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1 Mission and Objectives

1.1 Objectives
The European Federation for Medical Informatics (EFMI) is the leading nonprofit organization in biomedical and health informatics in Europe. The Federation comprises 30 national societies and includes an exceptional network of experts and stakeholders in health, care, IT and its societal dimensions; supported by 15 topic working groups ranging from human factors, to security and translational health informatics.

EFMI is committed to health for all underpinned by information and communication technology.

The objectives when founded in 1976 were:

- To advance international co-operation and dissemination of information in Medical Informatics on a European basis;
- To promote high standards in the application of medical informatics;
- To promote research and development in medical informatics;
- To encourage high standards in education in medical informatics;
- To function as the autonomous European Regional Council of IMIA.

1.2 Activities and Governance
All European countries, i.e. countries within the European Region of the World Health Organization are entitled to be represented in EFMI by a suitable Medical Informatics Society. The term medical informatics is used to include the whole spectrum of Biomedical, Health-/Socialcare Informatics and all disciplines concerned with Biomedical, Health-/Socialcare and Informatics.

The organization operates with a minimum of bureaucratic overhead. Each national society supports the federation by sending and paying for a representative to participate in the decisions of the Federation’s Council, the membership assembly. Apart from the Council, an elected board consisting of nine members governs EFMI. English has been adopted as the official language, although simultaneous translation is often provided for congresses in non-English speaking countries.

1.3 Membership and Organization
In 2018, 30 countries have joined the Federation. All representative societies in countries within the European Region of the WHO are entitled to apply for membership.

EFMI is also open for institutional membership. Typical institutions, which become EFMI members, include universities, research organizations, federations, companies and organizations. Currently, 13 organizations have become institutional members of EFMI: 11 academic institutions, public or private organization, non-profit organization and 2 industrial and corporate organizations.

EFMI has a long tradition in working groups (WG). 15 WGs are organizing and supporting events and projects on a European basis but also worldwide in close co-operation with national and international WGs and institutions. EFMI does not offer personal membership except for the working groups.

For details, see the following chapters.
2 Executive Board

2.1 Board Members (31.12.2018)

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>term begins</th>
<th>term ends</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stoiciu-Tivadar, Lăcrămioara</td>
<td>President</td>
<td>17.10.2018</td>
<td>2020 fall conf</td>
</tr>
<tr>
<td>Chronaki, Catherine</td>
<td>Vice President</td>
<td>17.10.2018</td>
<td>2020 fall conf</td>
</tr>
<tr>
<td>Lovis, Christian</td>
<td>Past President</td>
<td>17.10.2018</td>
<td>2020 fall conf</td>
</tr>
<tr>
<td>Winter, Alfred</td>
<td>Secretary</td>
<td>17.10.2018</td>
<td>2022 fall conf</td>
</tr>
<tr>
<td>Orel, Andrej</td>
<td>Treasurer</td>
<td>17.10.2018</td>
<td>2022 fall conf</td>
</tr>
<tr>
<td>Pape-Haugaard, Louise</td>
<td>Institutional Membership Officer</td>
<td>17.10.2018</td>
<td>2020 fall conf</td>
</tr>
<tr>
<td>Hörbst, Alexander</td>
<td>Press &amp; Information Officer</td>
<td>30.05.2015</td>
<td>2019 STC</td>
</tr>
<tr>
<td>de Lusignan, Simon</td>
<td>Publication Officer</td>
<td>30.05.2015</td>
<td>2019 STC</td>
</tr>
<tr>
<td>Hercigonja-Szekeres, Mira</td>
<td>Executive Officer</td>
<td>30.05.2015</td>
<td>2019 STC</td>
</tr>
<tr>
<td>Weber, Patrick</td>
<td>Assistant to the board</td>
<td>01.01.2017</td>
<td>31.12.2021</td>
</tr>
</tbody>
</table>

The reports of the individual board members are presented in Appendix 2.

2.2 Synopsis of board activities

In 2018, the board had 11 meetings, 8 of them virtual. A continuous documentation on participation and open activities has been maintained. Minutes and additional material of the meetings are available at the EFMI archive\(^1\). The main topics discussed have been:

- EFMI Strategy
- Accreditation and Certification
- EFMI Working groups
- EFMI conferences
  - Schedule of MIE and STC conferences
  - MIE conferences 2017, 2018, 2020, 2021
  - STC conferences 2017, 2018, 2019, 2020
  - Collaboration with a professional congress organizer (PCO)
  - Plagiarism checks
  - Organization of high quality reviews
- EFMI organization
  - Participation in Council meetings
  - Budget planning and amendment
  - Preparation of Council meetings,
  - Elections of Board members
  - EFMI Website & Social Media, Marketing
  - Membership situation (national members, institutional members)
  - Working groups
- EFMI endorsements
  - Endorsement principles
  - Endorsement of projects, conferences and journals

\(^1\) https://www.efmi.org/owncloud/
EFMI Annual Report 2018

- EFMI external relationships
  - IMIA & IMIA conferences
  - EFMI Collaboration with EUSEM
  - EU eHealth Stakeholder Group
  - Chinese Medical Informatics Society

3 National Members

<table>
<thead>
<tr>
<th>Country</th>
<th>National Society</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>Working Group Medical Informatics (AKMI) of the Austrian Society for Biomedical Engineering ÖGBMT and of the Austrian Computer Society (OCG)</td>
</tr>
<tr>
<td>Belgium</td>
<td>Belgian Medical Informatics Association</td>
</tr>
<tr>
<td>Bosnia Herzegovina</td>
<td>Society for Medical Informatics of Bosnia &amp; Herzegovina</td>
</tr>
<tr>
<td>Croatia</td>
<td>Croatian Society for Medical Informatics (CroSMI)</td>
</tr>
<tr>
<td>Cyprus</td>
<td>The Cyprus Society of Medical Informatics</td>
</tr>
<tr>
<td>Denmark</td>
<td>Danish Society for Digital Health</td>
</tr>
<tr>
<td>Finland</td>
<td>Finnish Social and Health Informatics Association (FinnSHIA)</td>
</tr>
<tr>
<td>France</td>
<td>French Medical Informatics Association (AIM)</td>
</tr>
<tr>
<td>Germany</td>
<td>German Association for Medical Informatics, Biometry and Epidemiology (GMDS)</td>
</tr>
<tr>
<td>Greece</td>
<td>Greek Biomedical and Health Informatics Association</td>
</tr>
<tr>
<td>Hungary</td>
<td>National Institute for Strategic Health Research</td>
</tr>
<tr>
<td>Iceland</td>
<td>A special interest group of health informatics within the Icelandic Society</td>
</tr>
<tr>
<td>Ireland</td>
<td>Healthcare Informatics Society of Ireland</td>
</tr>
<tr>
<td>Israel</td>
<td>Israeli Association for Medical Informatics</td>
</tr>
<tr>
<td>Italy</td>
<td>Società Scientifica Italiana di Informatica Biomedica</td>
</tr>
<tr>
<td>Norway</td>
<td>Norwegian Society for Medical Informatics</td>
</tr>
<tr>
<td>Portugal</td>
<td>Faculty of Medicine of Oporto University</td>
</tr>
<tr>
<td>Romania</td>
<td>Romanian Society of Medical Informatics</td>
</tr>
<tr>
<td>Serbia</td>
<td>Association for Medical Informatics of Serbia</td>
</tr>
<tr>
<td>Slovenia</td>
<td>Slovenian Medical Informatics Association</td>
</tr>
<tr>
<td>Spain</td>
<td>Spanish Society of Health Informatics</td>
</tr>
<tr>
<td>Sweden</td>
<td>Swedish Federation for Medical Informatics (SFMI)</td>
</tr>
<tr>
<td>Switzerland</td>
<td>Swiss Society for Medical Informatics</td>
</tr>
<tr>
<td>The Czech Republic</td>
<td>Czech Society for Biomedical Engineering and Medical Informatics</td>
</tr>
<tr>
<td>The Netherlands</td>
<td>Society for Healthcare Informatics (VMBI)</td>
</tr>
<tr>
<td>The Republic of Moldova</td>
<td>State Medical and Pharmaceutical University &quot;N. Testemitanu&quot;</td>
</tr>
<tr>
<td>The Russian Federation</td>
<td>National Association of Medical Informatics (NAMI)</td>
</tr>
<tr>
<td>The United Kingdom</td>
<td>British Computer Society</td>
</tr>
<tr>
<td>Turkey</td>
<td>Turkish Medical Informatics Association (TurkMIA)</td>
</tr>
<tr>
<td>Ukraine</td>
<td>The Ukraine Association for &quot;Computer Medicine&quot; (UACM)</td>
</tr>
</tbody>
</table>

Full reports of the EFMI national members are presented in appendix 4.
4 Institutional Members

Institutional Members of EFMI are academic institutions, public or private organizations, non-profit institutions as well as industrial and corporate organizations.

<table>
<thead>
<tr>
<th>Name</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>academic institutions, public or private organisations, non-profit institutions</td>
<td></td>
</tr>
<tr>
<td>HL7 – Health Level Seven International</td>
<td>Germany</td>
</tr>
<tr>
<td>HON – Health On the Net Foundation</td>
<td>Switzerland</td>
</tr>
<tr>
<td>National and Kapodistrian University of Athens – HIL</td>
<td>Greece</td>
</tr>
<tr>
<td>Politecnico di Milano – eHealthLAB</td>
<td>Italy</td>
</tr>
<tr>
<td>Dipartimento di Ingegneria Industriale e dell'Informazione, Università degli Studi di Pavia</td>
<td>Italy</td>
</tr>
<tr>
<td>Division of Medical Information Sciences of University Hospitals of Geneva (HUG)</td>
<td>Switzerland</td>
</tr>
<tr>
<td>University of Trieste</td>
<td>Italy</td>
</tr>
<tr>
<td>The Danish Centre for Health Informatics, Aalborg University (DaCHI)</td>
<td>Denmark</td>
</tr>
<tr>
<td>European Campus Rottal-Inn of Deggendorf Institute of Technology (ECRI)</td>
<td>Germany</td>
</tr>
<tr>
<td>Autoritatea Națională de Managementul Calității în Sănătate (National Authority for Quality Management in Healthcare) (ANMCS)</td>
<td>Romania</td>
</tr>
<tr>
<td>Faculty of Medicine of Oporto University (since 07.04.2019)</td>
<td>Portugal</td>
</tr>
<tr>
<td>industrial and corporate organisations</td>
<td></td>
</tr>
<tr>
<td>Case Mix</td>
<td>The Netherlands</td>
</tr>
<tr>
<td>Ramsey Systems Ltd</td>
<td>United Kingdom</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Chair</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDU - Education</td>
</tr>
<tr>
<td>EHR - Electronic Health Records</td>
</tr>
<tr>
<td>EVAL - Assessment of Health Information Systems</td>
</tr>
<tr>
<td>HIIC - Health Informatics for Interregional Cooperation</td>
</tr>
<tr>
<td>HIME - Health Information Management Europe</td>
</tr>
<tr>
<td>HOFMI - Human and Organisational Factors of Medical Informatics</td>
</tr>
<tr>
<td>IDeS - Information and Decision Support in Biomedicine and Health Care</td>
</tr>
<tr>
<td>LIFOS - Libre/Free and Open Source Software</td>
</tr>
<tr>
<td>MIP - Medical Image Processing</td>
</tr>
<tr>
<td>NI - Nursing Informatics</td>
</tr>
<tr>
<td>PCI - Primary Health Care Informatics</td>
</tr>
<tr>
<td>PPD - Personal Portabel Devices</td>
</tr>
<tr>
<td>SSE - Security, Safety and Ethics</td>
</tr>
<tr>
<td>THI - Translational Health Informatics</td>
</tr>
</tbody>
</table>

Full EFMI WGs reports as presented for the IMIA Yearbook is presented as appendix 3.
6 EFMI Council (31.12.2018)

6.1 National Representatives

<table>
<thead>
<tr>
<th>Name</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ammenwerth, Elske</td>
<td>Austria</td>
</tr>
<tr>
<td>Bakke, Sijie Ljosland</td>
<td>Norway</td>
</tr>
<tr>
<td>Balicer, Ran D</td>
<td>Israel</td>
</tr>
<tr>
<td>Cleary, Mary</td>
<td>Ireland</td>
</tr>
<tr>
<td>Cornet, Ronald</td>
<td>The Netherlands</td>
</tr>
<tr>
<td>da Costa Pereira, Altamiro</td>
<td>Portugal</td>
</tr>
<tr>
<td>De Clercq, Etienne</td>
<td>Belgium</td>
</tr>
<tr>
<td>de Lusignan, Simon</td>
<td>The United Kingdom</td>
</tr>
<tr>
<td>Hafberg, Anna</td>
<td>Iceland</td>
</tr>
<tr>
<td>Häyrinen, Kristiina</td>
<td>Finland</td>
</tr>
<tr>
<td>Héja, Gergely</td>
<td>Hungary</td>
</tr>
<tr>
<td>Hercigonja-Szekeres, Mira</td>
<td>Croatia</td>
</tr>
<tr>
<td>Karlsson, Daniel</td>
<td>Sweden</td>
</tr>
<tr>
<td>Lovis, Christian</td>
<td>Switzerland</td>
</tr>
<tr>
<td>Mantas, John</td>
<td>Greece</td>
</tr>
<tr>
<td>Masic, Izet</td>
<td>Bosnia Herzegovina</td>
</tr>
<tr>
<td>Mayorow, Oleg</td>
<td>Ukraine</td>
</tr>
<tr>
<td>Milic, Natasa</td>
<td>Serbia</td>
</tr>
<tr>
<td>Nøhr, Christian</td>
<td>Denmark</td>
</tr>
<tr>
<td>Orel, Andrej</td>
<td>Slovenia</td>
</tr>
<tr>
<td>Parra Calderon, Carlos</td>
<td>Spain</td>
</tr>
<tr>
<td>Pattichis, Constantinos</td>
<td>Cyprus</td>
</tr>
<tr>
<td>Quaglini, Silvana</td>
<td>Italy</td>
</tr>
<tr>
<td>Rosioru, Alexandru</td>
<td>The Republic of Moldova</td>
</tr>
<tr>
<td>Saka, Osman</td>
<td>Turkey</td>
</tr>
<tr>
<td>Seidl, Libor</td>
<td>The Czech Republic</td>
</tr>
<tr>
<td>Seroussi, Brigitte</td>
<td>France</td>
</tr>
<tr>
<td>Shifrin, Michael</td>
<td>The Russian Federation</td>
</tr>
<tr>
<td>Stoicu-Tivadar, Lăcrămioara</td>
<td>Romania</td>
</tr>
<tr>
<td>Winter, Alfred</td>
<td>Germany</td>
</tr>
</tbody>
</table>

6.2 Working Group Chairs

Please refer to chapter 5.

