

PRO Citations

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1. Adams N, Hoehndorf R, Gkoutos GV, Hansen G, Hennig C. PIDO: the primary immunodeficiency disease ontology. *Bioinformatics*. 2011 Nov 15; 27(22):3193-9. doi: 10.1093/bioinformatics/btr531. Epub 2011 Sep 22. PubMed PMID: [21949270](#).
2. Ai J, Smith B, Wong DT. Saliva Ontology: an ontology-based framework for a Salivaomics Knowledge Base. *BMC Bioinformatics*. 2010 Jun 3;11: 302. doi: 10.1186/1471-2105-11-302. PubMed PMID: [20525291](#); PubMed Central PMCID: PMC2898059.
3. Ai JY, Smith B, Wong DT. Bioinformatics advances in saliva diagnostics. *Int J Oral Sci*. 2012 Jun;4(2):85-7. Review. PubMed PMID: [22699264](#); PubMed Central PMCID: PMC3412667.
4. Anguita A, García-Remesal M, de la Iglesia D, Majojo V. NCBI2RDF: enabling full RDF-based access to NCBI databases. *Biomed Res Int*. 2013; 2013:983805. doi: 10.1155/2013/983805. Epub 2013 Jul 28. PubMed PMID: [23984425](#); PubMed Central PMCID: PMC3745940.
5. Arighi CN, Roberts PM, Agarwal S, Bhattacharya S, Cesareni G, Chatr-Aryamontri A, Clematide S, Gaudet P, Giglio MG, Harrow I, Huala E, Krallinger M, Leser U, Li D, Liu F, Lu Z, Maltais LJ, Okazaki N, Perfetto L, Rinaldi F, Sætre R, Salgado D, Srinivasan P, Thomas PE, Toldo L, Hirschman L, Wu CH. BioCreative III interactive task: an overview. *BMC Bioinformatics*. 2011 Oct 3;12 Suppl 8:S4. doi: 10.1186/1471-2105-12-S8-S4. PubMed PMID: [22151968](#); PubMed Central PMCID: PMC3269939.
6. Avram S, Milac A, Mernea M, Mihailescu D, Putz MV, Buiu C. Structure-biological function relationship extended to mitotic arrest-deficient 2-like protein Mad2 native and mutants-new opportunity for genetic disorder control. *Int J Mol Sci*. 2014 Nov 18;15(11):21381-400. doi: 10.3390/ijms151121381. PubMed PMID: [25411801](#); PubMed Central PMCID: PMC4264231.
7. Bada M, Hunter L. Desiderata for ontologies to be used in semantic annotation of biomedical documents. *J Biomed Inform*. 2011 Feb;44(1):94-101. doi: 10.1016/j.jbi.2010.10.002. Epub 2010 Oct 26. PubMed PMID: [20971216](#)
8. Bhattacharya S, Dunn P, Thomas CG, Smith B, Schaefer H, Chen J, Hu Z, Zalocusky KA, Shankar RD, Shen-Orr SS, Thomson E, Wiser J, Butte AJ. ImmPort, toward repurposing of open access immunological assay data for translational and clinical research. *Sci Data*. 2018 Feb 27;5: 180015. doi: 10.1038/sdata.2018.15. PubMed PMID: [29485622](#); PubMed Central PMCID: PMC5827693.
9. Blake JA, Bult CJ, Kadin JA, Richardson JE, Eppig JT; Mouse Genome Database Group. The Mouse Genome Database (MGD): premier model organism resource for mammalian genomics and genetics. *Nucleic Acids Res*. 2011 Jan;39(Database issue):D842-8. doi: 10.1093/nar/gkq1008. Epub 2010 Nov 3. PubMed PMID: [21051359](#); PubMed Central PMCID: PMC3013640.
10. Boguslav M, Cohen KB, Baumgartner WA, Hunter LE. Improving precision in concept normalization. *Pac Symp Biocomput*. 2018;23:566-577. PubMed PMID: [29218915](#); PubMed Central PMCID: PMC5730334.
