The 34th Congress of the International Union of Physiological Sciences

Anthony D. C. Macknight, Chair of Organizing Committee and International Program Committee, and Ewald R. Weibel, President, IUPS

The mission of an IUPS Congress in the 21st Century

The 34th Congress of the International Union of Physiological Sciences (IUPS) will be held in Christchurch, New Zealand, August 26—31, 2001. These Congresses are held every four years and represent a unique opportunity for physiologists and workers in associated disciplines to meet together on a world-wide and interdisciplinary basis.

IUPS Congresses have gone through various stages of transformation, some happier, some less. We have therefore made a special effort to prepare a Congress that is exciting and meets the expectations of the contemporary scientific community with its highly developed means of communication.

The 34th Congress was awarded to New Zealand at the 32nd IUPS Congress in Glasgow in 1993 and confirmed in St. Petersburg in 1997. In planning this Congress, the New Zealand Organizing Committee and the IUPS Executive Committee worked closely together. Early on, we asked ourselves what the purpose of large scientific conferences was in this age of increasing specialization and fragmentation. It was even suggested to us that such conferences had outlived their usefulness because of the new ways of communication. So we were conscious of the need to reexamine the role of large scientific meetings.

We concluded that there still is a need for physiologists from all parts of the world and from all disciplines to meet face to face and that the Congress should not be just a collection of small meetings. Rather, we wanted to build upon the unique opportunity that a truly multidisciplinary meeting of leading international scientists can offer. In particular, we wished to emphasize the central place of physiology within the continuum from molecular biology through cellular and comparative biology to clinical applications. For this reason we chose “From Molecule to Malady” as the Congress theme.

At a meeting of the Executive Council of the IUPS and the New Zealand Organizing Committee, we agreed upon a new structure for the 34th IUPS Congress. We recognized the desire for specialists to discuss issues in depth with their colleagues and reinstated official Congress satellites for this purpose. This relieved the main Congress of this responsibility.

A fundamental decision was made that, at the Congress itself, the presentation of new research findings would be exclusively through posters but that we must provide the authors the opportunity to discuss their work with colleagues. Thus there will be within the poster time, scheduled to run from 11:00 AM to 3:00 PM each day, Poster Focus Groups (see below) to ensure that every poster is discussed with experts in the field in a relatively formal session; there will be no other sessions to compete with the posters.

Secondly, we have replaced the traditional discipline-based symposia with what we are calling “synthesia.” These should provide forums for the presentation of a chosen topic based on a synthesis of material that is leading edge, provocative and controversial, integrative, and intellectually stimulating. The chief difference from the ordinary symposia is that we are aiming for a synthesis of knowledge across conventional discipline boundaries, which should raise new questions. These sessions will be designed so that specialists in the field, as well as workers in other fields, will be able to get an overview of the topic and of the exciting questions that are being studied. In addition, there is a deliberate attempt to have leading scientists working in areas related to the topic, who might not normally attend a physiological meeting, participate in the synthesia (e.g., research clinicians, chemists, molecular biologists). Thus the central aim of the synthesia is to broaden our understanding of important research areas and to learn in which directions they are going. Major review lectures by eminent scientists will continue to be a feature of the Congress. Two of these will be scheduled at the start and end of each day.

We believe it is important to emphasize the whole spectrum of physiology with all of its power to further knowledge and foster applications in biology as well as in medicine. There is great potential for mutual learning among scientists in the fields of cell physiology, integrative physiology of organ systems, physiological genomics, comparative physiology, and clinical physiology. The program is intentionally designed to meet these goals.

In addition, we wish to provide specific platforms to provide links between the exciting advances in biomedical knowledge and their practical applications for the benefit of the sick in all parts of the world. For this reason, a series of Continuing Medical Education breakfasts will run throughout the week to provide clinicians and others with reviews of developments in physiology and pathophysiology in areas of clinical importance. The Congress will meet the Essentials...
and Standards of the Accreditation Council for Continuing Medical Education (ACCME) with category 1 designation.

We believe that this new program format will provide the opportunity for all scientists interested in physiological research to participate actively in the Congress and will give all who attend an exciting, stimulating, and rewarding scientific experience. The format is outlined in more detail below.

