascade.

Some 70 yrs ago, cattle in rural plains of the U.S. and Canada developed spontaneous bleeding, often fatal. Veterinarians Frank Schofield in Alberta and Lee Roderick in North Dakota came to associate this mysterious illness with the ingestion of spoiled *Melilotus albus* hay and to coin the term sweet clover disease. Karl P. Link and coworkers, using spoiled sweet clover provided by farmer Ed Carlson, would ultimately discover dicumarol and that vitamin K reversed its action on clotting. In the absence of necrotic skin and tissue factor pathway (TFP)-induced coagulation, the risk of DIC following envenomation by the recluse spider is extremely low. Tissue necrosis may be related to sphingomyelinase D and intense vasoconstriction induced by such substances as perhaps serotonin and/or thromboxane A2 released by platelets.
EIGHTY PARTICIPANTS from Australia, New Zealand, Indonesia and Japan contributed to this intimate but vibrant meeting of one of ISHR’s smallest Sections. This meeting was organised by Salvatore Pepe and held at the Alfred Hospital and Baker Heart Research Institute in Melbourne. The Baker Heart Research Institute (established in 1926) is committed to research excellence with a mission to reduce death and disability from heart disease through activities ranging from research at the laboratory bench to clinical trials and patient care. Recently rehoused in a new state-of-the-art research and teaching complex, it was a fitting meeting venue. Symposia included: Artificial Heart Technology; Vascular Regulatory Mechanisms; Channels, Exchangers & Sensors; Signalling in Hypertrophy & Fibrosis; Genes & Signalling in Heart Failure; Gender & Cardiovascular Function; Dilemma of Diabetes.

Highlights of the meeting included a wonderful keynote presentation by Kazuo Ichihara (Hokkaido College of Pharmacy, Japan) on Prophylactic Effects of Statins on Ischemic Heart Disease. Don Esmore presented The Ventriassist Device: from Research to Clinical Reality. In addition, there was an entertaining presentation by Peter McLennan on Diet, Wine & Surviving Heart Disease. Centre piece was a stimulating moderated poster session, held on the 7th floor of the Baker Institute, with the backdrop views of Melbourne’s cityscape and surrounding parks. As usual, there was a focus on promoting trainees and postgraduate students. Prizes were awarded for: best postdoctoral fellow presentation (Cecilia Prele, Univ. of Western Australia); best poster presentation (Vincent Chan, Univ. of Queensland), with a high commendation award to Douglas Kelly (Univ. of Adelaide); best symposium presentation (Tanya Medley, Monash Univ./Baker Heart Research Institute), with symposium finalist Bronwyn Garnham (Griffith Univ.). Congratulations and a successful career ahead to all.

The Australasian Section committee elections are held every three years. Lindsay Brown will remain Section President until August 2004, with Salvatore Pepe as President Elect. Lea Delbridge and Xiao-Jun Du are the new Section Secretary and Treasurer.

For those who missed out, there is another chance to come to Melbourne and attend what promises to be another excellent meeting: Ageing Heart and Vessels, August 3-5, 2004. This meeting is a pre-congress satellite to the ISHR World Congress in Brisbane (See page 15 for more information). The venue is in the centre of Melbourne, close to cultural exhibitions, theatre, opera, music, sport, restaurants and great shopping. The conference will have organised excursions to local wildlife and fauna parks, the bay area and tours of the Yarra Valley and Mornington Peninsula winery districts.

Helen Kiriazis, Ph.D.
Melbourne, Australia
GERD HEUSCH was born on May 20, 1955 in Bonn. He graduated with an M.D. from the University of Bonn in 1980, and with a Ph.D. from the University of Düsseldorf in 1985. From 1985-6 he received a fellowship from the German Research Foundation to serve as research cardiologist in the Division of Cardiology at the University of California, San Diego under the supervision of Dr John Ross Jr. As a Heisenberg scholar of the German Research Foundation from 1987-9, he studied in the Department of Physiology and received clinical training in the Department of Cardiology at the University of Düsseldorf under the supervision of Professor Franz Loogen. Since 1989, Dr Heusch has been Professor and Chairman of Pathophysiology at the University of Essen Medical School. From 1999-2000 Dr Heusch was a Visiting Professor in the Department of Physiology, University of South Alabama, where he is now an Adjunct Professor.