11. Boyce RD, Freimuth RR, Romagnoli KM, Pummer T, Hochheiser H, Empey PE. Toward semantic modeling of pharmacogenomic knowledge for clinical and translational decision support. *AMIA Jt Summits Transl Sci Proc*. 2013 Mar 18;2013:28-32.eCollection 2013. PubMed PMID: [24303292](#) ; PubMed Central PMCID: PMC3814496.
12. Bug WJ, Ascoli GA, Grethe JS, Gupta A, Fennema-Notestine C, Laird AR, Larson SD, Rubin D, Shepherd GM, Turner JA, Martone ME. The NIFSTD and BIRN Lex vocabularies: building comprehensive ontologies for neuroscience. *Neuroinformatics*. 2008 Sep;6(3):175-94. doi: 10.1007/s12021-008-9032-z. Epub 2008 Oct 31. PubMed PMID: [18975148](#); PubMed Central PMCID: PMC2743139.
13. Burgun A, Bodenreider O. Accessing and integrating data and knowledge for biomedical research. *Yearb Med Inform*. 2008;91-101. Review. PubMed PMID: [18660883](#); PubMed Central PMCID: PMC2553094.
14. Chen B, Ding Y, Wild DJ. Improving integrative searching of systems chemical biology data using semantic annotation. *J Cheminform*. 2012 Mar 8;4(1):6. doi: 10.1186/1758-2946-4-6. PubMed PMID: [22401035](#); PubMed Central PMCID: PMC3320537.
15. Ciccarese P, Ocana M, Clark T. Open semantic annotation of scientific publications using DOME. *J Biomed Semantics*. 2012 Apr 24;3 Suppl 1: S1. doi: 10.1186/2041-1480-3-S1-S1. PubMed PMID: [22541592](#); PubMed Central PMCID: PMC3337259.
16. Ciccarese P, Ocana M, Garcia Castro LJ, Das S, Clark T. An open annotation ontology for science on web 3.0. *J Biomed Semantics*. 2011 May 17;2 Suppl 2:S4. doi: 10.1186/2041-1480-2-S2-S4. PubMed PMID: [21624159](#); PubMed Central PMCID: PMC3102893.
17. Chowdhary R, Tan SL, Zhang J, Karnik S, Bajic VB, Liu JS. Context-specific protein network miner--an online system for exploring context-specific protein interaction networks from the literature. *PLoS One*. 2012;7(4):e34480. doi: 10.1371/journal.pone.0034480. Epub 2012 Apr 6. PubMed PMID: [22493694](#); PubMed Central PMCID: PMC3321019.
18. Croft D, Mundo AF, Haw R, Milacic M, Weiser J, Wu G, Caudy M, Garapati P, Gillespie M, Kamdar MR, Jassal B, Jupe S, Matthews L, May B, Palatnik S, Rothfels K, Shamovsky V, Song H, Williams M, Birney E, Hermjakob H, Stein L, D'Eustachio P. The Reactome pathway knowledgebase. *Nucleic Acids Res*. 2014 Jan;42(Database issue):D472-7. doi: 10.1093/nar/gkt1102. Epub 2013 Nov 15. PubMed PMID: [24243840](#); PubMed Central PMCID: PMC3965010.
19. de Bono B, Hunter P. Integrating knowledge representation and quantitative modelling in physiology. *Biotechnol J*. 2012 Aug;7(8):958-72. doi: 10.1002/biot.201100304. PubMed PMID: [22887885](#)
20. Diehl AD, Augustine AD, Blake JA, Cowell LG, Gold ES, Gondré-Lewis TA, Masci AM, Meehan TF, Morel PA, Nijnik A, Peters B, Pulendran B, Scheuermann RH, Yao QA, Zand MS, Mungall CJ. Hematopoietic cell types: prototype for a revised cell ontology. *J Biomed Inform*. 2011 Feb;44(1):75-9. doi: 10.1016/j.jbi.2010.01.006. Epub 2010 Feb 1. PubMed PMID: [20123131](#); PubMed Central PMCID: PMC2892030
21. Ding R, Arighi CN, Lee JY, Wu CH, Vijay-Shanker K. pGenN, a Gene Normalization Tool for Plant Genes and Proteins in Scientific Literature. *PLoS One*. 2015 Aug 10;10(8):e0135305. doi: 10.1371/journal.pone.0135305. eCollection 2015. PubMed PMID: [26258475](#); PubMed Central PMCID: PMC4530884.
