

Resource Summary Report

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James S. McDonnell Foundation

RRID:SCR_006341

Type: Tool

Proper Citation

James S. McDonnell Foundation (RRID:SCR_006341)

Resource Information

URL: <http://www.jsmf.org/>

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Description: Supports research and scholarship to improve the quality of life by providing funding for grants in three program areas: studying complex systems, understanding human cognition, and mathematical and complex systems approaches for brain cancer. Types of awards include Fellowship Awards, Scholar Awards, and Collaborative Awards. * Studying Complex Systems: This program supports scholarship and research directed toward the development of theoretical and mathematical tools that can be applied to the study of complex, adaptive, nonlinear systems. It is anticipated that research funded in this program will address issues in fields such as biology, biodiversity, climate, demography, epidemiology, technological change, economic development, governance, or computation. * Understanding Human Cognition: This program supports research studying how neural systems are linked to and support cognitive functions and how cognitive systems are related to an organism's (preferably human) observable behavior. Studies with model organisms should justify why such models were selected and how data obtained from models advances our understanding of human cognition. * Mathematical & Complex Systems Approaches for Brain Cancer: (Collaborative Activity Awards grant type only.) Despite some recent cause for optimism for advancing the clinical treatment of brain cancers, for many patients brain tumor remains a devastating diagnosis. Progress against this disease has been stymied by limited understandings of the molecular, metabolic, and physiological characteristics of human brain cancers across multiple temporal and spatial scales and by the failure of many preclinical models to predict patient responses.

Abbreviations: JSMF

Synonyms: McDonnell Foundation

Resource Type: institution

Keywords: grant, scholarship, cognition, human cognition, human, brain, award, complex system, cancer, biology, biodiversity, climate, demography, epidemiology, technological

change, economic development, governance, computation, neural system, behavior, clinical

Related Condition: Brain cancer, Etc.

Resource Name: James S. McDonnell Foundation

Resource ID: SCR_006341

Alternate IDs: ISNI: 0000 0004 0612 0441, nlx_152052, grid.453017.4, Crossref funder ID: 100000913, Wikidata: Q6142668

Alternate URLs: <https://ror.org/03dy4aq19>

Record Creation Time: 20220129T080235+0000

Record Last Update: 20260725T190619+0000

Ratings and Alerts

No rating or validation information has been found for James S. McDonnell Foundation.

No alerts have been found for James S. McDonnell Foundation.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 65 mentions in open access literature.

Listed below are recent publications. The full list is available at [nidm-terms](#) .

Garchitorena A, et al. (2025) Changes in child mortality and population health following 10 years of health systems strengthening in rural Madagascar: A longitudinal cohort study. PLoS medicine, 22(10), e1004549.

Echeverria-Altuna I, et al. (2025) Sensory and motor contents are prioritized dynamically in working memory. PLoS biology, 23(7), e3003273.

Zhou Y, et al. (2025) Quantifying the roles of visual, linguistic, and visual-linguistic complexity in noun and verb acquisition. PloS one, 20(5), e0321973.

Akarca D, et al. (2025) Homophilic wiring principles underpin neuronal network topology in vitro. eLife, 14.

Wang Y, et al. (2024) Dopamine encoding of novelty facilitates efficient uncertainty-driven exploration. PLoS computational biology, 20(4), e1011516.

Bass I, et al. (2024) Early environments and exploration in the preschool years. PLoS one, 19(6), e0305353.

Chang BA, et al. (2023) Frontal Electroencephalography Findings in Critically Ill COVID-19 Patients. Journal of neurosurgical anesthesiology, 35(3), 322.

Piwek EP, et al. (2023) A recurrent neural network model of prefrontal brain activity during a working memory task. PLoS computational biology, 19(10), e1011555.

Hezemans FH, et al. (2022) Noradrenergic deficits contribute to apathy in Parkinson's disease through the precision of expected outcomes. PLoS computational biology, 18(5), e1010079.

Timcheck J, et al. (2022) Optimal noise level for coding with tightly balanced networks of spiking neurons in the presence of transmission delays. PLoS computational biology, 18(10), e1010593.

Brooke JM, et al. (2022) Biological action at a distance: Correlated pattern formation in adjacent tessellation domains without communication. PLoS computational biology, 18(3), e1009963.

LoBue V, et al. (2022) Behavioral avoidance of contagious and non-contagious adults. PLoS one, 17(8), e0272726.

Gibbs T, et al. (2022) Stability criteria for the consumption and exchange of essential resources. PLoS computational biology, 18(9), e1010521.

Benitez VL, et al. (2021) Two for the price of one: Concurrent learning of words and phonotactic regularities from continuous speech. PLoS one, 16(6), e0253039.

Zhigalov A, et al. (2021) The visual cortex produces gamma band echo in response to broadband visual flicker. PLoS computational biology, 17(6), e1009046.

Guevara EE, et al. (2021) Comparative analysis reveals distinctive epigenetic features of the human cerebellum. PLoS genetics, 17(5), e1009506.

Rivera C, et al. (2021) Inferring phenomenological models of first passage processes. PLoS computational biology, 17(3), e1008740.

Froböse MI, et al. (2020) Catecholaminergic modulation of the cost of cognitive control in healthy older adults. PLoS one, 15(2), e0229294.

Saad-Roy CM, et al. (2020) Implications of localized charge for human influenza A H1N1 hemagglutinin evolution: Insights from deep mutational scans. PLoS computational biology, 16(6), e1007892.

D'Andrea R, et al. (2020) Emergent neutrality in consumer-resource dynamics. PLoS computational biology, 16(7), e1008102.