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Interprofessionalism in Health Informatics Education – What do the IMIA and TIGER Recommendations Say?

Prof Marion J Ball, *The University of Texas at Arlington USA*

Dr Jen Bichel-Findlay, *IMIA VP Special Affairs, Australia*

Prof Gabriela Mustata Wilson, *The University of Texas at Arlington USA*

Toria Shaw Morawski, *Globally Empowered, Chicago USA*

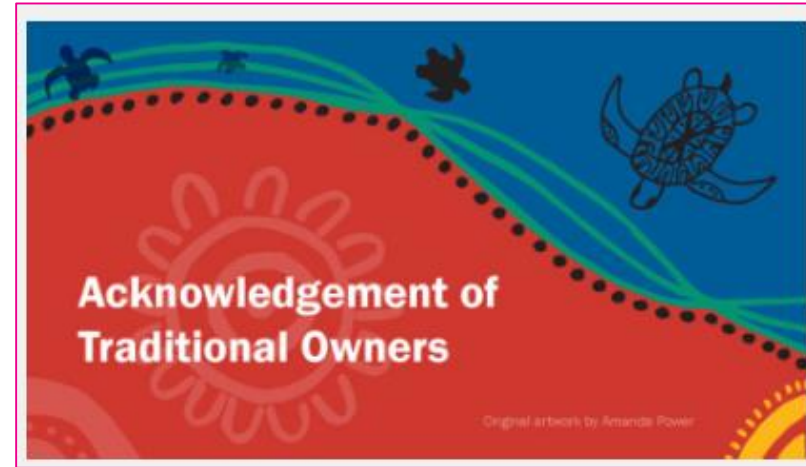
Prof Ursula H Hübner, *Osnabrück University Appl Sciences, Germany*





Acknowledgement of Country

- We acknowledge and pay respect to the Traditional Owners, Elders, and Knowledge Holders of the land that we are on – in all regions of this country. Thank you to the Aboriginal and Torres Strait Islander people and their fellow Australians.
- *Labour acknowledgement:* Thank you to the staff who are taking care of this space.





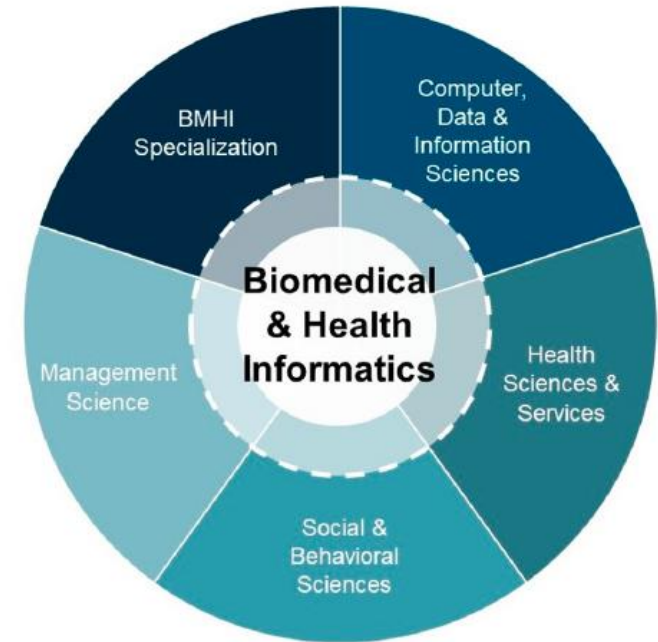
Agenda of the Panel

- Jen Bichel-Findlay “What is the essence of the 2nd Revision of the IMIA Recommendations on Education in Biomedical and Health Informatics?”
- Ursula H. Hübner “What is the TIGER International Framework for Recommendations of Core Competencies in Health Informatics 2.0 about?”
- Gabriela M. Wilson “This is the Time for Interprofessional Education!”
- Discussion (moderation Marion J. Ball and Toria Shaw Morawski):
“How can real-world experience in interprofessional education supplement these recommendations?”.



