IUPAB

CONNECTING THE WORLD OF BIOPHYSICS

IUPAB NEWS

No. 54 December 2008

Activities of the INTERNATIONAL UNION for PURE and APPLIED BIOPHYSICS
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Minutes of 53rd Council Meeting of IUPAB, Long Beach, California, February 2, 2008

Secretary-General F. Parak

53.1 The Agenda was slightly changed. Topic 53.4 - report on the present Congress - was cancelled, topic 53.6.1 and topic 53.6.2 were interchanged

53.2 Brzezinski apologized for not being able to participate.

53.3 The Minutes of the 52nd Council Meeting, Ottawa, September 2006 were approved.
As discussed at the Council, new subscriptions on the Euro basis should be proposed to the General Assembly. Since the legal seat of IUPAB is in Paris the official currency should be Euro.

53.4 Postponed

53.5 Minutes of the Executive Committee meeting, Beijing, September 2007 are communicated in IUPAB NEWS 53. The following subscription rates were proposed and approved by the General Assembly:
Category 1 : 4.500,- €;
Category 2: 2.250,- €;
Category 3: 750,- €;
Observer: 100,- €.
This corresponds to a modest increase of the subscriptions after 9 years.
Prof. Rao gave an overview on the preparation of the 17th International Congress in Beijing. He presented a first flyer, which will be distributed at the present Congress. The Council Members were impressed by the presentation.

53.6 The following items were discussed by the Council as pre-arranged items for the 17th General Assembly:

53.6.2 Two Adhering Bodies asked for a change of the Category:
a) The Australian Academy of Science wants to change from Category 3 to Category 2 from 2008.
b) The Turkish Biophysical Society wants to change from Observer to Category 3
The Council welcomed these proposed changes.

The following Federations asked to become an Adhering Body of IUPAB:
a) Latin American Federation of Biophysical Societies (LAFeBS), Category 3
b) Asian Biophysics Association (ABA), Category 3.
The Council was pleased by the proposals. If EBSA would also join the IUPAB, all Biophysical Unions would cooperate under the umbrella of IUPAB.

53.6.1 To have a wide representation of the Adhering Bodies also late appointed delegates should be accepted. If the new Categories and the new Adhering Bodies are accepted by the Extraordinary General Assembly, additional Delegates can be nominated for the General Assembly.

53.6.3 Already done

53.6.4 Three proposals to host the 2014 Congress were received:
a) Brisbane (Australia)
b) Graz (Austria)
c) Rio de Janeiro (Brazil)
The Council considers all applications as realistic and acceptable. The decision can therefore be put to the General Assembly for consideration.

53.7.5 Task Force reports were communicated by e-mail before the Council and orally presented by Ian Smith, Jean Garnier and Raul Grigera.
All reports will be communicated in IUPAB NEWS #54. It was decided that all Task Forces should continue. The problem of new Task Forces was discussed, e.g. single molecules would deserve great attention. It is first necessary to find a Convenor. For a new Task Force some preparatory work is necessary.

53.8 The Financial Report for 2005 – 2007 was communicated in IUPAB NEWS #53.
There was some discussion on a decrease of the total assessments. The Secretary-General explained that this is a consequence of the fact that the Audit report is given in Euro. Due to the unfavourable exchange rate of the USD, all USD assessments had a low Euro value. *

53.9 The budget for 2008 was printed in IUPAB NEWS #53. If it is reconciled, a surplus is possible even in the Congress year.

53.10 Ian Smith reported on his negotiations with the publishers of Quarterly Review. The situation is still unpleasant. IUPAB is not willing to launch a new journal in competition to EBJ. Smith will continue negotiations with different publishers.

53.11 Up to now there is only one application for sponsorship 2009. It concerns an International Summer School on Biophysics, Supramolecular Structures and Function in Croatia. This Summer School was already held successfully several times. According to the general rules, periodic events should not be supported. However, due to the success and the importance of this School this rule should not be applied and a new application will be treated in competition with other applications.

53.12 The draft of an agenda for the 54th Council Meeting was presented.
53.13 The need to improve the voting system was discussed. The counting of the votes takes too much time during the General Assembly. However, there were no proposals for a change to the voting rules.
The legal seat of IUPAB is in the building of ICSU. Since ICSU has changed its address IUPAB has also a new address. It is:
5 rue Auguste, Vacquerie 75016 Paris, France

*Note added after the Council meeting:
Total Bank Balance in the Audited report for 2005 and 2006. The balance for 2009 is an estimate.

			Estimated
	31.12.2005	31.12.2006	31.12. 2007
Euro	228.658,67	212.243,05	205.169,37
USD	269,735,99	279.953,77	287.237,12

Minutes of the Extraordinary General Assembly Long Beach February 4th 2008

Secretary-General F. Parak

17.1ex.	During the accreditation of Delegates only 6 Delegates from 61 were missing. The quorum was therefore fulfilled.
17.2ex	The tabled agenda was adopted
17.3ex.	The following changes of the Category of Adhering Bodies were adopted: a) The Australian Academy of Science changes from Category 3 to Category 2 from 2008. b) The Turkish Biophysical Society changes from Observer to Category 3
17.4ex	The following Federations became an Adhering Body: a) Latin American Federation of Biophysical Societies (LAFeBS), Category 3 b) Asian Biophysics Association (ABA) Category 3.
17.5ex 17.6ex	The changes of Statutes and the Rules of Procedure were accepted by a written vote, with 2 dissenting votes and no abstention.

