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Day of birth: May 30, 1980
Place of birth: Leipzig, Germany
Marital status: Single
Nationality: German

Current position

Assistant Professor of Computer Science, King Abdullah University of Science and Technology.

Educational background

2005-2009 PhD in Computer Science. University of Leipzig and Max Planck Institute for Evolutionary Anthropology.

- Member of graduate schools *Knowledge Representation* and *Leipzig School of Human Origins*
- Thesis title: *Basic considerations for improving interoperability between ontology-based biological information systems*
- Supervisors: Prof. Dr. Heinrich Herre and Dr. Janet Kelso

2001-2005 Diplom (M.Sc.) in Computer Science. University of Leipzig.

- Thesis title: *Situoid theory - an ontological approach to situation theory*
- Thesis advisor: Prof. Dr. Heinrich Herre
- Minor subject: Logics and Philosophy of Science

Research experience

2013-2014 *Research Fellow* in Bioinformatics

- Independent research on ontologies in biology.
- Department of Computer Science, Aberystwyth University

2012-2013 *Research associate.*

- Systematic analysis of model organism phenotypes.
- Advisor: Paul N. Schofield
- Department of Physiology, Development and Neuroscience, University of Cambridge, Cambridge, UK.

2010-2012 *Research associate.*

- Large-scale semantic integration of biomedical knowledge and data, with a particular focus on its applications in systems biology and computational modelling and the discovery of disease mechanisms.
- Advisor: Georgios V. Gkoutos.
- Department of Genetics, University of Cambridge, Cambridge, UK.

2009-2010 *Postdoctoral fellow.*

- Semantic integration of phenotypic information and the representation of disease.
- Advisor: Dietrich Rebholz-Schuhmann.
- European Bioinformatics Institute, Hinxton, UK.

2009 *Postdoctoral researcher.*

- Knowledge representation languages for biomedical ontologies to enable large-scale semantic integration and reasoning.
- Advisor: Janet Kelso.
- Max Planck Institute for Evolutionary Anthropology, Leipzig, Germany.

Teaching experience

2017-2018 *Instructor* for *Knowledge Representation and Reasoning*

- Computer Science Program, King Abdullah University of Science and Technology

2016–2017 *Instructor* for *Applied Ontology*

- Computer Science Program, King Abdullah University of Science and Technology

2015–2016 *Instructor* for *Knowledge Representation and Reasoning*

- Computer Science Program, King Abdullah University of Science and Technology

2015 *Organizer* for *Computer Science Graduate Seminar*

- Computer Science Program, King Abdullah University of Science and Technology

2014 *Instructor* in *Object-Oriented Programming*

- Software Engineering College, Northeastern University, Shenyang, China.

2013-2014 *Instructor* in *Professional And Personal Development*

- Department of Computer Science, Aberystwyth University

2013 *Instructor* in *Object-Oriented Programming*

- Software Engineering College, Northeastern University, Shenyang, China.

2013 *Co-instructor* in *Machine learning*.

- Department of Computer Science, Aberystwyth University.

2005-2008 *Co-instructor* for seminars on *Ontology in medical information systems*.

- Department of Computer Science, University of Leipzig.

2006-2007 *Instructor* and co-organizer for seminars on *Computer science and society* and *Information*.

- Department of Computer Science, University of Leipzig.

2002-2004 *Teaching assistant* for C and Java programming courses.

- Department of Computer Science, University of Leipzig.

Student supervision

2017-2018 *Supervision of master thesis*

- Topic: Ontology Design Patterns for Combining Pathology and Anatomy: Application to Study Ageing and Longevity in Inbred Mouse Strains
- Computer Science, King Abdullah University of Science and Technology

2016–2017 *Co-supervision of master thesis*

- Topic: deep learning on biological knowledge graphs
- Life Sciences Division, Hamad Bin Khalifa University, Qatar

2014 *Supervision* and *Co-supervision* for final year *BSc Computer Science* projects

- Supervision of five BSc students

- Department of Computer Science, Aberystwyth University

2008-2009 *Co-supervision of master thesis*

- Topic: ontology-based collaborative tagging in biomedicine.
- Department of Computer Science, University of Leipzig and Max Planck Institute for Evolutionary Anthropology, Leipzig, Germany.

2006-2008 *Co-supervision of master thesis*

- Topic: use of automated reasoning in a semantic wiki for life science data.
- Institute for Logics and Philosophy of Science, University of Leipzig and Max Planck Institute for Evolutionary Anthropology, Leipzig, Germany.

2006-2008 *Co-supervision of master thesis*

- Topic: representing n-ary relations and roles in a semantic wiki.
- Department of Computer Science, University of Leipzig and Max Planck Institute for Evolutionary Anthropology, Leipzig, Germany.

Tutorials

2018 *Learning with structured and semantic data.* European Conference on Computational Biology (with Maxat Kulmanov).

2018 *Ontologies in Computational Biology.* 26th Conference on Intelligent Systems in Molecular Biology (ISMB) (with Michel Dumontier).

2017 *Ontologies in Computational Biology.* 25th Conference on Intelligent Systems in Molecular Biology (ISMB) (with Michel Dumontier).

2016 *Bio-ontologies and their role in analyzing personal genome data.* 15th European Conference on Computational Biology (with Paul Schofield, Luke Slater, Imene Boudellioua).

2011 *Reasoning over biomedical ontologies.* 19th Annual International Conference on Intelligent Systems for Molecular Biology (ISMB) and 10th European Conference on Computational Biology (ECCB) (with Michel Dumontier).

2011 *A little semantics goes a long way: getting more from Linked Data with OWL.* OWL: Experiences and Directions (OWLED) 2011 (with Michel Dumontier).

Awards & fellowships

2016 *First prize (shared).* Ontology Alignment Evaluation Initiative 2016: Phenotype Track.

2009-2010 *Postdoctoral fellowship.*

- European Bioinformatics Institute, European Molecular Biology Laboratory, Hinxton, UK.

2005-2008 *PhD fellowship.*

- Graduate school "Knowledge Representation", Department of Computer Science, University of Leipzig.

Refereed publications

Journal articles

Rodríguez-García, M. Á., **Hoehndorf, R.,** "Inferring ontology graph structures using OWL reasoning". In: *BMC Bioinformatics* 19.1 (Jan. 2018), p. 7.

Alshahrani, M., Khan, M. A., Maddouri, O., Kinjo, A. R., Queralt-Rosinach, N., **Hoehndorf, R.,** "Neuro-symbolic representation learning on biological knowledge graphs". In: *Bioinformatics* 33.17 (2017), pp. 2723–2730.

Boudellioua, I., Mahamad Razali, R. B., Kulmanov, M., Hashish, Y., Bajic, V. B., Goncalves-Serra, E., Schoenmakers, N., Gkoutos, G. V., Schofield, P. N., **Hoehndorf, R.,** "Semantic prioritization of novel causative genomic variants". In: *PLOS Computational Biology* 13.4 (Apr. 2017), pp. 1–21.