Dr Heusch’s research has focused on the areas of α-,adrenergic coronary vasoconstriction and myocardial hibernation/ischemic preconditioning. In 1983, Dr Heusch was the first to identify α-,adrenergic coronary vasoconstriction distal to coronary stenosis and the resultant myocardial ischemia in anesthetized dogs during cardiac sympathetic nerve stimulation. Subsequently, he characterized the responsible α,-adrenoceptor subtype and a feed-back cycle between sympathetic activation and myocardial ischemia. He extended his findings with anesthetized dogs during electrical sympathetic nerve stimulation to conscious dogs during treadmill exercise, and finally and more recently, to patients with chronic stable angina and patients undergoing PTCA and stent implantation. Recently, he identified a genetic background (splice variant of G protein β-subunit) for enhanced α-adrenergic coronary vasoconstriction in patients. This work is an example of pioneering experimental observations that were subsequently and successfully transferred to the clinical arena.

Stimulated by his experience with Dr John Ross in San Diego, Dr Heusch developed a pig model of perfusion-contraction matching and short-term myocardial hibernation. Subsequently, he characterized the limits of such short-term hibernation in terms of blood flow, inotropic state and duration. He then studied the underlying mechanisms of short-term hibernation using ischemic preconditioning as a reference, and found an important role for adenosine and $K_{ATP}$-channel activation in his pig model of ischemic preconditioning but not in short-term hibernation, thus distinguishing these two phenomena mechanistically. Dr Heusch characterized the reduction of calcium respon-

siveness and the role of endogenous NO in short-term hibernation. His seminal article in *Physiological Reviews* is the most complete and critical article on myocardial hibernation. Most recently, Dr Heusch has focused on the pathophysiology of coronary microembolization and its inflammatory consequences in the coronary microcirculation and its surrounding myocardium, both in experimental and clinical studies.

Dr Heusch has published 250 papers, including 150 original articles in peer-reviewed journals. He received the Edens award of the Heinrich-Heine-

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THE ISHR is unique in that we are the only world-wide society that promotes cardiovascular research. We meet, as a society, every three years for a world congress. Meetings since the last meeting in Australia in Melbourne (1986) include Ann Arbor (1989), Kobe (1992), Prague (1995), Rhodes (1998) and Winnipeg (2001). These meetings have all emphasised the spectacular increase in knowledge in cardiovascular science while allowing old friends to meet and new friendships to be made. The next world congress in Brisbane will continue these traditions!

During the lead-up to this congress, I have been privileged to attend recent meetings of the European, North American, Indian and Japanese Sections and, of course, the Australasian Section. In addition, I met many Latin American members during a trip to Argentina and Brazil. The interest in the Brisbane meeting, as well as in the satellites, has been very encouraging so I would like to emphasise the “frequently asked questions” about the Brisbane congress.

Where can I get more information?

The Congress web-site at www.heart2004.com contains all the information on the congress, including the scientific program, the registration forms and the applications for the young investigator awards. In addition, there is information on the social events, accommodation options and a wide variety of tours. We have also linked the web-site to the Australian Government web-site for information on visa applications.

How do I get to Brisbane?

QANTAS, the Australian airline, is the official airline for the Congress with all bookings for flights within Australia being processed by Ozwings, a division of the Congress Manager, the Ozaccom Group. QANTAS is part of the One World alliance, which includes British Airways, American Airways, Cathay Pacific, Iberia and other great airlines (see www.qantas.com.au for more details). Star Alliance members such as Singapore Airlines, Thai Airways and United Airlines also fly to Australia. Brisbane has an international airport, one of the busiest in Australia, and there are direct flights from many cities such as Singapore, Bangkok, Hong Kong, Tokyo, Auckland, Los Angeles and Santiago de Chile. Further, Brisbane is only one hour’s flight from Sydney, the major entry point for flights to Australia, and two hours’ flight from Melbourne, site of the satellite on the ageing cardiovascular system. Your local travel agent should be able to provide the best fares to Australia but please feel free to contact Ozwings by email at ozwings@ozaccom.com.au if you have any queries. Please book your tickets soon since August is a peak travelling month for the Northern Hemisphere.
What will be the emphasis of the scientific programme for the congress?