22. Drabkin HJ, Blake JA; Mouse Genome Informatics Database. Manual Gene Ontology annotation workflow at the Mouse Genome Informatics Database. *Database (Oxford)*. 2012 Oct 29;2012:bas045. doi: 10.1093/database/bas045. Print 2012. PubMed PMID: [23110975](#); PubMed Central PMCID: PMC3483533.
23. Fu X, Batista-Navarro R, Rak R, Ananiadou S. Supporting the annotation of chronic obstructive pulmonary disease (COPD) phenotypes with text mining workflows. *J Biomed Semantics*. 2015 Mar 14;6:8. doi: 10.1186/s13326-015-0004-6. eCollection 2015. PubMed PMID: [25789153](#); PubMed Central PMCID: PMC4364458.
24. Funk C, Baumgartner W Jr, Garcia B, Roeder C, Bada M, Cohen KB, Hunter LE, Verspoor K. Large-scale biomedical concept recognition: an evaluation of current automatic annotators and their parameters. *BMC Bioinformatics*. 2014 Feb 26;15:59. doi: 10.1186/1471-2105-15-59. PubMed PMID: [24571547](#); PubMed Central PMCID: PMC4015610.
25. Gosal G, Kochut KJ, Kannan N. ProKinO: an ontology for integrative analysis of protein kinases in cancer. *PLoS One*. 2011;6(12):e28782. doi: 10.1371/journal.pone.0028782. Epub 2011 Dec 14. PubMed PMID: [22194913](#); PubMed Central PMCID: PMC3237543.
26. Guardia GD, Vêncio RZ, de Farias CR. A UML profile for the OBO relation ontology. *BMC Genomics*. 2012;13 Suppl 5:S3. doi: 10.1186/1471-2164-13-S5-S3. Epub 2012 Oct 19. PubMed PMID: [23095840](#); PubMed Central PMCID: PMC3477006.
27. Hastings J, Jeliazkova N, Owen G, Tsiliki G, Munteanu CR, Steinbeck C, Willighagen E. eNanoMapper: harnessing ontologies to enable data integration for nanomaterial risk assessment. *J Biomed Semantics*. 2015 Mar 21;6:10. doi: 10.1186/s13326-015-0005-5. eCollection 2015. PubMed PMID: [25815161](#); PubMed Central PMCID: PMC4374589.
28. Hastings J, Schulz S. Ontologies for human behavior analysis and their application to clinical data. *Int Rev Neurobiol*. 2012;103:89-107. doi: 10.1016/B978-0-12-388408-4.00005-8. Review. PubMed PMID: [23195122](#).

29. Hoehndorf R, Dumontier M, Oellrich A, Rebholz-Schuhmann D, Schofield PN, Gkoutos GV. Interoperability between biomedical ontologies through relation expansion, upper-level ontologies and automatic reasoning. *PLoS One*. 2011;6(7):e22006. doi: 10.1371/journal.pone.0022006. Epub 2011 Jul 18. PubMed PMID: 21789201; PubMed Central PMCID: PMC3138764.
30. Huang J, Dang J, Borchert GM, Eilbeck K, Zhang H, Xiong M, Jiang W, Wu H, Blake JA, Natale DA, Tan M. OMIT: dynamic, semi-automated ontology development for the microRNA domain. *PLoS One*. 2014 Jul 15;9(7):e100855. doi: 10.1371/journal.pone.0100855. eCollection 2014. PubMed PMID: 25025130; PubMed Central PMCID: PMC4099014.
31. Huntley RP, Harris MA, Alam-Faruque Y, Blake JA, Carbon S, Dietze H, Dimmer EC, Foulger RE, Hill DP, Khodiyar VK, Lock A, Lomax J, Lovering RC, Mutowo-Meullenet P, Sawford T, Van Auken K, Wood V, Mungall CJ. A method for increasing expressivity of Gene Ontology annotations using a compositional approach. *BMC Bioinformatics*. 2014 May 21;15:155. doi: 10.1186/1471-2105-15-155. PubMed PMID: 24885854; PubMed Central PMCID: PMC4039540.