6.3 Institutional Members Representatives

The Institutional Members (chapter 4) are represented in the Council by electing one representative of the academic institutions or non-profit organizations and one representative of the industrial or corporate organizations. The representatives are:

- non-profit and academic institutions: Catherine Chronaki
- industrial and for-profit organizations: Jacob Hofdijk
### 6.4 Honorary Fellows

<table>
<thead>
<tr>
<th>Name</th>
<th>Elected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andersen, Stig Kjaer</td>
<td>2015</td>
</tr>
<tr>
<td>Barber, Barry</td>
<td>1989</td>
</tr>
<tr>
<td>Baud, Robert</td>
<td>2008</td>
</tr>
<tr>
<td>Blobel, Bernd</td>
<td>2014</td>
</tr>
<tr>
<td>Engelbrecht, Rolf</td>
<td>2012</td>
</tr>
<tr>
<td>Gell, Günther</td>
<td>2004</td>
</tr>
<tr>
<td>Hasman, Arie</td>
<td>2010</td>
</tr>
<tr>
<td>Hofdijk, Jacob</td>
<td>2012</td>
</tr>
<tr>
<td>Mantas, John</td>
<td>2015</td>
</tr>
<tr>
<td>Masic, Izet</td>
<td>2016</td>
</tr>
<tr>
<td>McNair, Peter</td>
<td>2004</td>
</tr>
<tr>
<td>Mihalas, George</td>
<td>2012</td>
</tr>
<tr>
<td>O’Moore, Rory</td>
<td>1988</td>
</tr>
<tr>
<td>Peterson, Hans</td>
<td>1988</td>
</tr>
<tr>
<td>Roger-France, Francis</td>
<td>1991</td>
</tr>
<tr>
<td>Rossing, Niels</td>
<td>1994</td>
</tr>
</tbody>
</table>

EFMI will always remember its deceased Honorary Fellows:

<table>
<thead>
<tr>
<th>Name</th>
<th>Elected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abbott, Bud</td>
<td>2011</td>
</tr>
<tr>
<td>Anderson, John</td>
<td>2002</td>
</tr>
<tr>
<td>Bryden, John</td>
<td>2012</td>
</tr>
<tr>
<td>Grémy, François</td>
<td>2014</td>
</tr>
<tr>
<td>Hansen, Rolf</td>
<td>1993</td>
</tr>
<tr>
<td>Jorgensen, Mogens</td>
<td>1988</td>
</tr>
<tr>
<td>Reichert, Assa</td>
<td>2015</td>
</tr>
<tr>
<td>Reichertz, Peter L.</td>
<td>1987</td>
</tr>
<tr>
<td>Remond, Antoine</td>
<td>1998</td>
</tr>
<tr>
<td>Scherr, Jean-Raoul</td>
<td>2002</td>
</tr>
<tr>
<td>Wagner, Gustav</td>
<td>2006</td>
</tr>
<tr>
<td>Weber, Albert</td>
<td>1987</td>
</tr>
<tr>
<td>Zvárová, Jana</td>
<td>2017</td>
</tr>
</tbody>
</table>
6.5 Auditing Committee
The Auditing Committee has been elected at the council meeting at MIE 2018 in Gothenburg:

Name
Ammenwerth, Elske
Mihalas, George
Shifrin, Michael

6.6 Council Meetings
There were two meetings in 2018. On April 23 the Council met in Gothenburg at MIE 2018 and on October 14 the Council met at STC 2018 in Zagreb. Minutes and additional material of the meetings are available at the EFMI archive².

² https://www.efmi.org/owncloud/
7 Appendix 1: Statutes

Article 1 NAMES AND AIMS
The name of the association is European Federation for Medical Informatics (EFMI), hereinafter known as EFMI. EFMI is a not-for-profit organization involved with the scientific work on theory and practice of information and communication technology as applied in biomedical sciences and health care in a European context. EFMI facilitates the activities of its member national associations and institutions.

The main objectives of the association are to:
A. Advance international co-operation and dissemination of information in the field of Biomedical and Health Informatics on a European basis;
B. Stimulate the scientific work in this field and the evaluation of its applications;
C. Promote research and development in this field;
D. Encourage high standards in education in this field; and
E. Function as the autonomous European Regional Association of the International Medical Informatics Association (IMIA).

Article 2 SEAT
The seat of the association is in Switzerland at the following address:
Chemin de Maillefer 37, CH-1052 Le Mont-sur-Lausanne, Switzerland.

Article 3 MEMBERSHIP
EFMI shall be open for membership by National Societies from European Countries with objectives compatible with its own, by institutions, organizations and affiliated societies. In general, Europe shall be defined as comprising the countries within the European Region of the World Health Organization. The national boundaries and names adopted shall be those of member states as represented at the United Nations. The EFMI Council shall decide on the admission of Full Members, taking into account the membership arrangements of IMIA, ensuring that EFMI and IMIA have the same European countries as Full Members.

EFMI's members are obliged to collaborate in a tolerant and peaceful way, transcending nations, cultures, and political or social structures.

3.1 Full Members
In each country, a national scientific, technical society or group of such societies, may become a Full Member with the restriction that there shall be only one Full Member for each country, and that this member shall be representing the national activities in the field of Biomedical and Health Informatics. Only Full Members have the rights to the assets of EFMI.

Each Full Member is entitled to delegate one representative to the Council. Each representative of a Full Member shall be elected by the member society.

Each Full Member shall pay membership annual dues as decided by the Council.

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3 accepted at the 72nd EFMI Council, 2014
3.2 Institutional Members
The Council may accept academic institutions, public or private organizations, non-profit institutions as well as industrial and corporate organizations as Members to EFMI, hereinafter called Institutional Members.

The Institutional Members are represented in the Council by electing one representative of the academic institutions or non-profit organizations and one representative of the industrial or corporate organizations. The representatives’ term is two years. The election procedure is monitored by an Officer of the Executive Board. Besides the two representatives, each other Institutional Member may be represented at the Council meetings by ex officio delegates without voting rights.

The membership annual dues of all the Institutional Members are decided by the Council.

3.3 Affiliated Societies
The Council may at any time accept other international societies, organizations or associations as affiliated members of EFMI in order to enhance co-operation in achieving the aims of EFMI, as stated in Article 1.

Such affiliated members have the right of representation in the working groups of EFMI and may be represented at Council meetings by an ex officio delegate without voting rights. A prerequisite for affiliation is that reciprocal arrangements are made by the affiliated member society.

3.4 Honorary Fellows
In order to enhance and promote the work of EFMI, the Council is empowered to elect individuals, who have made a distinguished contribution to the field of Biomedical and Health Informatics or who have contributed significantly to the activities respectively objectives of EFMI, to be associated with EFMI as Honorary Fellows. Such Honorary Fellows shall have the right of attending and speaking at the Council, but shall not be entitled to vote, except for the admission of other Honorary Fellows.

3.5 Admission
The Council shall decide on the admission of Full Members, Honorary Fellows, Affiliated Societies and Institutional Members upon recommendation of a Full Member or the EFMI Executive Board. All admissions must be accepted by a majority vote of the EFMI Council.

3.6 Suspension
The membership of Full Members and Institutional Members shall be automatically suspended under the present conditions:
   A. For being more than two years in arrears with payment of membership annual dues, including the current year;
   B. A written statement has been sent to the member at the last known address two months before suspension, with a copy to the national representative or legal representative.
   C. For a long-term inactivity as defined in the Bylaws.

The suspension means that the Full Member or Institutional Member has temporarily lost the rights of a Full Member or Institutional Member, but is allowed to take the role of an observer. As such, a representative can attend the Council Meeting as a delegate, but is without voting rights.

The suspension is automatically cancelled when the payment of membership annual dues, including the years of suspension, is received in the bank account of EFMI.
3.7 Termination
The membership of Full Members or Institutional Members shall be terminated by:

A. Declaration of the member, the resignation to take effect from the beginning of the ensuing year;
B. A two-thirds majority of all Full Members and the two representatives of the Institutional Members:
   i. for a serious offence;
   ii. if the conditions of membership are no longer fulfilled;
   iii. for being more than two years in arrears with payment of membership dues;
   iv. for a long-term inactivity as defined in the Bylaws.
C. A simple majority of all Full Members and the two representatives of the Institutional Members:
   if the member is more than three years in arrears with the payment of membership dues.

Article 4 OPERATION
The main bodies of EFMI shall be in descending order of authority: the Council, the Executive Board, and the Working Groups.

4.1 Council
The Council shall be composed of one representative from each Full Member, the Members of the Executive Board, the Chairpersons of the Working Groups, the Honorary Fellows and two representatives of the Institutional Members.

4.1.1 Authority
A. The Council is the supreme authority of EFMI.
B. The Council shall determine fundamental policy, adopt the programme of activities, hear and approve the reports of any subordinate bodies it may have established, decide on admission and exclusion of members, elect the President and the Members of the Executive Board, adopt and revise statutes and bylaws, adopt the budget, review the incomes and expenditures, accept the audit reports and approve the annual accounts.
C. The Council may establish subordinate bodies for clearly defined permanent or temporary purposes. It shall decide on the composition, the terms of reference and the duration of existence of such bodies.
D. The Council may establish Working Groups to elaborate on specific domains of knowledge in the field of Biomedical and Health Informatics.
E. The Council will elect an Auditing Committee that consists of 3 members, one of them elected as chair person. Each committee member will be elected for a period of 3 years and can be re-elected once, for a total duration of 6 years. The Auditing Committee will review and audit all EFMI's monetary and financial statements in correspondence to the Council approved budget. The committee will issue a written report to be presented at the Council meeting at least once in every calendar/financial year.
F. The Council shall take decisions necessary for the implementation of the main objectives of EFMI.
4.1.2 Quorum, Majority and voting rights

A. **Quorum.** The Council shall be able to conduct business only if at least half of the Full Members and the two representatives of the Institutional Members are present. Proxies (Article 4.1.2.C) are counted for attaining the Quorum. If this is not the case, another assembly of the Council shall be convened within three months, having ensured that all members can be given at least one month’s notice in advance. During that meeting the Council shall operate without any quorum restriction.

B. **Voting Rights.** Only Full Members and the two representatives of the Institutional Members have voting rights in the Council for electing members of the Executive Board, approving the budget, approving future locations/organizers for Medical Informatics Europe Conferences (MIE) as well as Special Topic Conferences (STC) and accepting new Members to EFMI. The Honorary Fellows vote for accepting new Honorary Fellows. The Working Group chairs may vote for accepting the reports of the WGs, establishing new WGs, endorsing chairs/co-chairs. For all other issues all Council members may vote based on the corresponding articles of the statutes and corresponding bylaws.

C. **Proxy.** Only Full Members may give proxy. A representative of a Full Member may be given proxy to vote for a maximum of two other Full Members. For electing Members of the Executive Board no proxies are accepted.

D. **Single vote.** Each representative of Full Members has one vote unless he is recipient of proxy/proxies (see 4.1.2.C). Each other Council member has only one vote.

E. **Simple majority.** Decisions of Council shall be taken by a simple majority of those members present or represented by proxy by those who have the right to vote, except otherwise specified in the statutes.

F. **Waiving vote or abstention.** On a particular issue addressed by the Council, a member may waive the voting right. However, the abstention from voting shall be noted and the member shall be counted for the quorum.

G. **Electronic and Postal Voting.** The President may authorise the Secretary to conduct a postal or an electronic ballot on some issue if a quorum cannot be achieved at a Council meeting, or if other urgent business requires the attention of all Council members with voting rights between scheduled meetings. In this instance a formal proposal shall be put to each member with a copy to the Chair of the corresponding Full Member and the Institutional Members at their official address. At least one month shall be allowed for replies to be received and they shall be counted as if they were votes in a meeting of Council.

If the voting is deemed to require confidentiality and in particular anonymity of the casting votes, as may be the case for election of Members of the Executive Board, a postal ballot shall be given with an inner unmarked sealed envelope which contains the vote of the Member with no sender given and an enclosed signed letter indicating who issued the vote. Based on the rules for a confidential postal vote a similar system will be implemented for electronic votes guaranteeing anonymity.

In the event of any difference in a view being expressed between a Full Members of Institutional member representative and information sent by a letter from the Secretary or Chair of the same Full Member or Institutional Member, the Full Member or Institutional Member representative's views will be taken as subordinate to their Full Member or Institutional Member. The view as expressed by the Full Member’s or Institutional Member’s Chair will prevail.

4.1.3 Meetings

A. The Council shall decide on the dates and places of its meetings, but there shall be at least one Council Meeting each year. It may, however, be convened at any time if the President, after consultation with the Executive Board, deems it necessary.

B. The Secretary shall be supplied with an up-to-date address for each Member of the Council and shall issue minutes and agendas to these addresses. The dates of Council Meetings shall
be notified to Council members at least two months in advance of each meeting with a request for items for the agenda. The agenda will be issued one month before the meeting.

C. The minutes of meetings shall be prepared by the Secretary, endorsed by the President, and approved by the Council at the next meeting.

4.2 The Executive Board

The Executive Board shall execute and implement the decisions taken by the Council. The Executive Board is liable to the Council.

