

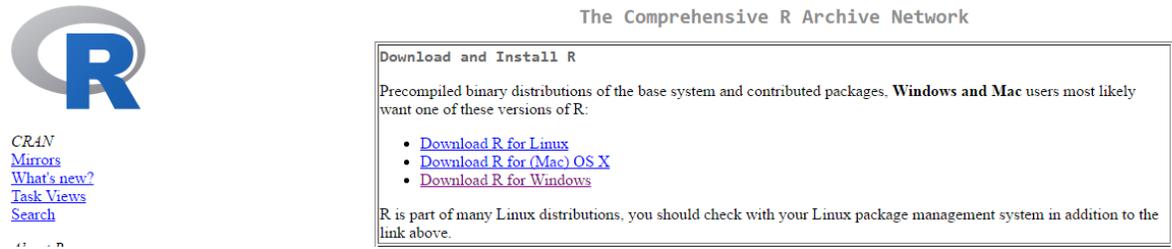
Requirements



- ✓ Personal computers
- ✓ Installation of the **R Software**
- ✓ Installation of the ***STR-validator* Package** ^[1]

Installation of the R Software

- Go to <http://www.cran.r-project.org/>
- Select your preferred [CRAN mirror](#) that is geographically close to you (e.g. USA <https://cran.cnr.berkeley.edu/>)
- Download R depending on your operating system (i.e. **Windows or Mac**)



- Install R by double clicking on the file “R-x.x.x-win.exe” (e.g.  R-3.3.1-win.exe)
- An 'R' icon will appear on your desktop



Installation of the *STR-validator* Package [1]

❖ STR-validator (Version 1.8.0) can be installed from within RGui

- Make sure your computer is connected to the Internet
- Launch R from your desktop

➤ In the **R console**, type in OR copy and paste the following command

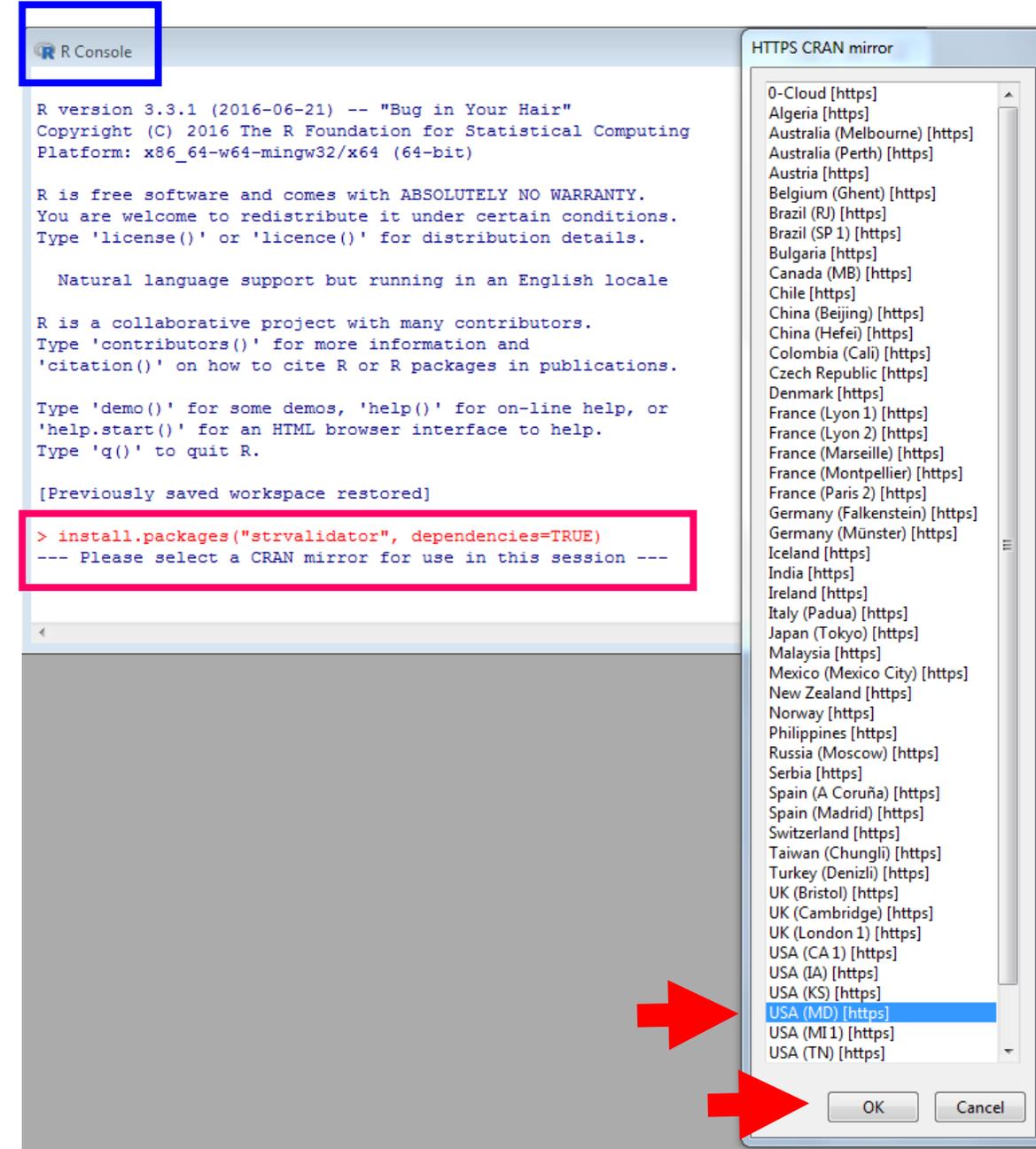
```
install.packages("strvalidator", dependencies=TRUE)
```