Gkoutos, G. V., Schofield, P. N., **Hoehndorf, R.,** "The anatomy of phenotype ontologies: principles, properties and applications". In: *Briefings in Bioinformatics* (2017).

Hoehndorf, R., Queralt-Rosinach, N., "Data science and symbolic AI: Synergies, challenges and opportunities". In: *Data Science* (2017).

Kafkas, Ş., Sarntivijai, S., **Hoehndorf, R.,** "Usage of cell nomenclature in biomedical literature". In: *BMC Bioinformatics* 18.17 (Dec. 2017), p. 561.

Kulmanov, M., **Hoehndorf, R.,** "Evaluating the effect of annotation size on measures of semantic similarity". In: *Journal of Biomedical Semantics* 8.1 (Jan. 2017), p. 7.

Kulmanov, M., Khan, M. A., **Hoehndorf, R.,** "DeepGO: predicting protein functions from sequence and interactions using a deep ontology-aware classifier". In: *Bioinformatics* (2017). in press, btx624.

Motwalli, O., Essack, M., Jankovic, B. R., Ji, B., Liu, X., Ansari, H. R., **Hoehndorf, R.**, Gao, X., Arold, S. T., Mineta, K., Archer, J. A. C., Gojobori, T., Mijakovic, I., Bajic, V. B., "In silico screening for candidate chassis strains of free fatty acid-producing cyanobacteria". In: *BMC Genomics* 18.1 (2017), p. 33.

Rodríguez-García, M. Á., Gkoutos, G. V., Schofield, P. N., **Hoehndorf, R.,** "Integrating phenotype ontologies with PhenomeNET". In: *Journal of Biomedical Semantics* 8.1 (Dec. 2017), p. 58.

Salhi, A., Negrão, S., Essack, M., Morton, M. J. L., Bougouffa, S., Mohamad Razali, R., Radovanovic, A., Marchand, B., Kulmanov, M., **Hoehndorf, R.**, Tester, M. A., Bajic, V. B., "DES-TOMATO: A Knowledge Exploration System Focused On Tomato Species". In: *Scientific Reports* (2017).

Bolleman, J. T., Mungall, C. J., Strozzi, F., Baran, J., Dumontier, M., Bonnal, R. P. J., Buels, R., **Hoehndorf, R.**, Fujisawa, T., Katayama, T., Cock, P. A. J., "FALDO: a semantic standard for describing the location of nucleotide and protein feature annotation". In: *Journal of Biomedical Semantics* 7.1 (Apr. 2016), pp. 1–12.

Boudellioua, I., Saidi, R., **Hoehndorf, R.**, Martin, M. J., Solovyev, V., "Prediction of Metabolic Pathway Involvement in Prokaryotic UniProtKB Data by Association Rule Mining". In: *PLoS ONE* 11.7 (July 2016), pp. 1–16.

Fisher, H. M., **Hoehndorf, R.**, Bazelato, B. S., Dadras, S. S., King, L. E., Gkoutos, G. V., Sundberg, J. P., Schofield, P. N., "DermO; an ontology for the description of dermatologic disease". In: *Journal of Biomedical Semantics* 7.1 (June 2016), pp. 1–9.

Henkel, R., **Hoehndorf, R.**, Kacprowski, T., Knüpfer, C., Liebermeister, W., Waltemath, D., "Notions of similarity for systems biology models". In: *Briefings in Bioinformatics* (Oct. 2016).

Hoehndorf, R., Alshahrani, M., Gkoutos, G. V., Gosline, G., Groom, Q., Hamann, T., Kattge, J., Oliveira, S. M., Schmidt, M., Sierra, S., Smets, E., Vos, R. A., Weiland, C., "The flora phenotype ontology (FLOPO): tool for integrating morphological traits and phenotypes of vascular plants". In: *Journal of Biomedical Semantics* 7.1 (Nov. 2016), p. 65.

Hoehndorf, R., Gkoutos, G. V., Schofield, P. N., "Datamining with Ontologies". In: *Data Mining Techniques for the Life Sciences*. Ed. by Oliviero Carugo and Frank Eisenhaber. New York, NY: Springer New York, May 2016, pp. 385–397.

Salhi, A., Essack, M., Radovanovic, A., Marchand, B., Bougouffa, S., Antunes, A., Simoes, M. F., Lafi, F. F., Motwalli, O. A., Bokhari, A., Malas, T., Amoudi, S. A., Othum, G., Allam, I., Mineta, K., Gao, X., **Hoehndorf, R.**, C. Archer, J. A., Gojobori, T., Bajic, V. B., "DESM: portal for microbial knowledge exploration systems". In: *Nucleic Acids Research* 44.D1 (2016), pp. D624–D633.

Slater, L., Gkoutos, G. V., Schofield, P. N., **Hoehndorf, R.,** "Using AberOWL for fast and scalable reasoning over BioPortal ontologies". In: *Journal of Biomedical Semantics* 7.1 (Aug. 2016), pp. 1–6.

Angelis, M. H. "Analysis of mammalian gene function through broad-based phenotypic screens across a consortium of mouse clinics". In: *Nature Genetics* (July 2015).

Baran, J., Durgahee, B. S. B., Eilbeck, K., Antezana, E., **Hoehndorf, R.**, Dumontier, M., "GFVO: the Genomic Feature and Variation Ontology". In: *PeerJ* 3 (May 2015), e933.

Gkoutos, G. V., **Hoehndorf, R.**, Tsaprouni, L., Schofield, P. N., "Best behaviour? Ontologies and the formal description of animal behaviour". English. In: *Mammalian Genome* (July 2015), pp. 1–8.

Gottlieb, A., **Hoehndorf, R.**, Dumontier, M., Altman, B. R., "Ranking Adverse Drug Reactions With Crowdsourcing". In: *J Med Internet Res* 17.3 (Mar. 2015), e80.

Hoehndorf, R., Gruenberger, M., Gkoutos, G., Schofield, P., "Similarity-based search of model organism, disease and drug effect phenotypes". In: *Journal of Biomedical Semantics* 6.1 (2015), p. 6.

Hoehndorf, R., Schofield, P. N., Gkoutos, G. V., "Analysis of the human diseasome using phenotype similarity between common, genetic, and infectious diseases". In: *Scientific Reports* 5 (June 2015), p. 10888.

Hoehndorf, R., Schofield, P. N., Gkoutos, G. V., "The role of ontologies in biological and biomedical research: a functional perspective". In: *Briefings in Bioinformatics* (Mar. 2015).

Hoehndorf, R., Slater, L., Schofield, P. N., Gkoutos, G. V., "Aber-OWL: a framework for ontology-based data access in biology". In: *BMC Bioinformatics* 16 (2015), p. 26.