32. Jayapandian CP, Zhao M, Ewing RM, Zhang GQ, Sahoo SS. A semantic proteomics dashboard (SemPoD) for data management in translational research. *BMC Syst Biol*. 2012;6 Suppl 3:S20. doi: 10.1186/1752-0509-6-S3-S20. Epub 2012 Dec 17. PubMed PMID: 23282161; PubMed Central PMCID: PMC3524316.
33. Jensen M, Cox AP, Chaudhry N, Ng M, Sule D, Duncan W, Ray P, Weinstock-Guttman B, Smith B, Ruttenberg A, Szigeti K, Diehl AD. The neurological disease ontology. *J Biomed Semantics*. 2013 Dec 6;4(1):42. doi: 10.1186/2041-1480-4-42. PubMed PMID: 24314207; PubMed Central PMCID: PMC4028878.
34. Jorge P, Lourenço A, Pereira MO. New trends in peptide-based anti-biofilm strategies: a review of recent achievements and bioinformatic approaches. *Biofouling*. 2012;28(10):1033-61. Review. PubMed PMID: 23016989.
35. Kah Wai Lin, Min Jia and Serhiy Souchelnyskiy (2012). Application of Bioinformatics Tools in Gel-Based Proteomics, Integrative Proteomics, Dr. Hon-Chiu Leung (Ed.), ISBN: 978-953-51-0070-6, InTech, DOI: 10.5772/31275.
36. Keet CM. Transforming semi-structured life science diagrams into meaningful domain ontologies with DiDoN. *J Biomed Inform*. 2012 Jun;45(3):482-94. doi: 10.1016/j.jbi.2012.01.004. Epub 2012 Jan 26. PubMed PMID: 22301196.
37. Laukens K, Naulaerts S, Berghe WV. Bioinformatics approaches for the functional interpretation of protein lists: from ontology term enrichment to network analysis. *Proteomics*. 2015 Mar;15(5-6):981-96. doi: 10.1002/pmic.201400296. Epub 2015 Feb 20. PubMed PMID: 25430566.
38. Lin Y, Mehta S, Küçük-McGinty H, Turner JP, Vidovic D, Forlin M, Koletti A, Nguyen DT, Jensen LJ, Guha R, Mathias SL, Ursu O, Stathias V, Duan J, Nabizadeh N, Chung C, Mader C, Visser U, Yang JJ, Bologa CG, Oprea TI, Schürer SC. Drug target ontology to classify and integrate drug discovery data. *J Biomed Semantics*. 2017 Nov 9;8(1):50. doi: 10.1186/s13326-017-0161-x. PubMed PMID: 29122012; PubMed Central PMCID: PMC5679337.
39. Lin Y, Xiang Z, He Y. Brucellosis Ontology (IDOBRO) as an extension of the Infectious Disease Ontology. *J Biomed Semantics*. 2011 Oct 31;2(1):9. doi: 10.1186/2041-1480-2-9. PubMed PMID: 22041276; PubMed Central PMCID: PMC3217896.
40. Livingston KM, Bada M, Hunter LE, Verspoor K. Representing annotation compositionality and provenance for the Semantic Web. *J Biomed Semantics*. 2013 Nov 22;4:38. doi: 10.1186/2041-1480-4-38. eCollection 2013. PubMed PMID: 24268021; PubMed Central PMCID: PMC4129183.
41. Masci AM, Arighi CN, Diehl AD, Lieberman AE, Mungall C, Scheuermann RH, Smith B, Cowell LG. An improved ontological representation of dendritic cells as a paradigm for all cell types. *BMC Bioinformatics*. 2009 Feb 25;10:70. doi: 10.1186/1471-2105-10-70. PubMed PMID: 19243617; PubMed Central PMCID: PMC2662812.
