

new: “Providing Adverse Outcome Pathways from the AOP-Wiki in a Semantic Web Format to Increase Usability and Accessibility of the Content”



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Keywords

Openrisknet, Eutoxrisk

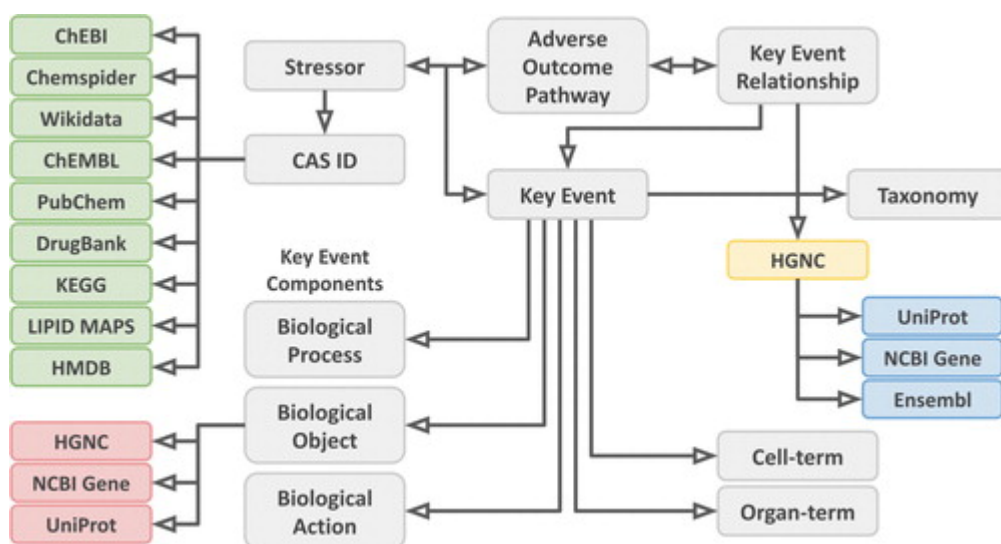
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I am a bit behind with tweeting about new published papers, but let that not reflect that these papers are not very exciting. The first paper is by [Marvin](#) an almost-finished PhD candidate in our group and now working as postdoc on the [VHP4Safety](#) project. He has been working on linking adverse outcome pathways (AOPs) with molecular pathways, such as in [WikiPathways](#). This work was mostly done as part of the EU projects [OpenRiskNet](#) and [EUToxRisk](#), during which he disseminated his research in many directions (e.g. the second paper in [this post](#)). Talking about impact.

He previously already sketched out the ideas of integration the two kinds of pathways in [this paper](#). The implementation of this has now been published in the paper *Providing Adverse Outcome Pathways from the AOP-Wiki in a Semantic Web Format to Increase Usability and Accessibility of the Content* (doi:[10.1089/aivt.2021.0010](https://doi.org/10.1089/aivt.2021.0010)). It's an important piece of our growing molecular life sciences knowledge graph, which already contains data from WikiPathways and ChEMBL. Of course, integrated with other SPARQL endpoints, such as NextProt/UniProt, Rhea, etc.

Schematic diagram from the article showing the kind of information in the database:



Marvin writes: “The resulting RDF contains >122,000 triples describing 158 unique properties of >15,000 unique subjects. Furthermore, >3500 link-outs were added to 12 chemical databases, and >7500 link-outs to 4 gene and protein databases. The AOP-Wiki RDF has been made available at <https://aopwiki.rdf.bigcat-bioinformatics.org>”. The last comes with many example queries.