4.2.1 Composition and Election

A. The Council shall elect an Executive Board consisting of President, Vice-President, Past President, Secretary, Treasurer, and a number of Officers. Allocation in elected Officers’ roles and responsibilities as well as additional Officers is to be justified by a Council decision. Each Officer shall have tasks and duties assigned by the Council. All members of the Executive Board shall be members of Council at the time of their election, with the possible exception of the Past President. Members of National Associations (Full Members of EFMI) nominated by its corresponding National Association may become candidates for an Executive Board position. In the latter case a 2/3 majority vote is required to accept the nomination.

B. Election of President

The Council elects every two years a President-elect, who takes up the position of the President for a term of two years. The election takes place at least three months before the end of the term of the current President. Candidates for the position of President-elect should be members of the Council or the Executive Board who served for at least four years in total. When the President-elect takes up the position of the President, the former President becomes Past President and serves the Executive Board for two years. The President is responsible for the electoral procedure. The President initiates the procedure at least three months before the expiration date by informing all Members of the Council and calling for tender for the position of President-elect. The election is held during the Council meeting by secret ballot. The person that receives the majority vote of the present Council is elected to the position of the President-elect. The President-elect attends all Executive Board and Council meetings without voting rights.

C. The positions of Secretary and Treasurer are elected by the Council for a period of four years. Their term can be extended for a maximum of another one term.

D. The Vice-President and the Officers are elected directly by the Council for two years. The term of the Vice-President and the Officers can be extended, if re-elected, for a maximum of another two consecutive terms in the same or another Executive Board position.

E. The Past President represents EFMI in IMIA and has, while EFMI is accepted as an IMIA Regional Member under the IMIA Bylaws, the right of attendance and voting at the IMIA Board and General Assembly. The Past President after serving for two years in his/her position ceases to be a member of the Executive Board.

F. The Members of the Executive Board shall commit themselves to assist to all the meetings of the committee.

G. If a Member of the Executive Board resigns or the office is terminated for any reason, a successor shall be elected for the unexpired portion of the term. In case of emergency, the Executive Board shall be entitled to elect a temporary successor for the period until the next Council meeting. Incomplete terms shall not count as complete term. For unexpected and force majeure circumstances the Council may decide with 2/3 majority of all Council members to extend the term of any Board member.

H. A Member of the Executive Board can be discharged for misdemeanour by a two-thirds vote of the Full Members and two representatives of the Institutional Members.
4.2.2 Authority
A. The Executive Board shall conduct the day-to-day operations of EFMI.
B. The President applies the policies of EFMI, represents EFMI and convenes and conducts both the Council and the Executive Board meetings. The President defines the agenda of the meetings, moves proposals for voting, and oversees the execution of all resolutions.
C. The Vice-President replaces the President whenever the President is absent or incapacitated. The Vice-President is responsible for initiating Working Groups and for monitoring the progress of existing ones.
D. The Past President represents EFMI in IMIA Executive Board and its meetings.
E. The Secretary is responsible for Membership of EFMI, supervises voting procedures, keeps records for each Member of the Council, and keeps minutes, resolutions and archives of the Council and the Executive Board meetings.
F. The Treasurer keeps records of payments of membership dues, reports to the Council and Executive Board about overdue payments from Full and Institutional Members, and initiates the procedure of suspension and termination of membership. The Treasurer keeps records of the bank accounts of EFMI and provides financial reports to the President and the Secretary during the Executive Board meetings. The bank accounts are held in the country where the EFMI registered office is located. The Treasurer prepares and reports the annual budgets and accounts to the EFMI Council and keeps all documentation, submits them for auditing, and reports the outcome of these audits to the Council and Executive Board. The Treasurer will cooperate with the Auditing Committee (Article 4.1.1.E) and supply it with all relevant materials and information.
G. The Officers authority and duties will be defined in the Bylaws.

4.2.3 Meetings
A. The President and the Members of the Executive Board shall decide on the dates and places of the Executive Board meetings, and shall meet at least twice each year.
B. The minutes of meetings shall be prepared by the Secretary, endorsed by the President, and approved by the Council and the Executive Board.

4.3 EFMI Working Groups
A. An EFMI Working Group is established by a Council decision upon the submission of a proposal by (a) Council member(s) describing the scope, objectives, outcomes, and the timeline of the deliverables of the Working Group. The term of a Working Group will be decided by the Council.
B. Each Working Group shall be composed by experts of the specific domain working together in a specified area. Membership in a Working Group is neither restricted to EFMI members nor EFMI countries.
C. A Working Group may develop workshops, cooperate with other Work Group(s) to propose Special Topic Conferences, produce scientific documents and papers, and whatever else that promotes the domain of the Working Group as specified by the Council decision of its establishment.
D. A Working Group operates under the Council and the Executive Board. Each Working Group is chaired by a person endorsed by the Council. The Chairperson of the Working Group may propose a co-chairperson (endorsed by the Council) among the working group membership. Consequently, the chairperson attends the meetings of the Council. The co-chair may act as a proxy to the chairperson in the Council, whenever the chairperson is not attending.
E. The Working Group Chairs shall communicate Working Group activities to the Vice-President, who monitors and encourages activities in all Working Groups. The Chairperson of
the Working Group shall submit a report to the EFMI Executive Board via the Vice President once a year, reporting previous and forthcoming activities and deliverables. The report is examined by the Vice-President and the Vice-President reports to the Executive Board and to the Council about the progress of each Working Group.

F. If no report has been delivered on two consecutive occasions, the Working Group shall automatically be dissolved.

G. The term of office of the Working Group Chairperson is four years but can be renewed for one further four-year period.

Article 5 FINANCE
EFMI shall be financed by membership annual dues from Full Members and Institutional Members, by royalties from publications, interest on funds, contributions and surplus from events such as Congresses, Conferences and Symposia including funds arising from activities of subordinate bodies.

The Council shall decide on the scale of annual membership dues for Full Members and Institutional Members for the ensuing year. It may accept donations and subsidies.

Article 6 LIABILITIES
In the event of dissolution of EFMI or as contributions to a financial loss in any year, no Full Member shall be held liable to pay a sum in excess of an amount equivalent to twice the annual membership dues to EFMI.

Article 7 LIQUIDATION
Any proposal to dissolve EFMI shall be brought to the notice of all Members of the Council at least three months in advance of the Council meeting, at which it will be discussed. Approval of such a proposal shall require a two-thirds majority of all the Full Members.

If the two-thirds majority is achieved for liquidation, the Council shall then decide by a simple majority of the full members on the method of liquidation and the disposal of its assets which may be given to the Full Members’ National Societies or other purpose(s).

Article 8 COMMITMENTS
Any documents committing EFMI to expenditure or other liability shall be signed by two members of the Executive Board, normally the President and the Secretary, in accordance with and subsequent to an explicit minute action within a Meeting of the Council or an Executive Board meeting.

All legal actions, whether as plaintiff or as defendant, shall be the responsibility of the Executive Board represented by the President or his legal representative.

Article 9 OFFICIAL LANGUAGE
The official language for conducting business of EFMI is English. Therefore, all minutes are kept and recorded in English as well as the communication with Members and during Board and Council meetings are conducted in English.
Article 10  **BYLAWS**
The Bylaws are the internal rules of operation implementing the EFMI policy and are approved by the Council. Therefore, procedures and operating actions related to the above mentioned Articles not provided within the Statutes will be defined and detailed in the Bylaws.

Article 11  **APPLICABLE LAW**
Anything not provided for in these Statutes and the Bylaws, and any dispute shall be resolved in accordance with the corresponding Swiss legal framework.

Article 12  **AMENDMENT**
All proposals for modification of these statutes must be submitted by at least one Full Member. Any such proposal shall be brought to the notice of all Members of Council at least one month in advance of the Council meeting at which it will be discussed. Approval of such proposals shall require a two-thirds majority of all Full Members.

**DECISIONS**
The statutes were adopted at Council Meeting in Toulouse, 23 March, 1977.
Amended at Council Meeting in Ljubljana, 13 March, 1999.
Suggested Amendments at Executive Board Meeting in Geneva, 26 August, 2005.
Extended Editing at Executive Board Meeting in Madrid, 4-5 March, 2007.
Amended at Council Meeting in Brijuni, Croatia in 30 May, 2007.
Approval for submission to the Court at Exec. Board meeting in Antalya, 17 November, 2007.
Approved by the Council in the Council meeting in Copenhagen on 19 Aug, 2013.
Approved by the Council in the Council meeting in Budapest on 26 April, 2014.
Approved by the Council in the Council meeting in Istanbul on 31 August, 2014.
8 Appendix 2: Full reports from the Board Members

8.1 President – Christian Lovis / Lăcrămioara Stoicu-Tivadar

8.1.1 Christian Lovis (January to October 2018)

This is the final report of my activity as President of the EFMI, 2016-2018. It has been an honor and a pleasure to serve EFMI during these two years, along with the Board and numerous and the rich and warm support of colleagues and friends of the EFMI community.

Serving as a President has been for me to try to respect both the continuity and building change. Continuity in enforcing the cohesion of the community, continuity in carrying the projects initiated by the Presidents, board members and the EFMI community already, such as the OCR Service Agreement with Webtek which was initiated by Anne Moen.

Change is a major component of our fast-moving world in the digitalization era. Science is moving fast, communication, information, big data and artificial intelligence are all born in what is the heart of EFMI: informatics, information sciences and technologies. And with these, there would be no genomics, no personalized medicine, no telemedicine, no network care, no quantified self, etc. to quote only few examples. It is no more enough however to adapt to change for a federation like EFMI. EFMI has to accompany change, EFMI has to forecast change, EFMI has to pave the future changes! Paving the future means a lot of activities for EFMI. I will only quote one, which is paradigmatic of the extension of the involvement of citizen in the field, it includes for example citizen science, health centered rather than care driven systems, and many others but for sure citizen empowerment. In this topic, I want to emphasize, as an example, the huge work and strong involvement of Anne Moen in the name of EFMI in the EU eHealth Stakeholder Group as Rapporteur of the Citizen and Health Data task.

This work, carried by the Past President, demonstrates the capacity of EFMI to build change in the continuity.

In this report, I will report on five aspects which I more specifically supported.

Improved autonomy of the board

It is important to build capacity in the ability of EFMI to act. One element of our culture is the strong distributed decision process between the board and the council. The delay between propositions, plan of action and resources to act has revealed to be often of several years, slowed down by numerous backs and forth between the board and the council, at the rhythm of our conferences, when we had ad personam voting capacity. The engagement of new instruments, such as electronic voting, did not change significantly that delay. As part of commitment to the Council when elected, I asked the Council to give more autonomy to the Board, especially in its ability to act using some financial resources. Many activities achieved during this mandate have been successful thanks to the trust the Council gave to the Board in accepting this debated proposition. At the end of my mandate, I think that this was a success, and I would strongly support the Council to renew this trust to the next President and to make it the new way of functioning between the Board and the Council.

The Accreditation and Certification Initiative

The Accreditation and Certification initiative was endorsed by the Board under consultation of the EFMI WG EDU Chair and led by a Task Force with John Mantas as Chair and members Anne Moen, Petra Knaup, Nicolet de Keizer, Ulli Prokosch, to investigate, develop, and implement the Accreditation and Certification initiative. Numerous activities have been held, and mostly discussions with IMIA, to enforce the needs and requirements of the regions and especially of Europe, such as promoting mobility and initiating processes that could lead to compliance with Erasmus programs. The work is still ongoing, but it has strengthened the position and
the needs of Europe in the very important field of education. Many ideas have been discussed, such as building MOOCs in using tutorials and workshops of our conferences, for examples. It is also, I hope, the start of building a real strong educational pathway in Europe, using the European instruments such as ECTS credits, thus enforcing mobility, helping students and teachers to benefit the EU programs that foster cross-border mobility and exchanges, enforce pre- and post- graduated pathway all over Europe.

Social media and communication strategy

The presence of EFMI on the web and on social medias such as Twitter, LinkedIn and Facebook have been revolutionized these last two years thanks to the hiring of a professional social media assistant, Mr. Dimitris Petkousis. A unified management and cockpit tool has been implemented, the visual design have been normalized towards EFMI line, the hashtags and keywords the access credentials have been unified, all medias are interconnected. A constant activity is now present in the last two years, the impact measured by several indexes has been boosted, all our events have now a strong presence in real-time on these medias. For example, there have been more than 15’000 impressions on Twitter on a single day, and 2’000 on LinkedIn during MIE2018 in Gothenburg.

In addition, a new website, still in draft version, is ready to be launched as soon as it will be validated by EFMI (https://myefmi.wordpress.com/). This website has both static content, such as for the statutes or the mission of EFMI, as well completely dynamic zones, such as the news feeder, directly connected to our social medias and our Cockpit management. This is a great instrument which completely changes the relationships between EFMI and the world.

One missed objective is that I failed at building a network of young participating “contributors” scattered all over Europe. My objective was to try to have most educational programs in Medical Informatics in Europe proposing to their students to become “contributors” of our social media, such as spreading the “best read of the week”, or “Conference impressions”. I still think this could be a good instrument to promote our field and build rich content, but it appeared more difficult than expected.