42. Matthews L, Gopinath G, Gillespie M, Caudy M, Croft D, de Bono B, Garapati P, Hemish J, Hermjakob H, Jassal B, Kanapin A, Lewis S, Mahajan S, May B, Schmidt E, Vastrik I, Wu G, Birney E, Stein L, D'Eustachio P. Reactome knowledgebase of human biological pathways and processes. *Nucleic Acids Res*. 2009 Jan;37(Database issue):D619-22. doi: 10.1093/nar/gkn863. Epub 2008 Nov 3. PubMed PMID: 18981052; PubMed Central PMCID: PMC2686536.
43. Mayer G, Jones AR, Binz PA, Deutsch EW, Orchard S, Montecchi-Palazzi L, Vizcaino JA, Hermjakob H, Oveillero D, Julian R, Stephan C, Meyer HE, Eisenacher M. Controlled vocabularies and ontologies in proteomics: overview, principles and practice. *Biochim Biophys Acta*. 2014 Jan;1844(1 Pt A):98-107. doi: 10.1016/j.bbapap.2013.02.017. Epub 2013 Feb 19. Review. PubMed PMID: 23429179; PubMed Central PMCID: PMC3898906.
44. McKeever S, Johnson D. The role of markup for enabling interoperability in health informatics. *Front Physiol*. 2015 May 18;6:152. doi: 10.3389/fphys.2015.00152. eCollection 2015. Review. PubMed PMID: 26042043; PubMed Central PMCID: PMC4434901.
45. Meehan TF, Vasilevsky NA, Mungall CJ, Dougall DS, Haendel MA, Blake JA, Diehl AD. Ontology based molecular signatures for immune cell types via gene expression analysis. *BMC Bioinformatics*. 2013 Aug 30;14:263. doi: 10.1186/1471-2105-14-263. PubMed PMID: 24004649; PubMed Central PMCID: PMC3844401.
46. Meehan TF, Masci AM, Abdulla A, Cowell LG, Blake JA, Mungall CJ, Diehl AD. Logical development of the cell ontology. *BMC Bioinformatics*. 2011 Jan 5;12:6. doi: 10.1186/1471-2105-12-6. PubMed PMID: 21208450; PubMed Central PMCID: PMC3024222.
47. Meldal BH, Forner-Martinez O, Costanzo MC, Dana J, Demeter J, Dumousseau M, Dwight SS, Gaulton A, Licata L, Melidoni AN, Ricard-Blum S, Roechert B, Skyzpek MS, Tiwari M, Velankar S, Wong ED, Hermjakob H, Orchard S. The complex portal—an encyclopaedia of macromolecular complexes. *Nucleic Acids Res*. 2015 Jan;43(Database issue):D479-84. doi: 10.1093/nar/gku975. Epub 2014 Oct 13. PubMed PMID: 25313161; PubMed Central PMCID: PMC4384031.
48. Mi H, Thomas PD. Ontologies and standards in bioscience research: for machine or for human. *Front Physiol*. 2011 Feb 21;2:5. doi: 10.3389/fphys.2011.00005. eCollection 2011. PubMed PMID: 21519400; PubMed Central PMCID: PMC3081276.
49. Miyazaki FA, Guardia GD, Vêncio RZ, de Farias CR. Semantic integration of gene expression analysis tools and data sources using software connectors. *BMC Genomics*. 2013 Oct 25;14 Suppl 6:S2. doi: 10.1186/1471-2164-14-S6-S2. PubMed PMID: 24341380; PubMed Central PMCID: PMC3908368.
50. Mungall CJ, Torniai C, Gkoutos GV, Lewis SE, Haendel MA. Uberon, an integrative multi-species anatomy ontology. *Genome Biol*. 2012 Jan 31;13(1):R5. doi: 10.1186/gb-2012-13-1-r5. PubMed PMID: 22293552; PubMed Central PMCID: PMC3334586.
51. Mungall CJ, Batchelor C, Eilbeck K. Evolution of the Sequence Ontology terms and relationships. *J Biomed Inform*. 2011 Feb;44(1):87-93. doi: 10.1016/j.jbi.2010.03.002. Epub 2010 Mar 10. PubMed PMID: 20226267; PubMed Central PMCID: PMC3052763.