IMIA Recommendations on Education in Biomedical and Health Informatics [BMHI]

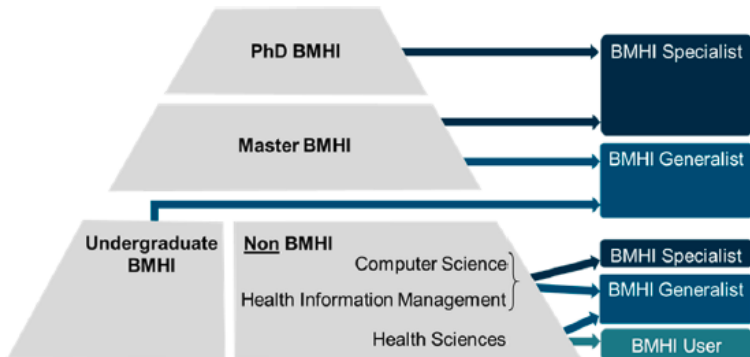
- Support BMHI curricula development
- Identify BMHI certification skills/competencies
- Provide BMHI program quality accreditation tool
- Motivate establishment and further development of BMHI programs



BMHI Knowledge Domains



IMIA Recommendations on Education in BMHI



Levels of BMHI education aligned with BMHI roles

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Recommendations of the International Medical Informatics Association (IMIA) on Education in Biomedical and Health Informatics: Second Revision

Jen Bichel-Findlay^{a,*}, Sabine Koch^b, John Mantas^c, Shabbir S. Abdul^d, Najeeb Al-Shorbaji^e, Elske Ammenwerth^f, Analia Baum^g, Elizabeth M. Borycki^h, George Demirisⁱ, Arie Hasman^j, William Hersh^k, Evelyn Hovenga^l, Ursula H. Huebner^m, Elaine S. Huesingⁿ, Andre Kushniruk^o, Kye Hwa Lee^p, Christoph U Lehmann^q, Svein-Ivar Lillehaug^r, Heimar F Marin^s, Michael Marschollek^t, Fernando Martin-Sanchez^u, Mark Merolli^v, Aurore Nishimwe^w, Kaija Saranto^x, Danielle Sent^y, Aviv Shachak^z, Jai Ganesh Udayasankaran^z, Martin C. Were^{aa}, Graham Wright^{ab}

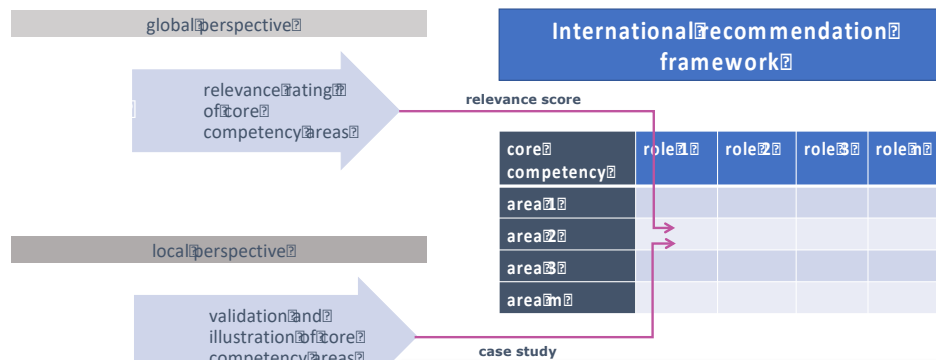
2023 IJMI publication





TIGER International Framework for Recommendations of Core Competencies in Health Informatics 2.0

Mixed Methods Approach



sources of core competency areas

- AMIA Board White Paper: definition of biomedical informatics and specification of core competencies for graduate education in the discipline³²
- German NKLM³¹
- Global Academic Curricula Competencies for Health Information Professionals Draft for Public Comment³³
- Health Informatics Scope, Careers and Competencies Version 1.9 from Australia³⁴
- Informatics Professional Core Competencies v3.0 from Canada³⁵
- Informatics Competencies for Every Practicing Nurse: Recommendations from the TIGER Collaborative³⁶
- Recommendations of the International Medical Informatics Association (IMIA) on Education in Biomedical and Health Informatics First Revision.³⁷

Original Articles

OPEN ACCESS

Technology Informatics Guiding Education Reform – TIGER*

An International Recommendation Framework of Core Competencies in Health Informatics for Nurses

Ursula Wildner¹, Toria Shao², Johannes Thye³, Nicole Egbert¹, Weimar de Fatima Maria⁴, Polun Chang⁵, Siebhan O'Connor⁶, Karen Day⁷, Michelle Honey⁸, Rachelle Blake⁹, Evelyn Hovenga¹⁰, Diane Skiba¹¹, Marion J. Ball¹¹