The emphasis is on the exciting advances in understanding the heart and blood vessels since the Winnipeg meeting in 2001. We have divided the symposia into six areas: generating and regenerating the heart; myocardial frameworks; excitation-contraction coupling and ion channels; nature and nurture, injury and immunity; responses to ischaemic, oxidative and metabolic stress; and neurohumoral influences and growth signalling. These symposia will be augmented by poster presentations.

What will each day contain?

Each morning and afternoon of the congress will start with either a landmark lecture or an award lecture. The achievements of these lecturers are impressive and cover a broad range of topics. These lecturers include Masayasu Hiraoka (Japan), Roberto Ferrari (Italy), Sir Magdi Yacoub (UK), Andrew Coats (Australia), Piero Anversa (USA), John Solaro (USA) and David Kass (USA). Each of these lectures will be followed by 8 concurrent symposia to showcase the advances in cardio-vascular research. An extensive poster session will occur during the lunch-break, following the morning symposia. We are also preparing some evening symposia on topical subjects.

What opportunity will I have to present my own studies?

One critical aspect of the ISHR world congresses is the opportunity for young and experienced investigators to present their recent studies. All free presentations will be as posters. Since posters are central to this meeting, they will be presented together with lunch between 12 and 2.30pm on the Saturday, Sunday and Tuesday of the meeting. There will be no symposia during the poster sessions.

Can we help young investigators to present their studies?

The ISHR has always emphasised the importance of younger investigators. The web-site contains the application forms for awards for younger investigators. Most of the sections of the ISHR will also be offering substantial assistance to young investigators to come to Brisbane. Don’t miss this opportunity to present your findings and defend your conclusions to an international audience!

Is there more?

Of course! The satellite meetings are a key part of the experience. These meetings were profiled in the last Heart News and Views. Just to remind you – we are the only society attempting 4 satellites on 4 continents! Start with the Iguazu Falls or Melbourne before Brisbane; try Hong Kong or the Kruger National Park on the way home. Details are on the congress web-site.

What will accompanying persons do while the sessions are on?

There are many tours available to see the highlights of Brisbane and the surrounding areas. Details are available on the web-site. These include a river cruise to a koala sanctuary on Sunday, August 8th, and a choice between whale-watching or a trip to the Gold Coast and enjoy a casual evening with a traditional Australian barbecue at Southbank, a wonderful parkland next to the Brisbane Convention and Exhibition Centre. The last event is the more formal Congress Dinner on Tuesday, August 10th. This promises to be a sumptuous meal highlighting the award-winning meals of the Convention Centre.

With all the innovative science, will I have time to talk to friends?

We hope so! There will be four major events during the conference. The welcome reception on Friday, August 6th will be an informal opportunity to meet old and new friends. On Monday, August 9th, there will be a tour for all registrants, partners and guests to the Australia Zoo, leaving Brisbane at about 12 noon. This Zoo is the home of over 750 animals on 50 acres in addition to Steve Irwin, the Crocodile Hunter. This provides a whole new dimension since the keepers interact with the wildlife, from giant snakes to hungry crocodiles! After returning to Brisbane late that afternoon, we can all relax and

Some of the magnificent colours of the corals that form the Great Barrier Reef stretching over 1000 km along Queensland's coast - one of the natural wonders of the world
Mt Tambourine on Tuesday, August 10th. Of course, we hope all accompanying persons will come to the Australia Zoo on Monday, August 9th.