52. Mungall CJ, Bada M, Berardini TZ, Deegan J, Ireland A, Harris MA, Hill DP, Lomax J. Cross-product extensions of the Gene Ontology. *J Biomed Inform*. 2011 Feb;44(1):80-6. doi: 10.1016/j.jbi.2010.02.002. Epub 2010 Feb 10. PubMed PMID: 20152934; PubMed Central PMCID: PMC2910209.
53. Mungall CJ, Gkoutos GV, Smith CL, Haendel MA, Lewis SE, Ashburner M. Integrating phenotype ontologies across multiple species. *Genome Biol*. 2010 Jan 8;11(1):R2. doi: 10.1186/gb-2010-11-1-r2. PubMed PMID: 20064205; PubMed Central PMCID: PMC2847714.
54. Pál G, Lovas G, Dobolyi A. Induction of transforming growth factor beta receptors following focal ischemia in the rat brain. *PLoS One*. 2014 Sep 5;9(9):e106544. doi: 10.1371/journal.pone.0106544. eCollection 2014. PubMed PMID: 25192322; PubMed Central PMCID: PMC4156357.
55. Pál G, Vincze C, Renner É, Wappler EA, Nagy Z, Lovas G, Dobolyi A. Time course, distribution and cell types of induction of transforming growth factor betas following middle cerebral artery occlusion in the rat brain. *PLoS One*. 2012;7(10):e46731. doi: 10.1371/journal.pone.0046731. Epub 2012 Oct 8. PubMed PMID: 23056426; PubMed Central PMCID: PMC3466286.
56. Park CA, Bello SM, Smith CL, Hu ZL, Munzenmaier DH, Nigam R, Smith JR, Shimoyama M, Eppig JT, Reecy JM. The Vertebrate Trait Ontology: a controlled vocabulary for the annotation of trait data across species. *J Biomed Semantics*. 2013 Aug 9;4(1):13. doi: 10.1186/2041-1480-4-13. PubMed PMID: 23937709; PubMed Central PMCID: PMC3851175.

57. Porteus B, Kocharunchitt C, Nilsson RE, Ross T, Bowman JP. Utility of gel-free, label-free shotgun proteomics approaches to investigate microorganisms. *Appl Microbiol Biotechnol*. 2011 Apr;90(2):407-16. doi: 10.1007/s00253-011-3172-z. Epub 2011 Feb 25. Review. PubMed PMID: 21350852.
58. Prosdocimi F, Chisham B, Pontelli E, Thompson JD, Stoltzfus A. Initial implementation of a comparative data analysis ontology. *Evol Bioinform Online*. 2009 Jul 3;5:47-66. PubMed PMID: 19812726; PubMed Central PMCID: PMC2747124. 52. Przydzial MJ, Bhatarai B, Koleti A, Vempati U, Schürer SC. GPCR ontology: development and application of a G protein-coupled receptor pharmacology knowledge framework. *Bioinformatics*. 2013 Dec 15;29(24):3211-9. doi: 10.1093/bioinformatics/btt565. Epub 2013 Sep 29. PubMed PMID: 24078711; PubMed Central PMCID: PMC3842764.
59. Reeves GA, Eilbeck K, Magrane M, O'Donovan C, Montecchi-Palazzi L, Harris MA, Orchard S, Jimenez RC, Prlic A, Hubbard TJ, Hermjakob H, Thornton JM. The Protein Feature Ontology: a tool for the unification of protein feature annotations. *Bioinformatics*. 2008 Dec 1;24(23):2767-72. doi: 10.1093/bioinformatics/btn528. Epub 2008 Oct 20. PubMed PMID: 18936051; PubMed Central PMCID: PMC2912506.
60. Robinson PN, Webber C. Phenotype ontologies and cross-species analysis for translational research. *PLoS Genet*. 2014 Apr 3;10(4):e1004268. doi: 10.1371/journal.pgen.1004268. eCollection 2014 Apr. Review. PubMed PMID: 24699242; PubMed Central PMCID: PMC3974665.
