



## **IMIA WG 11 - Human Factors Engineering for Healthcare Informatics - June 2021- 2022 report**

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## **1. Achievements – IMIA WG Events and projects conducted, and publications completed**

**Events:** Members took part to:

- organize masterclasses for the International Partnership in Health Informatics Collaboration, held at Seattle in June 2022
- collaborate with the WG on Organizational and Social issues to present a paper on Ethical Review of Human and Organizational Factor Research in the Context of AMIA's Code of Professional and Ethical Conduct. (Craig E. Kuziemsky, Christian Nøhr, and Linda Peute at AMIA 2023. present research papers at conferences and moderated panels (Medinfo, MIE, CSHI, AMIA).
- establish an international academic workspace eHealth Living & Learning Lab at the Amsterdam UMC for HFE Methods in HI collaboration and international online teaching at global Medical Informatics curricula. In Sept '22 the elective program sustainable eHealth, consisting of 18 European Credits, was launched adhering to IMIA educational recommendations.
- contribute to the IMIA 2022 Yearbook submission of the WG on Organizational and Social issues on the perspective of one Health for Human Factors engineering in Health informatics.

**Publications:** Linda W. Peute (WG Chair) supervised and contributed to the following papers:

- To Refer or Not to Refer in Teledermoscopy: Retrospective Study by Tensen E, van Sinderen F, Bekkenk MW, Jaspers MW, Peute LW, published in JMIR Dermatol

- Eleven years of teledermoscopy in the Netherlands: A retrospective quality and performance analysis of 18,738 consultations. Sinderen F, Tensen E, Lansink R, Jaspers M, Peute L. Journal of Telemedicine and Telecare.
- 'Expert appraisal and prioritization of barriers to mHealth use for older adults living with Alzheimer's disease and related Dementias: A Delphi study, International Journal of Medical Informatics. Thomas Engelsma, Ahsen Yurt, Rose-MarieDröes, Monique W.M.Jaspers, Linda W. Peute.
- "Medical informatics and climate change: a framework for modeling green healthcare solutions'. Marieke E Sijm-Eeken, Welmoed Arkenaar, Monique W Jaspers, Linda W Peute. Journal of the American Medical Informatics Association
- Thomas Engelsma (WG Member) together with Linda W. Peute contributed to the book 'Design for Dementia, Mental Health & Wellbeing" by Kristina Niedderer, Tom Denning, Geke Ludden and Vjera Holthoff, with the chapter 'Design inclusive mHealth for people with dementia: A human factors approach'.

Romarc Marcilly (WG Vice Chair) contributed to the following papers:

- Definition of a practical taxonomy for referencing data quality problems in healthcare databases. Quindroit, P., Fruchart, M., Degoul, S., Périchon, R., Soula, J., Marcilly, R., & Lamer, A. (2022). Methods of Information in Medicine, (AAM).
- Improving the usability and usefulness of computerized decision support systems for medication review by clinical pharmacists: A convergent, parallel evaluation. Marcilly R, Coliaux J, Robert L, Pelayo S, Beuscart JB, Rousselière C, Décaudin B Research in Social and Administrative Pharmacy. 2022 Aug 24
- Development and usage of an anesthesia data warehouse: lessons learnt from a 10-year project. Lamer A, Moussa MD, Marcilly R, Logier R, Vallet B, Tavernier B. Journal of Clinical Monitoring and Computing. 2022 Aug 6:1-2.
- Designing Formulae for Ranking Search Results: Mixed Methods Evaluation Study. Douze L, Pelayo S, Messaadi N, Grosjean J, Kerdelhué G, Marcilly R. JMIR Human Factors. 2022 Mar 25;9(1):e30258.
- The WG co-organized CSHI 2021 (with OI WG) virtually and gathered 110 participants. Proceedings were published at [IOS Press Ebooks - Context Sensitive Health Informatics: The Role of Informatics in Global Pandemics](#) Editors: Romarc Marcilly, Linda Dusseljee-Peute, Craig E. Kuziemsky, Xinxin (Katie) Zhu, Peter Elkin, Christian Nøhr. ISBN 978-1-64368-230- 3 (print) | 978-1-64368-231-0. Stud Health Technol Inform. 2021 Volume 286

**Projects:** The WG initiated/ works on several projects:

- development of a code of conduct for Human and Organizational Factors studies of Interactive Healthcare Technology. Interviews and analysis of existing ethical codes of conduct were performed. For Mie 2023 a workshop will be organized to gather further input aiming at a broad support base. A journal paper is expected as an outcome. (with EFMI-HOFMI).
- HFE within the context of teledermoscopy. Supervising research and a scientific paper together with Craig E. Kuziemsky (WG Organizational and Social Issues). A journal paper is expected as an outcome.
- HFE and sustainability. A collaborative effort of three Global workshops organized from the AMIA WG on Human Factors Engineering where we will look at HFE and sustainability within Healthcare to be submitted to Medinfo 2023, MIE 2023 and AMIA CIC2023. IMIA WG members are contributing. A journal paper is expected as an outcome.

## **2. Describe WG/SIG Participation - Engagement and participation in IMIA, IMIA Region or member health informatics events and activities in the past year**

The WG actively supported IMIA and the community by attending significant international scientific conferences, and by taking part in reviewing processes for international conferences and scientific journals.

### **Provide details of the WG/SIG's Outreach - Recruitment and engagement of new members and target communities, publicity, and representation at major events and/or on social media.**

The WG activities are promoted as soon as possible during the conferences the WG took part to (MIE, Medinfo). the organization of CSH supports outreach, recruitment and engagement of WG members.

For the purpose of its projects, the WG contacted and recruited experts from other communities..

The Masterclasses attracted new Human factor researchers who attended the online conference.

## **3. Current List of members:**

Melissa Baysari, Tomasso Bellandi, Elizabeth Borycki, Frederic Ehrler, Peter Elkin, Dorthe Furstrand, Maria Häggglund, Juell Homco, Aviv Shachak, Alexander Hörbst, Stephanie Jansen-Kosterink, Monique Jaspers, Ignacio Jauregui, Johanna Kaipio, Andre Kushniruk, Craig Kuziemy, Elin Lehnbo, Francisca Leite, Blake Lesselroth, Valentina Lichtner, Daniel Luna, Helen Monkman, Christian Nøhr, Carlos Otero, Rune Pedersen, Sylvia Pelayo, Raquel Santos, Isabella Scandurra, Nuno-André Silva, Mari Tyllinen, Lex Van Velsen, Sidsek Villumsen, Wu Yi Zheng, Katie Zhu, Romaric Marcilly (vice-chair), Linda Peute (chair).

Please note that not all members have the same level of involvement in the group. Some are active and others are observing. Their level of involvement changes over time.