Resource Summary Report

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bridge

RRID:SCR_001343
Type: Tool

Proper Citation

bridge (RRID:SCR_001343)

Resource Information

URL: http://www.bioconductor.org/packages/release/bioc/html/bridge.html

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Description: Software package to test for differentially expressed genes with microarray data. It can be used with both cDNA microarrays or Affymetrix chip. The packge fits a robust Bayesian hierarchical model for testing for differential expression. Outliers are modeled explicitly using a t-distribution. The model includes an exchangeable prior for the variances which allow different variances for the genes but still shrink extreme empirical variances. The model can be used for testing for differentially expressed genes among multiple samples, and can distinguish between the different possible patterns of differential expression when there are three or more samples. Parameter estimation is carried out using a novel version of Markov Chain Monte Carlo that is appropriate when the model puts mass on subspaces of the full parameter space.

Abbreviations: bridge

Synonyms: Bayesian Robust Inference for Differential Gene Expression

Resource Type: software resource

Defining Citation: PMID:16542223

Keywords: cdna microarray, affymetrix chip, differential expression, microarray, bio.tools

Funding:

Availability: GNU General Public License, v2 or newer

Resource Name: bridge

Resource ID: SCR_001343

Alternate IDs: OMICS_01996, biotools:bridge

Alternate URLs: https://bio.tools/bridge

Record Creation Time: 20220129T080207+0000

Record Last Update: 20250519T203126+0000

Ratings and Alerts

No rating or validation information has been found for bridge.

No alerts have been found for bridge.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 136 mentions in open access literature.

Listed below are recent publications. The full list is available at dkNET.

Kandror EK, et al. (2025) Enhancer Dynamics and Spatial Organization Drive Anatomically Restricted Cellular States in the Human Spinal Cord. bioRxiv : the preprint server for biology.

Sadekar N, et al. (2025) A Proof-of-Concept for Safety Evaluation of Inhalation Exposure to Known Respiratory Irritants Using In Vitro and In Silico Methods. Toxics, 13(1).

Lantinga VA, et al. (2025) Impact of device variability and protocol differences on kidney function during normothermic machine perfusion: A comparative study using porcine and human kidneys. Artificial organs, 49(1), 93.

Block VJ, et al. (2024) A Closed-Loop Falls Monitoring and Prevention App for Multiple Sclerosis Clinical Practice: Human-Centered Design of the Multiple Sclerosis Falls InsightTrack. JMIR human factors, 11, e49331.

DeWolf SE, et al. (2024) Human pulmonary microvascular endothelial cells respond to DAMPs from injured renal tubular cells. Pulmonary circulation, 14(3), e12379.

Zhang MY, et al. (2024) Chromothripsis is a novel biomarker for prognosis and differentiation

diagnosis of pancreatic neuroendocrine neoplasms. MedComm, 5(7), e623.

Dalal N, et al. (2024) BRIDGE to liver health: implementation of a group telehealth psychoeducational program through shared medical appointments for MASLD management. BMC public health, 24(1), 1546.

Endo C, et al. (2024) The Risk of Microbial Transmission in Recipients of Donor Livers That Underwent Hypothermic or Normothermic Machine Perfusion. Transplantation direct, 10(7), e1664.

von Reiterdank IF, et al. (2024) Enhancing Vascularized Composite Allograft Supercooling Preservation: A Multifaceted Approach with CPA Optimization, Thermal Tracking, and Stepwise Loading Techniques. Research square.

Weiss MG, et al. (2024) Activation of the Innate Immune System in Brain-Dead Donors Can Be Reduced by Luminal Intestinal Preservation During Organ Procurement Surgery - A Porcine Model. Transplant international : official journal of the European Society for Organ Transplantation, 37, 13569.

Nikolaev AV, et al. (2024) Pre-transplant kidney quality evaluation using photoacoustic imaging during normothermic machine perfusion. Photoacoustics, 36, 100596.

Chen Q, et al. (2024) Dexmedetomidine and argon in combination against ferroptosis through tackling TXNIP-mediated oxidative stress in DCD porcine livers. Cell death discovery, 10(1), 319.

Li M, et al. (2024) Metabolic Dysfunction-Associated Steatotic Liver Disease in a Dish: Human Precision-Cut Liver Slices as a Platform for Drug Screening and Interventions. Nutrients, 16(5).

Muench NA, et al. (2024) Preservation of Murine Whole Eyes With Supplemented UW Cold Storage Solution: Anatomical Considerations. Translational vision science & technology, 13(11), 24.

Herms A, et al. (2024) Organismal metabolism regulates the expansion of oncogenic PIK3CA mutant clones in normal esophagus. Nature genetics, 56(10), 2144.

Filz von Reiterdank I, et al. (2024) Supercooling preservation of vascularized composite allografts through CPA optimization, thermal tracking, and stepwise loading techniques. Scientific reports, 14(1), 22339.

Taggart MS, et al. (2024) Parallelized Droplet Vitrification Enables Single-Run Vitrification of the Whole Rat Liver Hepatocyte Yield. bioRxiv : the preprint server for biology.

Gokaltun A, et al. (2024) Supercooled preservation of cultured primary rat hepatocyte monolayers. Frontiers in bioengineering and biotechnology, 12, 1429412.

Cabanes-Creus M, et al. (2024) Harnessing whole human liver ex situ normothermic perfusion for preclinical AAV vector evaluation. Nature communications, 15(1), 1876.

Couppey T, et al. (2024) NRV: An open framework for in silico evaluation of peripheral nerve electrical stimulation strategies. bioRxiv : the preprint server for biology.