INTERNATIONAL UNION OF PHYSIOLOGICAL SCIENCES

EXECUTIVE COMMITTEE
DENIS NOBLE, UK, President,
JULIE CHEN, Taiwan, First Vice President
PENNY HANSEN, Canada, Second Vice President
WALTER BORON, USA, Secretary-General
PETER WAGNER, USA, Treasurer

LESLIE PRICE, USA, Manager



COUNCIL
TOMASZ BRZOZOWSKI, Poland
PETER HUNTER, New Zealand
BENEDITO MACHADO, Brazil
CAROLINE MCMILLEN, Australia
KATSUHIKO MIKOSHIBA, Japan
PENNY MOODY-CORBETT, Canada
JENS RETTIG, Germany
SAEED SEMNANIAN, Iran
TOBIAS WANG, Denmark
XIAOMIN WANG, PRC

2013 Annual Report

This annual report covers the activities of the International Union of Physiological Sciences for the calendar year 2013. This report addresses the main events of that very busy year, including those surrounding the 2013 IUPS Congress in Birmingham, activities of the Board of the General Assembly, updates from Commissions and Committees, outreach endeavors, and the interactions of the IUPS with the International Council for Science (ICSU).

1. The 2013 Congress in Birmingham, and Related Events

A. Council Meeting (July 19-20, 2013)

- The Membership Committee contacted 30 countries in the four years preceding the Congress, and successfully recruited three to become IUPS members (see General Assembly, below).
- Carthage Smith, Deputy Executive Director of the International Council of Science (ICSU), gave a presentation to Council on the structure and function of ICSU.
- The members of the ICSU Bio-Union cluster (the IUPS's and its sister unions, e.g., International Union of Biochemistry and Molecular Biology [IUBMB]) have in principle agreed to sponsor events at each other's Congresses, joint scientific meetings, and inter-union teaching workshops. The first such inter-union activity—spear-headed by IUPS—was the "Multi-Scale Systems Biology" meeting that took place in Chichely, UK after the 2013 Congress. It was co-sponsored by eight Unions, Elsevier, Company of Biologists, and a grant of €30k from ICSU. [Update: a joint teaching workshop on Signaling is planned for the Spring of 2015.]
- The Internal Revenue Service (the tax-collecting agency of the United States) conducted its first audit of the IUPS, beginning in 2012. The IUPS is incorporated in the United States. IUPS passed and was successful in having its nonprofit status renewed.
- Since taking office in 2009, the Executive Committee (ExCo) has been having monthly teleconference meetings instead of yearly face-to-face meetings. This change in policy has enabled the Committee to accomplish more than previous years. The plan is for Council to meet by teleconference twice a year along with the chairs of the Commissions.
- IUPS is re-examining the dues structure to make it equitable, clear and transparent. Council has given the assignment of restructuring the dues to the Board of the General Assembly.
- The minutes of the July 2013 meetings of the <u>2009–2013 Council</u> as well as of the new <u>2013–2017 Council</u> are on the IUPS website.

B. General Assembly (GA, July 21, 2013)

- For the first time, IUPS organized its GA meeting around a "consent calendar" that the GA could accept without further discussion. The purpose—by avoiding the oral recitation of written reports—was to devote time for discussion and questions from the floor. Accordingly, the Secretariat of the IUPS distributed reports to delegates before the Assembly.
- The IUPS raised or provided funds for the first attendance ever at an IUPS meeting of representatives from Myanmar and North Korea.
- The IUPS has created a new website, available at http://iups.org/. IUPS members are invited to advertise events on the website.
- The IUPS has begun to interact closely with ICSU and its member Bio-Unions.
- Between this and the previous Congress, the GA approved the formation of the Board of the General Assembly (BGA), which is intended to serve as a link between Council and the GA and member nations. The GA approved the BGA bylaws.
- New members recruited by Council (see above) and approved by the GA for IUPS membership are: Bangladesh (Adhering Member), Malta (Adhering Member) and Nepal (Associate Member).
- The GA re-affirmed Brazil as the host of the 2017 Congress, pending the signing of a contract (this has still not been completed).
- From among three finalists (Austria, China, South Korea), the GA selected China as the host of the 2021 Congress.
- The minutes of the <u>July 2013 GA meeting</u> are on the IUPS website.