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Methods Inf Med 2018; 57(Open 1): e30–e42
<https://doi.org/10.3414/ME17-01-0155>



TIGER Health Informatics 2.0

Direct Patient Care [phys, nurs, etc.] (DPC)			Health Information Management (HIM)		
1	Communication [n=335]	92.4 ± 14.5	1	Communication [n=184]	90.1 ± 19.0
2	Documentation [n=337]	91.7 ± 17.2	2	Documentation [n=184]	87.7 ± 18.0
3	Information & knowledge management in patient care [n=335]	90.0 ± 17.5	3	Data analytics [n=183]	87.7 ± 17.9

Interprofessional education is possible and necessary particularly regarding communication, leadership, ethics, quality & safety management, documentation and care processes & IT integration

Executives [clinical, administrative] (EXE)			Chief Information Officers [clin, tech] (CIO)		
1	Leadership [n=55]	96.4 ± 7.8	1	Leadership [n=62]	93.8 ± 9.6
2	Communication [n=55]	95.8 ± 8.3	2	Communication [n=62]	93.2 ± 10.7
3	Quality & safety management [n=55]	90.4 ± 16.1	3	Care processes & IT integration [n=62]	91.8 ± 13.7

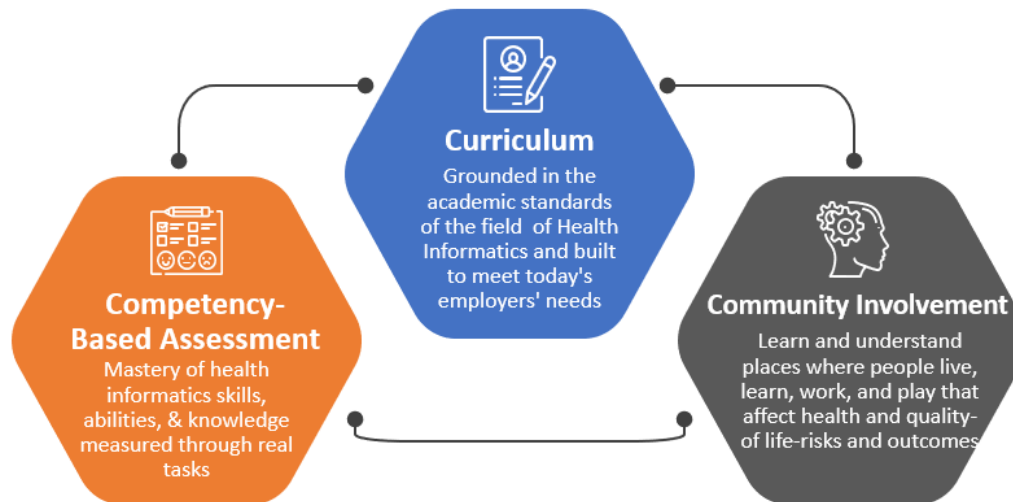
Engineering/Health IT specialist (ENG)			Science and Education (S&E)		
1	Communication [n=172]	91.3 ± 14.3	1	Communication [n=218]	91.6 ± 16.1
2	Care processes & IT integration [n=171]	87.5 ± 18.9	2	Teaching, training & education in health care [n=220]	89.2 ± 17.9
3	Information & communication technology (applications) [n=171]	87.2 ± 18.0	3	Leadership [n=218]	88.2 ± 17.3

Hübner U, Thye J, Shaw T, Elias B, Egbert N, Saranto K, Babitsch B, Procter P, Ball MJ. Towards the TIGER International Framework for Recommendations of Core Competencies in Health Informatics 2.0: Extending the Scope and the Roles. Stud Health Technol Inform. 2019;264:1218-1222. doi: 10.3233/SHTI190420.