**Should we extend our stay “down-under”?**

Why not? Australia is a large island, approximately the same size as the continental USA or Europe. There are tours available to tropical North Queensland to see world heritage rain forests and the Great Barrier Reef, to Sydney with its magnificent harbour and Opera House or to the Red Centre, a place of prehistoric land formations such as Uluru and Aboriginal heritage. Further, New Zealand is only 3-4 hours’ flight away (on the way to or from both North and South America) and August is the month for skiing, for example at Queenstown in the South Island. The scenery of New Zealand is magnificent – just look at “The Lord of the Rings” for some examples! And then there are tropical paradises such as Fiji and Samoa so you may not want to go home!

**Why are we holding the meeting in winter?**

Brisbane has very mild winters with daily temperatures in August ranging from an overnight low of around 8°C to a maximum of about 22°C. There is usually no rain during the month of August so days are sunny and mild. The evenings become cooler so a pullover or sweater is recommended. Water temperatures in the Pacific Ocean are around 20°C so scuba diving is certainly possible. Holding our congress at this time allows delegates to take part in several other major meetings in the same venue in Brisbane - the Clinical Pharmacology and Therapeutics world congress, the Cardiac Society of Australia and New Zealand meeting and the International Congress on Clinical Nutrition.

**Who do I contact for more information?**

Our congress web-site, [www.heart2004.com](http://www.heart2004.com), should answer most queries. Questions regarding accommodation or flights should be directed to the congress manager, Ozaccom Conference Services, at [heart2004@ozaccom.com.au](mailto:heart2004@ozaccom.com.au) or [ozwings@ozaccom.com.au](mailto:ozwings@ozaccom.com.au). Questions on other matters, such as the scientific programme or poster presentations, should be directed to me at [l.brown@uq.edu.au](mailto:l.brown@uq.edu.au) or to Reeza Nazer at [r.nazer@uq.edu.au](mailto:r.nazer@uq.edu.au).

I am looking forward to welcoming all of you to an exciting world congress in Brisbane this August!

*Lindsay Brown  
Convenor*
The Twentieth Annual Meeting of the Japanese Section was organized by Seibu Mochizuki, from Jikei University School of Medicine and held on the medical school campus. Jikei, one of Tokyo’s most prestigious medical schools, is located in southern Tokyo in the shadow of the famous Tokyo Tower. The theme of the meeting was to celebrate the 30th anniversary of the Japanese Section which began five years after the ISHR was founded. On Saturday there was a half-day satellite symposium on β-blockers in heart failure. Along with a distinguished Japanese faculty, Willem Remme (The Netherlands), Karl Swedberg (Sweden) and Finn Waagstein (Sweden) reviewed the clinical findings with β-blockers with much discussion centering around the recent COMET trial. Heinz-Gerd Zimmer (Germany), Lionel Opie (South Africa) and Sian Harding (UK) among others reviewed the basic science of β-blockade and heart failure.

A reception was held on Saturday night at the top of the Mori Office tower where we were treated to a panorama view of Tokyo at night. The actual meeting was held on Sunday and Monday. Foreign speakers included Clive Orchard (UK), Kenneth MacLeod (UK), Gary Lopaschuk (Canada), Grant Pierce (Canada), Pawan Singal (Canada), Naranjan Dhalla (Canada), Joan Heller-Brown (USA), James Downey (USA), Michael Shattock (UK), Metin Avkiran (UK), Martin Gerdes (USA), Danielle Feuvray (France), Lindsay Brown (Australia), Federica Del Monte (USA), Canwen Jiang (USA), Bernhard Maisch (Germany) and Jutta Schaper (Germany). The banquet was held at the Tsunamachi Mitsui Club on Sunday night. The Club was originally an estate built by the wealthy Mitsui Family (Mitsubishi company and Sumitomo bank are just a couple of their many holdings). The European-style mansion and its lavish formal gardens are all neatly concealed in downtown Tokyo. The eats included both western and Japanese treats including fresh sushi and soba noodles.

The poster competition was held on Monday and the winners included Drs Jun Fujita (Keio Univ.), Noriko Inoue (Yamaguchi Univ.) and Kazuo Terai (Osaka Univ.). In the afternoon ISHR President Jim Downey presented the Outstanding Investigator Prize to Issei Komuro from Chiba (see page 14).

