

# oneChannelGUI: A Bioconductor graphical interface for single channel microarrays analysis.

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## Motivation

Bioconductor ([www.bioconductor.org](http://www.bioconductor.org)) is an open source and open development software project for the analysis and comprehension of genomic data. It is widely used by the Bioinformatics community. However, since it is based on line command approach its learning and usage is quite complex for persons not used to write their own code, e.g. wet biologists. This package is intended to simplify the use of Bioconductor tools for beginners having limited or no experience in writing R code.

## Methods

oneChannelGUI is fully written in R and uses the TCL/TK graphical libraries.

oneChannelGUI extends the capabilities of the Graphical User Interface for Affymetrix arrays analysis (affylmGUI) based on the limma microarray package. oneChannelGUI package is available for windows and linux based operating systems.

## Results

oneChannelGUI package provides a graphical interface allowing QC, filtering, statistical validation and data mining for single channel microarray platforms.

Affymetrix, Illumina and Applied Biosystem are supported. Furthermore, it allows analysis of the new Affymetrix Exon arrays using gene/exon level probe set data, generated with the Affymetrix Expression Console.

This package allows the user to perform, in a graphical environment, the analysis pipe-line shown in figure 1 green box, without the need of writing any code.

**Availability:** <http://www.bioinformatica.unito.it/bioinformatics/DAGEL.II/software.installation.html>

**Image:** <http://www.bioinformatica.unito.it/bioinformatics/DAGEL.II/downloads/fig1.png>

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