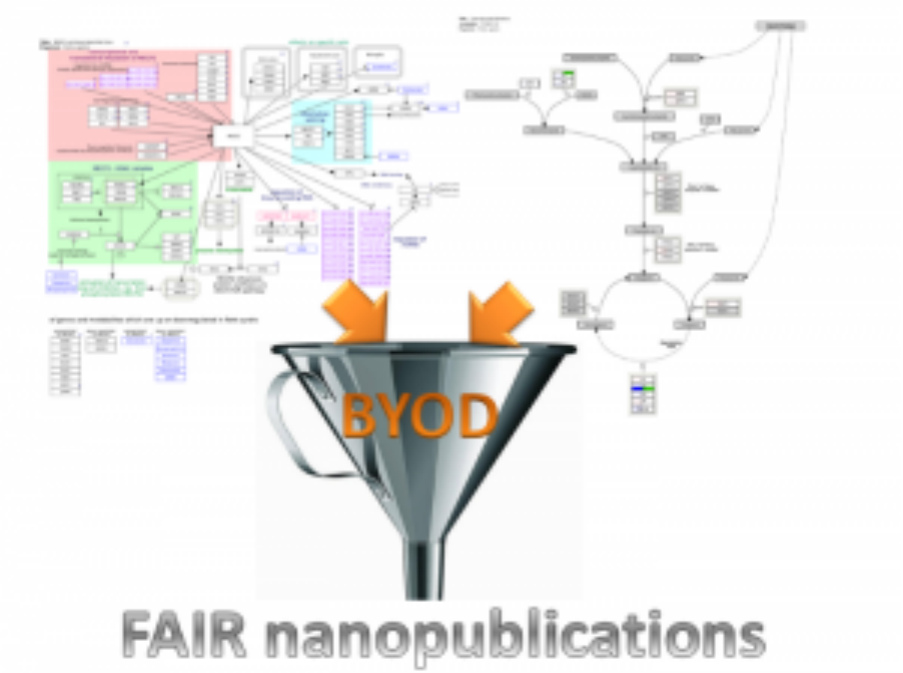
Bring Your Own Data workshop: WikiPathways, nanopubs, and the Rett Syndrome

On 1-3 November 2016 Maastricht University will organize a BYOD on WikiPathways, nano pubs and the Rett Syndrome. The BYOD is part of the rare disease use case of ELIXIR-EXCELERATE, and supported by ELIXIR-NL.



The Rett Syndrome is a rare disease actively being studied at Maastricht University. This research combines experimental research and bioinformatics. In this research, nanopublications have a lot to offer to WikiPathways, and the Maastricht WikiPathways team has two incentives. First, WikiPathways contains a lot of statements backed by literature (~12500 different PubMed papers); we wish to expose these statements as nanopublications with provenance, so that they can be linked to other data sets. Second, in the future, we like to use external nanopublications as information sources to be cited, just like PubMed papers are now cited. Using this kind of integration we expect to be able to increase the amount of provenance available in WikiPathways and we want to use this to explore which types of external nanopublications can be considered as evidence for statements that are part of pathways.

The goal of this BYOD is aimed at the first motivation. We like to make nanopublications out of WikiPathways and link this up to other data sources. For this we would bring our data, invite a nanopublication expert to help us get the details right, release the software that create these nanopublications, share these online for consumption, ideally via a nanopublication repository. The nanopublication to be created will be based on links between genes, metabolite, interactions, and reactions, and the PubMed literature. Focus will first be on those statements that can be linked to other data brought to the meeting (if any, given the short notice). As a possible specific BYOD workshop outcome, compatibility with the “AIDA Nanopubs extracted from GeneRIF” data set may be

explored, which makes statements about genes and proteins. This would require normalizing gene identifiers in pathways to those used in this data set using BridgeDb.

Time and place: 1-3 November 2016, Maastricht University
Venue address: Co Greep zaal, UNS60, 5th floor, Universiteitssingel 60, 6229 ER Maastricht, The Netherlands
Webinar time: to be announced
Hashtag: #byodrett