The role of IFMBE - look into the future

Ratko Magjarević
IFMBE President
University of Zagreb
Faculty of Electrical Engineering and Computing
Zagreb, Croatia
ratko.magjarevic@fer.hr

Meeting of the Slovene Society for Biomedical Engineering
13 March 2013, Ljubljana, Slovenia
Outlines

• On IFMBE
  – Structure - New Statute and management changes
  – Liaisons and benefits for IFMBE affiliated societies
  – Benefits for individual members of IFMBE affiliated societies
  – Global collaboration in biomedical engineering and health

• Questions?
Mission

• The objectives of the International Federation for Medical and Biological Engineering are scientific, technological, literary, and educational.

• The mission of the IFMBE is to encourage, support, represent and unify the world-wide Medical and Biological Engineering Community in order to promote health and quality of life through the advancement of research, development, application and management of technology.

• Within the field of medical, clinical and biological engineering its aims are to encourage research and the application of knowledge, to disseminate information and promote collaboration.
Goals

• To act as the leader in representing the international community of medical and biological engineering and science

• To advance collaboration between BME societies and organisations, industry, governments and non-governmental organizations engaged in health care and in biomedical research and its applications

• To recommend policies and provide guidelines in appropriate professional, educational and ethical areas
Governing Bodies

- IFMBE
  - General Assembly
    - Administrative Council
    - Society Committee
    - International Academy
      - Divisions
      - Working Groups
      - Committees

Delegates of each Society Vote at each session of GA
Representative of each Society - President, Secretary General or appointed representative
General Assembly

• The control and direction of the policy and affairs of the Federation

• Consist of the Delegates of the Member Organisations & the voting members of the Administrative Council

• Meetings:
  – At the World Congress of MP & BME (every three years)
  – In-between, business of the General Assembly carried out by postal or electronic mail
Number of delegates in GA

- Depends on number of members of the affiliated society:
  - Societies up to 31 members: 1 delegate
  - Societies from 32 to 316 members: 2 delegates
  - Societies from 317 to 3162 members: 3 delegates
  - Societies with more than 3163 members: 4 delegates
IFMBE delegates

• Elect officers of the IFMBE
• Elect ordinary members of the Administrative Council
• Elect members of the board of the Clinical Engineering Division
• Elect members of the board of the Division for Health Technology Assessment
• Elect Honorary Life Members
• Vote on any changes of the Statutes
Changes in Statutes 2012

Goal: Improve representation of Societies and professionals in the IFMBE

• Direct election of Regional representative to the Administrative Council by delegates of (only) that region

• Societies Committee becomes Council of Societies

• Ex-officio members of Administrative Council – Chairs of Council of Societies, IAMBE and Divisions
“Old” Administrative Council
(until May 2012)

• The affairs of the Federation are administered by an Administrative Council, whose voting members are:
  – the officers (President, President-Elect, Secretary General, Treasurer),
  – the immediate Past-President, and
  – eight ordinary members, elected by the General Assembly from the membership of the Member Organisations.
Voting procedure (OLD)
New Administrative Council

• The affairs of the Federation are administered by an Administrative Council, whose voting members are:
  – the officers (President, Pres-Elect, Secr General, Treasurer),
  – the immediate Past-President, and
  – Four members, elected by the General Assembly from the membership of the Member Organisations.
  – Four members, elected by regional groups
  – Ex-officio Chairs
New Administrative Council

- Regional Groups
  - Europe and Africa,
  - Asia Pacific Rim
  - North America
  - Latin America

- Transnational Societies are represented in the region where the official headquarters of the Society is registered

- Ex-officio Chairs
New Administrative Council

• Ex-officio Chairs
  – Council of Societies,
  – International Academy of BM Engineering (AIMBE)
  – Clinical Engineering Division
  – Division for Health Technology Assessment
Voting procedure (NEW)
Administrative Council 2012-2015

Officers
- Ratko Magjarevic, Croatia, IFMBE President
- Herbert Voigt, USA, IFMBE Past President
- James C. H. Goh, Singapore, President Elect
- Shankar M. Krishnan, USA, Secretary General
- Marc Nyssen, Belgium, Treasurer

Elected ordinary members
- Olof Lindahl, Sweden
- Luis Kun, USA
- Maria Siebes, the Netherlands
- Mario Secca, Portugal