61. Rocca-Serra P, Bellaousov S, Birmingham A, Chen C, Cordero P, Das R, Davis-Neulander L, Duncan CD, Halvorsen M, Knight R, Leontis NB, Mathews DH, Ritz J, Stombaugh J, Weeks KM, Zirbel CL, Laederach A. Sharing and archiving nucleic acid structure mapping data. *RNA*. 2011 Jul;17(7):1204-12. doi: 10.1261/rna.2753211. Epub 2011 May 24. PubMed PMID: 21610212; PubMed Central PMCID: PMC3138558.
62. Roncaglia P, Martone ME, Hill DP, Berardini TZ, Foulger RE, Imam FT, Drabkin H, Mungall CJ, Lomax J. The Gene Ontology (GO) Cellular Component Ontology: integration with SAO (Subcellular Anatomy Ontology) and other recent developments. *J Biomed Semantics*. 2013 Oct 7;4(1):20. doi: 10.1186/2041-1480-4-20. PubMed PMID: 24093723; PubMed Central PMCID: PMC3852282.
63. Ross KE, Arighi CN, Ren J, Natale DA, Huang H, Wu CH. Use of the protein ontology for multi-faceted analysis of biological processes: a case study of the spindle checkpoint. *Front Genet*. 2013 Apr 26;4:62. doi: 10.3389/fgene.2013.00062. eCollection 2013. PubMed PMID: 23637705; PubMed Central PMCID: PMC3636526.
64. Ruttenberg A, Rees JA, Samwald M, Marshall MS. Life sciences on the Semantic Web: the Neurocommons and beyond. *Brief Bioinform*. 2009 Mar;10(2):193-204. doi: 10.1093/bib/bbp004. Epub 2009 Mar 12. PubMed PMID: 19282504.
65. Sahoo SS, Zhang GQ, Lhatoo SD. Epilepsy informatics and an ontology-driven infrastructure for large database research and patient care in epilepsy. *Epilepsia*. 2013 Aug;54(8):1335-41. doi: 10.1111/epi.12211. Epub 2013 May 3. Review. PubMed PMID: 23647220; PubMed Central PMCID: PMC3774789.
66. Smith LM, Kelleher NL; Consortium for Top Down Proteomics. Proteoform: a single term describing protein complexity. *Nat Methods*. 2013 Mar;10(3):186-7. doi: 10.1038/nmeth.2369. PubMed PMID: 23443629; PubMed Central PMCID: PMC4114032.
67. Steinert-Threlkeld S, Ardekani S, Mejino JL, Detwiler LT, Brinkley JF, Halle M, Kikinis R, Winslow RL, Miller MI, Ratnanather JT. Ontological labels for automated location of anatomical shape differences. *J Biomed Inform*. 2012 Jun;45(3):522-7. doi: 10.1016/j.jbi.2012.02.013. Epub 2012 Apr 3. PubMed PMID: 22490168; PubMed Central PMCID: PMC3371096.
68. Sun D, Wang M, Li A. MPTM: A tool for mining protein post-translational modifications from literature. *J Bioinform Comput Biol*. 2017 Oct;15(5):1740005. doi: 10.1142/S0219720017400054. Epub 2017 Sep 11. PubMed PMID: 28982288.
69. Torii M, Arighi CN, Gang Li, Qinghua Wang, Wu CH, Vijay-Shanker K. RLIMS-P 2.0: A Generalizable Rule-Based Information Extraction System for Literature Mining of Protein Phosphorylation Information. *IEEE/ACM Trans Comput Biol Bioinform*. 2015 Jan-Feb;12(1):17-29. doi: 10.1109/TCBB.2014.2372765. PubMed PMID: 26357075; PubMed Central PMCID: PMC4568560.
70. Tudor CO, Ross KE, Li G, Vijay-Shanker K, Wu CH, Arighi CN. Construction of phosphorylation interaction networks by text mining of full-length articles using the eFIP system. *Database (Oxford)*. 2015 Mar 31;2015. pii: bav020. doi: 10.1093/database/bav020. Print 2015. PubMed PMID: 25833953; PubMed Central PMCID: PMC4381107.
