

VDRC publications 2023 (total 462 + 2 Patent applications)

[Targeted design of synthetic enhancers for selected tissues in the Drosophila embryo.](#)

de Almeida BP, Schaub C, Pagani M, Secchia S, Furlong EEM, Stark A. Nature. 2023 Dec 12. doi: 10.1038/s41586-023-06905-9. Online ahead of print. PMID: 38086418

[Molecular sensing of mechano- and ligand-dependent adhesion GPCR dissociation.](#)

Scholz N, Dahse AK, Kemkemer M, Bormann A, Auger GM, Vieira Contreras F, Ernst LF, Staake H, Körner MB, Buhlan M, Meyer-Mölck A, Chung YK, Blanco-Redondo B, Klose F, Jarboui MA, Ljaschenko D, Bigl M, Langenhan T. Nature. 2023 Mar;615(7954):945-953. doi: 10.1038/s41586-023-05802-5. Epub 2023 Mar 8. PMID: 36890234

[Multisensory learning binds neurons into a cross-modal memory engram.](#)

Okray Z, Jacob PF, Stern C, Desmond K, Otto N, Talbot CB, Vargas-Gutierrez P, Waddell S. Nature. 2023 May;617(7962):777-784. doi: 10.1038/s41586-023-06013-8. Epub 2023 Apr 26. PMID: 37100911

[A novel antidiuretic hormone governs tumour-induced renal dysfunction.](#)

Xu W, Li G, Chen Y, Ye X, Song W. Nature. 2023 Dec;624(7991):425-432. doi: 10.1038/s41586-023-06833-8. Epub 2023 Dec 6. PMID: 38057665

[A phosphate-sensing organelle regulates phosphate and tissue homeostasis.](#)

Xu C, Xu J, Tang HW, Ericsson M, Weng JH, DiRusso J, Hu Y, Ma W, Asara JM, Perrimon N. Nature. 2023 May;617(7962):798-806. doi: 10.1038/s41586-023-06039-y. Epub 2023 May 3. PMID: 37138087

[Gap junctions desynchronize a neural circuit to stabilize insect flight.](#)

Hürkey S, Niemeyer N, Schleimer JH, Ryglewski S, Schreiber S, Duch C. Nature. 2023 Jun;618(7963):118-125. doi: 10.1038/s41586-023-06099-0. Epub 2023 May 24. PMID: 37225999

[Cholinergic neurons trigger epithelial Ca²⁺ currents to heal the gut.](#)

Petsakou A, Liu Y, Liu Y, Comjean A, Hu Y, Perrimon N. Nature. 2023 Nov;623(7985):122-131. doi: 10.1038/s41586-023-06627-y. Epub 2023 Sep 18. PMID: 37722602

[Presynaptic Ube3a E3 ligase promotes synapse elimination through down-regulation of BMP signaling.](#)

Furusawa K, Ishii K, Tsuji M, Tokumitsu N, Hasegawa E, Emoto K. Science. 2023 Sep 15;381(6663):1197-1205. doi: 10.1126/science.ade8978. Epub 2023 Sep 14. PMID: 37708280

[A gut-secreted peptide suppresses arousability from sleep.](#)

Titos I, Juginović A, Vaccaro A, Nambara K, Gorelik P, Mazor O, Rogulja D. Cell. 2023 Mar 30;186(7):1382-1397.e21. doi: 10.1016/j.cell.2023.02.022. Epub 2023 Mar 22. PMID: 36958331

[A defect in mitochondrial fatty acid synthesis impairs iron metabolism and causes elevated ceramide levels.](#)

Dutta, D., Kanca, O., Byeon, S.K. et al. Nature Metabolism volume 5, pages 1595–1614 (2023). doi: 10.1038/s42255-023-00873-0

[Variant-to-gene mapping followed by cross-species genetic screening identifies GPI-anchor biosynthesis as a regulator of sleep.](#)

Palermo J, Chesi A, Zimmerman A, Sonti S, Pahl MC, Lasconi C, Brown EB, Pippin JA, Wells AD, Doldur-Balli F, Mazzotti DR, Pack AI, Gehrman PR, Grant SFA, Keene AC. *Sci Adv.* 2023 Jan 6;9(1):eabq0844. doi: 10.1126/sciadv.abq0844. Epub 2023 Jan 6. PMID: 36608130

[Pathogenic tau-induced transposable element-derived dsRNA drives neuroinflammation.](#)

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[Drosophila Stat92E Signaling Following Pre-exposure to Ethanol.](#)

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[Drosophila RhoGAP18B regulates actin cytoskeleton during border cell migration.](#)

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[Herzog is not required for mushroom body development or courtship learning & memory but is required for eye development in *Drosophila melanogaster*.](#)

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[α-Tubulin acetylation at lysine 40 regulates dendritic arborization and larval locomotion by promoting microtubule stability in *Drosophila*.](#)

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[Blimp-1/PRDM1 and Hr3/RORβ specify the blue-sensitive photoreceptor subtype in *Drosophila* by repressing the hippo pathway.](#)

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[Isoform specific knockdown of the ETS transcription factor Pointed in *Drosophila* S2 cells.](#)

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[RNAi of Complex I and V of the electron transport chain in glutamate neurons extends life span, increases sleep, and decreases locomotor activity in *Drosophila melanogaster*.](#)

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[Reduced levels of ALS gene *DCTN1* induce motor defects in *Drosophila*.](#)

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[Ataxia-associated DNA repair genes protect the *Drosophila* mushroom body and locomotor function against glutamate signaling-associated damage.](#)

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[Perilipin 1 Deficiency Prompts Lipolysis in Lipid Droplets and Aggravates the Pathogenesis of Persistent Immune Activation in *Drosophila*.](#)

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[The AMPK-like protein kinases *Sik2* and *Sik3* interact with *Hipk* and induce synergistic tumorigenesis in a *Drosophila* cancer model.](#)

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[Neural control of redox response and microbiota-triggered inflammation in *Drosophila* gut.](#)

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