Ex-officio members
- Andrel Linnenbank, the Netherlands
- Roger Kamm, USA
- Said Jorge Calil, Brazil
- Nicolas Pallikarakis, Greece

Interim ordinary members
- to be replaced by regional representatives by the end of 2012

- Said Jorge Calil, Brazil
- Akos Jobbágy, Hungary
- Sun I. Kim, Korea
- Jan Wojcicki, Poland
Membership

- **IFMBE** is a federation of 52 national and 6 transnational BME societies, with more than 120,000 members all over the world

<table>
<thead>
<tr>
<th>Argentina</th>
<th>Australia</th>
<th>Austria</th>
<th>Belgium</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil</td>
<td>Bulgaria</td>
<td>Canada</td>
<td>China</td>
</tr>
<tr>
<td>China Taipei</td>
<td>Colombia</td>
<td>Croatia</td>
<td>Cuba</td>
</tr>
<tr>
<td>Cyprus</td>
<td>Czech Republic</td>
<td>Denmark</td>
<td>Estonia</td>
</tr>
<tr>
<td>Finland</td>
<td>France</td>
<td>Germany</td>
<td>Greece</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>Hungary</td>
<td>Iceland</td>
<td>Ireland</td>
</tr>
<tr>
<td>Israel</td>
<td>Italy</td>
<td>Japan</td>
<td>Korea</td>
</tr>
<tr>
<td>Latvia</td>
<td>Lithuania</td>
<td>Malaysia</td>
<td>Mexico</td>
</tr>
<tr>
<td>Mongolia</td>
<td>The Netherlands</td>
<td>Nigeria</td>
<td>Norway</td>
</tr>
<tr>
<td>Poland</td>
<td>Portugal</td>
<td>Romania</td>
<td>Serbia</td>
</tr>
<tr>
<td>Singapore</td>
<td>Slovakia</td>
<td>Slovenia</td>
<td>South Africa</td>
</tr>
<tr>
<td>Spain</td>
<td>Sweden</td>
<td>Switzerland</td>
<td>Thailand</td>
</tr>
<tr>
<td>Ukraine</td>
<td>United Kingdom</td>
<td>United States</td>
<td>Venezuela</td>
</tr>
<tr>
<td>ACEE</td>
<td>CAHTMA</td>
<td>EAMBES</td>
<td>ESEM</td>
</tr>
<tr>
<td>ICMCC</td>
<td>IEEE EMBS</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

+ pending applications from Peru and Spanish CE society

+ CHILE?
Affiliated Organizations
The International Federation for Medical and Biological Engineering (IFMBE) was established in 1959 to provide medical and biological engineering with a vehicle for international collaboration in research and practice of the profession.

A group of medical engineers, physicists and physicians met at the 2nd International Conference of Medical and Biological Engineering, in the UNESCO Building, Paris, France to create an organization entitled International Federation for Medical Electronics and Biological Engineering.
Beijing, May 2012

50 Anniversary MBEC

Medical & Biological Engineering & Computing

Medical & Biological Engineering & Computing
Editor-in-Chief: J.A.E Spaan
Impact Factor: 1.757 (2009)
http://www.springerlink.com/content/0140-0118

IFMBE members have Free Online Access
IFMBE’s Liaisons

• Close association with the International Organization of Medical Physics

• The two international bodies have established the International Union for Physical and Engineering Sciences in Medicine
IFMBE’s Liaisons

ICSU
International Council for Science

IUPESM
International Union for Physical and Engineering Sciences in Medicine

IFMBE
International Federation for MBE

Scientific Unions (27)
National Scientific Members
(mainly Academies of Science, 73)

IOMP
International Organization for Medical Physics
Health and Wellbeing Committee

  - consult with the relevant stakeholders (WHO, city policy-makers, business and NGOs) and define the key health policy questions to be addressed in relation to the changing urban environment;
  - define in detail the short, medium and long-term goals and deliverables for a new interdisciplinary programme in this area;
  - etc.
IFMBE’s Liaisons

World Alliance for Patient Safety

WHO

UNESCO

UNIDO

E-health Initiative

ICSU

Standardisation

ISO

IEC

CEN

CENELEC

IFMBE

IUPESM

IOMP
World Health Organisation

IFMBE is a non-governmental organisation affiliated to WHO and has major interests in:

• patient safety issues
• human resources program
  – strengthen the position of clinical engineers and biomedical engineers whose workplace is within the healthcare system
• e-health programs
• health technology assessment and management
• evidence based medicine

IFMBE is representing the WHO in international standardisation bodies
Patient safety

- In October 2004, WHO launched the World Alliance for Patient Safety in response to a World Health Assembly Resolution (2002) urging WHO and Member States to pay the closest possible attention to the problem of patient safety.

