

How to Make European BMHI Education F.A.I.R.

Alfred WINTER *

Leipzig University, Institute of Medical Informatics, Statistics and Epidemiology, Leipzig, Germany
E-mail: alfred.winter@imise.uni-leipzig.de

* Author to whom correspondence should be addressed; Tel.: +49 341 9716107

Abstract

Experts in biomedical and health informatics (BMHI) are desperately sought throughout Europe. In Germany, for example, the shortage of young professionals is currently being drastically exacerbated by major government projects (Medical Informatics Initiative) and funding for the digitalization of medicine. To train the next generation, there are numerous study programs in Europe at bachelor, master and doctoral level, some of which have been compiled in a database by the European Federation for Medical Informatics (EFMI); four new BMHI study programs in Austria, Montenegro, Portugal and the UK have been accredited by the EFMI¹. In principle, the EU's Bologna regulations support the mobility of students across the EU, both to gain experience abroad and to take advantage of educational opportunities that are useful and necessary to achieve one's career goals. However, it is a challenge to find the programs that match the individual career and learning goals of (prospective) students in the Europe-wide offer of study programs and courses. Similar to the FAIR principles for data sharing, it is also necessary that educational offers are (F) findable, but also (A) accessible, (I) interoperable and (R) reusable. Own projects that use ontologies to ensure clear terminology in BMHI (SNIK², HITO³) and can provide catalogues of learning objectives (HI-LONa⁴), activities of professional societies such as the German GMDS to define catalogues of learning objectives in all areas of BMHI⁵, international and Romanian projects for a Medical Informatics and Digital Health Multilingual Ontology (MIMO)⁶, the EU project HosmartAI⁷ in which EFMI promotes education and FAIRness, and the EFMI Accreditation and Certification Committee contribute in different ways to FAIRness in educational offerings. However, further efforts are needed to achieve real FAIRness in BMHI training provision, which EFMI is well placed to coordinate.

Keywords: Education; Biomedical and health informatics; FAIR principles; Learning objectives

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