**Details of the program structure**

**Synthesia.** Introducing synthesia in place of the traditional symposia is more than a change in name. These sessions are intended as platforms for synthetic presentation and discussion of a varied and multidisciplinary knowledge base, for integrated critical reviews of seemingly established knowledge in the light of new information at the cutting edge of physiological science, and for raising new questions that emerge from the integration and synthesis of new insights. There will be 16 of these every day, 8 in the morning and 8 in the afternoon. Each synthesium will have a moderator and three speakers. The moderator will have up to 15 minutes to introduce the synthesium and some time in the discussion section to tie things together. Speakers will have approximately 20 minutes to focus on concepts, not detailed evidence. Since we are allocating two hours for each synthesium, about 30% of this time should be available for free discussion.

Four of the synthesia are being organized jointly with other Scientific Members of the ICSU; two are joint IUPS/IUPHAR Synthesia, and two are joint IUPS/IBRO Synthesia.

There is great enthusiasm for this new format and overwhelming support for the synthesia from the invited moderators and speakers, all of whom are internationally renowned in their fields. Full details of the program will be available on our website: http://www.iups2001.org.nz. As the date for the Congress draws nearer, our site will be updated at least monthly, so please check it out and remain in touch.

**Posters.** The major scientific activity of the Congress will be the poster sessions and related focus groups. Poster sessions will run between 11:00 AM and 3:00 PM each day. During this time there will be no other scheduled Congress activities. Our overriding aims are to ensure that the posters have a high profile, that all scientists regard these as the core of the Congress and present their original work in this format, and that all scientists get the chance to talk with colleagues about their work. To ensure this we will:

• Have longer abstracts than usual (one page);
• Place all abstracts on our website before the Congress so that all paid-in-full registrants can access the abstracts in advance of the meeting;
• Arrange related posters in relatively small contained groups; and
• Follow the free poster viewing time (11:00 AM to 12:45 PM) with Poster Focus Groups.

Lunch facilities will be available in close proximity to all of the poster viewing areas.

**Poster Focus Groups.** These are designed to provide an opportunity for all scientists presenting posters to take part in...
group discussions about their work. Wherever possible, each Poster Focus Group will be aligned with one of the synthesia held that day. With 16 synthesia a day, we envisage that each synthesium will link to approximately two focus groups. This would give some 32 focus group sessions per day. The moderator and speakers at each synthesium will be responsible for organizing and running the Poster Focus Groups related to their synthesium. In addition, we recognize that not every important area of physiology and pathophysiology will be covered within the synthesium framework. Therefore, each day there will be additional Poster Focus Groups, called “Designated Poster Focus Groups,” that will be convened and run by leading researchers in that area.

We can provide facilities for up to 50 focus group sessions per day: 25 between 12:45 and 1:45 PM and 25 between 1:50 and 2:50 PM. Wherever possible, we will ensure that related focus groups are geographically adjacent. By running up to 50 sessions per day, we can accommodate as many as 5,000 posters over 5 days with 20 posters per focus group.

The format of the focus groups can be flexible, and the scientists responsible for organizing each group will be asked to develop the format that best suits both themselves and their poster presenters. Options will include holding discussions around the posters themselves or having a more formal session in an adjacent room.

Satellite meetings. The more traditional symposium approach will almost certainly be a major feature of many of the official satellite meetings. At the moment, 40 satellites are available, some immediately before and some immediately after the Congress. Further information is available through the Congress website, which has links to all of the satellites. Satellites are being held in both New Zealand and Australia. In addition, the International Scientific Program Committee has identified links between satellites and Congress synthesia, and synthesium moderators are looking at the material in the relevant satellites in designing each synthesium.

Affiliated meetings. In addition to the satellite meetings, several related scientific conferences are being held in Australasia near the time of the Congress. These include the 7th World Congress for Microcirculation in Sydney, the BIOIRON 2001 Congress in Cairns, both during the week before the Congress, and the annual meeting of the Australasian Society of Nephrology in Darwin the week after the Congress. Details about these conferences can be obtained through links on our website.