➤ Select a 'CRAN mirror' mirror that is geographically close to you

For e.g. USA (MD) [https]

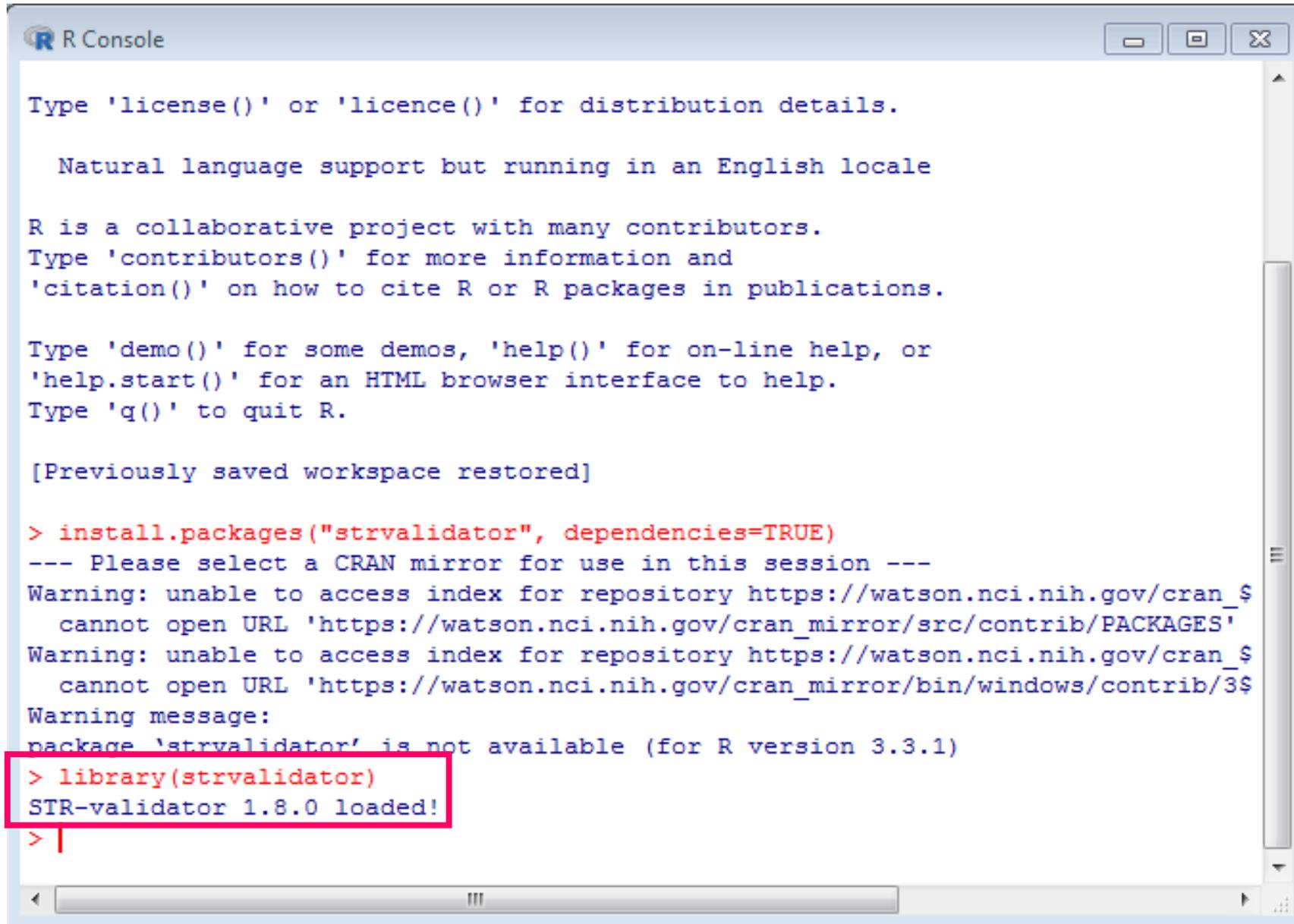
➤ Click OK

➤ Installation will start and other packages will be Installed.



➤ Load the package by typing OR copying the following command:

library(strvalidator)



```
R Console

Type 'license()' or 'licence()' for distribution details.

Natural language support but running in an English locale

R is a collaborative project with many contributors.
Type 'contributors()' for more information and
'citation()' on how to cite R or R packages in publications.

Type 'demo()' for some demos, 'help()' for on-line help, or
'help.start()' for an HTML browser interface to help.
Type 'q()' to quit R.

[Previously saved workspace restored]

> install.packages("strvalidator", dependencies=TRUE)
--- Please select a CRAN mirror for use in this session ---
Warning: unable to access index for repository https://watson.nci.nih.gov/cran_
cannot open URL 'https://watson.nci.nih.gov/cran_mirror/src/contrib/PACKAGES'
Warning: unable to access index for repository https://watson.nci.nih.gov/cran_
cannot open URL 'https://watson.nci.nih.gov/cran_mirror/bin/windows/contrib/3$
Warning message:
package 'strvalidator' is not available (for R version 3.3.1)
> library(strvalidator)
STR-validator 1.8.0 loaded!
> |
```

➤ Start the STR validator graphical user interface by typing the following command: **strvalidator()**

➤ The **welcome screen of STR-validator graphical user interface** should now open

