

Prion-like transmission of neuronal huntingtin aggregates in *Drosophila* brain

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Elusive roles for reactive astrocytes in neurodegenerative diseases. <i>Frontiers in Cellular Neuroscience</i> , 2015, 9, 278.	1.8	327
2	Shared Mechanisms of Disease. , 2015, , 407-443.		0
3	Non-cell autonomous cell death caused by transmission of Huntingtin aggregates in <i>Drosophila</i> . <i>Fly</i> , 2015, 9, 107-109.	0.9	9
4	Primary cilia and autophagic dysfunction in Huntington's disease. <i>Cell Death and Differentiation</i> , 2015, 22, 1413-1424.	5.0	32
5	Targeting cerebrovascular impairments in Huntington's disease: a novel treatment perspective. <i>Neurodegenerative Disease Management</i> , 2015, 5, 389-393.	1.2	4
6	Amyloid Fibres: Inert End-Stage Aggregates or Key Players in Disease?. <i>Trends in Biochemical Sciences</i> , 2015, 40, 719-727.	3.7	100
7	<i>Drosophila</i> as an <i>In Vivo</i> Model for Human Neurodegenerative Disease. <i>Genetics</i> , 2015, 201, 377-402.	1.2	266
8	<i>Drosophila</i> as a model to study the role of glia in neurodegeneration. <i>Journal of Neurogenetics</i> , 2015, 29, 69-79.	0.6	10
9	Transcellular spreading of huntingtin aggregates in the <i>Drosophila</i> brain. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, E5427-33.	3.3	105
10	Key Points Concerning Amyloid Infectivity and Prion-Like Neuronal Invasion. <i>Frontiers in Molecular Neuroscience</i> , 2016, 9, 29.	1.4	19
11	Embryonic Mutant Huntingtin Aggregate Formation in Mouse Models of Huntington's Disease. <i>Journal of Huntington's Disease</i> , 2016, 5, 343-346.	0.9	10
12	Astrocyte-to-neuron intercellular prion transfer is mediated by cell-cell contact. <i>Scientific Reports</i> , 2016, 6, 20762.	1.6	67
13	Delayed glial clearance of degenerating axons in aged <i>Drosophila</i> is due to reduced PI3K/Drap1 activity. <i>Nature Communications</i> , 2016, 7, 12871.	5.8	40
14	Protein Misfolding in Prion and Prion-Like Diseases: Reconsidering a Required Role for Protein Loss-of-Function. <i>Journal of Alzheimer's Disease</i> , 2016, 54, 3-29.	1.2	17
15	Potential Transfer of Polyglutamine and CAG-Repeat RNA in Extracellular Vesicles in Huntington's Disease: Background and Evaluation in Cell Culture. <i>Cellular and Molecular Neurobiology</i> , 2016, 36, 459-470.	1.7	75
16	Human-to-mouse prion-like propagation of mutant huntingtin protein. <i>Acta Neuropathologica</i> , 2016, 132, 577-592.	3.9	145
17	Protein aggregation and ER stress. <i>Brain Research</i> , 2016, 1648, 658-666.	1.1	87
18	Prion-like propagation as a pathogenic principle in frontotemporal dementia. <i>Journal of Neurochemistry</i> , 2016, 138, 163-183.	2.1	54

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19	Hunting cellular mechanisms underlying the spreading of misfolded protein pathology in the brain. <i>Neuropathology and Applied Neurobiology</i> , 2016, 42, 135-136.	1.8	2
20	DnaJ/Hsc70 chaperone complexes control the extracellular release of neurodegenerative-associated proteins. <i>EMBO Journal</i> , 2016, 35, 1537-1549.	3.5	154
21	Exosomes in the Pathology of Neurodegenerative Diseases. <i>Journal of Biological Chemistry</i> , 2016, 291, 26589-26597.	1.6	190
22	Induced Pluripotent Stem Cells in Huntington's Disease: Disease Modeling and the Potential for Cell-Based Therapy. <i>Molecular Neurobiology</i> , 2016, 53, 6698-6708.	1.9	20
23	Using Drosophila models of Huntington's disease as a translatable tool. <i>Journal of Neuroscience Methods</i> , 2016, 265, 89-98.	1.3	29
24	Visualization of prion-like transfer in Huntington's disease models. <i>Biochimica Et Biophysica Acta - Molecular Basis of Disease</i> , 2017, 1863, 793-800.	1.8	17