The HootSuite Social media manager is illustrated in the figure.
**Professional Conference Organizer**

Since the presidency of Jacob Hofdijk and me acting as Secretary, the Board and successive Presidents have envisioned to move the organization of EFMI’s conferences under a professional umbrella. The Board enforced a task force with Alfred, Lacri and Patrick supporting me to concretize the principle of having a PCO supporting the organization of EFMI’s conferences. It took dozens of hours of work, discussions and meetings, to design a specification book, open a tender to 10 PCO, managing the questions, analyzing and organizing the answers records, ranking the results, establishing a short and finally choosing the best candidates to start long discussions and negotiations to find a win-win path between EFMI and the PCO. However, finding a way between the history and the culture of EFMI and the requirements of professional conference organizers is a difficult way. As a paradigmatic example, amongst many others, one can take the tight and important relationship between EFMI and the National Societies, leaving to the latter the opportunity to submit bids for our MIE conferences, proposing locations, dates, satellite events, amongst others. Moving to a profit-driven approach to conference introduces strong pressure to focus on specific locations, usually already under contracts with the PCO. Our Special Topic Conference are another example for the need of a more structured approach. In our history, STC Conferences have very special characteristics. The first one is that they always been carrying the ideal of being strong scientifically grounded, sometimes on very specific topics, and are usually supported by our working groups. And thus, they have usually an attendance of around 100 people of highly ranked experts or interested scientists, or young scientists, in this domain. Which implies that the registration fee has always been kept very low, and efforts made to promote attendance of these young people. They can be located anywhere in Europe, including places with poor connections, little accommodation capacity, and don’t require large conferences infrastructures. However, STC conferences have the same high-quality publication path as our main MIE conferences, which leads to the last characteristics, that STC conferences have usually low, to very low, budget. As part of the umbrella contract, we thus proposed a co-financing structure allowing to use part of the profit our main MIE conferences to support our smallest, dedicated, STC Conferences. I think that this is an example of the intention behind the work to have an umbrella PCO contract: building a coherent organization of our conferences that support the overall goals of EFMI, rather than having unique, atomic, events, completely disconnected one from the other.

**European projects**

Thanks to the effort of John Mantas and Patrick Weber mostly, since the H2020-SC1-2016-CNECT call, EFMI can apply for EU funded projects.

We have been successfully involved in two EU projects. The CrowdHEALTH is an international research project partially funded by the Horizon 2020 Program of the European Commission that intends to integrate high volumes health-related heterogeneous data from multiple sources with the aim of supporting policy making decisions. The project started in March 2017 and will finish in February 2020. John Mantas and Patrick Weber are heavily involved.

The FAIR4Health project has recently been accepted and is still in negotiations. The overall objective of FAIR4Health is to facilitate and encourage European Union Health Research community to FAIRify, share and reuse their datasets derived from publicly funded research initiatives through the demonstration of the potential impact that such a strategy will have on health outcomes and health and social care research. Carlos Luis Parra Calderón is the coordinator and Patrick Weber strongly involved for EFMI.

I wish our new President Lăcrămioara Stoicu-Tivadar, the Board, the Council and all the EFMI community full success!
8.1.2 Lăcrămioara Stoicu-Tivadar (from October 2018)
President activities during 2018 include:

- Organizing virtual Board meeting to define EFMI working priorities for 2019 and aggregating the new team
- Participating in Slovenija at the invitation of the National Society President and EFMI representative to the 30th anniversary of SDMI
- Virtual/face to face calls with the Vicepresident, Secretary, and Treasurer to identify future priorities and actions.

Goals for 2019: organize EFMI events, support the EFMI European projects, define and participate in EFMI-EUSEM project as first of its kind in EFMI (with active VP support), continuing the PCO contract (with active Secretary support), managing current issues during monthly activities and meetings, defining and organizing the Young EFMI initiative.

8.2 Vice President – Lăcrămioara Stoicu-Tivadar / Catherine Chronaki

8.2.1 Lăcrămioara Stoicu-Tivadar (January to October 2018)
VP activities during 2018 include:

- Participation to face to face and virtual Board meetings – supporting current activities related to EFMI WGs in participation in events, strategy, EFMI promotion on different media, indexation of EFMI conference publications, increasing cooperation with similar organizations.
- Updating EFMI WGs list and activities - Status end of 2018: 14 WGs updated activity, 2 ended activity, WGs EDU, EVAL, HIIC, LIFOSS changed chair due to EFMI rules, former chairs ending 2 WG chairing mandates, 1 WG updated name
  - EDU – Education, new chair: Kaija Saranto, University of Eastern Finland
  - EHR – Electronic Health Records
  - EVAL – Assessment of Health Information Systems, new chair: Philip Scott, University of Portsmouth.
  - HIIC – Healthcare Informatics for Interregional Cooperation, new chair: Arriel Benis, Holon Institute of Technology
  - HIME – Health Information Management Europe
  - HOFMI – Human and Organisational Factors of Medical Informatics
  - IDeS – Information and Decision Support in Biomedicine and Healthcare
  - LIFOSS – Libre/Free and Open Source Software, new chair: Tom Kane, Edinburgh Napier University
  - NURSIE – Nursing Informatics in Europe, becomes NI- Nursing Informatics
  - PCI – Primary Healthcare Informatics
  - PPD – Personal Portable Devices
  - SSE – Security, Safety and Ethics
  - MIP – Medical Image Processing
  - THI – Translational Health Informatics
- WG chairs meetings to support functional activities during 2018 events - decisions on future activities, asking for financial support for active WGs, starting discussions on what active WGs mean.
- Supporting STC2018 in Zagreb, Croatia (EDU, IDeS) and MIE2018 conferences, scientifically, organizing activities in relation with WGs and communicating with WG chairs for contributions.
- Supporting EFMI advertise on social media

Current WG activities are mentioned for each WG at https://www.efmi.org/, Working Group.
• EFMI WGs IdeS and EDU organized together with LOC the 2018 EFMI STC Conference in Zagreb, Croatia, https://www.efmistc2018.org/
• EFMI WG EDU organized ICIMTH 2018, Athens, Greece, http://www.icimth.com/icimth2018

Main activities for 2019: new chairs co-chairs for WGs according to Statutes, updates, participation in MIE ans STC, WG chairs meetings during MedInfo2019 (Lyon) & STC 2019 (Hanover) consolidating WGs activity through: financial support, webinars/face to face presentations, and marketing, continuing cooperation with IMIA WGs.

8.2.2 Catherine Chronaki (from October 2018)
In 2018, honored to be elected vice-president, I initiated two initiatives:

A. Engagement of WG in Cooperation with medical associations in areas of joint interest:
In this context, working with the incoming president Lăcrămioara Stoicu-Tivadar prepared the ground for a Joint Task Force with the European Society of Emergency Medicine (EUSEM): A memorandum of understanding (MoU) was prepared between the European Society of Emergency Medicine (www.eusem.org) and EFMI with duration two years 2019-2020. The initiative was signed by the president of EFMI and EUSEM.

The European Society for Emergency Medicine (EUSEM) is a non-profit making scientific organization with an aim to promote and foster the concept, the philosophy and the art of Emergency Medicine throughout Europe. The main objective of EUSEM is to help and support European countries to implement the specialty of Emergency Medicine. Born as a society of individuals in 1994 from a multidisciplinary group of experts in Emergency Medicine, since 2005 EUSEM also incorporates national society members. There are currently 36 European national societies of Emergency Medicine. The mission of EUSEM is to promote and develop research, education, practice and standards of the specialty of Emergency Medicine throughout Europe. In the preparation of the MoU areas of common interest were identified:

a) common description of processes/workflows, performance indicators, structures in Emergency Medical Systems and Emergency Departments with emphasis on the use of digital health technologies. A specific project of interest is the standardization of the main concern/complaint and its link to care protocols and health records. There is an internally supported EUSEM project on this topic.

b) development of educational module(s) related to medical informatics that could be offered in the EUSEM congresses. We could also consider a module developed by EUSEM for medical informatics offered as tutorial in EFMI congresses. For accreditation of educational modules, EUSEM works with EUMS, the European Union of Medical specialists.

The Executive Board approved support of the Joint Task Force with 20000Euro for two years.

One of the first tasks of the EUSEM-EFMI Task force will be to set up a charter that sets up in detail joint activities and deliverables for the cooperation. WGs of EFMI, as well as representatives of Full Members (National Societies) and Institutional Members are encouraged to participate in the joint WG to be established in 2019.

B. EU-China Health Summit on Medical Innovation and Medical Technology Transfer: Blueprint for a joint mission on Aging. Following the unsuccessful submission of an EFMI-CMIA joint project proposal called EU-China Health to the European Commission spearheaded by myself and Patrick Weber, we discussed with the Chinese Medical Informatics Association
(CMIA), the possibility of organizing the first EU-China Health Summit in Lyon, co-located with MedInfo2019 on a shared cost-basis. The proposal was approved by the EFMI board and a program committee was set up from interested members among the leadership of EFMI (WGs and Executive Board). The EU-China Health Summit is planned for August 25, 2019 in Lyon, with support of the MedInfo2019 PCO. EFMI WGs were informed and encouraged to actively participate.

C. EFMI-WG health: In the last quarter of 2018, I reached out to EFMI-WGs leadership to understand how the council and the board can further support them. I also encouraged the Anne Moen, past EFMI Chair to initiate a new WG on Citizen and Health Data for EFMI to work on the societal and technical problems of the emerging data economy.

In 2018, we had the following WG Chair transitions:

- EDU WG: Kaija Saranto
- EVAL WG: Philip Scott
- HIIC WG: Arriel Benis
- LIFOS W: Tom Kane

Looking forward to 2019, we expect the following WG Chair transitions:

- HOFMI
- HIME
- E H R
- PCI
- PPD
- THI

8.3 Past President – Anne Moen / Christian Lovis

8.3.1 Anne Moen (January to October 2018)

Meetings of IMIA

Participated in the Board meeting held in conjunction with the MIE2018 conference in Gothenburg, Sweden, April 2018, and the planned Board Meeting and General Assembly in Colombo, Sri Lanka, October 2018. It was an honor to facilitate for the IMIA Board meeting as well as the Inaugural meeting of IAHSI – the Academy - in conjunction with MIE2018 in Gothenburg in April. As EFMI – IMIA Regional Vice President I am member of the IMIA Nominating Committee. After EFMI STC held in Zagreb, Croatia Oct. 15-16, 2018, Prof Lăcrămioara Stoicu-Tivadar, of Romania takes the office as EFMI President and current president Christian Lovis takes the over as Part President EFMI and regional VP of IMIA.

Collaboration between EFMI and IMIA

Collaboration of the EFMI and IMIA WG collaboration continues, and we have shared information about EFMI activities, including the EFMI WGs, in the EFMI Regional report for the IMIA Yearbook 2018. EFMI continues to establish overview of Health and Biomedical Informatics educational programs in Europe, and will conclude current activities in the near future. 1 or 2 Health Informatics educational programs in the EFMI region (University of Eastern Finland and University of Goettingen) have been through re-accreditation, with regional EFMI/IMIA members’ active contribution to the process. Systematic regional involvement in accreditation / re-accreditation processes should be further explored as a component in development of SOP for the IMIA accreditation.

Outreach

Participated in the following outreach activities;
the EU eHealth stakeholder group – as rapporteur “Citizen and Health Data”, DG Sante, European Union. Final draft of report enclosed.

Addressed the EU eHealth Action – connected to the Biannual Work program, at the eHealth Summit 2017 “---” Lisbon, Portugal June 21 2018

EU Digital Assembly, June 25-26, Sofia, Bulgaria

In addition I held the role as SPC chair, responsible for the scientific program and affiliated events at MIE2018, hosted in collaboration of EFMI, SFMI and the Vitalis 2018 event in Gothenburg Sweden, please see separate report.

Other activities
I have participated actively in the AC2 and look forward to sum up some of the work in this group. I also look forward to continue engagement as EFMI participant in the Horizon 2020

8.3.2 projects Fair4Health and CrowdHealth. Christian Lovis (from October 2018)

Meetings of IMIA

Participated in the board meeting of March 24th, 2019; held in San Francisco.

Christoph Lehmann, President (CL)
Petter Hurlen, Secretary (PH)
Johanna Westbrook, Treasurer (JW)
Hyeoun-Ae Park, Past President (HAP)
Elizabeth Borycki, VP Special Affairs (EB)
Daniel Luna, VP Membership (DL)
Patrick Webber, VP MedInfo (PW)
Helen Wu, VP WG and SIGs (HW)
Fernando Martin Sanchez, MedInfo VP Elect (FM)
Andre Kushniruk, North America (AK)
Antoine Geissbuhler, WHO (AG)
Brigitte Seroussi, VP Services (BS)
Christian Lovis, EFMI (CL)
Ghislain Kouematchoua Tchuitcheu, HELINA (GK)
Hiroshi Takeda, IFIP (HT)
Marcelo Silva, IMIA-LAC(MS)
Michio Kimura, ISO (MK)
Reinhold Haux, President IAHSI
Riyad Al Shammar, MENAHIA (RAS)
Sabine Koch, President-Elect (SK)
Vajira Dissanayake, APAMI (VD)

a) A proposal to create a new SIG for emerging professionals / students. It was considered favorable by the Board
b) After discussion about accreditation/education competencies about cost efficiency of the process, and regional constraints such as Bologna in Europe, it has been decided that there is a need to involve the GA in deciding in what direction accreditation should take
c) Medinfo conferences: Organization of Medinfo 2019 reported to go well. Some pendings with Medinfo 2017: a letter will be sent to CMIA.
d) Call for nominations for IMIA Board positions was open until April 1st
e) IMIA is still looking for new funding opportunities.

Locations for 2019 & 2020 Board meetings (CL)

a) August 25, 2019 – Lyon, France
b) Feb/Mar/Apr 2020 – MIE 2020 – Geneva/April?
c) August/Sept/Oct 2020 – IMIA LAC – Iguazu/ October?
d) Feb/Mar/Apr 2021 – KOSMI – South Korea?
e) August 2021 – Sydney, Australia

**Collaboration between EFMI and IMIA**

Collaboration of the EFMI and IMIA WG collaboration continues. Accreditation of Health Informatics education is an important example to be promoted.

### 8.4 Secretary - Alfred Winter

- Maintaining the EFMI Archive [https://www.efmi.org/owncloud](https://www.efmi.org/owncloud) and organizing technical support.
- Organizing and journalizing board meetings: For details see “Synopsis of board activities” before.
- Organizing and journalizing council meetings.
- Organizing and filing membership matters.
- Contributing to new model for organizing EFMI conferences and for collaboration with PCOs.
- Editing this EFMI report.

### 8.5 Treasurer - Ragnar Nordberg / Andrej Orel

#### 8.5.1 Ragnar Nordberg (January to October 2018)

The project regarding improving our visibility on Internet have developed very well during this year and the AC2 projects is to be finished this year. Both projects have been financed with money from EFMI’s assets. Another project which has started this year is the collaboration with a PCO (Professional Conference Organizer) regarding future MIE conferences. The expenses for this project has up to now been small.