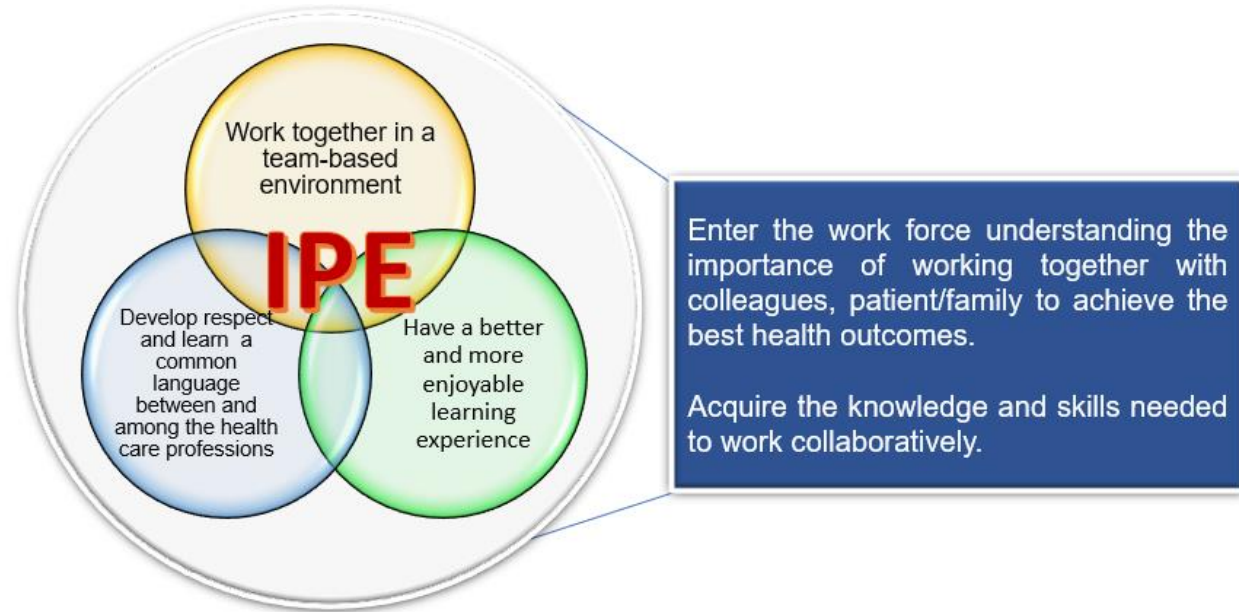
Interprofessional Education (IPE)

A COMBINATION OF THEORY AND PRACTICAL APPLICATION
DELIVERED THROUGH THREE ELEMENTS



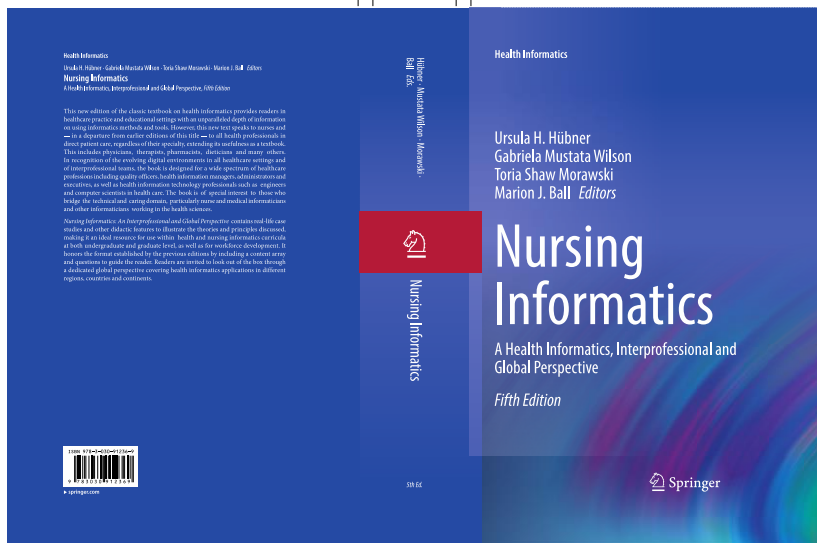


Benefits of IPE Integration in Health Informatics Curriculum





Examples of Interprofessional Education



The Osnabrück Spring School: May 2023



Ursula H. HÜBNER, Pedro VIEIRA-MARQUES,
Jens HÜSERS, Tiina HAUKKAKALLIO, Laura
PHIPPS, Mari TIETZE, Nicole EGBERT



and students from
Austria, Brazil, Germany, The Netherlands
and Ukraine



Discussion

“How can real-world experience in interprofessional education supplement these recommendations?”

moderation Marion J. Ball and Toria Shaw Morawski):



Thank you!

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