25	The prion model for progression and diversity of neurodegenerative diseases. <i>Lancet Neurology</i> , The, 2017, 16, 323-332.	4.9	92
26	Protein phosphatase 4 coordinates glial membrane recruitment and phagocytic clearance of degenerating axons in Drosophila. <i>Cell Death and Disease</i> , 2017, 8, e2623-e2623.	2.7	11
27	C. elegans neurons jettison protein aggregates and mitochondria under neurotoxic stress. <i>Nature</i> , 2017, 542, 367-371.	13.7	301
28	Proteins Containing Expanded Polyglutamine Tracts and Neurodegenerative Disease. <i>Biochemistry</i> , 2017, 56, 1199-1217.	1.2	111
29	The multitude of therapeutic targets in neurodegenerative proteinopathies. , 2017, , 1-20.		1
30	Connecting mitochondrial dynamics and life-or-death events via Bcl-2 family proteins. <i>Neurochemistry International</i> , 2017, 109, 141-161.	1.9	70
31	Prion-like transmission of pathogenic protein aggregates in genetic models of neurodegenerative disease. <i>Current Opinion in Genetics and Development</i> , 2017, 44, 149-155.	1.5	13
32	Protein misfolding in neurodegenerative diseases: implications and strategies. <i>Translational Neurodegeneration</i> , 2017, 6, 6.	3.6	424
33	Presence of tau pathology within foetal neural allografts in patients with Huntington's and Parkinson's disease. <i>Brain</i> , 2017, 140, 2982-2992.	3.7	51
34	Genetic human prion disease modelled in PrP transgenic Drosophila. <i>Biochemical Journal</i> , 2017, 474, 3253-3267.	1.7	6
35	The spread of prion-like proteins by lysosomes and tunneling nanotubes: Implications for neurodegenerative diseases. <i>Journal of Cell Biology</i> , 2017, 216, 2633-2644.	2.3	105
36	Mutant Huntingtin Is Secreted via a Late Endosomal/Lysosomal Unconventional Secretory Pathway. <i>Journal of Neuroscience</i> , 2017, 37, 9000-9012.	1.7	64

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37	Glial contributions to neuronal health and disease: new insights from <i>Drosophila</i> . <i>Current Opinion in Neurobiology</i> , 2017, 47, 162-167.	2.0	21
38	Glial Draper Rescues A β Toxicity in a <i>Drosophila</i> Model of Alzheimer's Disease. <i>Journal of Neuroscience</i> , 2017, 37, 11881-11893.	1.7	56
39	Extracellular vesicles: Novel promising delivery systems for therapy of brain diseases. <i>Journal of Controlled Release</i> , 2017, 262, 247-258.	4.8	298
40	Physico-Pathologic Mechanisms Involved in Neurodegeneration: Misfolded Protein-Plasma Membrane Interactions. <i>Neuron</i> , 2017, 95, 33-50.	3.8	83
41	What is the evidence that tau pathology spreads through prion-like propagation?. <i>Acta Neuropathologica Communications</i> , 2017, 5, 99.	2.4	272
42	Exosomes and Homeostatic Synaptic Plasticity Are Linked to Each other and to Huntington's, Parkinson's, and Other Neurodegenerative Diseases by Database-Enabled Analyses of Comprehensively Curated Datasets. <i>Frontiers in Neuroscience</i> , 2017, 11, 149.	1.4	50
43	The Evidence for the Spread and Seeding Capacities of the Mutant Huntingtin Protein in in Vitro Systems and Their Therapeutic Implications. <i>Frontiers in Neuroscience</i> , 2017, 11, 647.	1.4	33
44	Cell-to-cell Transmission of Polyglutamine Aggregates in <i>C. elegans</i> . <i>Experimental Neurobiology</i> , 2017, 26, 321-328.	0.7	19
45	Tau Internalization is Regulated by 6-O Sulfation on Heparan Sulfate Proteoglycans (HSPGs). <i>Scientific Reports</i> , 2018, 8, 6382.	1.6	162
46	Monitoring Cell-to-cell Transmission of Prion-like Protein Aggregates in <i>Drosophila Melanogaster</i> . <i>Journal of Visualized Experiments</i> , 2018, , .	0.2	3
47	Prion-Like Characteristics of Polyglutamine-Containing Proteins. <i>Cold Spring Harbor Perspectives in Medicine</i> , 2018, 8, a024257.	2.9	37
