


News

The Newsletter of the R Project

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Editorial

by Kurt Hornik

Welcome to the fourth issue of *R News*, the newsletter of the R project for statistical computing.

This is the first *special issue* of *R News*, with an emphasis on applying R in medical statistics. It is special in many ways: first, it took longer to prepare than we had originally anticipated (which typically seems to happen for special issues). Second, the newsletter file is rather large as there are many exciting images—in fact, in trying to keep the size reasonable, in some cases images are only included at a lower resolution, with the “real stuff” available from the respective authors’ web pages. And finally, articles are fewer but longer: as many of the applications described are based on recent advances in medical technology, we felt that extra space with background information was warranted.

The main focus in this issue is on using R in the analysis of genome data. Here, several exciting initiatives have recently been started, and R has the potential to become a standard tool in this area. The multitude of research questions calls for a flexible computing environment with seamless integration to databases and web content and, of course, state-of-the-art statistical methods: R can do all of that. Robert Gentleman and Vince Carey have started the Bioconductor project, a collaborative effort to provide common infrastructure for the anal-

ysis of genome data. The packages developed by this project (about 20 are currently under way) make heavy use of the S4 formal classes and methods (which are now also available in R) introduced in the “Green Book” by John Chambers, and in fact provide the first large-scale project employing the new S object system.

R 1.4.0 was released on Dec 19, 2001, making it the “Lord of the Rings” release of R. Its new features are described in “Changes in R”. The number of R packages distributed via CRAN’s main section alone now exceeds 150 (!!!)—“Changes on CRAN” briefly presents the 26 most recent ones. The series of introductory articles on each recommended package continues with “Reading Foreign Files”.

Developers of R packages should consider submitting their work to the *Journal of Statistical Software* (JSS, <http://www.jstatsoft.org>) which has become the ‘Statistical Software’ section of the *Journal of Computational and Graphical Statistics* (JCGS). JSS provides peer reviews of code and publishes user manuals alongside, and hence ideally complements *R News* as a platform for disseminating news about exciting statistical software.

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