The International Academy of Health Sciences Informatics: 2021 Update

William R. Hersh¹, Reinhold Haux², Elaine Huesing³, Marion J. Ball⁴, Michio Kimura⁵, Paula Otero⁶, Don Detmer⁷, Sabine Koch⁸, Kaija K. Saranto⁹, Graham Wright¹⁰

¹ Department of Medical Informatics & Clinical Epidemiology, School of Medicine, Oregon Health & Science University, Portland, OR, USA
² Peter L. Reichertz Institute for Medical Informatics of TU Braunschweig and Hannover Medical School, Braunschweig, Germany
³ International Medical Informatics Association (IMIA)
⁴ Multi-Interprofessional Center for Health Informatics, University of Texas at Arlington, Arlington, TX, USA
⁵ Medical Informatics Department, School of Medicine, Hamamatsu University, Shizuoka, Japan
⁶ Department of Health Informatics, Hospital Italiano de Buenos Aires, Buenos Aires, Argentina
⁷ Department of Public Health Sciences, School of Medicine, University of Virginia, Charlottesville, VA, USA
⁸ Health Informatics Centre, Department of Learning, Informatics, Management and Ethics, Karolinska Institutet, Stockholm, Sweden
⁹ Department of Health and Social Management, University of Eastern Finland, Kuopio, Finland
¹⁰ Rhodes University, Grahamstown, Eastern Cape, South Africa and University of South Africa, Pretoria, South Africa

Summary

Objectives: To summarize the activities of the International Academy of Health Sciences Informatics (IAHSI) in 2021 and welcome its 2021 Class of Fellows.

Methods: Report on governance, strategic directions, newly elected fellows, plenary meetings, and other activities of the Academy.

Results: As in 2020, all of the Academy’s activities were carried out virtually due to the COVID-19 pandemic. In 2021, new Board members were elected. Strategic activities in data standards and interoperability and in mentorship moved forward. A new class of 26 Fellows was elected, bringing the total membership of the Academy to 204 Fellows from all regions of the world. In addition, a virtual plenary meeting was held.

Conclusions: The Academy has continued to pursue its role as the honorific society globally for biomedical and health informatics. Expansion of strategic activities and membership will continue moving forward.

Keywords

Biomedical and Health Informatics; Medical Informatics; Health informatics; International Academy of Health Sciences Informatics; International Medical Informatics Association

Introduction

The International Academy of Health Sciences Informatics¹ (IAHSI, also known as the Academy) was established in 2017 under the auspices of the International Medical Informatics Association² (IMIA). The Academy aims to nominate and elect those whose contributions in biomedical and health informatics are recognized internationally. Its goal is to promote the dissemination of knowledge and best practices, foster new ideas, and encourage worldwide collaboration and sharing of expertise and resources.

The first vision for the Academy was published by Lehmann et al. in 2017 [1]. A further detailed view was set forth by Haux in 2018, who became the first elected President [2]. A strategy and focus areas process was published in 2020 [3]. The President reported on the activities in 2020 [4] and 2021 [5]. The Academy is governed by By-Laws³, and a process of nominating and electing new Fellows each year has been established and followed⁴.

The Academy held its first meeting, which included the induction of 118 inaugural fellows, in Gothenburg, Sweden in April, 2018. The Academy held its first Plenary in Lyon, France in August, 2019, where the By-Laws were approved. At that meeting, a new class of 26 Academy Fellows was inducted. The Lyon meeting also led to the development of strategy and focus areas for the Academy.

The COVID-19 pandemic led to a shift in activities for 2020. Despite the pandemic, the work of the Academy continued in 2020 and 2021. This report describes the activities in 2021.

⁴ https://imia-medinfo.org/wp/iahsi-nomination-process-for-new-fellows/
Governance

The Academy elected its first Board of Directors, including its first President, in 2019. The 2021 leadership of the Academy included:
- William Hersh, President (2020-2022);
- Reinhold Haux, Past President (2020-2022);
- Paula Otero, Secretary (2019-2022);
- Michio Kimura, Treasurer (2019-2021);
- Marion Ball, Member-at-Large (2019-2022);
- Don Detmer, Member-at-Large (2020-2023);
- Sabine Koch, IMIA President (ex officio);
- Elaine Huesing, CEO, IMIA (ex officio).

In 2021, elections resulted in a new President-Elect (Kaija K. Saranto) and Treasurer (Graham Wright). Dr. Saranto will assume the Presidency at the end of 2022, when Dr. Hersh will become the Past President and Dr. Haux’s service to the Board will end. Also in 2021, Jack Li became President of IMIA and replaced Sabine Koch as an ex officio Board member.

Strategic Activities

An important function of honorific societies is to provide scientific leadership and advocacy for its field. Now that the Academy has been established, the focus of its work has shifted from supporting activities to pursuing strategic directions. The initial strategic directions were approved in 2019 and published in 2020, and are summarized in Figure 1 [3].

In 2021, the Academy aimed to build on previous visions and planning. A key principle was to collaborate with IMIA and others, avoiding duplication of effort. Starting with Dr. Hersh assuming the Presidency, Fellows began with a focus on the high-priority activities of the initial strategic process. At the 2019 Plenary, three Task Forces had been established to focus on what were deemed the most important activities for the Academy. In 2020, these were renamed to Panels to reflect the longer-term nature of their work.