48	Genetic strategies to tackle neurological diseases in fruit flies. <i>Current Opinion in Neurobiology</i> , 2018, 50, 24-32.	2.0	61
49	Phagocytic Roles of Glial Cells in Healthy and Diseased Brains. <i>Biomolecules and Therapeutics</i> , 2018, 26, 350-357.	1.1	89
50	N-terminal Huntingtin (Htt) phosphorylation is a molecular switch regulating Htt aggregation, helical conformation, internalization, and nuclear targeting. <i>Journal of Biological Chemistry</i> , 2018, 293, 18540-18558.	1.6	63
51	The Tiny <i>Drosophila Melanogaster</i> for the Biggest Answers in Huntington's Disease. <i>International Journal of Molecular Sciences</i> , 2018, 19, 2398.	1.8	19
52	mHTT Seeding Activity: A Marker of Disease Progression and Neurotoxicity in Models of Huntington's Disease. <i>Molecular Cell</i> , 2018, 71, 675-688.e6.	4.5	50
53	Mutational analysis implicates the amyloid fibril as the toxic entity in Huntington's disease. <i>Neurobiology of Disease</i> , 2018, 120, 126-138.	2.1	37
54	Hunting the G-unit in Huntington's. <i>Brain</i> , 2018, 141, 1586-1589.	3.7	1

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55	A Filter Retardation Assay Facilitates the Detection and Quantification of Heat-Stable, Amyloidogenic Mutant Huntingtin Aggregates in Complex Biosamples. <i>Methods in Molecular Biology</i> , 2018, 1780, 31-40.	0.4	5
56	Mechanisms of protein toxicity in neurodegenerative diseases. <i>Cellular and Molecular Life Sciences</i> , 2018, 75, 3159-3180.	2.4	103
57	Unconventional Secretion and Intercellular Transfer of Mutant Huntingtin. <i>Cells</i> , 2018, 7, 59.	1.8	20
58	Q&A: Trash talk: disposal and remote degradation of neuronal garbage. <i>BMC Biology</i> , 2018, 16, 17.	1.7	5
59	The Crk adapter protein is essential for <i>Drosophila</i> embryogenesis, where it regulates multiple actin-dependent morphogenic events. <i>Molecular Biology of the Cell</i> , 2019, 30, 2399-2421.	0.9	5
60	Prionoid Proteins in the Pathogenesis of Neurodegenerative Diseases. <i>Frontiers in Molecular Neuroscience</i> , 2019, 12, 271.	1.4	26
61	Nmnat restores neuronal integrity by neutralizing mutant Huntingtin aggregate-induced progressive toxicity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 19165-19175.	3.3	23
62	Molecular mechanisms of heterogeneous oligomerization of huntingtin proteins. <i>Scientific Reports</i> , 2019, 9, 7615.	1.6	21
63	IKK β slows Huntingtin α 's disease progression in R6/1 mice. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 10952-10961.	3.3	23
64	<i>Drosophila</i> Glia. Colloquium Series on Neuroglia in Biology and Medicine From Physiology To Disease, 2019, 6, i-43.	0.5	0
65	Astrocytic expression of the chaperone DNAJB6 results in non-cell autonomous protection in Huntingtin α 's disease. <i>Neurobiology of Disease</i> , 2019, 124, 108-117.	2.1	22
66	Autophagy in <i>C. elegans</i> development. <i>Developmental Biology</i> , 2019, 447, 103-125.	0.9	32
67	Glial phagocytosis in developing and mature <i>Drosophila</i> CNS: tight regulation for a healthy brain. <i>Current Opinion in Immunology</i> , 2020, 62, 62-68.	2.4	23
68	<i>Drosophila</i> Glia: Models for Human Neurodevelopmental and Neurodegenerative Disorders. <i>International Journal of Molecular Sciences</i> , 2020, 21, 4859.	1.8	17
69	The role of glia in protein aggregation. <i>Neurobiology of Disease</i> , 2020, 143, 105015.	2.1	28
70	The Dichotomous Role of Extracellular Vesicles in the Central Nervous System. <i>IScience</i> , 2020, 23, 101456.	1.9	22
71	Distinct responses of neurons and astrocytes to TDP-43 proteinopathy in amyotrophic lateral sclerosis. <i>Brain</i> , 2020, 143, 430-440.	3.7	68
