

# Congratulations on the 25<sup>th</sup> Anniversary of the IMIA Yearbook!

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From its inception in 1992, the IMIA Yearbook of Medical Informatics has been one of the most visible and valuable products that the International Medical Informatics Association (IMIA) provides - not only to our members but to the health and biomedical informatics community at large.

Since its first issue appeared 25 years ago, the Yearbook has seen remarkable growth in quality and reputation, and it seemed appropriate to mark the Yearbook's silver jubilee with a special edition – an idea first suggested by the current editorial team. The result is the present issue which has been edited by current Editors-in-Chief Marie-Christine Jaulent, Christoph U. Lehmann, and Brigitte Séroussi.

For this special occasion, it seemed best for us to offer a collection of keynote papers rewritten by the original authors, pioneers in the field, and state-of-the-art articles by leading experts covering some of the most active and important areas in our field, as well as a visualization of the domain evolution papers to show the evolution of our field with word clouds and cluster maps using references from 25 years of Yearbook issues.

It seems appropriate to revisit the Yearbook's history. The idea of the Yearbook was first suggested by Morris Collen and Marion Ball to compile the most relevant high-quality scientific papers published in the preceding year in the field of medical informatics, and to include factual information on IMIA. This idea received considerable enthusiasm from the IMIA board members. Jan H. van Bommel and Alexa T. McCray served as founding editors. As founding editors they managed not only the challenges of compiling and selecting articles that were annual highlights in medical informatics, but also raising funding for the first publication.

In the first issue, the scientific part of the Yearbook was preceded by factual information on IMIA and its national member societies as well as its regional groups. In addition, information was given on the activities of several Working Groups within IMIA. The section on selected articles was preceded by a synopsis as an introduction and concluded by an authors and subjects index. Listed then were the titles of all articles that appeared during 1991 in five leading medical informatics journals, alphabetically ordered by their first authors, and also followed by a subject index. The Yearbook ended with a list of medical informatics subject headings that were used for indexing by the National Library of Medicine.

The objectives and target audiences are much the same now as they were at the time of the Yearbook's founding, though content and format have evolved somewhat. For instance, the content of the Yearbook was modified considerably in 2006 and 2011. In 2006, new original articles were added: a keynote paper on the Yearbook's annual special topic, and a special topic section, surveys of recent developments corresponding to the fields of the Yearbook sections, comprehensive reviews on relevant topics of health and biomedical informatics, articles on research and educational programs, and original papers on the history of medical informatics. All original papers were peer reviewed and indexed in Medline. In 2011, contributions from IMIA Working Groups were added to the survey, synopsis, and best paper selection of the annual special topic as well as the fields of the Yearbook sections.

The fields of the Yearbook sections have changed over the years, reflecting the

evolution of our field. Founding editors categorized articles into seven sections: 'Health and clinical management', 'Clinical support systems', 'Image and signal processing', 'Decision-support systems', 'Knowledge-based systems', 'Neural networks', and 'Biomedical research'. These sections were changed considerably in 2006. 'Neural networks' was removed and 'Patient records', 'Education and consumer informatics', and 'Bioinformatics' were introduced as new sections. In 2008, 'Patient records' was removed and 'Human factors' was introduced. In 2009, 'Decision support, knowledge representation, and management' was divided into two sections, 'Decision support' and 'Knowledge representation and management'. 'Human factors' was changed to 'Human factors and organization issues'. In 2013, 'Clinical research informatics' was introduced and 'Bioinformatics' was changed to 'Bioinformatics and translational informatics'. In 2015, 'Natural language processing' and 'Public health and epidemiology informatics' were introduced and 'Health information system' was changed to 'Clinical information system'.

The evolutions of our field and the Yearbook are also described in a contribution made to this edition by Yergens et al., who used 997 references from the Yearbook between 1992 and 2015 to create visualizations including word clouds and cluster maps using the whole data set as

well as three time periods. For example, 'medical' has been replaced with 'health', reflecting the more holistic approach to wellness in health care. 'Computer' and 'system(s)' have decreased in importance while 'informatics' has increased. The cluster maps clearly demonstrate the increasing complexity in our field but also its connectedness. Health informatics in the 21st century is a 'Team Sport' and the IMIA Yearbook has provided for 25 years a place to exchange ideas and to collaborate.

The mode of publication went through major changes in 2006 and 2014. In 2006, the full electronic version of the Yearbook, containing full-length original articles and content summaries of the selected best paper, was introduced in addition to the paper version. In 2014, the Yearbook introduced an online open access format so that readers could download all papers free of charge. The Yearbook became also available on PubMed Central in 2014.

The remarkable continuity of the Yearbook is reflected in the fact that the Yearbook had only eight Editors-in-Chief over 25 years, always with two or three serving at any given time. The Founding editors, Jan H. van Bommel and Alexa T. McCray, served until 2000. Their duties were taken over by Reinhold Haux and Casimir Kulikowski in 2001. Antoine Geissbuhler joined the team in 2007 and Haux served until 2008. Kulikowski and Geissbuhler served until 2012 and were succeeded by Marie-Christine

Jaulent, Christoph U. Lehmann, and Brigitte Séroussi. From 2000 until now, the team has been assisted by Martina Hutter, who does each year a considerable amount of work to have the edition ready for the MIE or MEDINFO conferences. The former Editors-in-Chief continuously kept an interest in the Yearbook's well-being and continue to be involved as contributors, as exemplified in this special edition.

It remains to express our sincere thanks to the members of our editorial board for their hard work and the editorial staff at Schattauer for their continuous support. Thanks are also due to our readership, to all contributors to the Yearbook, and to the many colleagues who serve as reviewers. Without their dedication, the Yearbook simply could not exist.

Finally, we specifically wish to acknowledge the authors of this special edition, who agreed to rewrite their keynote articles, state-of-the-art articles, and visualization of domain evolution paper at rather short notice and who even kept to the very tight deadlines. We are confident that the reader will find this special edition interesting and useful, and we hope that the articles in it will lead to many further exciting developments in our field. We look forward to this, and we also hope that the IMIA Yearbook will continue to play this important role in the next 25 years as well.

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