Minutes of the 17th General Assembly

Long Beach, February 4th 2008

Secretary-General F. Parak

17.1ga	As a consequence of the Extraordinary General Assembly the following new Delegates were accredited: Cris dos Remedios for Australia Raul Grigera for LAFeBS and Kuniaki Nagayama for ABA
17.2ga	The Agenda was slightly amended. The elections (17.9ga) will commence after item 17.6ga
17.3ga	The Minutes of 16th General Assembly, Montpellier 2005 were finally approved
17.4ga	The Report of the President is printed in IUPAB NEWS #53. The main topics were orally explained by Ian Smith.
17.5ga	The Report of the Secretary-General and Financial Report was also communicated in IUPAB NEWS #53. It should be mentioned that the developments of the assets looks rather different on the Euro scale and the USD scale due to the large change of the exchange rate. IUPAB has still a Euro and a USD bank account. Converting everything to Euro the assets decreased in the last 3 years while they increased if one converts everything to USD.
17.6ga	The new Subscriptions are based on Euro. The following subscriptions were approved by the General Assembly: Category 1: 4500.- Euro; Category 2: 2250,- Euro; Category 3: 750,- Euro and Observer: 100.-Euro
17.7ga	The presentation by ICSU did not take place because the nominated representative was not in attendance.
17.8ga	The Task Forces Reports were orally given by Ian Smith, Jean Garnier, Raul Grigera and Girjesh Govil. Two are communicated in this issue of IUPAB NEWS. It was decided that all task Forces should continue. There was a discussion of the need of new task forces. An important field is e.g. the single molecule spectroscopy. However, no decision was made. Pre-arrangements should be done by the next Council.
17.9ga.	Election of Officers and Council Members – see separate Report below
17.10ga.	Some early statistics of 16th International Biophysics Congress, Long Beach, USA were given. There were about 5500 participants. More details will be obtained after the end of the Congress.
17.11ga	Zi-He Rao gave an impressive report on the preparation of the 17th International Biophysics Congress in Beijing. A first attractively designed flyer was distributed.
17.12ga.	The General Assembly voted with a clear majority for Brisbane (Australia) as the venue for 18th International Biophysics Congress in 2014.
17.13ga	As there was no other approved business, the meeting closed.

Minutes of the 54th IUPAB Council Meeting,

Hyatt Regency Hotel, Seaview Room C. Long Beach, California
February 6, 2008

Secretary-General Cris G dos Remedios

Present: President **Nagayama**, Past-President **Smith**, President-Elect **Roberts**, Secretary-General **dos Remedios**, the former Secretary-General, **Parak**. The newly **elected members of Council**: **Alonso**, **El Gohary**, **Kovacs**, **Laggner**, **Morales**, **Olson**, **Pifat-Mrzljak**, and **Prieto.**

Agenda

1. Thanks to the members departing the Council and Executive.
2. Welcome to new members of Council.
3. Welcome to President Nagayama and President-Elect Roberts.
4. Report by departing-President Smith on progress with discussions with Springer Press regarding Quarterly Reviews in Biophysics.
5. President Nagayama: Suggests IUPAB give recognition plaques to departing members of Council and office bearers; suggests assistance package for young investigators.
6. Upgrading the voting system without changing the constitution.
7. A proposal for a new Computational Biophysics taskforce to be headed by Dr Willy Wriggers.
8. Other business.

Minutes of the Meeting

The meeting commenced at 2 pm

1: Apologies were received from members of Council that could not attend. *dos Remedios* expressed the appreciation of the IUPAB Executive and Council for the contributions of departing Past-President *Garnier*, departing President *Smith* and departing Secretary-General *Parak* as well as the other members of Council whose terms were completed.

Item 2: A welcome was extended to incoming members of the Executive (Past-President Ian C.P. Smith, President Kuniaki Nagayama, President-Elect Gordon Roberts, Secretary-General Cris dos Remedios), and Council (Alice Alonso; Francisco Barrantes; M.L. El Gohary; N.R. Jaganathan; Eugenia Kovacs; Peter Laggner; Manuel Marcos Morales; G. Ulrich Nieuhaus; Wilma Olson; Manuel

Prieto; Zi-He Rao; Andrew Rubin).

Item 3: President *Nagayama* said that he had learned a lot from the organization of the Long Beach Congress, and although there had been some difficulties, he urged Council to put that behind them and to go forward with the Biophysical Society (BS) with a spirit of cooperation and goodwill.
ACTION: A top priority of the Nagayama term in office will be the growth of IUPAB in the Asia-Pacific area and on the African continent.

Item 4: Report from Past-President *Smith* on negotiations regarding the future of Quarterly Reviews in Biophysics (QRB). Smith expressed the concern of Council at the present arrangements. He said changes were needed. The current publisher appeared to be willing to change some aspects (e.g. review the income-sharing arrangement) but not others. He suggested QRB publish short topical review that appeared promptly in print. The publisher did not like the idea. He said that IUPAB would like to move QRB to another publisher. The present publisher claimed they hold the copyright. *Smith* was concerned that any new publication should not compromise our sister organization, EBSA's publication (*European Biophysical Journal*). He suggested that the short review format would not complete with EBJ. In the discussion, the Council expressed a preference for retention of copyright and ownership.
ACTION: Smith will get a progress report to Council within 3-4 weeks.