Oellrich, A., Walls, R., Cannon, E., Cannon, S., Cooper, L., Gardiner, J., Gkoutos, G., Harper, L., He, M., **Hoehndorf, R.**, Jaiswal, P., Kalberer, S., Lloyd, J., Meinke, D., Menda, N., Moore, L., Nelson, R., Pujar, A., Lawrence, C., Huala, E., "An ontology approach to comparative phenomics in plants". In: *Plant Methods* 11.1 (Feb. 2015). Anika Oellrich and Ramona L Walls contributed equally to this work., p. 10.

Dumontier, M., Baker, C., Baran, J., Callahan, A., Chepelev, L., Cruz-Toledo, J., Del Rio, N., Duck, G., Furlong, L., Keath, N., Klassen, D., McCusker, J., Queralt-Rosinach, N., Samwald, M., Villanueva-Rosales, N., Wilkinson, M., **Hoehndorf, R.,** "The Semantic-science Integrated Ontology (SIO) for biomedical research and knowledge discovery". In: *Journal of Biomedical Semantics* 5.1 (2014), p. 14.

Hoehndorf, R., Hancock, J. M., Hardy, N. W., Mallon, A. M., Schofield, P. N., Gkoutos, G. V., "Analyzing gene expression data in mice with the Neuro Behavior Ontology". In: *Mamm Genome* 25.1-2 (2014), pp. 32–40.

Hoehndorf, R., Haendel, M., Stevens, R., Rebholz-Schuhmann, D., "Thematic series on biomedical ontologies in JBMS: challenges and new directions". In: *Journal of Biomedical Semantics* 5.1 (2014), p. 15.

Katayama, T., Wilkinson, M. D., Aoki-Kinoshita, K. F., Kawashima, S., Yamamoto, Y., Yamaguchi, A., Okamoto, S., Kawano, S., Kim, J.-D., Wang, Y., Wu, H., Kano, Y., Ono, H., Bono, H., Kocbek, S., Aerts, J., Akune, Y., Antezana, E., Arakawa, K., Aranda, B., Baran, J., Bolleman, J., Bonnal, R. J., Buttigieg, P. L., Campbell, M. P., Chen, Y.-A., Chiba, H., Cock, P. J., Cohen, K. B., Constantin, A., Duck, G., Dumontier, M., Fujisawa, T., Fujiwara, T., Goto, N., **Hoehndorf, R.**, Igarashi, Y., Itaya, H., Ito, M., Iwasaki, W., Kala, M., Katoda, T., Kim, T., Kokubu, A., Komiyama, Y., Kotera, M., Laibe, C., Lapp, H., Lütteke, T., Marshall, M. S., Mori, T., Mori, H., Morita, M., Murakami, K., Nakao, M., Narimatsu, H., Nishide, H., Nishimura, Y., Nystrom-Persson, J., Ogishima, S., Okamura, Y., Okuda, S., Oshita, K., Packer, N. H., Prins, P., Ranzinger, R., Rocca-Serra, P., Sansone, S., Sawaki, H., Shin, S.-H., Splendiani, A., Strozzi, F., Tadaka, S., Toukach, P., Uchiyama, I., Umezaki, M., Vos, R., Whetzel, P. L., Yamada, I., Yamasaki, C., Yamashita, R., York, W. S., Zmasek, C. M., Kawamoto, S., Takagi, T., "BioHackathon series in 2011 and 2012: penetration of ontology and linked data in life science domains." In: *Journal of biomedical semantics* 5.1 (2014), p. 5.

Vos, R., Biserkov, J., Balech, B., Beard, N., Blissett, M., Brenninkmeijer, C., Dooren, T., Eades, D., Gosline, G., Groom, Q., Hamann, T., Hettling, H., **Hoehndorf, R.**, Holleman, A., Hovenkamp, P., Kelbert, P., King, D., Kirkup, D., Lammers, Y., DeMeulemeester, T., Mietchen, D., Miller, J., Mounce, R., Nicolson, N., Page, R., Pawlik, A., Pereira, S., Penev, L., Richards, K., Sautter, G., Shorthouse, D., Tähtinen, M., Weiland, C., Williams, A., Sierra, S., "Enriched biodiversity data as a resource and service". In: *Biodiversity Data Journal* 2 (2014), e1125.

Vos, R., Biserkov, J., Balech, B., Beard, N., Blissett, M., Brenninkmeijer, C., Dooren, T., Eades, D., Gosline, G., Groom, Q., Hamann, T., Hettling, H., **Hoehndorf, R.**, Holleman, A., Hovenkamp, P., Kelbert, P., King, D., Kirkup, D., Lammers, Y., DeMeulemeester, T., Mietchen, D., Miller, J., Mounce, R., Nicolson, N., Page, R., Pawlik, A., Pereira, S., Penev, L., Richards, K., Sautter, G., Shorthouse, D., Tähtinen, M., Weiland, C., Williams, A., Sierra, S., "Enriched biodiversity data as a resource and service". In: *Biodiversity Data Journal* 2 (June 2014), e1125.

Cook, D., Neal, M., **Hoehndorf, R.**, Gkoutos, G., Gennari, J., "Representing physiological processes and their participants with PhysioMaps". In: *Journal of Biomedical Semantics* 4.Suppl 1 (2013), S2.

Dumontier, M., Chepelev, L. L., **Hoehndorf, R.,** "Semantic Systems Biology: Formal Knowledge Representation in Systems Biology for Model Construction, Retrieval, Validation and Discovery". In: *Systems Biology*. Springer Netherlands, 2013, pp. 355–373.

Hoehndorf, R., Hardy, N. W., Osumi-Sutherland, D., Tweedie, S., Schofield, P. N., Gkoutos, G. V., "Systematic Analysis of Experimental Phenotype Data Reveals Gene Functions". In: *PLoS ONE* 8.4 (Apr. 2013), e60847.

Hoehndorf, R., Hiebert, T., Hardy, N. W., Schofield, P. N., Gkoutos, G. V., Dumontier, M., "Mouse model phenotypes provide information about human drug targets". In: *Bioinformatics* (Oct. 2013).

Hoehndorf, R., Schofield, P. N., Gkoutos, G. V., "An integrative, translational approach to understanding rare and orphan genetically based diseases". In: *Interface Focus* 3.2 (2013).

Rebholz-Schuhmann, D., Kafkas, S., Kim, J.-H., Li, C., Jimeno Yepes, A., **Hoehndorf, R.**, Backofen, R., Lewin, I., "Evaluating gold standard corpora against gene/protein tagging solutions and lexical resources". In: *Journal of Biomedical Semantics* 4.1 (Oct. 2013), p. 28.

Rebholz-Schuhmann, D., Kim, J.-H., Yan, Y., Dixit, A., Friteyre, C., **Hoehndorf, R.**, Backofen, R., Lewin, I., "Evaluation and Cross-Comparison of Lexical Entities of Biological Interest (LexEBI)". In: *PLoS ONE* 8.10 (Oct. 2013), e75185.