C. Board of the General Assembly (BGA, July 23, 2013)

- The BGA met for the first time in Birmingham, UK. Running the meeting was Mike Spyer, the first Chair of the BGA.
- Every four years, the BGA will present a "state of physiology" report with the first being in 2017.
- One of the major tasks of the BGA will be to participate in the development—along with the IUPS Treasurer Peter Wagner—a new dues structure for the IUPS.
- The BGA will elect replacements for the four members who have now been elected to IUPS positions as Vice President (Julie Chan), Treasurer (Peter Wagner), and members of Council (Xiaomin Wang and Katsuhiko Mikoshiba).
- The minutes of the Board of the General Assembly are on the IUPS website.

D. 2013 Congress

- The Physiological Society organized the 2013 Congress (http://iups2013.org) in Birmingham. Bridget Lumb was the Chair of the Local Organizing Committee. David Eisner was Chair of the Local Programming Committee as well as the International Programming Committees (Walter Boron, co-chair).
- The Congress was widely hailed as a great success, both scientifically and organizationally. A Pre-Congress Report is available on the IUPS website, and the final report will be posted when received.

(1) Lectures

- The five-day Congress included five Plenary lectures, 33 Keynote lectures and 102 Symposia, and 2220 abstracts. The Scientific Program is available online.
- In the IUPS President's Lecture, Denis Noble addressed the theme *Physiology moves back onto Centre Stage*. A symposium later in the Congress picked up this theme in the context of the relevance of physiology to evolutionary biology. [A focused issue of the Journal of Physiology,

- to be published in June 2014 with contributions from 20 leading authors, will return to this subject.]
- Education Committee members led the development of three education-related symposia, and selected the inaugural keynote speaker for the ADInstruments Education Lecture.

(2) Visa issues

- Fifteen physiologists were initially denied visas by the UK. They were from Iran, Russia, Burma and Sudan. IUPS President Denis Noble wrote letters to the British Ambassador to Sudan, the Khartoum and Croydon Offices of the UK Border Agency, the Clearance Manager of the Russia|UK Visas & Immigration office and Andrew Smith, a Member of Parliament representing Oxford, explaining the necessity of allowing these scientists to attend the 2013 IUPS Congress. Only two were able to receive visas. The IUPS Secretariat sent a letter citing ICSU's Committee on Freedom and Responsibility in the Conduct of Science (CFRS).
- An article on the general issue of visas for attendance at scientific meetings in the UK appeared in *Nature* 506: 14, 2014 (February 6). This article contains a quote from IUPS President Denis Noble: "[He] was involved in organizing last year's union meeting in Birmingham, which attracted around 3,200 delegates. But in the weeks before the conference, he says, he spent nearly all of his time dealing with visa problems experienced by around 40 people who wanted to attend. 'From the experience I've had, there is an image problem in the United Kingdom. It's important that the right people try to put that right,' he says."

(3) Extraordinary Meeting of African physiologists

- Facilitated by the IUPS (especially President Denis Noble) and its Secretariat, delegates from Africa organized a special meeting that took place on the evening of Wednesday, July 24, 2013. Over 100 attended. A report prepared by Kennedy Erlwanger is available at http://iups.org/reports/other-reports/.
- Highlights of the discussion included identifying a need for:
 - * Developing teaching workshops and investing in research in Africa.
 - * Establishing national societies in African countries.
 - * Developing governance structures in the AAPS which would include regional representatives on the Executive Committee
- Others noted that the weaknesses of physiology in Africa are due to the lack or age of equipment, overcrowding in labs, and the expense of textbooks.
- Denis Noble, President of IUPS, identified key elements going forward:
 - * Strengthen mentorship.
 - * Mobilize and strengthen local resources (national societies).
 - * Develop a database of physiologists from Africa.
 - * Facilitate/support research and teaching workshops across the continent (through Tony McKnight in the IUPS).
 - * Provide a scheme to transfer equipment and textbooks to Africa.
 - * Reorganize AAPS.
- A report on this meeting is available on the IUPS website.

E. Encourage Francophone societies to engage in other African initiatives. Satellite Meetings of the Congress

- (1) July 18-21, 2013 The 8th IUPS Teaching Workshop
- In Bristol, UK, a teaching workshop organized by the IUPS Education Committee, was attended by 108 physiologists from 28 countries.
- Costs to participants were kept low due to grants from ADInstruments, The Physiological Society, and Wiley Publishers Committee.