Item 5: President *Nagayama* said he would like to organize appropriate plaques or certificates that recognized the services of departing members of the Executive and Council. Council agreed that he should do this provided the cost was not prohibitive. Similarly, a certificate could be prepared for recipients of IUPAB travel awards in Beijing.
ACTION: Nagayama will prepare the plaques and certificates.

Item 6: Councilor *Olson* raised the problems associated with the current voting system in the General Assembly (GA). She said it was unwieldy and could be improved by an on-line voting system using a login/password. Council agreed.
ACTION: Olson will consult with Professor Xiyun Yan in the Chinese delegation to put this in place by the next GA in Beijing 2011.

dos Remedios proposed the formation of a new taskforce. Its objective will be to form a communication network between students in developing countries that use mathematical modeling to solve biophysical problems.

APPROVED MOTION: Council approved the formation of a new Interim Group on Computational Biophysics.
ACTION: dos Remedios will ask the Biophysical Society for the names of the students who received travel awards and pass them on to Councilor Olson and Dr Willy Wriggers.

Item 7: Other business.

Item 7.1 (*Smith*) Council should approve the **extension of Parak's period of active signature** (for three to six months) until signatures from the new President, Treasurer and Secretary-General can be

deposited in France.
Approved Motion: Council approved the extension of the term during which Parak's signatures will remain in effect until August 2008.

Item 7.2 (*Parak*) Expenses for Council and Executive. Dr Parak asked Councilors to send him receipts for (i) hotel accommodation, (ii) airfares, (iii) registration and (iv) up to $70 per diem without delay. *dos Remedios* asked all Councilors to moderate their claims by requesting support form their respective Adhering Bodies.
ACTION: The departing Secretary-General Parak will ask all members of Executive and Council to send their receipts for reimbursement.

Item 7.3 Task Forces:
(i) The proposed African continent taskforce to foster biophysics was discussed (*El Gorhary*, pointed out that Egypt already has agreements through its International Committee on therapeutic and computational physics. *Laggner* said that the ICTP is active in Africa (he will send details to the Sect General). *Prieto* discussed the idea of biophysics in secondary schools. *Pifat-Mrzljak* pointed out that Nigerian students had attended her Biophysics Schools and that this was preferable to the potential danger of running the schools in African countries. *Nagayama* said he would actively promote the idea of improving biophysics in Africa.
ACTION: El Gohary, Laggner, Prieto and Pifat-Mrzljak will send suggestions to the Secretary-General who will pass them on to the President.

(ii) A taskforce for single molecule biophysics proposed at the GA will be led by Nagayama.
ACTION: Nagayama will be responsible for the assembly and composition of a new Interim Group on Single Molecule biophysics, which will include Nano-biology and Nano-medicine. He will email Councilors for suggestions.

Item 7.4 CVs and photographs for IUPAB website: The Secretary-General will request a CV (**max. one-page)** and a list of publications over the past five years, together with a passport type photograph suitable for the website. All CVs and publications will be edited so that they conform to a uniform standard.
ACTION: The Secretary-General will email Councilors for this information and will edit it to meet the above requirements.

The meeting closed at 4 pm sharp.

President's Report

Professor Kuniaki Nagayama

2008 was the first year of my three-year term as President. Though I have been working for IUPAB as one of its Councillors for nine years, I have found that it is a different story to be a President. On the way to learning how to carry out the IUPAB presidency from the past presidents, my contribution to IUPAB in 2008 is quite small. Mostly my job consists of simple endorsements for what the Secretary General has arranged, or for the contract to Springer to initiate "Biophysical Reviews". In the first report of the new term, I will illustrate the future rather than the past of IUPAB.

New Logo As you can see on the first page of this *News*, we have now a new IUPAB logo, which, by its splendid design, should attract many people whether or not they belong to IUPAB. We are very grateful to the efforts of the Brazilian team, particularly Prof. Marcelo Morales.

Biophysical Reviews Under the triumph of the new logo, which actually appears in the cover of this issue for the first time, we will start our own official journal, *Biophysical Reviews*, in cooperation with Springer, beginning in 2009. It can be risky starting a new online journal even though it is managed by an International union supported by an International publisher. Therefore officers, adhering bodies, and everyone under the IUPAB umbrella are requested to support it by their contributions. Particularly 2009 will be of great moment for *Biophysical Reviews*.

Encouraging biophysical researchers over the world to visit the IUPAB website (www.iupab.org) is also quite significant for us to be more recognized. The more involvement IUPAB Councillors have in the web pages, the more attractive it will be under the guidance of the Secretary General.

Membership of IUPAB IUPAB now has 50 adhering bodies and when summing up the entire members under the 50 bodies, the total number of IUPAB members will be about 20,000. Is this number high or low? I think it is low because the known total number of members even in one specific society, for example the Japanese Society of Chemistry, can exceed it. We have a lot of room to invite more researchers, particularly more young researcher to IUPAB through its adhering bodies. To expand the IUPAB capacity, it is particularly effective to cultivate new fields in the developing areas such as Eastern Europe, ASEAN, the Near East, Africa and South-America. Small but useful IUPAB funding has been used to support schools, workshops and travel for the young in those areas. We need to utilize the precious resource efficiently for the capacity building. Another resource, the Capacity Building & Education Taskforce, has to be renovated to meet the demand. Soon I will initiate the renovation by inviting active persons responsible for each of the developing areas.