Cultural and social activities. During the week, a variety of activities will be available to delegates and their companions. Chief among them is a special recital by the eminent Hungarian pianist András Schiff, who is coming to New Zealand especially to play at our Congress. He is renowned for his interpretations of the keyboard works of J. S. Bach and will include in his program three of the Bach Partitas for Keyboard (Nos. 2, 4, and 6) as well as the Bartok “Out of Doors” Suite and the Beethoven Piano Sonata Opus 109. We have also planned a wide range of entertainment, including Maori cultural activities, special exhibits at local art galleries, live dramatic performances, New Zealand films, and visits with local artists and craftsmen.

The Organizing Committee recognizes the importance of informal meetings and discussions and is designing a social program to encourage such interactions. This will include an informal refreshment bar in the main conference venue that will operate until late in the evening and serve as an ideal meeting place for delegates.
In the two days before the Congress begins, a wide range of sporting and leisure activities will be available. These will provide ideal opportunities to meet scientists working in areas other than your own and a chance to relax and adjust to the new time zone before the commencement of the Congress. Superb skiing can be found within an hour's travel from Christchurch; there are many fine, easily accessible golf courses; fishing trips, horseback riding, hiking, and tramping can be readily arranged, and the variety of other recreational activities available is enormous. In addition to an informal function after the opening event, there will be a Congress dinner/party.

An extensive and varied program will be available for accompanying persons. Details will be found on our website and in the final announcement.

The venue

New Zealand is a stable, peaceful country with all of the infrastructure and facilities of a modern, sophisticated economy. Christchurch, the largest city in the South Island of New Zealand, was selected as the ideal venue for the Congress because of the high quality of its conference facilities and other accommodations. The city is level, spacious, and beautiful. New, well-designed conference facilities permit all Congress activities to take place within one central city area, with all venues within easy walking distance of each other and of the main hotels.

The city offers concerts, art galleries, exhibitions, excellent shopping, a casino, and nightclubs. Many cafés and restaurants offer a wide range of cuisine, using high-quality local products and representing excellent value. New Zealand beers and wines are among the best in the world and are reasonably priced.

Christchurch lies close to some of the most beautiful country-side in the world, and the Congress will be held during the early spring in the southern hemisphere when the alpine scenery is particularly spectacular. Participants can be assured of a warm welcome from a community of relaxed, friendly people.

Travel and accommodation

This Congress provides a wonderful opportunity for you to come to New Zealand. Do not be put off by the cost of the airfares, which may initially appear relatively expensive.

Think instead of the total cost. By international standards, New Zealand accommodation, food, and incidental costs are very competitive. We estimate that, for a delegate from Europe or Asia, the total cost for the week of the Congress in Christchurch will be, if anything, slightly less than the cost of attending a conference in a large United States city. For delegates from the eastern and western seabords of North America, the costs will be comparable to those of attending a conference on the opposite coast.

A full range of accommodation has already been reserved at hotels, motels, and hostels at internationally competitive prices. Prices offered to registrants in all categories will be significantly lower than those normally available to the general public. Nearly all of the accommodations are within easy walking distance of the Convention Centre. An excellent public transport service is also available. New Zealand motels have fully equipped kitchens and are ideal for those wishing to bring families with them or for those wishing to economize by sharing accommodations. The cost of such accommodations for a family of four, in what is effectively a furnished, fully equipped, serviced apartment, would approximate US $60 per day.

Our official carrier for the Congress, Air New Zealand (http://www.airnz.co.nz), is a partner in the Star Alliance. Delegates from most countries will have access to a Star Alliance partner airline, and it is hoped that special fares will be available through the Star Alliance. Our website will contain further information when it becomes available.

Assistance to young scientists

IUPS is mindful of the fact that young scientists in developing and reconstructing countries have difficulty obtaining support to attend major international meetings. A special effort is being made to obtain dedicated funding from various sources to assist younger scientists to attend the Congress. The mechanisms for applying for such funds will be posted on our website.

In summary, the 34th IUPS Congress will be truly innovative and promises to be scientifically memorable as well as providing a unique opportunity to see something of New Zealand at a particularly beautiful time of the year and to experience its relaxed informal hospitality. We warmly invite you all to attend.