Gkoutos, G. V., **Hoehndorf, R.,** "Ontology-based cross-species integration and analysis of Saccharomyces cerevisiae phenotypes". In: *Journal of Biomedical Semantics* 3.Suppl 2 (2012), S6.

Gkoutos, G. V., Schofield, P. N., **Hoehndorf, R.,** "Chapter Four - The Neurobehavior Ontology: An Ontology for Annotation and Integration of Behavior and Behavioral Phenotypes". In: *Bioinformatics of Behavior: Part 1*. Ed. by Elissa J. Chesler and Melissa A. Haendel. Vol. 103. International Review of Neurobiology. Academic Press, 2012, pp. 69–87.

Gkoutos, G. V., Schofield, P. N., **Hoehndorf, R.,** "The Units Ontology: a tool for integrating units of measurement in science". In: *Database* 2012 (2012).

Hoehndorf, R., Dumontier, M., Gkoutos, G. V., "Evaluation of research in biomedical ontologies". In: *Briefings in Bioinformatics* (Sept. 2012).

Hoehndorf, R., Dumontier, M., Gkoutos, G. V., "Identifying aberrant pathways through integrated analysis of knowledge in pharmacogenomics". In: *Bioinformatics* 28.16 (Aug. 2012), pp. 2169–2175.

Hoehndorf, R., Harris, M. A., Herre, H., Rustici, G., Gkoutos, G. V., "Semantic integration of physiology phenotypes with an application to the Cellular Phenotype Ontology". In: *Bioinformatics* 28.13 (2012), pp. 1783–1789.

Hoehndorf, R., Oellrich, A., Rebholz-Schuhmann, D., Schofield, P. N., Gkoutos, G. V., "Linking PharmGKB to phenotype studies and animal models of disease for drug repurposing". In: *Pacific Symposium on Biocomputing (PSB)* (2012), pp. 388–399.

Jupp, S., Stevens, R., **Hoehndorf, R.,** "Logical Gene Ontology Annotations (GOAL): exploring gene ontology annotations with OWL". In: *Journal of Biomedical Semantics* 3.Suppl 1 (2012), S3.

Loebe, F., Stumpf, F., **Hoehndorf, R.**, Herre, H., "Towards improving phenotype representation in OWL". In: *Journal of Biomedical Semantics* 3.Suppl 2 (2012), S5.

Oellrich, A., Gkoutos, G. V., **Hoehndorf, R.**, Rebholz-Schuhmann, D., "Quantitative comparison of mapping methods between Human and Mammalian Phenotype Ontology". In: *Journal of Biomedical Semantics* 3.Suppl 2 (2012), S1.

Rebholz-Schuhmann, D., Oellrich, A., **Hoehndorf, R.,** "Text-mining solutions for biomedical research: enabling integrative biology". In: *Nature Reviews Genetics* 13.12 (Dec. 2012), pp. 829–839.

Schofield, P. N., **Hoehndorf, R.**, Gkoutos, G. V., "Mouse genetic and phenotypic resources for human genetics". In: *Human Mutation* (2012).

Wimalaratne, S. M., Grenon, P., **Hoehndorf, R.**, Gkoutos, G. V., Bono, B., "An infrastructure for ontology-based information systems in biomedicine: RICORDO case study". In: *Bioinformatics* 28.3 (2012), pp. 448–450.

Adams, N., **Hoehndorf, R.**, Gkoutos, G. V., Hansen, G., Hennig, C., "PIDO: The Primary Immunodeficiency Disease Ontology". In: *Bioinformatics* (Sept. 2011).

Bono, B., **Hoehndorf, R.**, Wimalaratne, S., Gkoutos, G. V., Grenon, P., "The RICORDO approach to semantic interoperability for biomedical data and models: strategy, standards and solutions." In: *BMC Research Notes* 4.1 (2011), p. 313.

Herre, H., **Hoehndorf, R.**, Kelso, J., Loebe, F., Schulz, S., "OBML - Ontologies in Biomedicine and Life Sciences". In: *Journal of Biomedical Semantics* 2.Suppl 4 (Aug. 2011), p. I1.

Hoehndorf, R., Batchelor, C., Bittner, T., Dumontier, M., Eilbeck, K., Knight, R., Mungall, C. J., Richardson, J. S., Stombaugh, J., Westhof, E., Zirbel, C. L., Leontis, N. B., "The RNA Ontology (RNAO): An Ontology for Integrating RNA Sequence and Structure Data". In: *Applied Ontology* 6.1 (Jan. 2011), pp. 53–89.

Hoehndorf, R., Dumontier, M., Gennari, J. H., Wimalaratne, S., Bono, B., Cook, D. L., Gkoutos, G. V., "Integrating systems biology models and biomedical ontologies". In: *BMC Systems Biology* 5.1 (Aug. 2011), pp. 124+.

Hoehndorf, R., Dumontier, M., Oellrich, A., Rebholz-Schuhmann, D., Schofield, P. N., Gkoutos, G. V., "Interoperability between biomedical ontologies through relation expansion, upper-level ontologies and automatic reasoning". In: *PLOS ONE* 6.7 (July 2011), e22006.

Hoehndorf, R., Dumontier, M., Oellrich, A., Wimalaratne, S., Rebholz-Schuhmann, D., Schofield, P. N., Gkoutos, G. V., "A common layer of interoperability for biomedical ontologies based on OWL EL". In: *Bioinformatics* 27.7 (Apr. 2011), pp. 1001–1008.

Hoehndorf, R., Ngonga Ngomo, A.-C., Pyysalo, S., Ohta, T., Oellrich, A., Rebholz-Schuhmann, D., "Ontology design patterns to disambiguate relations between genes and gene products in GENIA". In: *Journal of Biomedical Semantics* 2.Suppl 5 (2011), S1.

Hoehndorf, R., Schofield, P. N., Gkoutos, G. V., "PhenomeNET: a whole-phenome approach to disease gene discovery". In: *Nucleic Acids Research* 39.18 (July 2011), e119.

Schofield, P. N., Sundberg, J. P., **Hoehndorf, R.**, Gkoutos, G. V., "New approaches to the representation and analysis of phenotype knowledge in human diseases and their animal models". In: *Briefings in Functional Genomics* 10.5 (2011), pp. 258–265.

Hoehndorf, R., Ngonga Ngomo, A.-C., Dannemann, M., Kelso, J., "Statistical tests for associations between two directed acyclic graphs." In: *PloS ONE* 5.6 (June 2010), e10996+.

Hoehndorf, R., Ngonga Ngomo, A.-C., Kelso, J., "Applying the functional abnormality ontology pattern to anatomical functions." In: *Journal of biomedical semantics* 1.1 (Mar. 2010), pp. 4+.

