BioCuration 2016 Meeting notes

Date

11 Apr 2016

Attendees

Clayton L Birkett

Goals

Discussion items

Time	Item	Who	Notes
Monday	iPTMnet	Cecilia Arighi	 protein post-translational modifications (PTMs) in systems biology context http://research.bioinformatics.udel.edu/iptmnet/
	Protein Information Resource (PIR)	Andrew Nightingale	Protein Ontology UniProtKB use cytoscape for visualization UniProt contains PIR-PSD, Swiss-Prot, and TrEMBL databaes
	TopAnat	Frederic Bastian	GO-like enrichment mapped to genes by expression http://bgee.org
	Glycobiolog	Jean-Philippe Gourdine	Undiagnosed Disease Network https://www.genome.gov/27550959
	Cellosaurus	Amos Bairoch	Cell lines http://web.expasy.org/cellosaurus/
	OBO Foundry	Lynn Schriml	 develop a family of interoperable ontologies that are both logically well-formed and scientifically accurate phenocarta - tool for analysis of gene expression profiles http://www.chibi.ubc.ca/Gemma/phenotypes.html http://www.obofoundry.org/
	ontology mapping	Marie-Angelique Laporte	comparison of ontology mapping techniques to map traits map CO to TO
Tuesday	WikiData	Andra Waagmeester	showed example of disease ontology in 100's of languages
	protein2GO		
	rethinking databases	Ivan Erill	domain specific databases work as submission portals, then transfer to mainstream repository. specific databases will die when funding goes away. CollecTF
Thursd ay	PhenoPackets		hierarchiacal JSON www.phenopackets.org, https://github.com/phenopackets Global Alliance for Genomics & Health FAIR findable, accessible attributeable, interoperable
	subscription-based funding model	Tanya Berardini	Arabidopsis Information Resource (TAIR) lost funding, now subscription based

Action items

- Clayton L Birkett Marie-Angelique offered to help us convert from CO to TO
- Clayton L Birkett should T3 be responsible for submitting data to NCBI/Ensembl, which data? This is normally the responsibility of the PI

Clayton L Birkett - collaborate with Edward Marcotte, professor of biochemistry at The University of Texas at Austin, who is doing MassSpec on wheat. Our group studies the large-scale organization of proteins, essentially trying to reconstruct the 'wiring diagrams' of cells by learning how all of the proteins encoded by a genome are associated into functional pathways, systems, and networks. Such models let us better define the functions of genes, and to link genes to traits and diseases. See more on the Research page.

Clayton L Birkett - what is the resolution/size of QTL's? - Poland's 2015 paper on the POPSEQ map is says that the average gap is less than 1 cM and the maximum gap is 30 cM