2011 IUPAB Congress in Beijing
Finally let me remind you of the 17th IUPAB Congress. It will be held in Beijing from Oct 29 to Nov 2 of 2011. Together with the local organizing committee of IUPAB Congress 2011, IUPAB Council will mount a maximum effort for the success of the scientific program, congress management, and financial supports. A recently initiated regional biophysical association, ABA (Asian Biophysical Association), will also assist. I ask all of you to keep the Congress dates, which is the most important event in this term, in mind.

Report from the Secretary-General

Professor Cristobal G. dos Remedios

2008 was the first of a six-year term as Secretary-General. It has been a steep learning curve but I am pleased to be able report several significant outcomes.

Curriculum Vitae for the New Members of the Executive and Council
The new Executive and Council of IUPAB were asked to provide a photograph, a one-page CV, and a list of publications covering the past five years. This task is now complete and the files have been up-loaded onto the IUPAB website (www.iupab.org).

Computational Biophysics: At the 53rd Council Meeting in Long Beach California I proposed that this topic be accepted as a new Task Force for the Union. The decision was postponed until the next Council meeting in 2009. The stimulus for this move was my observation that at least 20 of the graduate students and early postdoctoral fellows from developing countries that were awarded travel scholarships by the US Biophysical Society were indeed doing computational biophysics. Therefore, our objective will be to provide mentoring assistance and possibly apply for grants to improve the networks in these countries. I have collected several potential mentors for this task including Willy Wriggers (Chair, from DE Shaw-New York), Wilma Olson (Rutgers), and Joerg Stelling (Swiss Institute of Bioinformatics, ETH Zurich). This activity was featured in a poster presented at the ICSU General Assembly in Mozambique in October 2008.

New Logo: Suggestions were solicited from several members of Council for the design of a new IUPAB logo. The winning design was selected on the basis of voting by the entire Council. It was produced from the Brazilian team under the direction of Councillor Marcelo Morales. It is displayed at the head of this edition of the *News,*. and the decision was a clear winner. Thanks to all those who submitted designs.

The IUPAB Website: The hosting location of the IUPAB website (www.iupab.org) was moved from Germany to Sydney. I have worked steadily on its content and I hope that the result is noticeably improved. It is updated on a regular basis, so that hardly a week goes by without an addition.

IUPAB Schools: In non-congress years, IUPAB has traditionally supported schools, particularly in developing countries, on topics that are considered core to biophysics. In 2008, IUPAB contributed financial support to the following initiatives: (1) Sofia Bulgaria "School of Protein Science. From basic research to drug design", 21-26 September 2009; (2) Mumbai, India, "NMR in Biological Sciences" (at a date to be decided); (3) Rovinj, Croatia, "Biophysics Summer School", 19 September - 1 October 2009; (4) Rio de Janeiro, Brazil "Latin-American Postgraduate Program Course of Biophysics", October 5-9, 2009; (5) Romania Biophysics for Human Health, 2009

Election of Officers and Members of Council for 2008-2010

Executive

Professor **Kuniaki Nagayama** - President
Department of Molecular Physiology, National Institute for Physiological Sciences
Myodaiji-cho, Okazaki, 444-8585, Japan

Professor **Gordon C K Roberts** - President-Elect
Henry Wellcome Laboratories of Structural Biology, Department of Biochemistry,
Henry Wellcome Building, University of Leicester, PO Box 138,
Lancaster Road,
Leicester LE1 9HN, UK

Professor **Ian C P Smith** - Past-President
Institute for Biodiagnostics, National Research Council, 435 Ellice Avenue,
Winnipeg, Manitoba, Canada R3B 1Y6

Professor **Patrick J.Cozzone** - Treasurer
Professeur à l'Institut Universitaire de France
Centre de Résonance Magnétique Biologique et Médicale (CRMBM)
UMR n°6612 CNRS - Université de la Méditerranée, Faculté de Médecine de Marseille, France

Professor **Cris G dos Remedios** – Secretary-General

Bosch Institute, Anderson Stuart Building F13, The University of Sydney
Sydney, 2006, Australia

IUPAB Council

Members may be elected for only two consecutive terms at the end of which they are not eligible until three years have passed. All elected members are not considered to be representatives of their national bodies, and no country may have more than one member of either the Council or the Executive.

Professor **Alicia Alonso**
Unidad de Biofisica, Dpto Bioquímica y Biología Molecular, Facultad de Ciencia y Tecnología, Barrio Sarriena s/n, 48940 Leioa (Vizcaya), Spain

Professor Dr **Francisco Jose Barrantes**
Instituto de Investigaciones, Bioquimicas de Bahia Blanca (INIBIBB)
Consejo Nacional de Investigaciones Cientificas y Ticnicas
Universidad Nacional del Sur, C.C. 857, 8000 Bahia Blanca, Argentina

Professor **Mohamed I. El Gohary**
147 El Hgaz St. Heliopolice, 11361 Cairo, Egypt

Professor **N.R. Jagannathan**
Department of NMR and MRI Facility, All India Institute of Medical Sciences
New Delhi – 110029, India

Professor **Eugenia Kovacs**
Department of Biophysics and Cell Biotechnology, Carol Davila Medical University Bucharest, P.O. Box 35-43, 050461 Bucharest, Romania

Professor **Peter Laggner**
Institute of Biophysics and Nanosystems Research, Austrian Academy of Sciences, Schmiedlstrasse 6, 8042 Graz, Austria

Associate Professor **Marcelo M. Morales**
CCS Bloco G02-48, Ilha do Fundão, Cidade Universitária
Rio de Janeiro, Brazil, CEP 21949900

Professor Dr **G. Ulrich Nienhaus**
Albert Einstein Allee 11, 89081 Ulm, Germany

Professor **Wilma Olson**
Rutgers, The State University of New Jersey, Dept. of Chemistry and Chemical Biology, Wright-Rieman Laboratories, 610 Taylor Road, Piscataway, NJ 08854-8087 U.S.A.