Hoehndorf, R., Oellrich, A., Dumontier, M., Kelso, J., Rebholz-Schuhmann, D., Herre, H., "Relations as patterns: bridging the gap between OBO and OWL." In: *BMC Bioinformatics* 11.1 (Aug. 2010), pp. 441+.

Hoehndorf, R., Oellrich, A., Rebholz-Schuhmann, D., "Interoperability between phenotype and anatomy ontologies". In: *Bioinformatics* 26.24 (Oct. 2010), pp. 3112–3118.

Hoehndorf, R., Bacher, J., Backhaus, M., Gregorio, S. E., Loebe, F., Prüfer, K., Uciteli, A., Visagie, J., Herre, H., Kelso, J., "BOWiki: an ontology-based wiki for annotation of data and integration of knowledge in biology." In: *BMC Bioinformatics* 10 Suppl 5.Suppl 5 (2009), S5+.

Hoehndorf, R., Kelso, J., Herre, H., "The ontology of biological sequences." In: *BMC Bioinformatics* 10.1 (Nov. 2009), pp. 377+.

Hoehndorf, R., Loebe, F., Poli, R., Kelso, J., Herre, H., "GFO-Bio: A biomedical core ontology". In: *Applied Ontology* 3.4 (Dec. 2008), pp. 219–227.

Hoehndorf, R., Loebe, F., Kelso, J., Herre, H., "Representing default knowledge in biomedical ontologies: Application to the integration of anatomy and phenotype ontologies". In: *BMC Bioinformatics* 8.1 (Oct. 2007).

Burek, P., **Hoehndorf, R.**, Loebe, F., Visagie, J., Herre, H., Kelso, J., "A top-level ontology of functions and its application in the Open Biomedical Ontologies." In: *Bioinformatics* 22.14 (July 2006), e66–e73.

International conferences and workshops

Alrashed, M., Alharbi, L., Al-Muhammadi, O. T., Bahadiq, S., **Hoehndorf, R.**, Mencel, L., "Interactively Exploring Graph Coloring Algorithms in a Bilingual Web Platform with Gamification". In: *Proceedings of EdMedia: World Conference on Educational Media and Technology 2017*. Ed. by Joyce P. Johnston. Washington, DC: Association for the Advancement of Computing in Education (AACE), June 2017, pp. 298–302.

Boudellioua, I., Kulmanov, M., Schofield, P. N., Gkoutos, G. V., **Hoehndorf, R.,** "Phenotype-driven discovery of digenic variants in personal genome sequences". In: *Proceedings of VarI-SIG*. July 2017.

García, M. A. R., Gkoutos, G. V., Schofield, P. N., **Hoehndorf, R.,** "Integrating phenotype ontologies with PhenomeNET". In: *Proceedings of Ontology Matching Workshop 2016*. Oct. 2016.

Hoehndorf, R., Mencel, L., Gkoutos, G. V., Schofield, P. N., "Large-Scale Reasoning over Functions in Biomedical Ontologies". In: *Formal Ontology in Information Systems*. Vol. 283. Frontiers in Artificial Intelligence and Applications. IOS Press, July 2016, pp. 299–312.

Kulmanov, M., **Hoehndorf, R.,** "Evaluating the effect of annotation size on measures of semantic similarity". In: *Proceedings of Bio-Ontologies SIG*. July 2016.

Slater, L., Gkoutos, G. V., Schofield, P. N., **Hoehndorf, R.,** "To MIREOT or not to MIREOT? A case study of the impact of using MIREOT in the Experimental Factor Ontology

(EFO)". In: *International Conference on Biomedical Ontology and BioCreative (ICBO BioCreative 2016)*. Proceedings of the Joint International Conference on Biological Ontology and BioCreative (2016). ICBO and BioCreative. ICBO and BioCreative, Aug. 2016.

Slater, L., Rodríguez-García, M. Á., O'Shea, K., Schofield, P. N., Gkoutos, G. V., **Hoehndorf, R.,** "Experiences with Aber-OWL, an Ontology Repository with OWL EL Reasoning". In: *Ontology Engineering: 12th International Experiences and Directions Workshop on OWL, OWLED 2015, co-located with ISWC 2015, Bethlehem, PA, USA, October 9-10, 2015, Revised Selected Papers*. Ed. by Valentina Tamma, Mauro Dragoni, Rafael Gonçalves, and Agnieszka Ławrynowicz. Cham: Springer International Publishing, 2016, pp. 81–86.

Slater, L., Gkoutos, G., Schofield, P. N., **Hoehndorf, R.,** "AberOWL: an ontology portal with OWL EL reasoning". In: *Proceedings of International Conference on Biomedical Ontologies (ICBO)*. July 2015, pp. 127–128.

Slater, L., Gkoutos, G., Schofield, P. N., **Hoehndorf, R.,** "Using Aber-OWL for fast and scalable reasoning over BioPortal ontologies". In: *Proceedings of International Conference on Biomedical Ontologies (ICBO)*. July 2015, pp. 72–76.

Hoehndorf, R., Dumontier, M., Gkoutos, G. V., "Integration of knowledge for personalized medicine: a pharmacogenomics case-study". In: *Proceedings of the Virtual Physiological Human Conference 2012 (VPH2012)*. 2012.

Hoehndorf, R., Gkoutos, G. V., "A translational medicine approach to orphan diseases". In: *Proceedings of the Virtual Physiological Human Conference 2012 (VPH2012)*. 2012.

Wyner, A., Riley, L., **Hoehndorf, R.**, Croset, S., "Argumentation to Represent and Reason over Biological Systems". In: *Proceedings of the 3rd International Conference on Information Technology in Bio- and Medical Informatics (ITBAM 2012)*. 2012.

Gkoutos, G. V., **Hoehndorf, R.,** "Ontology-based cross-species integration and analysis of Saccharomyces cerevisiae phenotypes". In: *Proceedings of the 3rd Workshop for Ontologies in Biomedicine and Life sciences (OBML)*. Oct. 2011.

Jupp, S., Stevens, R., **Hoehndorf, R.,** "Exploring Gene Ontology Annotations with OWL". In: *Proceedings of the 13th Bio-Ontology Meeting*. July 2011.

Loebe, F., Stumpf, F., **Hoehndorf, R.**, Herre, H., "Towards Improving Phenotype Representation in OWL". In: *Proceedings of the 3rd Workshop for Ontologies in Biomedicine and Life sciences (OBML)*. Oct. 2011.

Masuya, H., Gkoutos, G. V., Tanaka, N., Waki, K., Okuda, Y., Kushida, T., Kobayashi, N., Doi, K., Kozaki, K., **Hoehndorf, R.**, Wakana, S., Toyoda, T., Mizoguchi, R., "Investigation of the fundamental strategy for interoperability of description of biological measurements". In: *Proceedings of the Second International Conference on Biomedical Ontology*. July 2011.

