Editorial

by John Verzani

On behalf of the Editorial Board, I am pleased to present Volume 10, Issue 1 of the R Journal. This issue contains 36 contributed articles. The majority of which cover new or newly enhanced packages on CRAN.

As of writing, CRAN has over 12,500 contributed packages. Including BioConductor packages, there are over 14,000 packages readily installable for R users. Despite the large combined size of the repositories, there are still numerous new contributions made each year, as highlighted in the note "Changes on Cran." The majority of submissions to the R Journal cover add-on packages for R. In this issue over a dozen articles are focused on newly developed packages for applied statistical modeling. As examples, the article by Wurm and Rathouz describes their **gldrm** package for semiparametric generalized linear models; the article by Kim, Zhang, and Zhou describes their **MGLM** package for multivariate categorical data; and Garcia-Donato and Forte's article present their **BayesVarSel** package. For hypothesis tests there are articles on the **HHG** package for non-parametric independence tests; and an article describing the **onewaytests** package, which provides an interface to numerous oneway tests. We have several articles on imputation, including descriptions of the **ImputeRobust**, **FHDI**, and **imputeTestbench** packages.

Several contributions are related to managing complexity, either in data or computational time. The article by Happ, Harrar, and Bathke on their **HRM** package discusses challenges arising in high-dimensional longitudinal data; Kraemer, Reichstein, and Mahecha write about their packages **dimRed** and **coRanking** which enhance R's dimension reduction facilities; and Liu and Quertermous describe their **sinib** package for precise calculations of a useful probability distribution.

Though packages on CRAN do come and go, many are constantly improved and updated. A few articles discuss enhancements to existing packages, for example we have Burkner's article on improvements to his **brms** package. For years, spatial data has been analyzed by R users with the **sp** package. One of **sp**'s authors, Pebesma, describes the important new package **sf** in the article "Simple Features for R" for spatial data. This package is more tightly coupled to standard representations of such data. Spatial data users will also be interested in the article describing **rpostgis** about using a data base add on for spatial data within R.

The Editorial Board has encouraged submissions with comparisons and benchmarking of available packages on CRAN, as in some instances packages offer overlapping features. In this edition we have a few contributions providing overviews. As an example, the "Collections in R" article by Barry reviews several packages providing support, in addition to base R, for various type of collections.

Finally, as R continues to provide value to more and more disciplines, there are a large number of field-specific articles. Examples, among many, include the article on **PortfolioOptim** and its application to optimizing financial portfolios; the article on the **mopa** package and its application to climate data; and the article on the **rtip** package and its application to income data.

In addition the News and Notes section contains the usual updates on CRAN, the Bioconductor project, and several conferences that have highlighted R's usage.

I'd like to thank Roger Bivand for his excellent leadership as editor in chief for the past two issues, welcome Olivia Lau to the Editorial Board, and say farewell to Michael Lawrence from the Editorial Board. Finally, I'd like to thank the enormous number of reviewers who have helped significantly shape the articles contained herein. Their peer-review is invaluable and always most appreciated.

John Verzani
John.Verzani@r-project.org