Professor **Manuel Prieto**
Centro de Química-Física Molecular, Complexo I, IST, Av. Rovisco Pais 1049-001 Lisbon, Portugal

Professor **Zi-He Rao**
The President's Office, Nankai University, 94 Weijin Road, Nankai District
Tianjin 300071, China

Professor **Andrew Rubin**
119992, Lomonosov Moscow State University, Biological Faculty Department of Biophysics, Russia

Report on the 29th General Assembly International Council of Scientific Unions (ICSU), Mozambique, October 21-24, 2008

Secretary-General Cris dos Remedios

The Secretary-General represented the IUPAB as its official delegate to the ICSU GA held in Maputo, the capital of Mozambique (October 21-24, 2008).

A one-day meeting on "Science in Africa" preceded the GA. This session was a dialog between the national members from sub-Saharan Africa. Science in Africa is starting to emerge from its current relatively undeveloped state into what may be called mainstream International science. It will be some time before science in Africa will achieve this, but it is also clear that the fundamental science questions that concern African nations are quite different from those of more developed nations.

IUPAB Poster Given the above background, the IUPAB Executive endorsed the presentation of a poster at the ICSU General Assembly that "advertised" ways by which IUPAB could help biophysics in Africa. The Secretary-General presented this poster and provided 25 copies as A4 printed sheets. The poster was conveniently located just outside the meeting room for African delegates. All copies were taken before the end of the first day of the four-day meeting. The content of the poster was discussed with delegates from African countries and organizations, and the laminated poster was presented to Professor Sospeter Muhongo, Regional Director ICSU Office for Africa where it will be displayed at their regional office in Pretoria.

Biophysics Summer Schools
The Secretary-General provided names, titles and email addresses of a number of African contacts requested by Professor Greta Pifat-Mrzljak who will encourage African students to attend the workshop she has organized in Croatia in 2009. This list of contacts will also be sent to the organizers of other IUPAB-approved Workshops (Sofia Bulgaria, Mumbai India, Rio de Janeiro, Brazil) in 2009.

Cooperation between the Scientific Unions in Africa: The Secretary-General had discussions with the following Union representatives: (1) Professor de Leon (Union of Mathematical Sciences, UMS) was positive about cooperating on educational aspects of mathematics in Africa and was supportive of the proposed IUPAB Task Force on Computational Biophysics; (2) Professor Jacques-Henry Weil said that IUBMB has already sent a workshop into Africa and will continue to do so. He expressed an interest in coordinating with other scientific Unions; (3) Professor Bruce McKellar representing IUPAP (Pure & Applied Physics, a very large Union with a significant subsection on biophysics) who agreed we should cooperate in this field and that there was a need to develop educational capacity in Africa. IUPAP is also active in the area of

ethical conduct in science so there it may be possible to introduce this into African PhD courses. The Secretary-General will contact other Unions including Biology and Physiology (Professor Ann Sefton, International Union for Physiological Sciences, IUPS).

Africa is a Sleeping Giant The population of Africa is nearly one billion people. This presents opportunities as well as challenges for Africa, and the challenges are huge. They include severe poverty, an HIV-AIDS and other epidemics due to infectious agents, on-going national conflicts, and high population growth, particularly in urban areas. Basic resources such as food supply, clean drinking water, and adequate access to medicine are in short supply. These problems are compounded by rising coastal sea levels, tsunamis, wildfires, and volcanic activity. So there are many challenges to science in Africa that countries in the developed world do not have to deal with. Generally the most pressing problems in Africa are of a practical nature such as controlling insect infestations, and identifying suitable crops for specific areas.

Holding the GA in Mozambique presented an unusual opportunity to bring all African nations together, and this was largely achieved. The nations represented at this forum faced a Catch-22 challenge.

Funding Research Many funding agencies in the West responded to requests from African countries for financial assistance by asking them to "show something before we provide funding" but in many instances, there is little or nothing available in Africa to start the process.

The International Foundation for Science (IFS) provides one avenue to address the need to provide "seed" funding for science. IFS is an organization based in Sweden (http://www.ifs.se/). Its mission is to strengthen science in developing countries by enabling them to conduct relevant and high quality research on the sustainable management of biological re-sources. They provide funding for the study of a wide range of areas of research involving physical, chemical, and biological processes. Through a careful selection process, IFS identifies promising young scientists from developing countries to become future science leaders. IFS provides funding (and other) assistance in their early careers to pursue high quality research in developing countries on relevant problems. This research must be done in a university of research institution in the developing country. Thus, it funds young researchers to work in developing countries. Generally, up to $15,000 can be granted per year and this can be renewed for up to three years.

On a larger scale, The Wellcome Trust recently announced a £20 million investment in research and training in Africa.

Welcome Strategic Awards are aimed at ensuring that local researchers are equipped to tackle the most pressing problems in their region.

