

# Resource Summary Report

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## bridge

RRID:SCR\_001343

Type: Tool

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### Proper Citation

bridge (RRID:SCR\_001343)

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### Resource Information

**URL:** <https://bioconductor.org/packages//2.11/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 package 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

**Availability:** Free, Available for download, Freely available

**Resource Name:** bridge

**Resource ID:** SCR\_001343

**Alternate IDs:** OMICS\_01996, biotools:bridge

**Alternate URLs:** <http://www.bioconductor.org/packages/release/bioc/html/bridge.html>

**License:** GNU General Public License, v2 or newer

**Record Creation Time:** 20220129T080207+0000

**Record Last Update:** 20260829T182041+0000

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## Ratings and Alerts

No rating or validation information has been found for bridge.

No alerts have been found for bridge.

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## Data and Source Information

**Source:** [SciCrunch Registry](#)

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## Usage and Citation Metrics

We found 157 mentions in open access literature.

**Listed below are recent publications.** The full list is available at [NIF](#) .

Wang Y, et al. (2026) A comprehensive benchmarking study on computational tools for cross-omics label transfer from single-cell RNA to ATAC data. G3 (Bethesda, Md.), 16(4).

Slagter JS, et al. (2025) Limited Risk of Microbial Contamination During Hypothermic and Normothermic Machine Perfusion of Donor Kidneys. Transplant infectious disease : an official journal of the Transplantation Society, 27(3), e70019.

van den Brekel A, et al. (2025) Spatial distribution of fractionally administered holmium microspheres in non-tumorous human liver tissue: how livers survive transarterial radioembolisation. EJNMMI research, 15(1), 49.

Borgognon S, et al. (2025) Regional specialization of movement encoding across the primate sensorimotor cortex. Nature communications, 16(1), 5729.

Hamelink TL, et al. (2025) Perfusate Biomarker Comparison During Renal Hypothermic and Normothermic Machine Perfusion: Do These Techniques Provide Similar Insights? Transplantation, 109(10), e554.

Morrison AI, et al. (2025) Functional organotypic human lymph node model with native immune cells benefits from fibroblastic reticular cell enrichment. Scientific reports, 15(1), 12233.

Kroezen FPC, et al. (2025) Radial Forearm Free Flap: A Modified Technique for Procurement as a Sentinel Skin Flap. Transplantation direct, 11(5), e1798.

Leber B, et al. (2025) Equal performance of HTK-based and UW-based perfusion solutions in sub-normothermic liver machine perfusion. Scientific reports, 15(1), 7601.

H??llqvist J, et al. (2025) Multi-omic analysis reveals lipid dysregulation associated with mitochondrial dysfunction in parkinson's disease brain. *Nature communications*, 16(1), 10490.

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).

McGreevy O, et al. (2025) A Preclinical Model of Human Liver Using Precision Cut Tissue Slice Culture. *F1000Research*, 14, 571.

Magliozzi R, et al. (2025) Neuropathological and cerebrospinal fluid correlates of choroid plexus inflammation in progressive multiple sclerosis. *Brain pathology (Zurich, Switzerland)*, 35(4), e13322.

Khan A, et al. (2025) Human Schwann Cell-Derived Extracellular Vesicle Isolation, Bioactivity Assessment, and Omics Characterization. *International journal of nanomedicine*, 20, 4123.

Lascaris B, et al. (2025) Perfusion Pressures and Weight Loss During Normothermic Machine Perfusion of Human Donor Livers. *Artificial organs*, 49(5), 820.

de Haan MJA, et al. (2025) Normothermic human kidney preservation drives iron accumulation and ferroptosis. *Nature communications*, 16(1), 5420.

Miller N, et al. (2025) Actionable Wearables Data for the Neurology Clinic: A Proof-of-Concept Tool. *Annals of clinical and translational neurology*, 12(8), 1556.

Stepanov I, et al. (2025) Low-cost robotic manipulation of live microtissues for cancer drug testing. *Science advances*, 11(20), eads1631.

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.

Jafree DJ, et al. (2025) Microvascular aberrations found in human polycystic kidneys are an early feature in a Pkd1 mutant mouse model. *Disease models & mechanisms*, 18(4).