71. Tudor CO, Arighi CN, Wang Q, Wu CH, Vijay-Shanker K. The eFIP system for text mining of protein interaction networks of phosphorylated proteins. *Database (Oxford)*. 2012 Dec 5;2012:bas044. doi: 10.1093/database/bas044. Print 2012. PubMed PMID: 23221174; PubMed Central PMCID: PMC3514748.
72. UniProt Consortium. Activities at the Universal Protein Resource (UniProt). *Nucleic Acids Res*. 2014 Jan;42(Database issue):D191-8. doi: 10.1093/nar/gkt1140. Epub 2013 Nov 18. PubMed PMID: 24253303; PubMed Central PMCID: PMC3965022.
73. Vázquez-Naya JM, Martínez-Romero M, Porto-Pazos AB, Novoa F, Valladares-Ayerbes M, Pereira J, Munteanu CR, Dorado J. Ontologies of drug discovery and design for neurology, cardiology and oncology. *Curr Pharm Des*. 2010;16(24):2724-36. Review. PubMed PMID: 20642429.
74. Vincze C, Pál G, Wappler EA, Szabó ER, Nagy ZG, Lovas G, Dobolyi A. Distribution of mRNAs encoding transforming growth factors-beta1, -2, and -3 in the intact rat brain and after experimentally induced focal ischemia. *J Comp Neurol*. 2010 Sep 15;518(18):3752-70. doi: 10.1002/cne.22422. PubMed PMID: 20653032.
75. Vita R, Overton JA, Greenbaum JA, Sette A; OBI consortium, Peters B. Query enhancement through the practical application of ontology: the IEDB and OBI. *J Biomed Semantics*. 2013 Apr 15;4 Suppl 1:S6. doi: 10.1186/2041-1480-4-S1-S6. Epub 2013 Apr 15. PubMed PMID: 23734660; PubMed Central PMCID: PMC3633001.
76. Walls RL, Athreya B, Cooper L, Elser J, Gandolfo MA, Jaiswal P, Mungall CJ, Preece J, Rensing S, Smith B, Stevenson DW. Ontologies as integrative tools for plant science. *Am J Bot*. 2012 Aug;99(8):1263-75. doi: 10.3732/ajb.1200222. Epub 2012 Jul 30. PubMed PMID: 22847540; PubMed Central PMCID: PMC3492881.
77. Wang D, Yang L, Zhang P, LaBaer J, Hermjakob H, Li D, Yu X. AAgAtlas 1.0: a human autoantigen database. *Nucleic Acids Res*. 2017 Jan 4;45(D1):D769-D776. doi: 10.1093/nar/gkw946. Epub 2016 Oct 19. PubMed PMID: 27924021; PubMed Central PMCID: PMC5210642.
78. Wang H, Azuaje F, Zheng H. An information theoretic approach to assessing Gene-Ontology-driven similarity and its application. *Int J Data Min Bioinform*. 2014;9(2):121-34. PubMed PMID: 24864374.
79. Willighagen EL, Waagmeester A, Spjuth O, Ansell P, Williams AJ, Tkachenko V, Hastings J, Chen B, Wild DJ. The ChEMBL database as linked open data. *J Cheminform*. 2013 May 8;5(1):23. doi: 10.1186/1758-2946-5-23. PubMed PMID: 23657106; PubMed Central PMCID: PMC3700754.
80. Xiang Z, Courtot M, Brinkman RR, Ruttenberg A, He Y. OntoFox: web-based support for ontology reuse. *BMC Res Notes*. 2010 Jun 22;3:175. doi: 10.1186/1756-0500-3-175. PubMed PMID: 20569493; PubMed Central PMCID: PMC2911465.
81. Yamamoto S, Sakai N, Nakamura H, Fukagawa H, Fukuda K, Takagi T. INOH: ontology-based highly structured database of signal transduction pathways. *Database (Oxford)*. 2011 Nov 26;2011:bar052. doi: 10.1093/database/bar052. Print 2011. PubMed PMID: 22120663; PubMed Central PMCID: PMC3225078.