The awards, which will fund research programs across sub-Saharan Africa, will ensure that talented researchers in some of the

world's poorest countries can access the training and experience needed to conduct research at a world-class level. With improved training and career incentives it is hoped that African scientists will remain or return in order to build sustainable research programs that are initiated and led by Africans.

The following is an extract from their recent announcement on research awards. "The future for science in Africa depends on providing the best training opportunities for the brightest young African scientists," says Dr Mark Walport, Director of the Wellcome Trust. "These important awards will provide first class training opportunities for the potential scientific leaders of the future in Africa. But excellent scientists also need outstanding facilities in order to pursue their work and careers. That is why we are also working with African universities and research institutes to develop programs to support the institutional infrastructure that is essential to provide a thriving environment for research and for the education of future generations."

All of this is good news for science in Africa.

Report on CODATA

Jean Garnier (2008 History of CODATA

The Committee on Data for Science and Technology (CODATA) was created in 1966 as an interdisciplinary Scientific Committee of the International Council for Science (ICSU). Its seat is located in Paris, 5 rue Auguste Vacquerie at the ICSU headquarters where their secretariat is housed. We may note that it is also the legal seat for IUPAB. The aim of CODATA is to improve the “quality, reliability, management and accessibility of data of importance to all fields of science and technology” (http://www.codata.org).

Consequently CODATA is concerned by the large spread of disciplines such as, but not limited to, physical sciences, biology, geology, astronomy, engineering, environmental science, ecology.

CODATA is involved in several international co-operations through their task groups. I will cite some of them: Polar Year Data Policy and Management, eGY Earth and Space Science data Interoperability, Biodiversity, Observation and Specimen Records, Preservation of and Access to Scientific and Technical Data in Developing Countries. Other task groups are of a more traditional type such as the task group on Fundamental Physical Constants, which makes the reputation of CODA or some that are related to geological sciences

or energy resources like the task Group of Data on Natural Gas Hydrates.

Altogether the last CODATA General Assembly held in Kiev, October 9-10, 2008, approved the funding of ten task groups and two working groups (one of the two is the working group on UV/Vis+ Spectra Data Base of interest to IUPAB).

Membership The membership of CODATA is composed of National members (25), International Scientific Unions (16 including the IUPAB), Co-opted organizations (4), and 20 supporting Organizations including the Protein Data Bank and the Japan International Protein Information Database (PIR). Only the National members pay annual dues according to a structure that is similar to the ICSU dues i.e. based on the Gross National Product (GNP). The other sources of revenue for CODATA are grants from different organizations, ICSU and UNESCO for instance contribute about 50% of the amount received as membership dues.

Publication For the last three years CODATA has produced a scientific publication, *Data Science Journal*, which replaced an older communication, the Newsletter. Both depend financially upon the CODATA funding. The same applies to the International CODATA Conferences held every two years, the last one of which was in Kiev, October 5-8, 2008.

Strategic Plan The Strategic Plan for 2006-2012 contains three major initiatives. The first is a Global Information Commons for Science Initiative (GICSI) already launched by CODATA following the World Summit for the Information Society (WSIS) in Tunis, in 2003 and 2005. Its goal is to promote full and equitable access to scientific data in the world. The second is a Scientific Data across the Digital Divide (SD^3). This Program has as its aim "making critical scientific data and associate tools and resources related to sustainable development widely accessible in developing countries" (CODATA Strategic Plan). For that purpose CODATA is working with the International Polar Year (IPY) or the electronic Geophysical Year (eGY) through its task forces. The third initiative is to strengthen the links between data mining, data integration, artificial intelligence and other techniques under the heading of Advanced Data Methods and Information technologies for Research and Education (ADMIRE). Naturally this strategic plan is related to the final report of ICSU on June 2008 from the *ad hoc* Strategic Committee on Information and Data (http://www.icsu.org).

If the Plan devoted to biology and biophysics seems limited in regards to the diversity of stakeholders, IUPAB has a great interest, like other Union members of CODATA, in being represented if only because the definition of the task groups are renewed every two years or in the elaboration of the CODATA Conference Program.

Reports on Activities from Task Forces

REPORT OF THE TASK FORCE OF EDUCATION AND CAPACITY BUILDING OF BIOPHYSICS

Prof. Dr. J. Raul Grigera

The activities of this task force during the last few years may not be fully understood without considering previous information. For the benefit of those who may not be aware of this history, I will make a brief mention of the general ideas that drove us to the present point.

History of the Taskforce for Capacity Building In 1996 in the General Assembly in Amsterdam created the Task Force on Capacity Building and, among others, the Task Force of Education. These two Task Forces were fused later in the present Task Force of Capacity Building and Education.

From the very beginning the idea was to devise a strategy to promote the activities in Biophysics in the developing countries by an analysis of the real deficiencies and then the implementation of new strategies.
At first, horizontal cooperation within regions was considered the most efficient way of producing a sustainable advance on the field. The Council agreed that the test case would be Latin America.

The first step was to develop an exchange program for short stays for PhD students and young researchers. Most of the stays (nominally one month, often extended by the host lab) were made in the region and in some cases a permanent exchange started.

A workshop was convened to analyse the real situation in Latin America, and a map of laboratories with a good level of different specialities was produced. Special funds were requested and obtained from ICSU that enabled many students to attend the IUPAB Congress of 2002 in Buenos Aires. A major conclusion from this Workshop was that “brain drain” was one of the main problems for developing countries, particularly where students go to developed countries to do their PhD. Therefore, a regional postgraduate program may help to solve the problem. Meetings were organized in Roorkee (India) and Yerevan (Armenia) to analyze the problems of different regions.

