

Peer reviewed articles about biological processes in WikiPathways

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Earlier this year I [blogged](#) about a few collaborations where [WikiPathways](#) content has been created and/or curated. I mentioned that *there are pathways in WikiPathways supported by a full paper, but I will leave that for a later moment*.

Well, it has been a busy year, but that moment has arrived.

Almost every year since the start of WikiPathways a paper was published described mostly one and sometimes a few pathways. Here is an overview:

2010-2020

- *Biotransformation pathway maps in WikiPathways enable direct visualization of drug metabolism related expression changes*, **2010**, doi:[10.1016/j.drudis.2010.08.002](#)
- *A Signaling Network of Thyroid-Stimulating Hormone*, **2011**, doi:[10.4172/jpb.1000195](#)
- *Improving the description of metabolic networks: the TCA cycle as example*, **2012**, doi:[10.1096/fj.11-203091](#)
- *A pathway approach to investigate the function and regulation of SREBPs*, **2013**, doi:[10.1007/s12263-013-0342-x](#)
- *Pathways for ligand activated nuclear receptors to unravel the genomic responses induced by hepatotoxicants*, **2013**, doi:[10.2174/1389200214666131118234138](#)
- *Systems-level perspective of sudden infant death syndrome*, **2014**, doi:[10.1038/pr.2014.90](#)
- *Rett syndrome – biological pathways leading from MECP2 to disorder phenotypes*, **2016**, doi:[10.1186/s13023-016-0545-5](#)
- *Visualizing the regulatory role of Angiopoietin-like protein 8 (ANGPTL8) in glucose and lipid metabolic pathways*, **2017**, doi:[10.1016/j.jgeno.2017.06.006](#)
- *A Data Fusion Pipeline for Generating and Enriching Adverse Outcome Pathway Descriptions*, **2018**, doi:[10.1093/toxsci/kfx252](#)
- *Prader-Willi syndrome and Angelman syndrome: Visualisation of the molecular pathways for two chromosomal disorders*, **2018**, doi:[10.1080/15622975.2018.1439594](#)
- *A comprehensive pathway map of IL-18-mediated signalling*, **2019**, doi:[10.1007/s12079-019-00544-4](#)
- *An assembly of galanin-galanin receptor signaling network*, **2020**, doi:[10.1007/s12079-020-00590-3](#)

2021-2022

- *SARS-CoV-2 signaling pathway map: A functional landscape of molecular mechanisms in COVID-19*, **2021**, doi:[10.1007/s12079-021-00632-4](#)
- *The network map of Elabela signaling pathway in physiological and pathological conditions*, **2021**, doi:[10.1007/s12079-021-00640-4](#)
- *A network map of apelin-mediated signaling*, **2021**, doi:[10.1007/s12079-021-00614-6](#)
- *A modular map of Bradykinin-mediated inflammatory signaling network*, **2021**, doi:[10.1007/s12079-021-00652-0](#)
- *Opioid receptors signaling network*, **2021**, doi:[10.1007/s12079-021-00653-z](#)

chem-bla-ics

- A Community-Driven, Openly Accessible Molecular Pathway Integrating Knowledge on Malignant Pleural Mesothelioma, **2022**, doi:[10.3389/fonc.2022.849640](https://doi.org/10.3389/fonc.2022.849640)
- A molecular network map of orexin-orexin receptor signaling system, **2022**, doi:[10.1007/s12079-022-00700-3](https://doi.org/10.1007/s12079-022-00700-3)
- A network map of discoidin domain receptor 1(DDR1)-mediated signaling in pathological conditions, **2022**, doi:[10.1007/s12079-022-00714-x](https://doi.org/10.1007/s12079-022-00714-x)
- The network map of urotensin-II mediated signaling pathway in physiological and pathological conditions, **2022**, doi:[10.1007/s12079-022-00672-4](https://doi.org/10.1007/s12079-022-00672-4)
- A comprehensive network map of IL-17A signaling pathway, **2022**, doi:[10.1007/s12079-022-00686-y](https://doi.org/10.1007/s12079-022-00686-y)

2023-

- Copy number variant risk loci for schizophrenia converge on the BDNF pathway, **2023**, doi:[10.1080/15622975.2024.2327027](https://doi.org/10.1080/15622975.2024.2327027)
- Interactive neuroinflammation pathways and transcriptomics-based identification of drugs and chemical compounds for schizophrenia, **2023**, doi:[10.1080/15622975.2023.2281514](https://doi.org/10.1080/15622975.2023.2281514)
- An assembly of TROP2-mediated signaling events, **2023**, doi:[10.1007/s12079-023-00742-1](https://doi.org/10.1007/s12079-023-00742-1)
- Systematic review of molecular pathways in burn wound healing, **2023**, doi:[10.1016/j.burns.2023.03.006](https://doi.org/10.1016/j.burns.2023.03.006)
- A network map of macrophage-stimulating protein (MSP) signaling, **2023**, doi:[10.1007/s12079-023-00755-w](https://doi.org/10.1007/s12079-023-00755-w)
- A network map of GDNF/RET signaling pathway in physiological and pathological conditions, **2023**, doi:[10.1007/s12079-023-00726-1](https://doi.org/10.1007/s12079-023-00726-1)
- Mapping out the gut microbiota-dependent trimethylamine N-oxide super pathway for systems biology applications, **2023**, doi:[10.3389/fsysb.2023.1074749](https://doi.org/10.3389/fsysb.2023.1074749)
- Molecular pathways of kidney development and their applications to clinical research, **2025**, doi:[10.1016/j.kint.2025.09.032](https://doi.org/10.1016/j.kint.2025.09.032)

That list turned out to be quite a bit longer than I expected. I only knew of a handful of articles describing newly created/curated pathways. This is positive. If peer review works well, then these pathways, as part of these articles have been peer reviewed well too. It is reasonable assume that peer review will not be ideal (it is not), but I even found an example of an article describing a WikiPathways that was retracted, and so has been the WikiPathways itself.

Did I miss an article? Let me know, and I will add it to this list!

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