All board meetings, except two, have this year been done via Skype and therefore been rather inexpensive.

The Mie 2018 in Gothenburg was successful and have created a good surplus. The EFMI part of the surplus will end up in almost the same as the successful MIE in Munich which means almost 25 000 EURO. This is better than what EFMI got from the former MIE in Gothenburg in 2008. The dark clouds over MIE in the future seem to be the increasingly tough competition from more and more conferences around the world. MIE 2018 conducted a massive Internet and e-mail campaign, but we received no more than about 600 registered participants. In 2008, we traveled to a large number of conferences worldwide and announced for MIE 2008 and it resulted in 750 registered participants, but it also cost a lot of money so the net of it was certainly negative. It is therefore very important that you, all members of the EFMI, advertise MIE on your home plans. It is also harder and harder to find people who have time to unpaid engagement in projects such as MIE conferences. It is therefore important to consider the possibility of allowing a professional organization to help us with the MIE conferences.

Another difficulty we face now is to keep in touch with our National as well as Institutional / Industrial members, which in turn results in more and more work to bring in membership fees.

The 2017 balance sheet was presented at the Council meeting during MIE 2018. For the balance sheet up to October 30 2018 see below.

Below is two tables showing the situation with payments from our members. Armenia has asked for withdrawal from EFMI without having to pay off its debts. The Board has agreed to this.
AGFA jumped off as an industry member because “they are no longer interested in our business”.

If someone knows someone in the member organizations that have not paid their fees, we are very grateful if you contact them and ask for the name of a person we can contact. Send the new contact to Andrej.

Item series 7000 is new and proposed by the treasurer because 7001 is going towards its end and 7002 is periodically filled up.

Item 9000 is re-born after a discussion in the Board. The reason is that it is the responsibility of the Council to decide how much investments, in the coming year(s), that shall be made for improvements in the operation of EFMI.

8.5.2 Andrej Orel (from October 2018)
No report for 2018

8.6 Institutions Membership Officer - Catherine Chronaki / Louise Pape-Haugaard

8.6.1 Catherine Chronaki (January to October 2018)
As a Institutions Membership Officer, my activities have been as follows:

(a) Contributed to a number of workshops in MIE2018 in Gothenburg, which paved the way towards cooperation with the European Society for Emergency Medicine and highlighting the important of Health Records and Patient Summaries for Children
(b) Organized a Datathon in MIE2018 in collaboration with Institutional Members and WG LIFOS. The Datathon was on Children with Asthma.
(c) Collaborated with Patrick Weber and served as main author on the submission of the EU-China Health proposal aiming to strengthen cooperation with the Chinese Medical Informatics Association, the European Society of Cardiology, and several other societies that are visible in the European level.
(d) Facilitated the introduction of new institutional members to EFMI, highlighting the value of participation in EFMI events and WGs.
(e) Organized a meeting for institutional members in MIE2018

8.6.2 Louise Pape-Haugaard (from October 2018)
No report for 2018

8.7 Publication Officer - Simon de Lusignan
No report for 2018

8.8 Press- and Information Officer - Alexander Hoerbst
No report for 2018
8.9 Executive Officer - Mira Hercigonja-Szekeres

MIE 2018:
EFMI MIE 2018 “Building Continents of Knowledge in Oceans of Data: The Future of Co-Created eHealth” was organized by SFMI (Swedish Federation for Medical Informatics) and it was held 24th – 26th April 2018 in Gothenburg, Sweden.

There were all in all 512 submissions, and 397 of them are accepted as full papers, short communications, posters, workshops, panels, demonstrations and tutorials. Full papers were published in Proceedings in IOS Press Series Studies in Health Technology and Informatics 2018 according Agreement between EFMI and IOS Press as Volume 247, ISBN print 978-1-61499-851-8, ISBN online 978-1-61499-852-5.

Keynote speakers were:
Patricia Flatley Brennan, RN, PhD. Director, National Library of Medicine
Carmen LaPlaza-Santos, Deputy Head of Unit – eHealth, Wellbeing and Ageing DG Communication Networks, Content and Technology European Commission
Marie-Christine Jaulent, Research director at the French national medical research institute (IN-SEMR)
Robin Farmanfarmaian, VP Actavalon and author of “The Patient as CEO: How Technology Empowers the Healthcare Consumer”.

EFMI MIE 2018 was organized in co-arrangement with Vitalis – the largest eHealth event in Scandinavia. Vitalis is vibrant conference and very big exhibition, and covers every aspect of business development in health, care and welfare where IT solutions provide support and assistance. This combination brought benefits for both organizers, visitors were able to join both manifestations and participants were able to expand their approaches and knowledge.

SPC and LOC worked hard in organization and according to EPOS. EFMI EO had cooperated successfully with SPC and LOC, and has taken part in the organization of Conference.

STC 2018:
STC 2018 was held in Zagreb, Croatia on October 15-16 as the 2018 annual EFMI Special Topic Conference (STC). Main theme of the STC was: “Decision support system and education - help and support in healthcare“. This theme supported the cooperation between the two EFMI Working Groups (WG) in the professional and scientific organization of the STC: WG Education (EDU) and WG Information and Decision Support in Biomedicine and Health Care (IDeS). The Conference was an opportunity to meet researchers, data scientists, practitioners, decision makers, entrepreneurs from different domains of application of medical information technology to exchange experiences specifically in areas of support for decision-making and education. It should be emphasized that a larger number of young scientists participated, who were able to present their work and to learn about the work of their colleagues in Europe and the world.

The Co-chairs of Special Program Committee were professors John Mantas (Health Informatics Laboratory, National and Kapodistrian University of Athens, Athens, Greece) and WG IDeS Chair Zdenko Sonicki (Department of Medical Statistics, Epidemiology and Medical Informatics, University of Zagreb, School of Medicine, Andrija Stampar School of Public Health, Zagreb, Croatia). The invited speakers were WG EDU Chair Kaija Saranto, PhD, RN, FACMI, FAAN, FIAHSI (Professor in Health and Human Services Informatics (HHSI) at the University of Eastern Finland, Department of Health and Social Management), and Mark Ebell (family physician and Professor of Epidemiology and Biostatistics at the University of Georgia, US). In their lectures, the invited speakers brought particularly interesting contents in the fields of education and decision support. All accepted submissions were published: the 5-pages papers (52) in Conference Proceedings published by IOS Press (Mantas, J., Sonicki, Z., Crișan – Vida,

Head of the local organizers was Marijan Erceg, PhD, MD, lecturer at University of Applied Health Sciences, head of Department in Croatian Institute for Public Health and CroSMI president. The venue for the STC 2018 was in the heart of Zagreb, the city where professor Andrija Štampar did his great work. Prof. Andrija Štampar (1888-1958) is founder of the School of Public Health in Zagreb, he is one of the leading persons in founding the World Health Organization (WHO) and he was chairman of the first WHO Assembly in 1948.

The comments of the participants were very positive, and EFMI STC 2018 can be considered an interesting scientific and well-organized meeting in the series of EFMI conferences.

This conference was a special event because it was the last conference as Board members for our dear friends and colleagues Anne Moen and Ragnar Nordberg.

**STC 2019:**
The GMDS and Thomas Deserno applied new Bid for EFMI STC 2019. This new bid was accepted at the 77th EFMI Council meeting, more precisely after that meeting by electronic voting.

According this bid EFMI STC 2019 is dedicated to Prof. Reichertz. The Peter L. Reichertz Institute for Medical Informatics (PLRI) hosts the meeting on behalf of the GMDS in collaboration with EFMI Translational Health Informatics Working Group from April 4th to April 9th, 2019, at the historic Leibniz House, which is located directly in the city centre of Hannover, Germany.

On Wednesday April 10th is the day when Peter L. Reichertz Symposium will be held at the Hannover Medical School. The Peter L. Reichertz Symposium (PLT Symposium) would be organized by the PLRI in honour of Peter Leo Reichertz, who was a pioneer in applying information and communication technology (ICT) not only to health care but also to health science research.

According the bid:
- Head of the Conference: Thomas Deserno
- Scientific Program Committee: Amnon Shabo (Shvo) (Chair), Inge Madsen (Co-Chair), Hans-Ulrich Prokosch, Kristiina Häyrinen, Klaus-Hendrik Wolf, Fernando Martin-Sanchez, Matthias Löbe.
- Local Organizing Committee. Thomas M. Deserno (Chair), Michael Marschollek (Co-Chair), Martin Dugas, Jürgen Stausberg, Alfred Winter.
- PLR Symposium Committee: Reinhold Haux (Chair), Otto Rienhoff, Rolf Engelbrecht.

Keynote speakers:
- Prof. Dipak Kalra, President of the European Institute for Innovation through Health Data. The speech title: Raising the impact of real world evidence.
- Dr. Pierre Meulien Executive Director of The Innovative Medicines Initiative (IMI). The speech title: How to harness big data for the benefit of patients.

The conference proceedings would be published by IOS Press in Series Studies in Health Technology and Informatics.

**MIE 2020:**
The bid from Prof. Christian Lovis on behalf of the Swiss Society for Medical Informatics that the EFMI MIE 2020 will be organized in Geneva, Switzerland was accepted at 79th Council Meeting in Zagreb.
Venue and dates: The International Centre for Conferences (CICG), from April 28th to May 1st, 2020.
Main theme: Personalized Health digitalization to leverage health, care and research.
Local Organization Committee: Frédéric Ehrler (Chair), members: to be defined.
Scientific Program Committee: Inge Madsen (Chair), Christian Lovis (Vice-Chair), Amnon Shabo, Ulrich Sax.
The organizers expect to that they can attract at least 500 participants to come to MIE2020 in Geneva.

STC 2020:
There is an intent done by Andrej Orel that STC 2020 would be organized in Ljubljana, Slovenia, in the period from second half of October and first half of November 2020.
Intended general topic: Safety, security and privacy in e-health.
Intended EFMI WGs involved:
SSE (Safety Security and Ethics); with a possible cooperation with the equal WG from IMIA,
HIIC (Health Informatics for Interregional Cooperation
LIFOSS (Libre/free and Open Source Software).

MIE 2021:
There is an intent communicated by John Mantas on behalf of the Greek Biomedical and Health Informatics Association (GBHIA), April 2021, Athens, Greece.
9 Appendix 3: Working group reports

9.1 EDU – Education in Health Informatics

Chair:
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Co-Chair:
Emeritus Professor Arie Hasman
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University of Amsterdam, The Netherlands
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Main Objectives:
The introduction of eHealth applications as well as of the Biomedical and Health Informatics (BMHI) discipline into the health care domain requires high quality educated and trained health care professionals in the field. Education is considered as the most appropriate tool to improve greatly the acceptance attitudes and behaviour of the professionals working in the health care environment towards eHealth applications. EFMI is well-aware of the importance of Education and in its history the working group on education was the first working group to be established. Since education has an international value and there are no borders in its objectives, the working group seeks to achieve International cooperation in its main objectives which they may be summarised as follows: information on existing programs and curricula in the field, dissemination of experiences in implementing educational programs, evaluation, and assisting of programs, and finally promoting certification of users in BMHI knowledge and skills.

A more detailed reference to the objectives can be found below:

- to disseminate and exchange information on Biomedical and Health Informatics (BMHI) programs and courses
- to exchange experiences of how BMHI is taught and to improve the implementation
- to utilize the developed by AC2 database on programs in BMHI education
- to disseminate and participate in developing international recommendations on BMHI education
- to support BMHI courses and exchange of students and teachers within the EFMI countries
- to promote and foster the accreditation process of BMHI programs in Europe based on AC2 Initiative
- to assist the AC2 process of certification of knowledge and skills of users in BMHI
- to investigate the possibility of establishing summer courses organised by the WG EDU.

Activities:
- During the joint Board meetings of IMIA and EFMI the issue of representation of EFMI in the accreditation process of academic programs was raised and it was agreed that EFMI will be presented in the accreditation committee and EFMI will be mentioned in
the accreditation certificate whenever an accreditation is taking place in an EFMI country.

- Presentation of WG EDU activities during the recent STCs, MIEs and MEDINFOs.
- The activities of the WG EDU and important outcomes will be cited in the new website of the WG EDU
- Enhancing the cooperation between EFMI and IMIA in the accreditation process
- Providing an operational website for the WG
- A number of educational related papers were presented during the International Conference in Informatics, Management and Technology in Healthcare on 2013-2019.
- An Educational Plenary Panel Session was organized at MIE2018.
- WG EDU co-organised the EFMI STC in Zagreb 2018. One of the two major themes was on Education.
- A workshop of the WG EDU was organised at MIE2017.
- WG/Panel meetings were organised at Medinfo2017.
- A workshop of the WG EDU was organised at MIE2016 in Munich.
- A workshop/panel of the WG EDU in MIE was organised 2014 in Istanbul.
- Investigating the logistics in supporting a summer course in BMHI.
- A panel discussion was accepted and organised during Medinfo 2013 in Copenhagen for the accreditation process. In the panel besides the chair and co-chair of the WG representatives of AMIA and IMIA joined exchanging experiences and presenting intended activities in accreditation. It was attended by more than a hundred participants.
- A paper prepared by the chair and co-chair was presented as oral presentation at Medinfo 2013 in Copenhagen regarding the accreditation process. It was well accepted.
- Enhancing the Accreditation process in EFMI.
- Exploring Certification process for Health Informatics.