The most active panel has been the one on Data Standards and Interoperability, co-chaired by Diego Kamiker and William (Ed) Hammond. Their major activity has been the publication of podcasts, with two produced in 2021. These are available through

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**Fig. 1** Strategic directions for the Academy, from [3].
Apple Podcast⁵ and Spotify⁶. Additional panels have been proposed for artificial intelligence and computational knowledge, but there is no work to report. Another panel was formed in late 2021 around mentoring, with Martin Were and Boonchai Kijisanayothin volunteering to serve as Co-Chairs. They will aim in 2022 to bring together Fellows to focus on mentoring individuals and associations in the field, especially those from less economically developed countries that lack an established national infrastructure for biomedical and health informatics.

Election of 2021 Fellows
In 2021, 26 new Fellows were elected, who are listed in Table 1. The distribution of Fellows by region, year elected, and gender are shown in Table 2.

Plenary Meetings
An important activity of the Academy is its Plenary Meetings. In 2021, a single virtual Plenary was held on 18 November. The meeting commenced with a tribute to those in memoriam during the past year: Brenda Faye (1949-2021), John Fox (1948-2021), Reed Gardner (1937-2020), Hans Peterson (1928-2021), Thomas Pierrme (1932-2021), and Werner Schneider (1939-2021). After a short business meeting, a panel discussion was held on the topic, "Artificial Intelligence: What Will It Take to Get Basic Research into Clinical Use?" The session was organized and moderated by the Academy President. Panel speakers and their topics included:

- Susanne Bakken – Scientific Publication and Diversity, Equity, & Inclusion: JAMIA Example
- John Holmes – Bias and Fairness: Threats to the integrity of inferences made from data using machine learning
- Enrico Coiera – Quality, reproducibility, and transportability of AI research
- Jack Li – AI to Improve Medication Safety
- Brad Malin – Balancing Privacy and Utility

The plans for the type of Plenary to be held in 2022 are uncertain, pending the progression of the COVID-19 pandemic. Academy Board members are hopeful that an in-person plenary can take place at Medinfo 2023, which is currently scheduled to be held from 7-12 July in Sydney, Australia.

Other Activities
The Academy was involved in other activities in 2021. Many Academy Fellows made contributions to the IMIA History Book [6], which was published in 2021. The volume was edited by Academy Fellows Casimir Kulikowski, George Mihalas, Robert Greenes, Hyeoun-Ae Park, and Varlerio Yacubsohn.

The Academy also took part in IMIA activities, including the virtual Medinfo 2021 and the 2021 General Assembly. The Academy President also traveled to Germany in September, 2021 to represent the Academy at the retirement ceremony of Dr. Haux at Technische Universität Braunschweig in Braunschweig, Germany (see Figure 2).

Another activity of the Academy actually took place in early 2022 but is important enough to be mentioned here. The Academy Board endorsed the statement of IMIA and the European Federation of Medical Informatics supporting the Ukrainian Society of Medical Informatics and making an appeal for peace from the hostilities of the government of Russia⁷.

Future Directions
The Academy continues to be an important part of IMIA and the global biomedical and health informatics field. While the pandemic has impacted activities, Academy

### Table 1: Academy Fellows elected in 2021 and their home regions.

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<tbody>
<tr>
<td>MENAHIA Region</td>
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<td>IMIA</td>
<td>IMIA North America</td>
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### Table 2: Distribution of Academy Fellows by region, year elected, and gender.

<table>
<thead>
<tr>
<th>Region</th>
<th>Total</th>
<th>2017</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>F</th>
<th>M</th>
</tr>
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<tbody>
<tr>
<td>APAMI</td>
<td>39</td>
<td>19</td>
<td>4</td>
<td>9</td>
<td>7</td>
<td>13</td>
<td>26</td>
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<tr>
<td>EFMI</td>
<td>62</td>
<td>42</td>
<td>10</td>
<td>3</td>
<td>7</td>
<td>17</td>
<td>45</td>
</tr>
<tr>
<td>HELINA</td>
<td>8</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>IMIA LAC</td>
<td>15</td>
<td>10</td>
<td>0</td>
<td>5</td>
<td>0</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>MENAHIA</td>
<td>8</td>
<td>5</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>7</td>
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<tr>
<td>N. America</td>
<td>72</td>
<td>38</td>
<td>11</td>
<td>13</td>
<td>10</td>
<td>20</td>
<td>52</td>
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<tr>
<td>Total</td>
<td>204</td>
<td>118</td>
<td>26</td>
<td>34</td>
<td>26</td>
<td>58</td>
<td>146</td>
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⁶ https://open.spotify.com/show/4dqIDz8b7eZk3iQyYooFIn
Fellows are still global informatics leaders. In 2022, an election of new Fellows and Board members, along with a Plenary, will take place. The panels will continue their activities.

**Personal Note from the President**

It is a great honor to serve as President of the Academy, and to continue its development forward. As one who has always enjoyed international travel and interaction with colleagues across the world, having to serve as President during the pandemic has required a reset of personal expectations. But I am confident that the Academy will continue to provide leadership and value to the field of biomedical and health informatics.

**Acknowledgements**

The activities of the Academy would not be possible without the executive support of Ms. Elaine Huesing. The Board members have enthusiastically participated in virtual bi-monthly meetings at odd hours due to time zone differences. We also appreciate Academy Fellows who have provided leadership in the panels and participated in the Plenary sessions.

**References**


Correspondence to:
William Hersh, MD
Professor and Chair
Department of Medical Informatics & Clinical Epidemiology
School of Medicine
Oregon Health & Science University
Portland, OR, USA
Tel: +1-503 494 4563
E-mail: hersh@ohsu.edu