This year, 44 members were added to the Japanese Section’s governance council. In addition, the council elected a new Japanese Section President, Masayasu Hiraoka from Tokyo Medical and Dental University. He will be replacing Yoshio Yazaki from the International Medical Center of Japan.
SUBMISSIONS to the Journal continue to steadily increase. The number of submissions in 2003 reflects a 32% increase from 1999, the first year of the JMCC Cleveland office. We are poised for more growth in submissions and suspect that potential authors will continue to be motivated to submit to the JMCC by our competitive average initial review time, the absence of page or color figure charges and the overall quality of the journal content. The editorial office, associate editors and board members are absolutely committed to providing authors a quick and thorough evaluation of their work. Our thanks go out to our reviewers and editors whose dedication and responsiveness makes our peer-review process flow smoothly and efficiently.

While the number of submissions a journal receives provides some reflection of a Journal’s strength, it is not the complete picture since it does not represent the quality of journal content. We have gradually raised the standards for publication in the Journal in order to sculpt the JMCC into a leading source of information for basic and translational cardiovascular research. Our pledge to accept top quality science has not hindered submissions to the JMCC, but it has affected the quality of research submitted and papers published. All of our editors agree that the pool of papers we receive is of increasingly high quality and contributed by leading laboratories. We believe that this strategy will lead to a more valuable, high impact product.

Currently, our impact factor ranks the JMCC 6th out of 63 journals in the Institute for Scientific Information’s Cardiac and Cardiovascular Systems category. The accompanying graph illustrates the change of impact factors for top journals in the cardiovascular field since 1998. The JMCC experienced the largest growth in impact of the top journals in our field with an increase of 50%. Although important, impact factors should not be relied on exclusively as the metric for journal quality. The two-year lag time between publication, citation and calculation of impact factor shows journal performance in the too-distant past and proves most useful when a span of five or ten years is examined. Also, current impact factors are calculated with citations of original articles and review articles unsorted. Thus the quality of a journal’s original research cannot be appropriately assessed by the analysis of the impact factor as currently derived by the ISI. By contrast, review articles inflate the impact factor calculation since they invariably attract more citations than a tightly focused original paper.

We are additionally able to gauge current exposure and utilization trends of our content by an examination of the extent of downloading of full text articles from our website (Science Direct: http://www.sciencedirect.com/science/journal/00222828) and the growing number of institutional subscriptions. There has been a 440% increase in downloading of articles since the inception of our Cleveland editorial office. The increase of downloads is due in part to a substantial increase in our subscriptions. We have more than doubled our institutional subscriptions since 2000. As the official journal of the International Society for Heart Research, we and our publisher Elsevier, are absolutely committed to being universally available in every corner of the globe.

We remain committed to publishing the best international cardiovascular science. Our editorial board reflects the global nature of our submissions with a 88% increase in colleagues from abroad over the past five years. In 2003, we also welcomed three new Associate Editors, Dr David Eisner (UK), Dr Stephanie Dimmeler (Germany), and Dr Issei Komuro (Japan). In addition to assisting with manuscripts in their areas of
experts, our Associate Editors help to identify expert reviewers in their regions and encourage talented investigators to send their work to the *Journal of Molecular and Cellular Cardiology*. We would like to encourage cardiovascular investigators to send us their best work and recommend the JMCC to colleagues regardless of their country of residence.

A number of initiatives are in progress to continue to engage our authors and readers. One advance is that all manuscripts are now handled electronically from submission to publication reducing the manuscript-handling time to our most efficient pace ever (see our Online Submission Site at http://jmcc.editorialmanager.com). Contributors also have the capacity to track their accepted manuscripts through production phases online, at Elsevier’s Author Gateway (available at: http://www.elsevier.com/locate/issn/0022-2828 then click on the Guide for Authors link on the left). Additionally, authors now can include multi-media supplements to their work online, such as audio and video files and spreadsheets. Each of these achievements was in part made possible by our transformation into the Elsevier portfolio of Journals.

