Contents

President’s Statement
A. Geissbuhler
Scaling up Health Informatics

Obituaries
P. Weber
Professor John Bryden

L. Hanmer
Sedick Isaacs

Editorial
B. Séroussi, M.-C. Jaulent, C.U. Lehmann
Looking for the Evidence: The Value of Health Informatics

Keynote
R. Koppel
Is Healthcare Information Technology Based on Evidence?

Special Section: Evidence-based Health Informatics

Survey
A. B. McCoy, A. Wright, G. Eysenbach, B. A. Malin, E. S. Patterson, H. Xu, D. F. Sittig
State of the Art in Clinical Informatics: Evidence and Examples

Working Group Contributions
E. Borycki, A. Kushniruk, C. Nohr, H. Takeda, S. Kuwata, C. Carvalho, M. Bainbridge, J. Kannry
Usability Methods for Ensuring Health Information Technology Safety: Evidence-Based Approaches

D. Luna, C. Otero, A. Marcelo
Health Informatics in Developing Countries: Systematic Review of Reviews

Evidence Based Health Informatics: 10 Years of Efforts to Promote the Principle

Synopsis
C. Lovis
Evidence-based Biomedical Informatics. The Long Way from Pioneer to Science

Best Paper Selection
Content summaries of*:


* The complete papers can be accessed in the Yearbook’s full electronic version, provided that the article is freely accessible or that your institution has access to the respective journal.
Section 1: Health and Clinical Management

Survey
P. A. Abbott, Y. Liu
A Scoping Review of Telehealth

Regional Paper
A. Moen, W. O. Hackl, J. Høfdijk, L. Van Gemert-Pijnen, E. Ammenwerth, P. Nykänen, A. Hoerbst
eHealth in Europe — Status and Challenges

Synopsis
N. Bricon-Souf, M.-C. Jaulent,
Trends on Integrating Technologies for Mobile and Personalized Care

Best Paper Selection
Content summaries of*

Section 2: Human Factors and Organizational Issues

Survey
M.C. Beuscart-Zéphir, E. Borycki, P. Carayon, M.W.M. Jaspers, S. Pelayo
Evolution of Human Factors Research and Studies of Health Information Technologies: The Role of Patient Safety

Working Group Contribution
A. Kushniruk, C. Nohr, S. Jensen, E. M. Borycki
From Usability Testing to Clinical Simulations: Bringing Context into the Design and Evaluation of Usable and Safe Health Information Technologies

Synopsis
G. Declerck, X. Aimé
Why Medical Informatics (still) Needs Cognitive and Social Sciences

Best Paper Selection
Content summaries of*

* The complete papers can be accessed in the Yearbook’s full electronic version, provided that the article is freely accessible or that your institution has access to the respective journal.
Section 3: Health Information Systems

Survey
D. Kalra, B. Fernando
A Review of the Empirical Evidence of the Healthcare Benefits of Personal Health Records 93

Regional Paper
E. M. Borycki, D. Newsham, D. W. Bates
eHealth in North America 103

Working Group Contribution
H. Schmuhl, O. Heinze, B. Bergh
Use of Open Source Software in Health Care Delivery — Results of a Qualitative Field Study 107

Synopsis
L. Toubiana, M. Cuggia
Health Information Systems. Toward Evidence-based Health Information Systems? 114

Best Paper Selection
Content summaries of*:

Section 4: Sensor, Signal and Imaging Informatics

Synopsis
S. Voros, A. Moreau-Gaudry
Sensor, Signal, and Imaging Informatics: Evidence-Based Health Informatics 117

Best Paper Selection
Content summaries of*:

* The complete papers can be accessed in the Yearbook’s full electronic version, provided that the article is freely accessible or that your institution has access to the respective journal.
Section 5: Decision Support

Survey
R. N. Shiffman, A. Wright
Evidence-Based Clinical Decision Support

Synopsis
J. Bouaud, J.-B. Lamy
A Medical Informatics Perspective on Clinical Decision Support Systems

Best Paper Selection
Content summaries of:


Section 6: Knowledge Representation and Management

Survey
S. Schulz, L. Jansen
Formal Ontologies in Biomedical Knowledge Representation

Working Group Contribution
The Evidence-base for Using Ontologies and Semantic Integration Methodologies to Support Integrated Chronic Disease Management in Primary and Ambulatory Care: Realist Review

Synopsis
N. Griffon, J. Charlet, S.J. Darmoni
Knowledge Representation and Management: Towards an Integration of a Semantic Web in Daily Health Practice

Best Paper Selection
Content summaries of:


* The complete papers can be accessed in the Yearbook's full electronic version, provided that the article is freely accessible or that your institution has access to the respective journal.
Section 8: Bioinformatics and Translational Informatics

Survey
M. C. Gibbons
Bringing Genome Tests into Clinical Practice 172

Synopsis
T. Lecroq, L. F. Soualmia
From Genome Sequencing to Bedside 175

Best Paper Selection
Content summaries of*:


*The complete papers can be accessed in the Yearbook’s full electronic version, provided that the article is freely accessible or that your institution has access to the respective journal.
## Section 9: Clinical Research Informatics

### Survey

**P. J. Embi**
Clinical Research Informatics: Survey of Recent Advances and Trends in a Maturing Field 178

### Synopsis

**C. Daniel, R. Choquet,**
Information Technology for Clinical, Translational and Comparative Effectiveness Research 185

### Best Paper Selection

**Content summaries of**: 188

*The complete papers can be accessed in the Yearbook’s full electronic version, provided that the article is freely accessible or that your institution has access to the respective journal.*

<table>
<thead>
<tr>
<th>Title</th>
<th>Author(s)</th>
<th>Journal/Details</th>
</tr>
</thead>
</table>

### Research & Education

**O. Bouhaddou, M. Bennani Othmani, S. Diouny**
Medical Informatics in Morocco 190

### History of Medical Informatics

**M. Korpela**
Two decades of HELINA Conferences: A Historical Review of Health Informatics in Africa 197

**J. Zvárová**
Medical Decision Support and Medical Informatics Education: Roots, Methods and Applications in Czechoslovakia and the Czech Republic 206

### Information on IMIA

Information on IMIA 213
Honorary Fellows 216
IMIA Member Societies 217
Institutional Members 218
Addresses of IMIA Member Societies 220

### Information on IMIA Regions

Information on APAMI (Asia Pacific Association for Medical Informatics) 235
Information on Helina (African Region) 237
Information on IMIA-LAC (Federation of Health Societies in Latin America) 240
Information on MEAHI (Middle East Association of Health Informatics) 241
Information on North-American Medical Informatics (NAMI) 242
Information on EFMI (European Federation For Medical Informatics) 249
Information on EFMI Working Groups 251

### Miscellaneous

Contributors 263
MIA Yearbook Special Topics 265
Impressum 265

*The complete papers can be accessed in the Yearbook’s full electronic version, provided that the article is freely accessible or that your institution has access to the respective journal.*