72	Huntington disease: new insights into molecular pathogenesis and therapeutic opportunities. <i>Nature Reviews Neurology</i> , 2020, 16, 529-546.	4.9	248

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73	C. elegans Models to Study the Propagation of Prions and Prion-Like Proteins. <i>Biomolecules</i> , 2020, 10, 1188.	1.8	7
74	Disease-related Huntingtin seeding activities in cerebrospinal fluids of Huntington's disease patients. <i>Scientific Reports</i> , 2020, 10, 20295.	1.6	10
75	Astrocytes and microglia in neurodegenerative diseases: Lessons from human in vitro models. <i>Progress in Neurobiology</i> , 2021, 200, 101973.	2.8	29
76	Shared Mechanisms of Disease. , 2021, , 385-414.		0
77	Current and future applications of induced pluripotent stem cell-based models to study pathological proteins in neurodegenerative disorders. <i>Molecular Psychiatry</i> , 2021, 26, 2685-2706.	4.1	18
78	The role of astrocytes in prion-like mechanisms of neurodegeneration. <i>Brain</i> , 2022, 145, 17-26.	3.7	10
79	Prionopathies and Prionlike Protein Aberrations in Neurodegenerative Diseases. <i>Neurographics</i> , 2021, 11, 127-148.	0.0	0
80	The Molecular Clock and Neurodegenerative Disease: A Stressful Time. <i>Frontiers in Molecular Biosciences</i> , 2021, 8, 644747.	1.6	27
81	Emerging Roles of Exosomes in Huntington's Disease. <i>International Journal of Molecular Sciences</i> , 2021, 22, 4085.	1.8	26
83	Genetic Screen in Adult Drosophila Reveals That dCBP Depletion in Glial Cells Mitigates Huntington Disease Pathology through a Foxo-Dependent Pathway. <i>International Journal of Molecular Sciences</i> , 2021, 22, 3884.	1.8	3
84	Downregulation of glial genes involved in synaptic function mitigates Huntington's disease pathogenesis. <i>ELife</i> , 2021, 10, .	2.8	20
86	Amplification of neurotoxic HTTex1 assemblies in human neurons. <i>Neurobiology of Disease</i> , 2021, 159, 105517.	2.1	6
87	Huntington Disease. , 2021, , 161-180.		0
88	Protein Misfolding Cyclic Amplification of Infectious Prions. <i>Progress in Molecular Biology and Translational Science</i> , 2017, 150, 361-374.	0.9	6
90	The copper transport-associated protein Ctr4 can form prion-like epigenetic determinants in <i>Schizosaccharomyces pombe</i> . <i>Microbial Cell</i> , 2017, 4, 16-28.	1.4	16
91	Quantitative Approaches for Scoring in vivo Neuronal Aggregate and Organelle Extrusion in Large Exopher Vesicles in C. elegans. <i>Journal of Visualized Experiments</i> , 2020, , .	0.2	13
92	Control of the structural landscape and neuronal proteotoxicity of mutant Huntingtin by domains flanking the polyQ tract. <i>ELife</i> , 2016, 5, .	2.8	62
93	The physical dimensions of amyloid aggregates control their infective potential as prion particles. <i>ELife</i> , 2017, 6, .	2.8	31

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94	Phagocytic glia are obligatory intermediates in transmission of mutant huntingtin aggregates across neuronal synapses. <i>ELife</i> , 2020, 9, .	2.8	24
96	Prion-Like Propagation in Neurodegenerative Diseases. , 2018, , 189-242.		0
97	Huntingtonâ€™s Disease and Other Polyglutamine Repeat Diseases. , 2018, , 145-188.		0
100	Prion-like properties of the mutant huntingtin protein in living organisms: the evidence and the relevance. <i>Molecular Psychiatry</i> , 2022, 27, 269-280.	4.1	6
103	Myelinosome Organelles in the Retina of R6/1 Huntington Disease (HD) Mice: Ubiquitous Distribution and Possible Role in Disease Spreading. <i>International Journal of Molecular Sciences</i> , 2021, 22, 12771.	1.8	4
105	Exogenous polyserine and polyleucine are toxic to recipient cells. <i>Scientific Reports</i> , 2022, 12, 1685.	1.6	6