We are now realizing the fruits of being an Elsevier product. This includes our transfer to the ScienceDirect web platform (http://www.sciencedirect.com), the world’s largest scientific, technical and medical publication database. ScienceDirect has over 1700 journals, 3 million articles, and 9 million authorized users. The increasing functionality of the search and alert tools on ScienceDirect, along with the vast amount of information available through the site, should prove useful for our readers. JMCC content from 1993 to the present is currently available online. The Journal is also now available on Cardiosource (http://www.cardiosource.com/), Elsevier’s online resource specially designed for cardiovascular clinicians and investigators. This added exposure directed specifically to our consumers is certain to increase our readership and citations.

In addition to our advances in electronic publishing, we are expanding our content coverage. One important and unique area is *Cardiovascular Phenotyping*. Original research in this area is exploding and we hope to provide a centralized venue for these studies, as well as concise, clear reviews that put breakthroughs into context for the cardiovascular field. Dr Jeffrey Robbins will be the editor of a new and ongoing series, *Genetic Modification of the Heart*, for this purpose. Concise reviews in progress include phenotypic analysis of genetically engineered mice with altered myocardial contractility, cardiac hypertrophy and cardiomyopathy, murine physiology, electrophysiology, cytokines, apoptosis, and metabolism. We will continue to offer our focused issues as well. Focused issues in progress include, K-ATP Channels guest edited by Andre Terzic, Scaffolding and Anchoring Proteins guest edited by Meredith Bond, and Myocardial Apoptosis guest edited by Douglas Mann and Richard Kitsis.

The changes taking place in the Journal both electronically and in content will enhance our contribution to cardiovascular science. Looking ahead, more growth and possibilities are certain and our editorial team is energized to explore our potential. As always, we look forward to input from our scientific community to help build the JMCC into the most valuable publication for cardiologists and cardiovascular investigators worldwide. Please send your thoughts and suggestions directly to me at our office (JMCC@po.cwru.edu).

Richard A. Walsh, M.D.
(Editor in Chief)
Ann Smisek
(Managing Editor)
**Dr Issei Komuro**

**Winner of the 2003 Outstanding Investigator Prize**

*(November 2003; Tokyo, Japan)*

Dr Komuro started his research career by purifying cardiac myosin heavy chain (MHC) isoforms in Dr Yoshio Yazaki’s laboratory at the University of Tokyo in 1985. He first showed differences in the protein structure and enzymatic activity between α and β MHC. Since the discovery of an increase in β MHC in hypertrophied hearts, his research interest has been focused on cardiac hypertrophy. He analyzed altered gene expression in cardiac hypertrophy by two-dimensional gel electrophoresis of in vitro translated products and showed that the fetal gene program is re-activated in hypertrophied hearts. Based on the hypothesis that similar mechanisms are involved in cell hypertrophy and proliferation, he examined the expression of proto-oncogenes during the course of hypertrophy. He also first cloned SERCA2 from the heart and demonstrated its downregulation at mRNA and protein levels in hypertrophied hearts. In 1987, he developed the procedure to stretch cultured cardiomyocytes and extensively studied signal transduction processes involved in the development of cardiac hypertrophy induced by mechanical stress. He first applied molecular biology and biochemistry to analyze the molecular mechanism of mechanical stress-induced biological events.

From 1989 to 1993, he was a post-doctoral fellow in Dr Izumo’s laboratory at Beth Israel Hospital/Harvard Medical School in Boston. He succeeded in isolating the cardiac homeobox protein Csx/Nkx2.5, a transcription factor essential for cardiac development. The discovery of Csx/Nkx2.5 greatly stimulated the study of cardiac development, and Csx/Nkx2.5 has been used worldwide as an early marker of the heart.

