

How to install the R-package “crmPack” for model-based dose escalation in R

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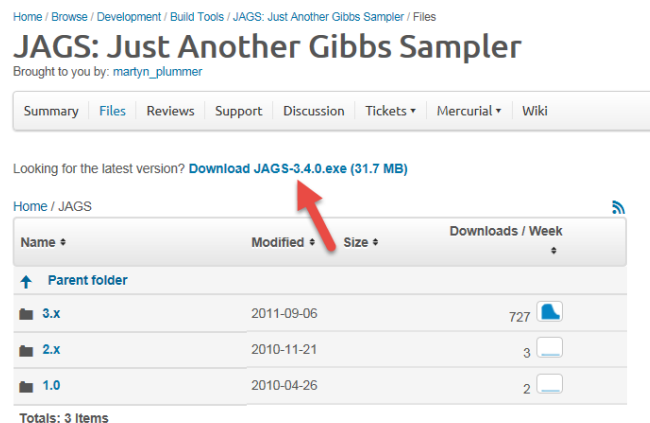
Following this installation guide, you will install the R-package “crmPack” on your local computer with your local R installation. Please note that it has nothing to do with the remote RStudio that you can access on <https://r.roche.com>. Your local R and the remote RStudio on the server are completely independent. We assume here that you have already installed R or RStudio on your computer.

1. First, you have to install JAGS (“Just Another Gibbs Sampler”) on your computer. Note that this requires you to have administrative rights on your computer.

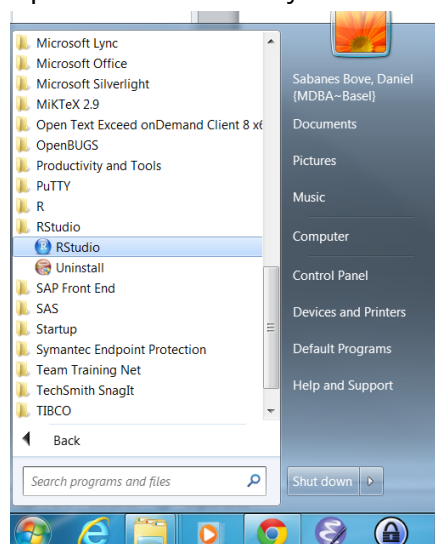
- a. Click on the following link to visit the JAGS webpage:

<http://sourceforge.net/projects/mcmc-jags/files/JAGS/>

- b. Download the JAGS installation program suitable for your computer by clicking on the top link in the JAGS webpage:



- c. Run the JAGS installation program by executing the downloaded file, and clicking through and confirming all installation setup steps (including warnings).
2. Now we will install the latest version of the R-package “crmPack” to your computer.
 - a. Open R or RStudio on your local computer, e.g. by finding it in your Programs list.



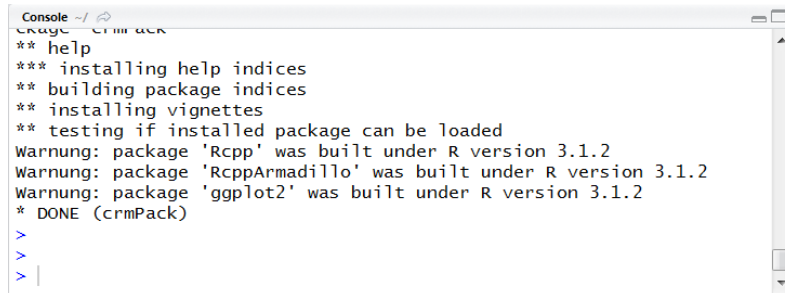
- b. Please copy the following lines into your R console and press Enter:

```
options(repos=
  c(CRAN="http://stat.ethz.ch/CRAN",
    GRAN="http://gran.roche.com/packages"))

install.packages("crmPack",
  type="both",
  dependencies=TRUE)
```

Please be patient as this may take a minute.

- c. The successful installation looks like this:



```
Console -/ C:\Program Files\R\R-devel\bin
** help
*** installing help indices
** building package indices
** installing vignettes
** testing if installed package can be loaded
Warnung: package 'Rcpp' was built under R version 3.1.2
Warnung: package 'RcppArmadillo' was built under R version 3.1.2
Warnung: package 'ggplot2' was built under R version 3.1.2
* DONE (crmPack)
>
>
>
```

3. Before you can use the R-package “crmPack”, you have to load it into your R session, by typing the command

```
library("crmPack")
```

into your console.

Note that you have to run `library("crmPack")` *again* for each *new R session*!

On the other hand, you only have to do the *installation* process (step 2) *once* on your computer.

4. In order to read an introductory example to the package, type the following into your console:

```
crmPackExample()
```

In order to get help on specific functions or classes, get a list of all help pages by typing

```
crmPackHelp()
```

5. Please check regularly for updates of crmPack. For this just type:

```
crmPackUpgrade()
```

in the R console. When a newer version is available in the Roche repository, it will be installed.

Please read the excerpt from the “NEWS” file that is afterwards printed in the console, in order to see changes in the package that might require different programming than before.

Thank you very much for installing crmPack.

If you have any questions or feedback, please post on the Hive page:

<https://roche.jiveon.com/projects/crm-pack>

Thank you!

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