Relevant Recent Publications:


Jaspers MW, Mantas J, Borycki E, Hasman A. IMIA Accreditation of Biomedical and Health Informatics Education: Current State and Future Directions. Yearbook of medical informatics 26 (01), 252-256

9.2 EHR - Electronic Health Records

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Co-Chair:
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Website: http://wg.efmi.org

No report for 2018

9.3 EVAL - Assessment of Health Information Systems

Chair:
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Co-Chair:
Elske Ammenwerth
UMIT - University for Health Sciences, Medical Informatics and Technology, Hall in Tyrol, Austria
Email: elske.ammenwerth@umit.at
Main Objectives:
Information and communications technologies (ICTs) are being used increasingly in health care. It is evident that the use of modern ICT offers tremendous opportunities to reduce clinical errors, to support health care professionals, and to increase the efficiency of care. However, there are also hazards associated with such technologies. Therefore, rigorous, generalizable evaluations of ICT applications in health care are absolutely necessary. Based on this, the aims of the working group are:

- to foster transdisciplinary dialogues between experts from informatics, medical informatics, economics, health care, health services research, clinical epidemiology, biometry, psychology, sociology, ethnography, organizational development, operations research and other evaluation fields, on a European level, and to encourage exchange on methodological issues between researchers from different traditions;
- to offer an opportunity to share knowledge with the aim of obtaining profitable cross-fertilization among different fields of expertise and especially between quantitative and qualitative research;
- to promote a combined research agenda to develop frameworks and toolkits for information systems evaluation, offering guidelines for an adequate combination of evaluation methods and tools;
- to discuss and clarify the networking needs for long-term evaluation research in medical informatics, and to promote combined research proposals at a European level.

Relevant Activities 2018:
- The working group published a position paper entitled “The safe and effective use of shared data underpinned by Stakeholder Engagement and Evaluation Practice” in the IMIA Yearbook of Medical Informatics 2018.
- The working group continued its fruitful cooperation with the IMIA Working Group on Technology Assessment and Quality Development. Among others, regular skype meetings of the WGs core group were organized.
- Members of the working group were involved in workshops and presentations at Medical Informatics Europe 2018 (MIE 2018) in Gothenburg.
- All members of the working group have published on topics related to health IT evaluation, here are a few examples:
Activities planned for 2019:

- Group members are finalizing an edited book on health informatics theories, working title: Applied interdisciplinary theory in health informatics: a knowledge base for practitioners, editors: Dr Philip Scott, Prof Nicolette de Keizer, Prof Andrew Georgiou. The book will be launched at Medinfo 2019 in Lyon.
- The WG participates, together with the IMIA WG, in the public consultation on the WHO Draft Global Health Strategy on Digital Health
- The WG plans a submission to the new journal Lancet Digital Health
- The WG will have a working group meeting at Medinfo 2019, Lyon, together with the IMIA WG.
- The WG will organize a panel session “Celebrating the Value of Applied Theory in Health Informatics: How Can We Broaden Appreciation and Further Advance the Field” during Medinfo 2019 in Lyon.
- Three WG members contribute as Editorial Board Members to a special issue of the International Journal of Medical Informatics on Evaluation of IT in Primary Care.

Relevant WG Publications 2018:


9.4 HIIC - Health Informatics for Interregional Cooperation

Chair:
Arriel Benis
Faculty of Technology ManagementHolon Institute of Technology, Israel
e-mail: arrielb@hit.ac.il

Co-Chair:
Mihaela Crisan-Vida
Relevant Activities 2018:

- The chair of EFMI WG EFMI as changed in April 2018. Arriel Benis replaced Lăcramioara Stoicu-Tivadar as chair.
- The WG HIIC is continuing communicating its activities and projects in order to initiate new collaboration and partnerships. A 2 page paper has been submitted and accepted for presentation as a poster at MedInfo 2019 “The EFMI Working Group “Healthcare Informatics for Interregional Cooperation”: An evolving strategy for building cooperation bridges”.
- Furthermore, the workgroup started research for developing an online multilingual dictionary focusing on Medical Informatics terms. (a.k.a. EFMI dictionary).

Activities planned for 2019:

- Continuing expending the WG HICC over Europe by recruiting new members
- Continuing research, development, implementation, and dissemination of EFMI dictionary.
- Participation in ICIMTH 2019, 19th International Conference on Informatics, Management and Technology in Healthcare Athens (presentation of “EFMI dictionary”, preliminary results)
- Participation in MedInfo 2019, Lyon, France (presentation of “The EFMI Working Group “Healthcare Informatics for Interregional Cooperation”: An evolving strategy for building cooperation bridges”)
- Being involved in different taskforce of EFMI for proving the Interregional Cooperation perspectives

9.5 HIME - Health Information Management Europe

Chair:
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Co-Chair:
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President of IFHIMA
DVMD board member
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Lorraine Nicholson
IFHIMA and IFHIMA-Europe past president
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Website: http://efmi.org
No report for 2018

9.6 HOFMI - Human and Organizational Factors of Medical Informatics

Chair:
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Co-Chair:
Rebecca Randell
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Main Objectives:

- To establish a network of researchers and practitioners interested in the role of human and organisational factors in the use of healthcare technologies.
- To organise workshops, panels and tutorials dedicated to this topic at the Medical Informatics Europe (MIE) conference and other events.
- To disseminate knowledge about the role of human and organisational factors in the use of healthcare technologies through various activities, including journal publications.
- To support exchange and discussion between researchers and practitioners as well as European collaborations.

Relevant Activities 2018:

- A successful HOFMI working group meeting was held at MIE 2018 in Gothenburg. As part of this meeting, plans were made for panel and workshop proposals for MedInfo 2019.
- Two workshops supported by the group took place at MIE 2018:
  - Participatory Inspection-Based Evaluation Techniques: Engaging Clinicians in Usability Evaluations
  - How to overcome barriers to user-based usability evaluations faced with older people?
- A mailing list for the HOFMI working group has been created, to provide working group members with details of relevant conferences and workshops. To join, please sign up at: https://www.jiscmail.ac.uk/cgi-bin/webadmin?A0=HOFMI-EFMI
A LinkedIn group has also been created for the HOFMI working group, to help connect researchers and practitioners working in this area. The group can be found here: https://www.linkedin.com/groups/8448126

**Activities planned for 2019:**
- At the end of May 2019, Romaric Marcilly took over from Rebecca Randell as Chair of the group.
- The working group is supporting the “Context Sensitive Health Informatics - CSHI” conference that will be held in Lille, France, August 23th-24th, just before MedInfo 2019.
- There will be several panels at MedInfo 2019 that are supported by the group, including:
  - Combining Data and Technology for Healthcare Quality Improvement through Audit and Feedback
  - Using Health Information Technology to Transform Healthcare Quality

**Relevant Publications 2018:**
Members of the working group were involved in several publications on human and organizational factors of medical informatics, for example:

**9.7 IDeS - Information and Decision Support in Biomedicine and Health Care**

*Chair:*
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Andrija Stampar School of Public Health
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Website: https://www.efmi.org/workinggroups/ides-information-and-decision-support-in-biomedicine-and-health-care

*Main Objectives:*
Decision support systems (DSS) in biomedicine and health care, in the form of various applications, guidelines or reminders, is applied more often to assist the decision making processes. The complexity of decision-making procedures in these areas caused the development of various decision support systems in order to provide help to the decision makers. DSS are using existing knowledge and evidence, helping the decision maker to make appropriate decision for the specific situation. The quality and comprehensiveness of existing evidence and knowledge that are used in such systems, influence in deriving appropriate decisions, and indirectly affects decision maker’s behaviour. DSS needs to be analysed, systematized, and validated before adopting them for routine use because of its influence on decisions and decision makers.
- Analysis of currently available Decision Support Systems in biomedicine and health care, especially in the European environment
- Classification of existing Decision Support Systems
- Definition of the recommendations set for successful evaluation and implementation of the Decision Support Systems

**Relevant Activities 2018:**

- Working group meeting in Croatia during EFMI STC 2018, 14-16 October 2018, Zagreb, Croatia
- GO-FAR score validation in Croatian regional settings (research project)
- Individual presentations at different meetings focused on decision support topics

**Activities planned for 2019:**

- Presentations at BIOSTAT 2019, 24th International Scientific Symposium on Biometrics, Zagreb, Croatia, 5 - 8 June 2019
- Working group meeting in Croatia during BIOSTAT 2019 in Zagreb, Croatia
- GO-FAR score validation in Croatian regional settings (research project)
- Participation at 14th Symposium Medicinska Informatika 2019., to be organized by the Croatian Society for Medical Informatics
- Working group meeting during 14th Symposium Medicinska Informatika 2019., to be organized by the Croatian Society for Medical Informatics
- Individual presentations at different meetings focused on decision support topics

### 9.8 LIFOSS - Libre/Free and Open Source Software

**Chair:**
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**Co-Chair:**
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Website: http://www.efmi.org/index.php/workinggroups/lifoss-librefree-and-open-source-software

No report for 2018
9.9 MCRO/MBDS - Casemix, Resources Management and Outcomes of Care

Chair:
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No report for 2018

9.10 MIP - Medical Image Processing

Chair:
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Co-Chair:
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No report for 2018

9.11 NLU - Natural Language Understanding

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Co-Chair:
Julien Gobeill
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No report for 2018
9.12 EFMI NI - Nursing Informatics in Europe

Chair
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Co-Chair
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University West, Sweden.
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Website: https://www.efmi.org/workinggroups/nursie-nursing-informatics-in-europe
Facebook: Nursing Informatics in Europe, @efmi.ni
Twitter:

Vision:
“Our vision is to be an active and progressive network, which supports nursing informatics across settings in Europe”.

Mission:
To function as a working group under the European Federation for Medical Informatics (EFMI).
To support nurses and nursing organizations in the European countries with information and contacts in the field of informatics.
To use social media to share knowledge between members.
Selection of members
Current membership countries with appointed representatives are Austria, Belgium, Croatia, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Israel, the Netherlands, Norway, Portugal, Romania, Slovenia, Spain, Sweden, Switzerland and the UK. In addition, observers may attend annual assemblies at MIE conferences.

Activities: Since MIE Manchester the WG have been working with our overall strategy:
- To recruit ACTIVE AND INNOVATED country representatives
- To increase the WG’s activity, influence and visibility

The board of the EFMI NI Working Group have extended the Board with a communication officer, who is responsible for the contact with our members and recruiting new members.

This board has been working on a strategy for the first year, including:
1. Terms of Reference: Done
2. Change of name for the WG to NURSING INFORMATICS (NI). Done
3. A logo for the WG done
4. A vision and mission for the WG Done
5. A strategy for using social media. The first step is an active Facebook page: “Nursing Informatics in Europe”. Done. We are still working on a more activity on social media and are starting a twitter account.
6. A strategy for being more visible at MIE 2018 conference. Done. We had posters at EFMI booth and had a competition for the best NI presentation.
7. Working internationally. Done. Meetings and a joint paper with AMIA and IMIA nursing working groups.
8. A strategy for interventions for the upcoming MEDINFO in Lyon 2019:
   - Inge Madsen, Track chair at the organization committee.
   - Joint workshop with AMIA –NI: Supporting Quality of Care by Co-Creation in the International Nursing Informatics Community. Inge Madsen, Gregory L. Alexander, Laura-Maria Peltonen, Judy Murphy
   - Invited panel: Women in Health Informatics: perspectives, leadership and mentoring for diversity. Anne Moen, Catherine Chronaki, Inge Madsen, Elena Petelos, Stavroula Kalaitzi, Suzanne Bakken
   - Guide tours
   - Active on social media
   - General Assembly
   - Nursing Informatics board: Chair, rapporteur and social media responsible at the Nursing session at EU – China Workshop, MEDINFO, Lyon.

9.13 PCI - Primary Health Care Informatics
Chair:
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No report for 2018
9.14 PPD - Personal Portable Devices

Chair:
Lenka Lhotska
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Co-Chair:
Peter Pharow
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Germany
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Website: http://wg.efmi.org

Main Objectives:
EFMI Working Group (WG) Personal Portable Devices (PPD) aims at being a European competence center to watch ongoing activities and to provide knowledge to policy makers and architect designers involved in the deployment of projects related to personalized, portable devices (PPD) such as cards, tokens, wearable and portable devices, sensors and actuators, and similar technologies including advanced network infrastructures mainly in the domain of healthcare and welfare. WG PPD links its activities to the domain of Ambient Assisted Living by liaising with the IMIA WG on Smart Homes and AAL.

Furthermore, WG PPD representatives are actively involved in standardization activities in various fields and domains including security, safety, management, ethics, medical devices, and sensor networks. Members of WG PPD act as a kind of ambassador to additional standards developing organizations in various other domains, where aspects of personal portable (mobile) devices are addressed.

Moreover, WG PPD actively supports the organization of meetings of various kinds to disseminate the WG achievements, and to exchange knowledge and information about any topic linked to the interest of the WG PPD members. The main topics the WG PPD is focused on are:

- Personal(ized) Portable Devices, sensors and actuators as well as the underlying networks enable personal and even personalized health service provision going far beyond traditional care procedures. It includes wellness aspects, lifestyle aspects, and safety aspects. Applications from other domains stimulate the respective paradigm shift towards personalized services (addressing citizens rather than patients) also in the healthcare and welfare domain.

- The paradigm shift from health cards to personalized devices and sensor networks for providing personal health services addresses various technical, medical, organizational, legal, and standardization aspects of portable devices (EFMI WG PPD) and related work on sensor networks (ISO/IEC JTC1 SGSN). What EFMI WG PPD is aiming at from a technological viewpoint, are aspects of the present and the near future of personal health service provision supported by devices of any technology, any kind and any size either directly applied to the human body, or placed even inside the body.

- Patient safety, data and communication security, ethics and legal issues become more important as the personal devices, wearables and related technologies are penetrating the market. With the expected interconnection with Internet of Things these non-technical issues must be analyzed in depth and recommendations prepared for development of new applications.

Relevant Activities 2018:

- Strengthening the links to relevant societies and their working groups
• Active participation in pHealth 2018, Gjovik, Norway – Lenka Lhotska and Peter Pharow were members of the SPC and Lenka Lhotska is invited as keynote speaker
• Active participation in preparation of the Jana Zvarova Memorial Conference 2018, Prague, Czech Republic
• Active participation in Jana Zvarova Memorial Conference 2018, Prague, Czech Republic – Lenka Lhotska is one of the speakers
• Active participation in the IUPESM World Congress 2018 on Medical Physics and Biomedical Engineering. Lenka Lhotska was Scientific Co-chair of the congress and chaired together with Pirkko Nykänen the main track on medical informatics.

