Editorial

by Thomas Lumley

R has been well accepted in the academic world for some time, but this issue of R News begins with a description of the use of R in a business setting. Marc Schwartz describes how his consulting company, MedAnalytics, came to use R instead of commercial statistical software, and has since provided both code and financial support to the R Project.

The growth of the R community was also evident at the very successful useR! 2004, the first conference for R users. While R aims to blur the distinctions between users and programmers, useR! was definitely different in aims and audience from the previous DSC conferences held in 1999, 2001, and 2003. John Fox provides a summary of the conference in this issue for those who could not make it to Vienna.

A free registration to useR! was the prize in the competition for a new graphic for `http://www.r-project.org`. You will have seen the winning graphic, from Eric Lecoutre, on the way to downloading this newsletter. The graphic is unedited R output (click on it to see the code), showing the power of R for creating complex graphs that are completely reproducible. I would also encourage R users to visit the Journal of Statistical Software (`http:///www.jstatsoft.org`), which publishes peer-reviewed code and documentation. R is heavily represented in recent issues of the journal.

The success of R in penetrating so many statisti-

cal niches is due in large part to the wide variety of packages produced by the R community. We have articles describing contributed packages for principal component analysis (ade4, used in creating Eric Lecoutre's winning graphic) and statistical process control (qcc) and the recommended `survival` package. Jianhua Zhang and Robert Gentlement describe tools from the Bioconductor project that make it easier to explore the resulting variety of code and documentation.

The Programmers' Niche and Help Desk columns both come from guest contributors this time. Gabor Grothendieck,known as frequent poster of answers on the mailing list r-help, has been invited to contribute to the R Help Desk. He presents "Date and Time Classes in R". For the Programmers' Niche, I have written a simple example of classes and methods using the old and new class systems in R. This example arose from a discussion at an R programming course.

Programmers will also find useful Doug Bates' article on least squares calculations. Prompted by discussions on the `r-devel` list, he describes why the simple matrix formulae from so many textbooks are not the best approach either for speed or for accuracy.

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