The Alliance raises awareness and political commitment to improve:
- the safety of care and facilitates
- the development of patient safety policy and practice in all WHO Member States.

Each year, the Alliance delivers a number of programmes covering systemic and technical aspects to improve patient safety around the world.
Essential health technologies

Evidence-based technologies that provide cost-efficient solutions to health problems.

In parallel and as part of the activities of the World Alliance for Patient Safety, the WHO Department of Essential Health Technologies in cooperation with the IFMBE is dealing with the issue of health technologies as well.
WHA Resolution on Health Technologies

In a resolution on health technologies, in particular medical devices, the Assembly urged Member States to draw up national guidelines and plans for the assessment, procurement and management of technologies used in healthcare.

IFMBE Publications

Journal MBEC (Medical and Biological Engineering and Computing)

IFMBE Proceedings Series (CD/DVD, Book, On-line)

IFMBE Book Series

IFMBE News

more info at:
www.springer.com/ifmbe
Benefits for Individual members of IFMBE

• Who are individual members of IFMBE?
  – Every member of an IFMBE affiliated BME society; e.g. Swedish BME Society, Mexican MBE Society, Croatian BME Society, IEEE EMBS and more than 50 other societies
  – Each of you who is or becomes a member of an national or transnational BME Society which is affiliated to IFMBE
Benefits for Individual members of IFMBE

- What are the benefits of individual members?
  - FREE access to 4 journals in the field of BIOMEDICAL ENGINEERING, including the IFMBE journal *Medical and Biological Engineering and Computing* (MBEC) through Internet (list and links on the next slide)
  - FREE access to *IFMBE Proceedings* through Internet (e.g. Proceedings of the World Congress in Medical Physics and Biomedical Engineering, Beijing, 2012)
  - FREE access to IUPESM journal *Health and Technology*
  - FREE access to *IFMBE News*
  - Discount on other selected BME Journals published by Springer
  - Discount on BME books published by Springer
  - Discount on registration fees at IFMBE sponsored and co-sponsored conferences
IFMBE members have Free Online Access to

**Medical & Biological Engineering & Computing**  
Editor-in-Chief: J.A.E Spaan  
Impact Factor: 1.757 (2009)  
http://www.springerlink.com/content/0140-0118

**Biomechanics and Modeling in Mechanobiology**  
Editors-in-Chief: G.A. Holzapfel; J.D. Humphrey  
Impact Factor: 3.169 (2009)  
http://www.springerlink.com/content/1617-7959

**Biomedical Microdevices**  
Editors-in-Chief: Mauro Ferrari  
Impact Factor: 3.323 (2009)  
http://www.springerlink.com/content/1387-2176

**Cardiovascular Engineering**  
Editor-in-Chief: John K.-J. Li  
http://www.springerlink.com/content/1567-8822

**IFMBE Proceedings**  
Series Editor: Ratko Magiarevic  
http://www.springerlink.com/content/nhr2v8/
New in 2011
Health and Technology

Editors in Chief:
Lodewijk Bos, Luis Kun

Founding Editor: Joachim Nagel

Published Jointly by IUPESM and Springer

Health and Technology is the first truly cross-disciplinary journal on issues related to health technologies addressing all professions relating to health, care and health technology.

The journal constitutes an information platform connecting medical technology and informatics with the needs of care, health care professionals and patients. Thus, medical physicists and biomedical/clinical engineers are encouraged to write articles not only for their colleagues, but directed to all other groups of readers as well, and vice versa.
How to access free IFMBE – Springer publications on Internet?