Activities planned for 2019:
• Strengthening the links to relevant societies and their working groups
• Active participation in pHealth 2019, Genoa, Italy – Lenka Lhotska and Peter Pharow are members of the SPC and Lenka Lhotska is invited as invited speaker

9.15 SSE - Security, Safety and Ethics

Chair:
Jaime Delgado
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Barcelona, Spain
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Co-Chair:
Andrej Orel
Marand d.o.o.
Ljubljana, Slovenia
E-Mail: andrej.orel@marand.si

Website: https://www.efmi.org/workinggroups/sse-security-safety-and-ethics

Main Objectives:
Speed up the use of ICT for health care to increase trustworthiness, security and safety of solutions and infrastructure deployed. Promote research, development, education and training on the field of security and privacy in health care. Close collaboration with other EFMI WGs and beyond, as well as with IMIA, to find solutions for trustworthy interoperable health systems and to analyze the impact of new healthcare and health management models to security and privacy.

Relevant Activities 2018:
• During MIE 2018 in Gothenburg, SSE organized a Workshop, jointly with IMIA WG SiHiS, on “EU GDPR - Security implementation in health information systems”.
• The workshop included six presentations lasting approximately ten minutes each, leaving the last thirty minutes for discussion between presenters and attendees. The presentations were around implementation strategies for the EU GDPR in secure e-health, and some of its general security aspects.
• Specific topics were: “How does the EU GDPR support the paradigm changes of healthcare systems and how can it be properly implemented”, “Updating existing e-health systems for GDPR”, “GDPR in e-health – importance of using data protection for research and systems development”, “The GDPR reception in Italy and examples of
support tools”, “Global impacts of the EU GDPR” and “Cybersecurity threats to healthcare”.

Activities planned for 2019:

- Develop a long-term activity plan for SSE, discuss on it and accept the plan in the formal Business Meeting planned for MIE 2020.
- Confirm the way SSE Workshops are functioning. Workshops include research papers, theory papers, methodology and conceptual papers, all mixed to provide the widest possible view on the chosen topic. Workshops should be as interdisciplinary as possible, including researchers from different institutions and research fields. An important part of the workshop’s time is reserved for discussion, small groups or other forms of interaction.
- Develop the visibility of SSE’s work and encourage young experts to participate more actively in the work of the SSE. Promote the LinkedIn group of the WG (https://www.linkedin.com/groups/8624068).
- Consider new activities, such as producing regular Bulletins devoted to specific issues (that could be the basis for future Workshops), re-activating the web site in order to be a real mean of communication between members and to the public outside, etc.
- Organize a new Workshop for MIE 2020 in Geneva. It should be clarified if this will be again a joint workshop with IMIA WG SiHiS. The Workshop topic needs to be discussed. In any case, it will probably include four to six presentations, leaving the last thirty minutes for a discussion between presenters and attendees.

Relevant Publications 2018:


9.16 THI - Translational Health Informatics

Chair:
Amnon Shabo (Shvo)
Philips
E-mail: amnon.shvo@gmail.com

Co-Chair:
Mauro Giacomini
DIBRIS, University of Genova, Italy
E-mail: Mauro.Giacomini@dibris.unige.it
Website: http://www.efmi.org/index.php/workinggroups/thi-translational-health-informatics

Main Objectives:
Translational medicine is a relatively new discipline targeted at removing barriers in utilizing new scientific discoveries in healthcare, moving from bench to bedside, on to communities and finally to policy. The biomedical discoveries need to be accompanied by studies in areas such as health economy as well as sociological and psychological aspects. In order to manage the information generated by each of these disciplines, it is crucial to use advanced informatics that
could fuse the various types of data into computerized systems that support the translational processes.

This Working Group will be focused on the health informatics needed for accommodating the translational challenges. In particular, we will target the following goals:

- Explore a proposal for a Translational Health Information Language to underlie translational info-structure (see details in the document "Towards Translational Health Information Language" under the Files tab)
- Demonstrate feasibility of common translational infostructure for the currently distinct environments of biomedical research and health care
- Support studies focusing on informatics underlying translational research and medicine
- Foster better interrelation of bioinformatics and medical informatics
- Discuss major challenges in the new OMICS era with regard to translational health informatics and analytics

**Relevant Activities 2018:**

- Planned the EFMI STC 2019 (https://stc2019.plri.de/) that will be held in Hanover, Germany, under the auspices of WG THI and will focus on clinical research and clinical trials, among other topics.
- Amnon Shabo (Shvo) is the SPC chair of the EFMI STC 2019 (https://stc2019.plri.de/about/committees)
- NETTAB 2018 is co-chaired by Prof. Mauro Giacomini (http://www.igst.it/nettab/2018/committees/), who is Vice-Chair of this EFMI THI WG; the conference is focused on "Building a FAIR Bioinformatics environment"
- Amnon Shabo (Shvo) delivered a keynote speech at NETTAB 2018 (http://www.igst.it/nettab/2018/) and will include in his talk issues promoted by this EFMI THI WG.

**Activities planned for 2019:**

- Participated in the EFMI STC 2019 (https://stc2019.plri.de/), held in Hanover, Germany, in organization and leadership positions.
- Held a business meeting of the THI WG and elected a new vice-chair.
10 Appendix 4: Reports from Council Task Forces and Committees

10.1 Accreditation and Certification Committee (AC2)

An on-line research was conducted on Google, Coursera, Edx and FutureLearn databases. We are focused on European Universities, Colleges and Institutions that offer educational programs with specializations in Health Informatics, Medical Informatics, Biomedical Informatics, Bioinformatics, Nursing Informatics, Dental Informatics, Health Technology, Healthcare Technology, Medical Technology, Biomedical Technology, Dental Technology, Health Engineering, Healthcare Technology, Medical Engineering and Biomedical Engineering.

Furthermore, the database includes educational programs in specific areas such as Nanomedicine, Medical Electronics, Clinical Informatics, Clinical Technology, Clinical Engineering, Computational Biology, Life Science Informatics, Clinical Data Management, Big Data in Healthcare, Data Mining in Healthcare and Medicine, Digital Health Systems, E-Health, Telemedicine, Healthcare Analytics, Wireless Networks in Healthcare, Internet of Thing in Healthcare etc.

A full list of the universities, colleges, institutions etc. was found. This list contains all universities, colleges and institutions of each country. The official website of every university is carefully checked so as to find educational programs related to our subject. The research is limited only in European countries that are members of European Federation for Medical Informatics (EFMI).

In the first phase, specific information is being collected for each study program: university(ies), study program name, academic level (e.g. Undergraduate/Postgraduate/PhD/Postdoctoral studies), mode, duration and specialization(s). In the second phase, each study program compiles information such as department(s)/faculty(ies), director of the education program, details about contact person of the program, curriculum, time table, learning outcomes, competences, and program’s language. Additionally, Program’s ECTS and academic staff’s details are included. Our interest focuses only on degrees.

In the next phase, the corresponding data of each study program was sent to the EFMI Representatives Members in order to validate the existing information of each educational program in their corresponding countries. It is worth to mention there is pending feedback from certain representatives. Until receiving the feedback from all the countries, we should consider this information as a draft.

Afterwards, the verified elements are uploaded to the website and they are published on the network (http://efmi-ac2.bmhi-edu.org). The public have access to the content. In more detail, the University(ies)/Institution(s), the Faculty(ies)/Department(s), Program’s name, Specialization(s), Academic Level and the official URL are accessible to the public.

This study has covered almost 29 EFMI countries-members out of 32. Almost 1900 universities and colleges were checked in order to find related educational programs at all academic levels. More than 180000 courses in total were checked. More than 1000 educational programs in these domains so far.

It is worth to note that we do not have a clear view on specific countries such as Poland, Russian Federation, Turkey and Ukraine since not all the necessary elements have been found.
11 Appendix 5: Reports from the National Members

11.1 Croatia / Croatian Society for Medical Informatics (CroSMI)

*Representative: Mira Hercigonja-Szekeres*

**EFMI STC 2018**

The main event for CroSMI in the year 2018 was the organization of EFMI STC 2018. The organization was very active and hardworking, especially activities of members of LOC. The one of main tasks of CroSMI Board was to encourage as many members as possible to participate. Especially this was a chance for young members to present their papers and participate, because on that way the international conference was financially much more accessible. Indeed almost 20% of the participants were from Croatia. Apart that CroSMI was being honoured to host STC second time (first time it was at 2007), this conference further boosted the range of activities that will take place in 2019 but also in the coming years.

**The 2018 Annual General Assembly**

Several important decisions have been made at the CroSMI Annual General Assembly which should mark the CroSMI activities in the next years. I would like to point out two: in the year 2019, the 14th symposium Medical informatics 2019 (MI 2019) should be organised, and the second one is to encourage the activities to establish better education in health informatics not only for users, but also to organize studies for IT professionals in healthcare.

**Publishing**


**Working group**

CroSMI is a founder of the EFMI Working Group Information and Decision Support in Biomedicine and Health Care (IDeS). Members of WG IDeS and other members of CroSMI had various activities concerning IDeS topics (more information in IDeS report).

**Cooperation**

CroSMI actively cooperate with various institutions and societies related to field of medicine, health, IT etc.:

- Ministry of Health (Commission for developing a strategy of informatization of Health in Croatia)
- Croatian Health Insurance Fund (Commission for EHR)
- European Institute for Health Records
- HL7 Croatia
- Croatian Medical and Biological Engineering Society
- Croatian Biometric Society
- Croatian Standards Institute
- Academy of Medical Sciences of Croatia (E-health Committee)

**Other activities**

Some members of CroSMI were active participants at MIE 2018, EFMI STC 2018 and at some other professional conferences in the field of Health/Medical Informatics, Informatics and Medicine.
11.2 France / Association française d’Informatique Médicale (AIM)

Representative: Brigitte Seroussi

Preparation of MEDINFO 2019 (Lyon, August 26-30, 2019)

AIM is organizing MEDINFO 2019, on behalf of the International Medical Informatics Association (IMIA). We worked on the contractual issues (contract signed with IMIA and with MCO Congrès, a company specialized in congress organizations). We begun working on all the practical issues related to the organization of MEDINFO 2019, and are participating to the Scientific Program Committee. The tracks have been validated. Some French sessions too. Information and registration on the website www.medinfo-lyon.org will be online shortly.

Organization of scientific meetings in 2018:
- Montpellier, March 29-30, 2018: co-organization of a session “Information Systems” in the EMOIS meeting
- Nancy, July 3, 2018: co-organization of a session “Artificial Intelligence and Health” within the framework of the Artificial Intelligence Platform 2018, and in partnership with the French Association for Artificial Intelligence (AFIA)
- Marseille, November 19-20, 2018: co-organization of sessions “From Portfolio of competencies to Learning Analytics: Applying to medical curriculum” within INNO-V'inMED

Organization of scientific meetings in 2019:
- Toulouse, July 1st, 2019: co-organization of a session “Artificial Intelligence and Health” within the framework of the Artificial Intelligence Platform 2018, and in partnership with the French Association for Artificial Intelligence (AFIA)
- Lyon, August 26-30, 2019: co-organization of MEDINFO 2019

Participation to the works of scientific societies or established bodies
- Membership of EFMI
- Membership of the French “Strategic Council of Numeric tools for Healthcare”
- Invited to auditions by the French “Ordre des Médecins”
- Invited to auditions by the French “Conference of General Directors of University Hospitals”, about the development of Big Data for healthcare

11.3 Germany / German Association for Medical Informatics, Biometry and Epidemiology (GMDS)

Representative: Alfred Winter

The German Association of Medical Informatics, Biometry and Epidemiology (GMDS, www.gmds.de) besides Medical Informatics encompasses the disciplines Medical Biometry, Epidemiology, Health Data Management and Bio-Informatics. Currently about 2,000 scientists and professionals are member of GMDS. In spring 2019 GMDS was proud to host STC 2016 in Hanover.

GMDS organizes two main conferences annually. In spring GMDS co-organizes a congress, academy and networking program as integral part of the industrial fare DMEA - Connecting Digital Health. Autumn is time for its scientific congress “GMDS- Jahrestagung”. This year the Jahrestagung had the motto "The Learning Health System: Research-based, Innovative and Networking" and was held in Osnabrück. It attracted more than 700 participants. A collection of presented paper has been published in IOS proceedings with open access. Main messages
have been published as “Osnabrücker Erklärung / Osnabruck Declaration”. Next annual con-
gress will be in Dortmund under the motto “Shaping Change - Creative Solutions for Innovative
Medicine”.

GMDS is platform for more than 50 working groups. Some of them organized additional con-
gresses with more than 100 participants each. The open access journal “GMS Medizinische
Informatik, Biometrie und Epidemiologie” and the journal “Methods of Information in Medi-
cine” are the official journals of GMDS.

Activities in 2018 include:

- new youtube channel for GMDS: https://www.youtube.com/channel/UCgun-
fQtV2Ba0tEdik2rRudw ;
- advisory statements for government bodies regarding legal initiatives in digital health;
- awards and prices for young scientists;
- mentoring programs for young scientists seeking leadership positions;
- seminar for PhD students;
- involvement in the review of German medical faculties.

GMDS is governed by a board representing its disciplines Medical Informatics, Medical Biom-
etry, Epidemiology, Health Data Management and Medical Bioinformatics. The board is cur-
tently chaired by Andreas Stang; names of all board members can be found at
https://gmds.de/ueber-uns/organisation/#c309 .

11.4 Greece / Greek Biomedical and Health Informatics Association (GBHIA)

Representative: John Mantas

Greek Biomedical Informatics and Health Informatics Association aims to evolve and promote
the scientific field of Health and Biomedical Informatics in Greece and abroad. GBHIA is a
non-profit scientific association which specializes in research, training and documentation of
Health Informatics in terminology, documentation and standardization.

The website of the association is: www.gbhia.com

Health Informatics is the scientific discipline concerned with the systematic processing of data,
information and knowledge in health care.

The domain covers computational and informational aspects of processes and structures in
health care. Its aim is to study all the applications of informatics and computer science in Health Sciences
(Medicine, Nursing, Dentistry, Biology, and Pharmacy) and health care.