After returning to Japan, he isolated human Csx/Nkx2.5 and determined the locus of this gene, which later led to the discovery that Csx/Nkx2.5 is one of the genes responsible for various heart diseases such as atrial septal defect, ventricular septal defect, Tetralogy of Fallot, Epstein anomaly and atrioventricular block. He clarified the molecular mechanism of Csx/Nkx2.5 involvement in cardiac development by isolating proteins which associate with Csx/Nkx2.5, and the role of bone morphogenetic proteins in cardiac development by establishing a cardiomyocyte differentiation system. He has also elucidated the role of molecules such as angiotensin II and calcineurin in the development of cardiac hypertrophy and remodeling using transgenic mice. In 2001, he became a professor and chairman of cardiovascular medicine at Chiba University where he leads over 100 doctors in clinical work as well as research.

Dr Komuro is a pioneer in, and has made great contributions to, the research fields of cardiac hypertrophy and remodeling. His work has provided valuable insights into the pathophysiology of cardiac diseases; for example, elucidation of the molecular mechanism of mechanical stress-induced cardiac hypertrophy and demonstration of the role of angiotensin II in cardiac remodeling provided the rationale for inhibiting the renin-angiotensin system in patients with heart failure. In the future, insights gained from the study of cardiac development will prove to be even more important to the burgeoning fields of gene therapy and regenerative medicine. Originality is a feature of Dr Komuro’s research and he is also a highly productive man. He has published over 200 original articles, many of which have appeared in leading journals. He has also published 40 book chapters/review articles, is a regular speaker at national and international meetings, and serves as an associated editor of the *Journal of Molecular and Cellular Cardiology* and an editorial board member of *Circulation* and *Circulation Research*.

The purpose of this Prize is to recognize an outstanding scientist who is making major and independent contributions to the advancement of cardiovascular science, and is likely to further develop his/her research in the future. The main criteria for selecting awardees are scientific excellence, independence, and potential for future research contributions. While the Peter Harris Award recognizes lifelong accomplishments and the Richard Bing Award recognizes young investigators, the Outstanding Investigator Prize is similar to the Research Achievement Award; the major difference between the two is that the latter is presented during the ISHR World Congress while the former is given at Section Meetings.
May 2-5, 2004. XXV Annual Meeting of the American Section - “Bench to Bedside and Back; Exploring New Paradigms” - A multinational perspective of cardiovascular research in North America. Westin Regina Resort, Cancun, Mexico. Inquiries: Dr D. Villarreal, Division of Cardiology, SUNY Upstate Medical University, 750 East Adams Street, Syracuse, New York 13210, USA. Tel. +1 315 464 9578; Fax +1 315 464 9571; E-mail villar@upstate.edu or backush@upstate.edu

June 2-6, 2004. XXIV European Section Meeting. Dresden, Germany. Inquiries: Dr U. Ravens, Medical Faculty Carl Gustav Carus, Dresden University of Technology, Fetscherstrasse 74, 01307 Dresden, Germany. Tel. +49 351 458 6251; Fax +49 351 458 6315; E-mail ishr-dresden2004@mailbox.tu-dresden.de; Website www.ishr-dresden2004.de

August 1-3, 2004. XIII Meeting of the Latin American Section - Heart Failure 2004: an Integrated Basic and Clinical Approach (a Satellite Symposium of the XVIII World Congress of the ISHR). Iguazu Falls, Argentina - Brazil. Inquiries: Dr M. Vilapetroff, Centro de Investigaciones Cardiovasculares, Facultad de Ciencias Medicas 60 y 120 (1900), La Plata, Argentina. Tel./Fax +54 221 4 834 833; E-mail mvila@atlas.med.unlp.edu.ar

August 3-5, 2004. Ageing Heart and Vessels: Current Understanding, New Research and the Challenge of Reducing the Health Care Impact of Age-Related Cardiovascular Disease (a Satellite Symposium of the XVIII World Congress of the ISHR). Melbourne, Australia. Inquiries: Dr S. Pepe, Tel. +61 3 8532 1310; Fax +61 3 8532 1314; E-mail spepe@baker.edu.au; Website www.baker.edu.au/ishr