- (2) July 28-29, 2013 ICSU Bio-union Multi-Scale Systems Biology, Chicheley, UK
- For the first time, the Bio-Unions of ICSU collaborated to create an interdisciplinary meeting, "Multi-Scale Systems Biology". The meeting took place at Chicheley Hall, a 17th century structure owned by the Royal Society. Follow-up: a focused issue of Progress in Biophysics and Molecular Biology is being produced using papers based on the meeting and will appear in later 2014.
- The term "systems biology" has different meanings for different disciplines, and one of the goals of this meeting was to bring together leading scientists and students who represent diverse areas of systems biology. See <u>Bio-union symposium</u>.
- (3) July 27-30, 2013 H⁺ Ion Sensing, Signaling, and Servo-Control, Oxford, UK
- As a satellite conference of the 2013 IUPS Congress, a select group of speakers shared their research on areas related to pH action in the cells.
- Information on this pH satellite meeting is available on the IUPS website.

2. Updates from Committees and Commissions

A. Education Committee

- Since the 2009 Congress, members of the Education Committee helped to plan and carry out workshops and symposia in Bahrain, Brazil, Chile, China, Egypt, England, India, Indonesia, Malaysia, Sri Lanka, and Taiwan.
- The Committee has begun planning education-related events to be held in 2014 in Nigeria and Brazil.
- The Committee inaugurated a new Keynote lecture at the 2013 IUPS Congress in Birmingham: *The IUPS and ADInstruments Education Lecture*, delivered by Olusoga Sofola. The lecture was wholly sponsored by ADInstruments. Our listserv at IUPS-teaching@yahoogroups.com which helps us to keep in touch and to share our educational successes and problems with hundreds of colleagues, continues to be moderated by Adrianta Surjadhana.
- Excellent progress was made in the creation of the web-based *Physiology for the 21st Century:* A Source of Effective and Economical Experiments. This on-going project, led by Dee Silverthorn, was funded by a National Science Foundation grant, and its experiments are available free to all at http://apsarchive.org/ and advan.physiology.org

B. Membership Committee

- In order to better approach certain areas of the world that are currently not well represented within the IUPS, the Membership Committee proposed the possibility of forming a new membership category to include societies that cover geographical areas rather than national boundaries.
- The Membership Committee recommended to the Executive Committee that the word "territory" in the IUPS constitution (Article IV, Membership, item #2) be more clearly defined. They requested it to mean "outside national borders." This would allow the definition to include individual physiologists from countries that do not have societies who form their own group to join IUPS as an adhering body. The suggestion was approved by the Executive Committee.

3. Outreach

A. Burma and the Democratic People's Republic of Korea

• Because the IUPS is perceived as politically neutral, it reached out to the politically sensitive countries of Myanmar (Burma) and North Korea.

• Despite the difficulties in weaving through diplomatic channels and raising the necessary funds, the IUPS was successful in arranging for the attendance at the 2013 Congress of representatives of Myanmar (1) and North Korea (2).

B. Francophone Africa

- Denis Noble sent a video message and lecture to the Congress in Dakar, Senegal.
- This message—delivered in French—included an invitation for the societies to become members of IUPS.

C. Other Efforts

- The Education Committee provided funding for seven events planned and implemented by members of the Education Committee in collaboration with local organizing groups.
- The workshops were held in Taiwan, Chile, Bahrain, Malaysia, Brazil, Egypt, and Sri Lanka.

4. ICSU and Bio-Union activities

- During the first months of 2013, the Secretariat of the IUPS succeeded in organizing support from seven other Bio-Unions (aside from the IUPS) to support the first inter-union meeting ("Multi-Scale Systems Biology"), to be held later in 2013 in Chichely.
- The Bio-Unions as a group met in Paris, France on May 28, 2013.
- A major accomplishment was solidifying support for the Chicheley meeting.
- In addition, the group agreed in principle to support the following activities on a recurring basis:
 - * Yearly advanced summer school on the Island of Spetses, Greece. These would be on topics of broad interest. [Update: the first such workshop, on Signaling, is scheduled for May 2015.]
 - * Symposia within each other's international congresses.
 - * Joint Satellite Meetings (e.g., Chicheley) in conjunction with each other's international congresses.

Respectfully submitted to the International Physiology community by Walter Boron, Secretary General April 21, 2014