A new Postgraduate Program was devised, based in a network of universities and research institutes that can provide regional courses and conduct research projects for students. Activities included lectures, seminars and political visits to education and scientific authorities in Argentina, Brazil, Chile, Uruguay. The funds needed for these activities were not provided by IUPAB but came from organizations such as the Sociedad Argentina de Biofisica, Sociedad Brasileria de Biofisica, Sociedade Brasileria de Fisica, Associacion Fisica Argentina, PEDECIBA (Uruguay) Universities, and from my own grants.

Subsequently, I generated interest in this program through the

Commission of Biological Physics of IUPAB. During its General Assembly (Cape Town 2005) contact was made with several African scientists. Africa is a complex region and previous attempts to get them to participate in the Roorkee meeting failed.

In November 2006 a group of active scientists and teachers from Argentina, Brazil, Chile, Colombia, and Uruguay held a workshop at La Plata, Argentina, which was supported by IUPAB. This Workshop considered questions such as the feasibility and the need for high quality, the potential of the regions, and the different regulation of universities in different countries.

We began with the premise that the best way to strengthen the scientific community is to develop a Latin American biophysical PhD program that will intensify the exchange of knowledge, stimulate cooperation, and raise the capacity of all countries to retain their young scientists. We relied on the activities of their Biophysical Societies, which have a history of coordinating activities and developing common interests.

In August of 2007, the Latin American Federation of Biophysical Societies (LAFeBS) was founded. The goals of the LAFeBS are to develop a lasting inter-relationship between the Latin American biophysical and related societies, and to promote regional human resources in biophysics from the undergraduate to the post-doctoral level.

The LAFeBS was asked to:

(a) Organize regional co-operation in biophysics and to promote communication between the various branches of biophysics and allied subjects:

(b) Encourage co-operation between the adhering societies that represent the national interests of biophysics,

(c) Enhance regional contributions to the advancement of biophysics,

(d) Set up commissions or other bodies for special purposes,

(e) Generate appropriate procedures to promote an academic network for postgraduate education in the region,

(f) Organize periodic meetings, workshops and conferences on biophysics in Latin America.

(g) Collaborate with other scientific organizations in biophysics and allied subjects, and

(h) Develop activities deemed helpful to the advancement of these objectives.

LAFeBs is now officially accepted as an IUPAB adhering body.

Universities in Argentina, Brazil and Uruguay have agreed to the Postgraduate Program and others are likely to follow. As consequence, the Program was launched at the beginning of 2008.

How will the Program be financed? We have succeeded in creating a biophysics Nucleus within the Association of Universities of the Montevideo Group (AUGM). This group comprises 30 universities from Argentina, Bolivia, Brazil, Chile, Paraguay, and Uruguay, and will be expanded. Within this Association the activities of the

Nucleus include the amalgamation of teaching and research activities that can contribute to the building of capacity in the Latina Americana programme. Some resources will be provided by AUGM.

Argentina and Uruguay have requested additional funds from the UNESCO special program for education and we are waiting for the final decision.

Additionally, we have entered into discussions with CAPESP (the Brazilian agency that supervises the university teaching, including postgraduate programs) to develop a one-day workshop in Aguas de Lindoia, Brazil. These involve several officers of CAPES including Professor Marcelo Morales (Brazil), President of the Brazilian Biophysical Society and Council Member of IUPAB, Professor Silvia Alonso (Argentina), President of Argentinean Biophysical Society, and myself. The present status is promising and we may be able to generate permanent financial support to complete the programme.

In December 2008, close to the annual meeting of the Argentinean Biophysical Society, the first collective activity of all enrolled students will take place.

In 2009, prior to the Ibero-American Congress of Biophysics in Rio de Janeiro, there will be a Summer School supported by a grant from IUPAB (see news item below).

Report on the Task Force on Biomedical Spectroscopy

Ian C.P. Smith

Members: Ian Smith (Convenor), Winnipeg; Carolyn Mountford, Sydney, Boston; Shirley Schreier, Sao Paulo; Girjesh Govil, Mumbai; Gheorghe Mateescu, Cleveland; Greta Pifat-Mrzljak, Zagreb; Eugenia Kovacs, Bucharest.

This Task Force specializes in the transfer of knowledge between scientists, especially in countries where personal contact with the world scientific community is infrequent. We also broker partnerships between laboratories, usually in different countries, to open opportunities in research that neither could have alone.

During this period we worked hard at organizing a workshop in Africa. Much correspondence was exchanged with Nigeria, South Africa, and Eritrea. In all cases complications arose which prevented fruition of the workshop, but we have not given up. At the General Assembly of the International Council for Science, ICSU, October 21-24, 2008, Secretary-General dos Remedios (see the report on ICSU GE above) discussed the situation of biophysics in Africa with a number of African scientists in the hope of finding a successful pathway. Current thoughts are to hold a workshop in Capetown, South

Africa to serve scientists throughout Sub-Saharan Africa, hopefully in 2009 or 2010.