Oellrich, A., **Hoehndorf, R.**, Gkoutos, G. V., Rebholz-Schuhmann, D., "Quantitative comparison of mapping methods between Human and Mammalian Phenotype Ontology". In: *Proceedings of the 3rd Workshop for Ontologies in Biomedicine and Life sciences (OBML)*. Oct. 2011.

Schulz, S., Brochhausen, M., **Hoehndorf, R.,** "Higgs bosons, mars missions, and unicorn delusions: How to deal with terms of dubious reference in scientific ontologies". In: *Proceedings of the Second International Conference on Biomedical Ontology*. July 2011.

Adams, N., Hennig, C., **Hoehndorf, R.**, Oellrich, A., Rebholz-Schuhmann, D., Hansen, G., "The Ontology of Primary Immunodeficiency Diseases (PIDs): Using PIDs to Rethink the Ontology of Phenotypes". In: *Proceedings of the 2nd Workshop for Ontologies in Biomedicine and Life sciences (OBML)*. Sept. 2010.

Dumontier, M., **Hoehndorf, R.,** "Realism for scientific ontologies". In: *Formal Ontology in Information Systems, Proceedings of the Sixth International Conference, FOIS 2010*. Ed. by Antony Galton and Riichiro Mizoguchi. Vol. 209. Frontiers in Artificial Intelligence and Applications. Toronto, Canada: IOS Press, May 2010, pp. 387–399.

Hoehndorf, R., Ngonga Ngomo, A.-C., Pyysalo, S., Ohta, T., Oellrich, A., Rebholz-Schuhmann, D., "Applying ontology design patterns to the implementation of relations in GENIA". In: *Proceedings of the Fourth Symposium on Semantic Mining in Biomedicine (SMBM 2010)*. Oct. 2010.

Hoehndorf, R., Oellrich, A., Dumontier, M., Kelso, J., Herre, H., Rebholz-Schuhmann, D., "OWLDEF: Integrating OBO and OWL". In: *Proceedings of the 13th Annual Bio-Ontologies Meeting*. July 2010.

Hoehndorf, R., Oellrich, A., Dumontier, M., Kelso, J., Herre, H., Rebholz-Schuhmann, D., "Relational patterns in OWL and their application to OBO". In: *OWL: Experiences and Directions (OWLED)*. June 2010.

Hoehndorf, R., Kelso, J., Herre, H., "A Formal Ontology of Sequences". In: *Proceedings of the First International Conference on Biomedical Ontologies (ICBO)*. 713. Nature Publishing Group, July 2009.

Hoehndorf, R., Kelso, J., Herre, H., "Contributions to the formal ontology of functions and dispositions: an application of non-monotonic reasoning". In: *Proceedings of the 12th Annual Bio-Ontologies Meeting*. June 2009.

Hoehndorf, R., Ngonga Ngomo, A.-C., Herre, H., "Developing Consistent and Modular Software Models with Ontologies". In: *SoMeT*. Sept. 2009, pp. 399–412.

Hoehndorf, R., Ngonga Ngomo, A.-C., Kelso, J., "The application of an ontology design pattern for functional abnormalities to phenotype ontologies and the extraction of an ontology of anatomical functions". In: *Proceedings of the The 3rd International Symposium on Languages in Biology and Medicine*. Oct. 2009.

Hoehndorf, R., Bacher, J., Backhaus, M., Gregorio, S. E., Loebe, F., Prüfer, K., Uciteli, A., Visagie, J., Herre, H., Kelso, J., "BOWiki: An ontology-based wiki for annotation of data and integration of knowledge in biology". In: *Proceedings of the 11th Annual Bio-Ontologies Meeting*. Ed. by Phillip Lord, Nigam Shah, Susanna-Assunta Sansone, and Matthew Cockerill. June 2008.

Hoehndorf, R., Ngonga Ngomo, A.-C., Dannemann, M., "Towards Ontological Interpretations for Improved Text Mining". In: *Proceedings of the Third International Symposium on Semantic Mining in Biomedicine (SMBM 2008), Turku, Finland*. Ed. by Tapio Salakoski, Dietrich Rebholz-Schuhmann, and Sampo Pyysalo. Turku Centre for Computer Science (TUCS), Sept. 2008, pp. 165–166.

Hoehndorf, R., Ngonga Ngomo, A.-C., Dannemann, M., Kelso, J., "From Terms to Categories: Testing the Significance of Co-occurrences between Ontological Categories". In: *Proceedings of the Third International Symposium on Semantic Mining in Biomedicine (SMBM 2008), Turku, Finland*. Ed. by Tapio Salakoski, Dietrich Rebholz-Schuhmann,

and Sampo Pyysalo. Turku Centre for Computer Science (TUCS), Sept. 2008, pp. 53–60.

Backhaus, M., Kelso, J., Bacher, J., Herre, H., **Hoehndorf, R.**, Loebe, F., Visagie, J., "BOWiki - a collaborative annotation and ontology curation framework". In: *Proceedings of Workshop on Social and Collaborative Construction of Structured Knowledge*. May 2007.

Hoehndorf, R., Prüfer, K., Backhaus, M., Herre, H., Kelso, J., Loebe, F., Visagie, J., "A proposal for a gene functions wiki". In: *OTM Workshops 2006*. Ed. by R. Meersman, Z. Tari, and P. Herrero. LNCS 4277. Springer-Verlag, Nov. 2006, pp. 669–678.

Hoehndorf, R., Prüfer, K., Backhaus, M., Visagie, J., Kelso, J., "The design of a wiki-based curation system for the Ontology of Functions". In: *Proceedings of the Joint BioLINK and 9th Bio-Ontologies Meeting*. July 2006.

Other refereed publications

Hoehndorf, R., Gkoutos, G. V., Schofield, P. N., "Datamining with Ontologies". In: *Data Mining Techniques for the Life Sciences*. Ed. by Oliviero Carugo and Frank Eisenhaber. New York, NY: Springer New York, May 2016, pp. 385–397.

Schofield, P. N., **Hoehndorf, R.**, Smith, C. L., Eppig, J. T., Gkoutos, G. V., "Kaufmann's Atlas of Mouse Development Supplement". In: Amsterdam: Elsevier Academic Press, 2015. Chap. The Informatics of Developmental Phenotypes, pp. 307–318.

Hoehndorf, R. "What is an upper-level ontology?" In: *Ontogenesis blog*. Feb. 2010.

Kelso, J., **Hoehndorf, R.**, Prüfer, K., "Ontologies in Biology". In: *Theory and Applications of Ontology: Computer Applications*. Ed. by Roberto Poli, Michael Healy, and Achilles Kameas. Springer Netherlands, July 2010, pp. 347–371.

Hoehndorf, R. "Basic considerations for improving interoperability between ontology-based biological information systems". PhD thesis. University of Leipzig, June 2009.

Herre, H., Heller, B., Burek, P., **Hoehndorf, R.**, Loebe, F., Michalek, H., *General Formal Ontology (GFO) - A Foundational Ontology Integrating Objects and Processes [Version 1.0]*. Tech. rep. 8. Leipzig: Research Group Ontologies in Medicine, Institute of Medical Informatics, Statistics and Epidemiology, University of Leipzig, July 2006.