106	Roles of Î±-Synuclein and Disease-Associated Factors in <i>Drosophila</i> Models of Parkinsonâ€™s Disease. <i>International Journal of Molecular Sciences</i> , 2022, 23, 1519.	1.8	8
107	Toxicity of internalized polyalanine to cells depends on aggregation. <i>Scientific Reports</i> , 2021, 11, 23441.	1.6	8
108	Neuronâ€“glia crosstalk in neuronal remodeling and degeneration: Neuronal signals inducing glial cell phagocytic transformation in <i>Drosophila</i> . <i>BioEssays</i> , 2022, , 2100254.	1.2	7
109	Reactive astrocytes promote proteostasis in Huntingtonâ€™s disease through the JAK2-STAT3 pathway. <i>Brain</i> , 2023, 146, 149-166.	3.7	24
110	Rhes protein transits from neuron to neuron and facilitates mutant huntingtin spreading in the brain. <i>Science Advances</i> , 2022, 8, eabm3877.	4.7	12
111	Spatial sequestration of misfolded proteins in neurodegenerative diseases. <i>Biochemical Society Transactions</i> , 2022, 50, 759-771.	1.6	4
112	Emerging roles of extracellular vesicles in polyglutamine diseases: Mutant protein transmission, therapeutic potential, and diagnostics. <i>Neurochemistry International</i> , 2022, 157, 105357.	1.9	5
113	<i>C. elegans</i> as an Animal Model to Study the Intersection of DNA Repair, Aging and Neurodegeneration. <i>Frontiers in Aging</i> , 0, 3, .	1.2	9
114	Striatal Induction and Spread of the Huntingtonâ€™s Disease Protein: A Novel Rhes Route. <i>Journal of Huntington's Disease</i> , 2022, 11, 281-290.	0.9	3
115	Hunting for the cause: Evidence for prion-like mechanisms in Huntingtonâ€™s disease. <i>Frontiers in Neuroscience</i> , 0, 16, .	1.4	6
117	Proteinopathies: Deciphering Physiology and Mechanisms to Develop Effective Therapies for Neurodegenerative Diseases. <i>Molecular Neurobiology</i> , 2022, 59, 7513-7540.	1.9	5
118	FLIM-FRET Investigation of Heterogeneous Huntingtin Aggregation in HeLa Cells. <i>Methods in Molecular Biology</i> , 2023, , 595-604.	0.4	0

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120	Conditioned medium from BV2 microglial cells having polyleucine specifically alters startle response in mice. <i>Scientific Reports</i> , 2022, 12, .	1.6	2
121	The Emerging Landscape of Small-Molecule Therapeutics for the Treatment of Huntingtonâ€™s Disease. <i>Journal of Medicinal Chemistry</i> , 2022, 65, 15993-16032.	2.9	6
123	Mechanisms Underlying Neurodegenerative Disorders and Potential Neuroprotective Activity of Agrifood By-Products. <i>Antioxidants</i> , 2023, 12, 94.	2.2	7
124	The Emerging Landscape of Natural Small-molecule Therapeutics for Huntingtonâ€™s Disease. <i>Current Neuropharmacology</i> , 2023, 21, 867-889.	1.4	1
125	Cell Rearrangement and Oxidant/Antioxidant Imbalance in Huntingtonâ€™s Disease. <i>Antioxidants</i> , 2023, 12, 571.	2.2	7
126	Large vesicle extrusions from <i>C. elegans</i> neurons are consumed and stimulated by glial-like phagocytosis activity of the neighboring cell. <i>ELife</i> , 0, 12, .	2.8	7
127	Curbing Rhes Actions: Mechanism-Based Molecular Target for Huntingtonâ€™s Disease and Tauopathies. <i>CNS and Neurological Disorders - Drug Targets</i> , 2023, 22, .	0.8	1
128	ATP modulates self-perpetuating conformational conversion generating structurally distinct yeast prion amyloids that limit autocatalytic amplification. <i>Journal of Biological Chemistry</i> , 2023, 299, 104654.	1.6	3
129	Molecular Mechanisms of Cellular Senescence in Neurodegenerative Diseases. <i>Journal of Molecular Biology</i> , 2023, 435, 168114.	2.0	9
134	Astrocytes in Huntingtonâ€™s Disease Pathology: Implications for Biomarkers. <i>Contemporary Clinical Neuroscience</i> , 2023, , 305-319.	0.3	0
135	Extracellular Vesicles as Possible Sources of Huntingtonâ€™s Disease Biomarkers. <i>Contemporary Clinical Neuroscience</i> , 2023, , 45-75.	0.3	1