Our task force supported three workshops over this period. In June 2007 we sponsored the workshop "Modern Spectroscopy Methods in Studying Structure and Function of Biopolymers in Biology and Medicine" in Dubna, Russia, organized by Council member Andrei Rubin. It was attended mostly by Russian scientists, but with a variety of lecturers from other countries including the USA and Canada. In October 2007, we sponsored a workshop in Mangalia, Romania, organized by Eugenia Kovacs, on Biophysics for Medicine, attended by scientists from throughout south-eastern Europe. Also in October 2007, we supported a workshop on Modern Imaging Methods in Krakow, Poland, attended by scientists from Central and Western Europe.

Since 2008 was a congress year, financial support was given to the congress itself with attendance by all members of the task force, where plans for 2009 were discussed. We proposed a sequel to the Supra-molecular Structure and Function workshop in Rovinj, Croatia (Chaired by Dr. Pifat-Mrzljak), a Modern Spectroscopy workshop in Sibiu, Romania (Chaired by Dr. Kovacs), a workshop on Biophysical Methods for Rio de Janeiro (Chaired by Dr. M. Morales - see next item), and a NMR Spectroscopy Workshop to be held in Mumbai in late 2009. All were approved by the IUPAB Council and preparations are underway.

IberoAmerican Congress of Biophysics

Marcelo M. Morales –
Congress President

The VII IberoAmerican Congress of Biophysics will be held in Rio de Janeiro, Brazil, from September 30 to October 03, 2009.

This year the meeting will be sponsored by the Brazilian Biophysical Society, on behalf of SOBLA (Sociedad de Biofisicos Latino Americanos), Argentine Biophysical Society, Latin American Federation of Biophysical Societies, Portuguese Biophysical Society, and Spanish Biophysical Society, and by the International Union for Pure and Applied Biophysics.

Similar to a previous Iberoamerican Congress, we have planned a large International participation and will invite some outstanding biophysicists, independent of their countries of origin, to contribute to the meeting. This should promote fruitful discussions and the development and integration of the biophysical groups attending the meeting. The program of the congress will cover many areas of biophysics. Furthermore, many biophysical research projects nowadays concern the relationships between molecular-structural, molecular

biology, nanotechnology, nuclear magnetic resonance, data and biological function. We plan to cover a broad area of biophysics, including the traditional areas of electrophysiology, bioenergetics and membranes. The congress will be held in the beautiful city of Búzios - Rio de Janeiro State, Brazil. Despite Rio´s natural tourist attractions you can easily visit other places in Brazil, since the city is readily connected to many other parts of the country, both by plane and bus. Rio de Janeiro also houses the Federal University of Rio de Janeiro and the de Carlos Chagas Filho Biophysics Institute, a pioneering institution in our field. In Rio is also located the National Center of Nuclear Magnetic Resonance (CNRMN).

We are also planning to organize a round table on local and regional scientific policies and to include discussions about hot subjects, such as the possibilities of structural genome projects.

Immediately after the Congress we will present the first Latin American Postgraduate Program Course (5-9 October, 2009 – Atlântico-Buzios Hotel, in Buzios) supported by IUPAB, with intense participation of students.

We hope to see you in Buzios-Brazil next October.
Additional Information:
http://www.sbbf.org.br/congresso2009/

Biophysical Reviews Makes its Debut in 2009

PRESS RELEASE

The International Union for Pure and Applied Biophysics and Springer will collaborate on a new journal

Heidelberg, 14 January 200

The International Union for Pure and Applied Biophysics (IUPAB) and Springer will launch the journal *Biophysical Reviews* in spring 2009. *Biophysical Reviews* is the new official journal of the IUPAB, the leading international biophysics organization consisting of 52 national societies with approximately 15,000 members. The entire IUPAB Council will form the editorial board of the new journal in order to demonstrate the close affiliation between the Springer journal and the IUPAB.

Biophysical Reviews will publish short and critical reviews from key scientists active in the field. The quarterly journal will cover the entire field of biophysics, generally defined as the science of describing biological phenomena and resolving their underlying principles using the concepts and techniques of physics. This includes, but is not limited to, such areas as bioinformatics, biophysical methods and instrumentation, medical biophysics, biosystems and cell biophysics. The editor-in-chief, Professor Jean Garnier of the Institut National de la Recherche Agronomique (INRA) - Unité Mathématique Informatique et Génome (France) will work closely with the expert international editorial board.

Dr. Sabine Schwarz, Senior Editor for Life Sciences at Springer, said, “We are excited about the IUPAB’s decision to cooperate with Springer. The new journal will provide top-level reviews in biophysics, which will of course all be peer-reviewed. This aspect, combined with the high-caliber editorial board and the IUPAB’s previous publishing experience, provides the perfect preconditions for a successful journal.”

Professor Kuniaki Nagayama, President of the International Union for Pure and Applied Biophysics, said, “The IUPAB requires a useful and broadly informative official journal, and our old journal did not serve our purposes well. Now, in cooperation with Springer, we are starting the new official journal, *Biophysical Reviews*. I am pleased to have the opportunity to be part of the development of this new journal, together with the IUPAB, biophysicists affiliated with the IUPAB and all others interested in biophysics.”

Springer will publish *Biophysical Reviews* in both print and electronic formats. It will be available via www.springerlink.com, Springer’s online information platform, and will include fast, electronic publication in Online First™, as well as Cross Reference Linking and Table of Content Alerts. All potential authors have the option, via the Springer Open Choice™ program, of publishing their articles using the open access publishing model.

The International Union for Pure and Applied Biophysics (www.iupab.org) is a member of the International Council for Science family. Its function is to support research and teaching in biophysics.
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