Hoehndorf, R. "Situoid Theory - An ontological approach to Situation Theory". MA thesis. Institute for Informatics, University of Leipzig, Mar. 2005.

Funding

2018-2019 *Improvement of genetic variant prioritization technology.*

- Funding body: KAUST (Center Partnership Fund)
- PI: Robert Hoehndorf
- Co-Investigators: Paul Schofield, Georgios Gkoutos, Vladimir Bajic
- Total amount: 129,715 USD (9,500 USD to Robert Hoehndorf)

2018-2020 *Bio2Vec: Smart analytics infrastructure for the life sciences.*

- Funding body: KAUST (Competitive Research Grant)

- PI: Robert Hoehndorf
- Co-Investigators: Xin Gao, Michel Dumontier, Jens Lehmann
- Total amount: 399,986 USD (113,250 USD to Robert Hoehndorf)

2018-2020 *The Whale Shark 100: Applying Population Genomics to Understand Mysteries of the World's Largest Fish.*

- Funding body: KAUST (Competitive Research Grant)
- PI: Takashi Gojobori
- Co-Investigators: Michael Berumen, Robert Hoehndorf
- Amount: 389,713 USD (105,838 USD to Robert Hoehndorf)

2016-2018 *Data integration and ontologies for microbial cell factories.*

- Funding body: KAUST (Center Competitive Funding)
- PI: Vladimir Bajic
- Role: WP leader
- Amount: 4,786,036 (115,691 USD to Robert Hoehndorf)

Talks and presentations

Invited talks

2018 *Symbolic AI in Computational Biology.* Bioinformatics Research Seminar, University of Cambridge, UK.

2018 *Symbolic AI in Computational Biology.* Keynote lecture, the Eighth BEAR PGR Conference & Users Forum, University of Birmingham, UK.

2017 *Combining symbolic and statistical AI methods for biomedical data analysis.* Research seminar, IIIS, Tsinghua University.

2017 *Semantic prioritization of novel causative variants.* Research seminar, Peking University.

2017 *The Semantic Web – Bioinformatics applications.* Lecture in CS, Tsinghua University.

2017 *Symbolic AI in Computational Biology.* Special Research Seminar, Scripps Research Institute.

2017 *Symbolic AI in Computational Biology.* Biomedical Informatics Research Seminar, Stanford University.

2017 *Symbolic AI in Computational Biology.* Special Research Seminar, University of Colorado Denver.

2017 *Symbolic AI in Computational Biology.* Research Seminar, Maastricht University.

2017 *Ontologies in Biology.* Colloquium in Honor of Prof. Dr. Heinrich Herre on the Occassion of his 75th Birthday, University of Leipzig.

2016 *Ontologies of phenotypes and their applications in personalized medicine.* CS Seminar, University of Murcia.

2016 *Mobilizing and integrating phenotype data.* Biodiversity-Informatics Seminar, Senckenberg Institute for Biodiversity.

2013 *From ontologies to translational medicine.* CS Seminar, University of Rostock.

2012 *My ontology is better than your! Building and evaluating ontologies for integrative research.* Keynote, Bio-Ontologies Meeting (co-located with ISMB 2012).

2012 *From ontologies to translational medicine.* Invited External Speaker, European Bioinformatics Institute.

2012 *Phenotype informatics and translational research.* IMISE Kolloqium, Institute for Medical Informatics, Statistics and Epidemiology, University of Leipzig.

2012 *Ontologies for integrating and analyzing phenotypes.* Department of Computer Science, University of Birmingham.

2011 *Exploring phenotype data for information about rare diseases.* Department of Computer Science, University of Capetown.

2011 *Ontologies for representing, integrating and analyzing phenotypes.* AIC Seminar, Stanford Research Institute.

2011 *Towards integration of biomedical ontologies and systems biology.* Computational Modeling in Biology Network (COMBINE).

2011 *Integrating systems biology and biomedical ontologies.* Workshop on Modelling interoperability, European Bioinformatics Institute.

2010 *Interoperability between biomedical ontologies.* Knowledge Representation and Knowledge Management Research Group, University Mannheim.

2010 *The ontology of biomedical sequences.* IMISE Kolloqium, Institute for Medical Informatics, Statistics and Epidemiology, University of Leipzig.

2010 *Perspectives for the ontology of phenotypes.* Ontology Interest Group, European Bioinformatics Institute.

2010 *An introduction to formal ontology.* Ontology Interest Group, European Bioinformatics Institute.

2008 *Towards interoperability between anatomy and phenotype ontologies.* Dagstuhl seminar *Ontologies and Text Mining for Life Sciences : Current Status and Future Perspectives.*

2007 *Interoperability, non-monotonicity and core ontologies.* Dagstuhl seminar *Towards Interoperability of Biomedical Ontologies.*

Professional memberships

2006–now International Society of Computational Biology (ISCB)
2009–2013 International Organization for Ontology and its Applications (IAOA)

2009–2012
- sub-chair of education committee for Doctoral Consortia

2008–2014 Nicolai Hartmann Society
2007–2012 Association for Computing Machinery (ACM)

- Member of Special Interest Group "Artificial Intelligence"

Professional services

Editorial work

2017–now Associate Editor: *Applied Ontology*
2017–now Associate Editor: *BMC Bioinformatics*
2016–now Member of Editorial Board: *Data Science*
2012–now Associate Editor: *Journal of Biomedical Semantics*
2012 Editor: Special Issue on Ontologies in Biomedicine and Life Sciences in *Journal of Biomedical Semantics*
2011 Editor: Special Issue on Ontologies in Biomedicine and Life Sciences in *Journal of Biomedical Semantics*
2010 Editor: Special Issue on Ontologies in Biomedicine and Life Sciences in *Journal of Biomedical Semantics*

Reviewing for scientific journals

I have reviewed manuscripts for

- *Applied Ontology*
- *Bioinformatics*
- *BMC Bioinformatics*
- *BMC Complementary and Alternative Medicine*
- *Briefings in Bioinformatics*
- *Central European Journal of Computer Science*
- *Computational and Structural Biotechnology Journal*

- *Data Science*
- *Database*
- *Genetics in Medicine*
- *Genome Medicine*
- *Genomics, Proteomics & Bioinformatics*
- *Human Mutation*
- *International Journal on Semantic Web and Information Systems*
- *Journal of Bioinformatics and Computational Biology*
- *Journal of Biomedical Informatics*
- *Journal of Biomedical Semantics*
- *Journal of Engineering*
- *Journal of Web Semantics*
- *Knowledge-based Systems*
- *Natural Language Engineering*
- *PLoS ONE*
- *Scientific Reports*