August 7-11, 2004. XVIII World Congress of the International Society for Heart Research and the 52nd Annual Scientific Meeting of the Cardiac Society of Australia & New Zealand - Cardiology Bench to Bedside: the Science and the Practice. Brisbane Convention & Exhibition Centre, Brisbane, Australia. Inquiries: ISHR 2004 Congress, PO Box 164, Fortitude Valley QLD 4006, Australia. Tel. +61 7 3854 1611; Fax +61 7 3854 1507; E-mail heart2004@ozaccom.com.au; Website www.heart2004.com

August 13-15, 2004. Cellular Injury in Ischaemia (a Satellite Symposium of the XVIII World Congress of the ISHR). Kruger National Park, South Africa. Inquiries: Dr J. van Rooyen, Department of Physiological Sciences, University of Stellenbosch, Matieland, Stellenbosch, South Africa. Fax +27 21 808 3145; E-mail jvrooy@sun.ac.za; Website http://ishr.sun.ac.za/

August 13-15, 2004. Endothelial Factors and Coronary Disease: New Understandings and Effects of Natural Products (a Satellite Symposium of the XVIII World Congress of the ISHR). Hong Kong. Inquiries: Dr R.Y.K Man, Department of Pharmacology, Faculty of Medicine, The University of Hong Kong, 2/F, Laboratory Block, 21 Sassoon Road, Hong Kong. Fax +852 2817 0859; E-mail ishr-Satellite@hkukh.hku.hk; Website www.ISHR-satellite.hku.hk

August 28-September 1, 2004. XXVI Congress of the European Society of Cardiology. Munich, Germany. Inquiries: E-mail webmaster@escardio.org; Website www.escardio.org


November 7-10, 2004. Scientific Sessions of the American Heart Association. New Orleans, Louisiana. Inquiries: American Heart Association, Meetings and Councils, 7272 Greenville Avenue, Dallas, TX 75231. Tel. +1 214 706 1543; Fax +1 214 373 3406; E-mail scientificconferences@ahapt.org; Website www.americanheart.org

November 24-25, 2004. XXI Annual Meeting of the Japanese Section. Kofu City, Yamanashi Prefecture, Japan. Inquiries: Dr K. Hashimoto and Dr A. Sugiyama, Department of Pharmacology, Yamanashi University School of Medicine, 1110, Tamahomachi, Nakakoma-gunn, Yamanashi 409-3898, Japan. Tel. +81 55 273 9503; Fax +81 55 273 6739; E-mail pharmaco@res.yamanashi-med.ac.jp

the 2003 Keith Reimer distinguished lecture

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University Düsseldorf (1985), the Vater award of the Johannes Gutenberg-University Mainz (1997), the Acker award of the German Cardiac Society (1998) and the Silver Medal as the Basic Science Lecturer of the European Society of Cardiology (2002). In 2000, he was awarded an honors doctorate by the Medical Academy Nishnij Nowgorod. Dr Heusch is Editor of Basic Research in Cardiology, and has served on the Editorial board of numerous prestigious journals. He is a Fellow of the Council of Basic Cardiovascular Sciences of the AHA, the American College of Cardiology, the Cardiovascular Section of the American Physiological Society, the European Society of Cardiology and the ISHR. In addition, Dr Heusch has served on the board of the German Cardiac Society (1995-9), as Chairman of the Working Group on Myocardial Function of the European Society of Cardiology (1998-2000), and on the Council of the ISHR (1995-present). He is currently President of the European Section of the ISHR.
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Servier is also the founding father of The European Cardiologist Journal by Fax and Dialogues in Cardiovascular Medicine, a quarterly publication with a worldwide circulation edited by Roberto FERRARI and David J. HEARSE. Dialogues discusses in a comprehensive way issues from the cutting edge of basic research and clinical cardiology.

The forthcoming issue, devoted to GENETIC RISK FACTORS & CARDIOVASCULAR DISEASE will feature articles by:

R. S. Williams and P. J. Goldschmidt-Clermont,
H. Watkins, A. S. Hall, I. N. M. Day

For further information on Dialogues in Cardiovascular Medicine please contact:
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