

## NORM-SYS - harmonizing standardization processes for model and data exchange in systems biology

Babette Regierer<sup>1</sup>, Susanne Hollmann<sup>2</sup>, Martin Golebiewski<sup>3</sup>✉

<sup>1</sup>LifeGlimmer GmbH, Berlin, Germany

<sup>2</sup>University of Potsdam, Potsdam, Germany

<sup>3</sup>Heidelberg Institute for Theoretical Studies (HITS), Heidelberg, Germany

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The rapid development of modern life science technologies, such as Next Generation Sequencing (NGS) techniques, allows the generation of biological data with increasing speed and precision. All these data have to be accessed, processed, integrated, shared, analysed and compared. Hence, standards for data, resulting computer models and applied workflows have become a critical issue specifically in distributed and interdisciplinary approaches like systems biology. Different stakeholder groups need to be engaged in the standardisation activities to allow an efficient and fast process of standardisation and adoption of the developed standards: researchers from both, academia and industries, with their existing grass-root standardisation communities; as well as the official standardisation bodies (e.g. DIN in Germany, CEN/CENELEC at European level, or ISO at international level) with

their long-standing professional experience in the formal standardization process; or representatives of scientific journals and research funding agencies.

[NORM-SYS](#)<sup>1</sup> (Normalization and standardization for the exchange of models and data in systems biology research) is a new project that started in October 2014 aiming at enhancing and promoting the formal normalisation of existing community standards for computational modelling in systems biology in close collaboration with relevant stakeholder groups and grass-root standardisation initiatives. One major goal of NORM-SYS is to develop a concept for the transformation of existing standards into certified specifications or norms to achieve a more effective transfer of systems biology research results into applications.

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1 [normsys.de/](http://normsys.de/)