The STR-validator main GUI

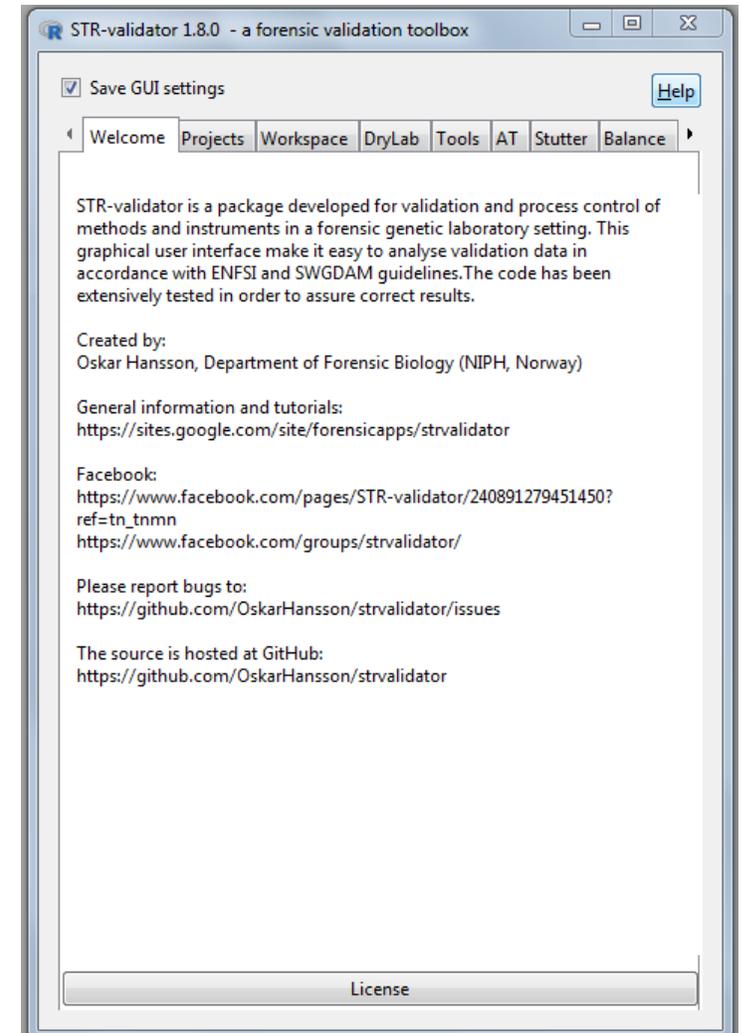
```
R Console

'citation()' on how to cite R or R packages in publications.

Type 'demo()' for some demos, 'help()' for on-line help, or
'help.start()' for an HTML browser interface to help.
Type 'q()' to quit R.

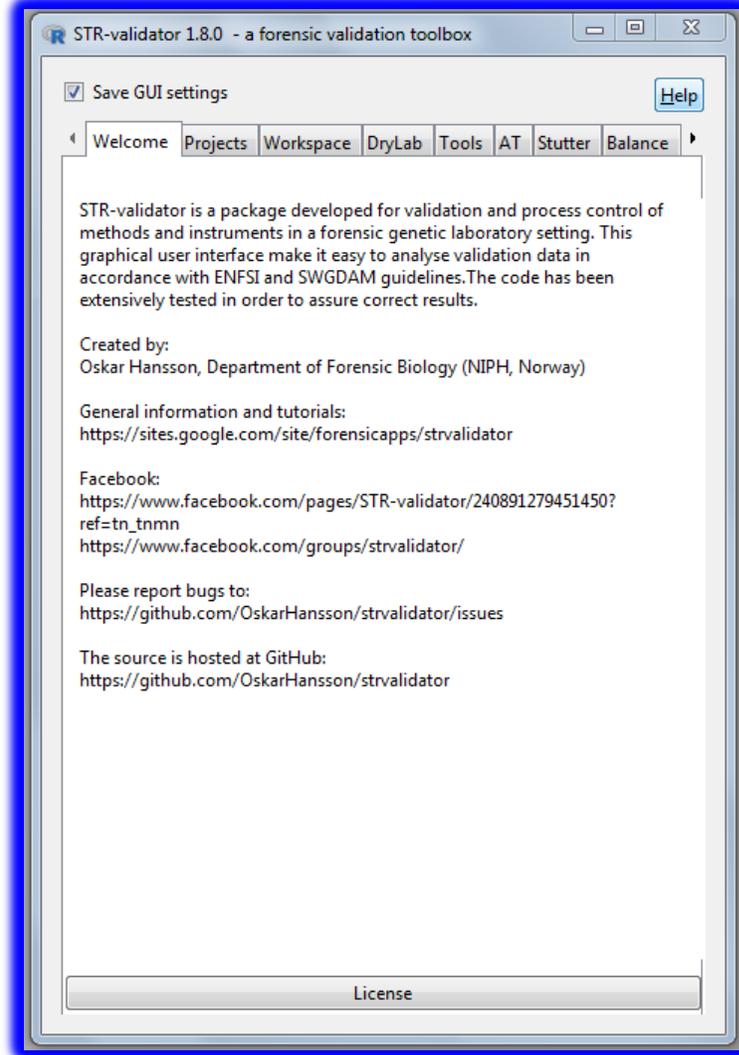
[Previously saved workspace restored]

> install.packages("strvalidator", dependencies=TRUE)
--- Please select a CRAN mirror for use in this session ---
Warning: unable to access index for repository https://watson.nci.nih.gov/cran_$
cannot open URL 'https://watson.nci.nih.gov/cran_mirror/src/contrib/PACKAGES'
Warning: unable to access index for repository https://watson.nci.nih.gov/cran_$
cannot open URL 'https://watson.nci.nih.gov/cran_mirror/bin/windows/contrib/3$
Warning message:
package 'strvalidator' is not available (for R version 3.3.1)
> library(strvalidator)
STR-validator 1.8.0 loaded!
> strvalidator()
Loading required package: gWidgetsRGtk2
Loading required package: RGtk2
Loading required package: gWidgets
Loading required package: cairoDevice
STR-validator graphical user interface loaded!
> |
```



STR-Validator Main GUI is a Sign for the Successful Installation of the Software

The STR-validator main GUI





- ❖ **Methods to estimate Analytical and Stochastic Thresholds using *STR-validator* are described in details in the attached papers.**
- ❖ **Also, attached the paper published by the creator of *STR-validator*: Oskar Hansson, Department of Forensic Biology (NIPH, Norway).**
- ❖ **Please If you have any question about downloading both *Softwares* before the workshop contact Sarah Riman at: sarah.riman@nist.gov**