Introducing the “Fostering the uptake of RDA indicators in Systems Biomedicine as a measure for model quality and FAIRness within the COMBINE community” project

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Brief introduction

Luxembourg Centre for Systems Biomedicine (LCSB), University of Luxembourg: https://wwwen.uni.lu/lcsb/

Medical Informatics Laboratory, University Medicine Greifswald: https://www.medizin.uni-greifswald.de/medizininformatik

Common research interests

• FAIRification
• Research data management
• Health Standards, Systems Biology Standards
• Reproducible research
What is systems biomedicine?

**Systems Biomedicine** is the science that studies how biological function emerges from the interactions between the components of living systems, in particular in healthy systems and during disease progression ...

... and how these emergent properties enable or constrain the behavior of the components under study.

**Example of a curated biosimulation**
Novak and Tyson (1997). DOI: 10.1073/pnas.94.17.9147. BIOMD0000000007
COVID-19 DiseaseMap: Application of models on disease exploration

Adherance to FAIR principles fosters reuse and interoperability

Main challenges to increase the impact of computational models: Niarakis et al. (2022). DOI: 10.1093/bib/bbac212
Fostering the uptake of RDA indicators

Project goals:

1. To implement FAIR evaluation as a standard procedure during model curation/development
2. To provide, together with the COMBINE core partners, FAIR model indicators for the Systems Biomedicine community
3. Semi-automatic FAIR evaluation tool for use by the community

Legend – indicator priority: Essential Important Useful

Adapted from RDA indicators (DOI: 10.15497/rda00045)
A method for semi-automated FAIR assessment

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Interested? Join us!

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Project website:  
https://fair-ca-indicators.github.io/