Reviewing for funding organizations

I have reviewed research grant applications for

- German Federal Ministry of Education and Research (BMBF)
- German Research Foundation (DFG)
- National Research Fund Luxembourg (FNR)
- Dr Hadwen Trust
- European Commission Horizon 2020: ERA-Net for Research Programmes on Rare Diseases

and have been a panel member for grant programs at

- German Federal Ministry of Education and Research (BMBF)
  - i:DSem – Integrative Data Semantics
  - Computational Life Sciences

Conference organization

2018 *PC Member* for Function-SIG 2018

2018 *PC Member* for Data Integration in the Life Sciences (DILS 2018)

2018 *PC Member* for FOIS 2018: 10th International Conference on Formal Ontologies in Information Systems

2018 *PC member* of the Extended Semantic Web Conference (ESWC), 2018

2018 *PC Member* for International Semantic Web Conference (ISWC) 2018

2018 *PC Member and Co-Organizer* for Bio-Ontologies SIG 2018

2018 *PC Member* for Intelligent Systems in Molecular Biology (ISMB) 2018

2018 *PC Member* for Semantic Web Solutions for Large-scale Biomedical Data Analytics (SeWeBMeDA) 2018

2017–2020 *Steering Committee* member for International Conference on Biological and Biomedical Ontologies (ICBO)

2017 *PC Member* for Semantic Web Applications and Tools in Life Sciences (SWAT4LS) 2017

2017 *Reviewer* for the AMIA 2018 Informatics Summit, 2018

2017 *Organizing committee member* for the International Conference on Biomedical Ontology (ICBO) 2017

2017 *PC member* for the Workshop on Ontologies and Databases in Life Sciences 2017 (ODLS)

2017 *PC member* of the Function SIG 2017

2017 *PC member* and *Co-organizer* of the Bio-Ontologies SIG 2017

2017 *PC member* of the International Semantic Web Conference (ISWC), 2017

2017 *PC Member* for International Workshop on Biological Data Mining and Knowledge Discovery (BioKDD 2017)

2017 *PC Member* for 25th Conference on Intelligent Systems for Molecular Biology (ISMB) and the 16th European Conference on Computational Biology

2017 *PC member* of Medinfo 2017

2017 *PC member* of the Extended Semantic Web Conference (ESWC), 2017

2016 *PC Member* for Semantic Web Applications and Tools in Life Sciences (SWAT4LS) 2016

2016 *PC member* for the Workshop on Ontologies and Databases in Life Sciences 2016 (ODLS)

2016 *PC Chair* for the International Conference on Biological Ontology 2016 (ICBO)

2016 *PC member* for the Bio-Ontologies SIG 2016

2016 *PC member* for the 15th International Semantic Web Conference (ISWC)

2016 *PC member* of the 15th European Conference on Computational Biology (ECCB)

2016 *PC Member* for 24nd Annual International Conference on Intelligent Systems for Molecular Biology (ISMB)

2016 *PC Member* for Know@LOD 2016

2016 *PC Member* for FOIS 2016: 9th International Conference on Formal Ontologies in Information Systems

2015 *PC Member* for Semantic Web Applications and Tools in Life Sciences (SWAT4LS) 2015

2015 *PC member* for the 14th International Semantic Web Conference (ISWC)

2015 *PC member* for Bio-Ontologies SIG 2015

2015 *PC Member* for 23nd Annual International Conference on Intelligent Systems for Molecular Biology (ISMB)

2015 *PC Member* for 15th World Congress on Health and Biomedical Informatics (MEDINFO'15)

2015 *PC Member* for 4th Workshop on Knowledge Discovery and Data Mining Meets Linked Open Data (Know@LOD)
2015 *PC Member* for 29th AAAI Conference on Artificial Intelligence (AAAI-2015)
2014 *PC Member* for Ontologies and Data in the Life Sciences (ODLS) 2014
2014 *PC Member* for Semantic Web Applications and Tools in Life Sciences (SWAT4LS) 2014
2014 *PC Member* for Conference and Labs of the Evaluation Forum (CLEF) 2014
2014 *Reviewer* for 22nd Annual International Conference on Intelligent Systems for Molecular Biology (ISMB)
2014 *PC member* of Bio-Ontologies SIG 2014
2014 *PC member* of the 13th European Conference on Computational Biology (ECCB)
2014 *PC member* of the 8th International Workshop on Modular Ontologies (WoMO)
2014 *Workshop chair* of FOIS 2014: 8th International Conference on Formal Ontologies in Information Systems
2014 *PC member* of CSHALS2014: Conference on Semantics in Healthcare and Life Sciences
2014 *PC member* of the International Symposium on Inconsistency Robustness 2014
2013 *PC member* of the 7th International Workshop on Modular Ontologies (WoMO)
2013 *PC member* of the 12th International Semantic Web Conference (ISWC)
2013 *Program chair* of the Fourth International Conference on Biomedical Ontologies (ICBO)
2012 *PC member* of the Third Workshop on the use of Semantic Web Technology for Mobile and Ubiquitous Applications (SWUMA)
2012 *PC member* of Bio-Ontologies SIG 2012
2012 *PC member* of the 11th European Conference on Computational Biology (ECCB)
2012 *Chair* of the 4th Workshop on Ontologies in Biology and Life Sciences (OBML)
2012 *PC member* of the 6th International Workshop on Modular Ontologies (WoMO)
2012 *PC member* of the International Symposium on Inconsistency Robustness
2012 *PC member* of Intelligent Systems in Molecular Biology (ISMB) 2012
2012 *PC member* of FOIS 2012: 7th International Conference on Formal Ontology in Information Systems
2012 *PC member* of ICBO 2012: 3rd International Conference on Biomedical Ontologies
2011 *Chair* of the 3rd Workshop on Ontologies in Biology and Life Sciences (OBML)
2011 *PC member* of the International Symposium on Inconsistency Robustness
2011 *PC member* of the Workshop on Working with Multiple Biomedical Ontologies (WoMBO)
2011 *PC member* of the 5th International Workshop on Modular Ontologies (WoMO)
2011 *PC member* of OWL: Experiences and Directions (OWLED) 2011
2011 *PC member* of the 2nd International Conference on Biomedical Ontologies (ICBO)
2010 *Program Chair* of the 2nd Workshop on Ontologies in Biology and Life Sciences (OBML)
2010 *PC member* of the NETTAB 2010 Workshop on Biological Wikis
2010 *PC member* of the Extended Semantic Web Conference (ESWC), 2010
2010 *PC member* of Intelligent Systems in Molecular Biology (ISMB) 2010
2009 *Reviewer* for the 31st Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC)
2009 *PC member* of Medical Informatics Europe (MIE), 2009
2008 *PC member* of Intelligent Systems in Molecular Biology (ISMB) 2008
2008 *PC member* of Medical Informatics Europe (MIE), 2008
2007 *PC member* of Intelligent Systems in Molecular Biology (ISMB) and European Conference

on Computational Biology (ECCB), 2007