• **Individually**
  – You must be a member of an IFMBE affiliated society
  – You must register for access through your BME Society (name, affiliation, e-mail)
  – The Secretary General of your BME Society sends a list of registered individual members to IFMBE Secretariat ([ifmbe@fer.hr](mailto:ifmbe@fer.hr))
  – In return, the IFMBE Secretariat sends every registered member a token
  – With the token, you open an account at the springerlink ([www.springer.com/ifmbe](http://www.springer.com/ifmbe))
  – The tokens are reset every 2 years (you must register again every two years)

• **Through the secure web site of your BME Society affiliated to IFMBE**
  – In case your society has a password protected area, the link to the free IFMBE – Springer can be embedded to the secure web page
  – Details of technical requests (webmasters!) on the next slide
http-referrer access

Web Requirements

- Protected Member Area (Login)
- Society website URL (e.g. http://www.oegbmt.at/ )
- URL to refer from (society website http refer, e.g. http://www.oegbmt.at/drupal/?q=node/336)
- Test Username (for society website)
- Test Password (for society website)

The Croatian Medical and Biological Engineering Society has enabled secure access to the Journals through the Society web page [www.hdmbt.hr](http://www.hdmbt.hr)
Individual Membership fee for IFMBE

- There is NO membership fee for individuals who are members of affiliated societies.
- The amount of the membership fee that the affiliated BME society pays to IFMBE yearly is symbolic.

<table>
<thead>
<tr>
<th>No. of Members</th>
<th>IFMBE Membership Dues (US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤ 31</td>
<td>$2 per member</td>
</tr>
<tr>
<td>32 - 316</td>
<td>$2 per member for first 31 members + $1.75 per member for members in excess of 31.</td>
</tr>
<tr>
<td>317 - 3162</td>
<td>$2 per member for first 31 members + $1.75 per member for next 285 members + $1.25 per member for members in excess of 316.</td>
</tr>
<tr>
<td>≥ 3163</td>
<td>$2 per member for first 31 members + $1.75 per member for next 285 members + $1.25 per member for next 2846 members + $0.50 for members in excess of 3162.</td>
</tr>
</tbody>
</table>

Please compare this amount with the amount 100 subscribers would pay for access to 5 Journals and a series of Conference proceedings + the savings on registration fees.
Membership Cards

- The Spanish BME society has proposed introduction of BME societies’ membership card which would serve also as IFMBE membership card
Other benefits to IFMBE Affiliated Societies

- IFMBE grants free layout and production of IFMBE Proceedings for organizers of IFMBE sponsored and co-sponsored conferences
- Regional Young Fellows Networking Grant - IFMBE and affiliated societies each support travel of young fellows (typically post docs and assistant profs) in order to build up collaboration within the region and help the growth of new leaders in the field
- Young Investigator Competition – IFMBE grants at least three awards at IFMBE co-sponsored conferences
- IFMBE presents seven awards:
  - Vladimir K. Zwoykin Award
  - Otto Schmitt Award
  - John Hopps Distinguished Service Award (NEW)
  - Student Design Award (NEW)
  - Nightingale Award (in cooperation with IPEM)
  - James Zimmerman Award (in cooperation with BIOMAG)
  - IUPESM Merit Award for Biomedical Engineer (in cooperation with IUPESM)
IFMBE Projects

• From Industry Working Group
  – Platform for searching partners for cooperation with industry
  – Partner EUCOMED
  – 2 year project for Middle and East Europe and for Latin America
  – Sweden included in the pilot

• New on – line Journal on Clinical Engineering and Health Technology Assessment (open access)

• Acquisition of information on BME programs (in regions)
• Acquisition of information on accreditation requirements for BME programs (in regions)

• Regular activities of different Committees and Working groups
Global collaboration in biomedical engineering and health

• Having in mind the complexity of research in medicine, biomedical engineering and other similar scientific fields involved in multidisciplinary research,

• the fact that there is no International, National or Regional organization that can cover all needs and find solutions for all problems in health care,

• there is a need for *Global collaboration in biomedical engineering and health*
Conclusions

• IFMBE
  – recognised as one of the most important bodies in development of biomedical and clinical engineering
  – driver of many actions at global level relevant for medicine and health care
  – all aspects of biomedical and clinical engineering are present in the strategy and in plans of the IFMBE
  – in order to achieve its goals, the IFMBE is seeking for close collaboration with biomedical engineering community worldwide
  – IFMBE is based on voluntary work – JOIN US!
Thank you for your attention!

Visit IFMBE @ www.ifmbe.org