

## Application Note

# JBrowseR: An R Interface to the JBrowse 2 Genome Browser

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## Abstract

**Motivation:** Genome browsers are an essential tool in genome analysis. Modern genome browsers enable complex and interactive visualization of a wide variety of genomic data modalities. While such browsers are very powerful, they can be challenging to configure and program for bioinformaticians lacking expertise in web development.

**Results:** We have developed an R package that provides an interface to the JBrowse 2 genome browser. The package can be used to configure and customize the browser entirely with R code. The browser can be deployed from the R console, or embedded in Shiny applications or R Markdown documents.

**Availability:** JBrowseR is available for download from CRAN, and the source code is openly available from the Github repository at

**Contact:** [ihh@berkeley.edu](mailto:ihh@berkeley.edu)

**Supplementary information:** Supplementary data are available at Bioinformatics Online.

## 1 Introduction

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Instructions for authors are available online.

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## 2 Approach

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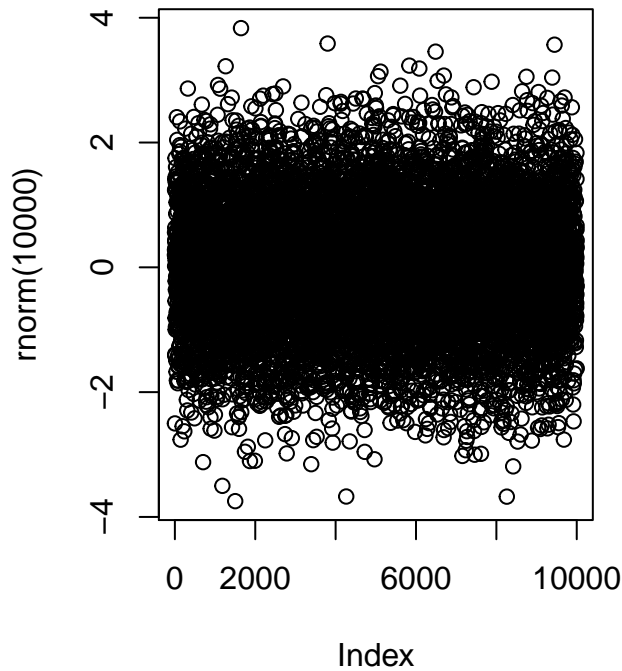


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## Acknowledgements

These should be included at the end of the text and not in footnotes. Please ensure you acknowledge all sources of funding, see funding section below.

Details of all funding sources for the work in question should be given in a separate section entitled ‘Funding’. This should appear before the ‘Acknowledgements’ section.

## Funding

The following rules should be followed:

- The sentence should begin: ‘This work was supported by ...’ -
- The full official funding agency name should be given, i.e. ‘National Institutes of Health’, not ‘NIH’ (full RIN-approved list of UK funding agencies)
- Grant numbers should be given in brackets as follows: ‘[grant number xxxx]’
- Multiple grant numbers should be separated by a comma as follows: ‘[grant numbers xxxx, yyyy]’
- Agencies should be separated by a semi-colon (plus ‘and’ before the last funding agency)

- Where individuals need to be specified for certain sources of funding the following text should be added after the relevant agency or grant number ‘to [author initials]’.

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## References

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- Zou, H. and Hastie, T. (2005). Regularization and variable selection via the elastic net. *Journal of the Royal Statistical Society: Series B (Statistical Methodology)*, **67**(2), 301–320.