Nowadays, GBHIA has over 130 members including scientists, professionals and students in
the field of Health Informatics.

Recently, the Association has introduced the Fellowship Award to honor distinguished scien-
tists who have contributed to the aims of the field and to the objectives of the GBHIA. The
honorary fellows may bare the insignia FGBHI.

GBHIA organizes every year an International Scientific Conference in Informatics, Manage-
ment and Technology in Healthcare (ICIMTH – www.icimth.com) with over 180 participants
from all over the world. Approximately, 35% of the participants are from Greece. ICIMTH
conference proceedings are published on Medline.

GBHIA supports the national reforms in the Healthcare domain and the IT strategies for pri-
mary healthcare, family doctors, national electronic health records and other actions. Many
members of the society evolve with Health IT education on plenty Masters’ Degree programs
which are conducted in Greece.

GBHIA intends to bid for MIE 2021.
11.5 Israel / The Israeli Association for Medical Informatics (ILAMI)

Representative: Ran D. Balicer

ILAMI has organized in 2018
- A colloquium, on March 18, in cooperation with the Department of Nursing at the University Tel Aviv entitled "The Role of the Nurse in the Digital Age";
- Its annual conference, on November 4, and focusing on Information Technology for Personalized Medicine.

11.6 The Czech Republic / Czech Society for Biomedical Engineering and Medical Informatics (CSBMEMI)

Representative: Libor Seidl

The Czech Society for Biomedical Engineering and Medical Informatics is a non-profit scientific and educational organization in the field of medical, clinical and biological engineering and medical informatics. It joins together physicians, biomedical engineers, medical and health care informaticians and other professionals from related areas. The Society aims at encouraging research and the application of knowledge, and to disseminate information both to professionals and general public, and promote collaboration.

The Society’s main aims are to:
- Foster interdisciplinary research activities comprising medicine/biology and engineering sciences and informatics (both in basic and applied research)
- Provide platform for joint activities of the Society members, inform about latest development and events in the field
- Support organization of conferences and workshops
- Actively participate in negotiations on legislative issues on the ministerial level in favour of the Society members and research and educational institutions working in the area of biomedical engineering and medical informatics
- Develop job profiles for biomedical engineers
- Develop guidelines for undergraduate and postgraduate education and lifelong learning in biomedical engineering and medical informatics
- Support and develop publishing activities – the Society has its own journal “Physician and technician” and closely cooperates with the official EFMI journal “European Journal for Biomedical Informatics”

Since 2014 Jana Zvarova and Lenka Lhotska have been members of the Working Group of the Czech Medical Society for preparation of the eHealth strategy in the Czech Republic. After designing the concept and basic principles, the documents were handed over to the Ministry of Health of the Czech Republic. When the Ministry developed a detailed strategy, the WG members were asked to perform a critical review of the strategy. Finally, the strategy was adopted by the government. However, activity of the Working Group of the Czech Medical Society continues and its main focus is on critical review of documents connected with the eHealth that are being prepared by the Ministry of Health of the Czech Republic and its institutions. After Jana Zvarova passed away, Michal Huptych (Czech Technical University in Prague, Czech Institute of Informatics, Robotics and Cybernetics) took over and continues her work together with Lenka Lhotska.

Events

IUPESM World Congress 2018 on Medical Physics and Biomedical Engineering. Many Society members were members of the congress program and organizing committees and also participated as active participants with their contributions. Lenka Lhotska was Scientific Co-chair
Cooperation
CSBMEMI actively cooperates with various institutions and societies related to field of medicine, health, IT, education, etc.:

- Ministry of Health of the Czech Republic
- HL7 Czech Republic
- Czech Technical University in Prague
- Charles University in Prague and University Hospitals
- Czech Academy of Sciences

11.7 The United Kingdom / British Computer Society

Representative: Philip Scott

Introduction
The BCS is committed to a strong and active working relationship with EFMI. This report covers relevant areas of BCS activity in 2018-19.

New national representation arrangements
BCS Health & Care has decided to have one representative for both EFMI and IMIA to improve the coordination of UK input to European and broader international health informatics work. Dr Philip Scott was appointed as the new international representative in February 2019. He is also chair of the EFMI EVAL working group.

BCS official journal becomes BMJ Health & Care Informatics
From January 2019 (volume 26), the BCS Health & Care official journal, the Journal of Innovation in Health Informatics, transitioned from BCS in-house publishing to BMJ. The new title is BMJ Health & Care Informatics. Dr Philip Scott is the interim Editor-in-Chief. Full information can be found at: https://informatics.bmj.com/

BCS Health & Care leadership team
BCS Health & Care is led by a Chair (Andy Kinnear) and an executive committee. To broaden the scope of multi-disciplinary leadership, the executive committee now has members representing: nursing, mental health, physicians, social care, primary care, equality & diversity, professionalism, editorial, communications and strategy. See https://www.bcs.org/membership/member-communities/bcs-health-and-care-specialist-group/meet-the-team/

Conference activities
BCS has not renewed its event contract with HIMSS, which ended in 2018. The two event partners we work with are now Closer Still Media, who ran the “Health + Care” show in London in July 2018, and Digital Health Media, who run various events and numerous online activities with the CIO/CCIO Forum and other groups.

BCS is planning to submit a proposal to host the EFMI STC in 2022.
12 Appendix 6: Congresses and Publications

EFMI organizes two main series of conferences: the Special Topic Conferences (EFMI-STC) and Medical Informatics Europe (EFMI-MIE). In conjunction or independent of the main congress series, working groups in addition organize topic specific workshops, tutorials and seminars.

12.1 Medical Informatics Europe Conferences (MIE)

So far, 29 MIE congresses (Medical Informatics Europe) have been organized by the national members and EFMI with up to more than 1000 participants each. The concept includes peer-reviewed presentations according to the type of paper as oral or poster presentation. Workshops and tutorials prepared or supported by EFMI working groups are an essential part of EFMI MIE conferences.

- MIE 2018 - Gothenburg, Sweden (together with VITALIS 2018)
- MIE 2017 - Manchester, UK (part of Informatics for Health 2017)
- MIE 2016 - Munich, Germany (part of HEC 2016)
- MIE 2015 - Madrid, Spain
- MIE 2014 - Istanbul, Turkey
- MIE 2012 - Pisa, Italy
- MIE 2011 - Oslo, Norway
- MIE 2009 - Sarajevo, Bosnia-Herzegovina
- MIE 2008 - Gothenburg, Sweden
- MIE 2006 - Maastricht, Netherlands
- MIE 2005 - Geneva, Switzerland
- MIE 2003 - Sant Malo, France
- MIE 2002 - Budapest, Hungary
- MIE 2000 - Hanover, Germany
- MIE 1999 - Ljubljana, Slovenia
- MIE 1997 - Thessalonica, Greece
- MIE 1996 - Copenhagen, Denmark
- MIE 1994 - Lisbon, Portugal
- MIE 1993 - Jerusalem, Israel
- MIE 1991 - Vienna, Austria
- MIE 1990 - Glasgow, Scotland
- MIE 1988 - Oslo, Norway
- MIE 1987 - Roma, Italy
- MIE 1985 - Helsinki, Finland
- MIE 1984 - Brussels, Belgium
- MIE 1982 - Dublin, Ireland
- MIE 1981 - Toulouse, France
- MIE 1979 - Berlin, Germany
- MIE 1978 - Cambridge, UK
12.2 Special Topic Conferences (STC)
STCs are conferences, specialized in current topics. Special Topic Conferences follow a successful concept including the following components:

- Organization by a member society (often in combination with its annual meeting)
- Topic defined to the needs of the member society
- Relevant EFMI Working groups are engaged for the content
- Contributions mostly on invitation
- Small 2-day conference with 100+ participants

So far, 17 STC congresses have been organized by our member societies:

- STC 2018 – Zagreb, Croatia
- STC 2017 – Tel Aviv, Israel
- STC 2016 – Paris, France
- STC 2014 – Budapest, Hungary
- STC 2013 – Prague, Czech republic
- STC 2012 - Moscow, Russia
- STC 2011 - Lasko, Slovenia
- STC 2010 - Reykjavik, Iceland
- STC 2009 - Antalya
- STC 2008 - London, UK
- STC 2007 - Brijuni Island, Croatia
- STC 2006 - Timisoara, Romania
- STC 2005 - Athens, Greece
- STC 2004 - Munich, Germany
- STC 2003 - Rome, Italy
- STC 2002 - Nicosia, Cyprus
- STC 2001 - Bucharest, Romania

12.3 Publication

**IOS Press series “Health Technology and Informatics”**

Publication of the conference proceedings of the EFMI conference series was done in close cooperation with IOS Press in its Medline indexed series “Health Technology and Informatics” in the last years. Selected papers from the EFMI conferences were also published in Methods of Information in Medicine. The proceedings are for open access.

**European Journal for Biomedical Informatics**

The European Journal for Biomedical Informatics reacts on the great European need to share the information in the multilingual and multicultural European area. The journal publishes peer-reviewed papers in English and other European languages simultaneously. This opens new possibilities for faster transfer of scientific-research pieces of knowledge to large international community of biomedical researchers, physicians, other health personnel and citizens. More information can be found at: [http://www.ejbi.org/en/about/](http://www.ejbi.org/en/about/)

**International Journal of Medical Informatics**

International Journal of Medical Informatics provides an international medium for dissemination of original results and interpretative reviews concerning the field of medical informatics. The Journal emphasizes the evaluation of systems in healthcare settings.

The scope of journal covers: 1) Information systems, including national or international registration systems, hospital information systems, departmental and/or physician's office systems,
document handling systems, electronic medical record systems, standardization, systems integration etc.; 2) Computer-aided medical decision support systems using heuristic, algorithmic and/or statistical methods as exemplified in decision theory, protocol development, artificial intelligence, etc. 3) Educational computer based programs pertaining to medical informatics or medicine in general; and 4) Organizational, economic, social, clinical impact, ethical and cost-benefit aspects of IT applications in health care. More information can be found at: http://www.ijmijournal.com/

Methods of Information in Medicine
Good medicine and good healthcare demand good information.
Since the journal’s founding in 1962, Methods of Information in Medicine has stressed the methodology and scientific fundamentals of organizing, representing and analyzing data, information and knowledge in biomedicine and health care. Covering publications in the fields of biomedical and health informatics, medical biometry, and epidemiology, the journal publishes original papers, reviews, reports, opinion papers, editorials, and letters to the editor. From time to time, the journal publishes articles on particular focus themes as part of a journal’s issue. More information can be found at: http://methods.schattauer.de/

Acta Informatica Medica
Acta Informatica Medica (Acta Inform Med) is a peer-reviewed, open access journal publishing original articles, professional articles, reviews, viewpoints, and case studies, covering issues in Medical and Health informatics.

The journal is the official organ of the Society for Medical Informatics of Bosnia and Herzegovina, European Federation for Medical Informatics (EFMI) and published by the Academy of Medical Sciences of Bosnia and Herzegovina. Issues are published quarterly in March, June, September, and December.

Specific scope of interests of the journal relates to System and System analysis, Medical documentation, Electronic health records, Clinical decision-making, Artificial intelligence, Expert systems, Science editing, E-learning in medicine, On-line biomedical databases, Information and Communication technologies, Health information systems.

More information can be found at: http://www.actainformmed.org/
13 Appendix 7 Awards

13.1 Peter L Reichertz Young Scientist Prize
Peter L Reichertz Young Scientist Prize is awarded to a
- Young scientist (<35 years);
- First author of an MIE-paper,
- Excellent presentation.
- There should not be an EFMI- council member as co-author of the paper.

The winner receives a check of 1,000€. Peter L. Reichertz Young Scientist Prize is funded by EFMI.

In 2018, Johan van Soest (The Netherlands) and his co-authors won the price for the paper “Using the Personal Health Train for Automated and Privacy-Preserving Analytics on Vertically Partitioned Data.” (pubmed-id 29678027).

13.2 Rolf Hansen Memorial Award
Rolf Hansen Memorial Award will be awarded for
- Outstanding paper discussing innovative aspects of clinical information systems, preferably the Electronic Health Record or other tools or resources to support clinical work / delivery of health care, actively acknowledging the end-user, i.e. Health Providers;
- First author should have a health professional degree, e.g., MD, RN;
- Excellent presentation.

The winner receives a check of 1,000 €. The Rolf Hansen Memorial Prize is administered by EFMI.

In 2018, Brigitte SEROUSSI and Jacques BOUAUD (France) won the price for the paper “The (Re)-Relaunching of the DMP, the French Shared Medical Record: New Features to Improve Uptake and Use.” (pubmed-id 29677962).

13.3 Best Poster Award
Best Poster Award will be awarded for
- Promising project, concluded or work in progress;
- Aligning with the chosen topic of the actual conference;
- The chosen poster employs the variety of features and modalities available for a poster.

The winner receives a check, decided by the actual conference LOC and SPC.

In 2018, Virginia Cid-de-la-Paz Furest amd Andrés Jiménez-Ramírez won the price for the poster “Clinical Computer-Interpretable Guidelines: A review”.

13.4 Mantas’ Prize for Best Paper on Education in Biomedical and Health Informatics
The Mantas’ Prize for Best Paper on Education in Biomedical and Health Informatics will be awarded for one paper meeting the following criteria
- Outstanding paper about Education in Biomedical and Health Informatics.
• The paper may discuss curriculum development, program and course implementation and evaluation, guidelines and accreditation processes, courseware and software development in education, continuing education of healthcare professionals of all disciplines and levels, distance learning, and even patients/citizens empowerment and increased digital health literacy through education.

• Excellent presentation

The winner receives a check of 500€

Mantas’ Prize for Best Paper on Education in Biomedical and Health Informatics is funded by the Mantas Foundation through the national Greek Biomedical Informatics and Health Informatics Association (GBHI) and administered by EFMI.

In 2018, Elske Ammenwerth (Austria) and her co-authors won the price for the paper “Community of Inquiry in online-based Health Informatics Courses”.