

# affyImGUI

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affyImGUI	<i>Graphical User Interface for the limma microarray package</i>
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## Description

Graphical User Interface for Affy analysis using the limma microarray package

## Usage

```
AboutaffyImGUI ()
affyHelp ()
affyImGUI (BigfontsForaffyImGUIpresentation=FALSE)
affyImGUIhelp ()
affyPlotMA ()
affyPlotMAcontrast ()
ALGlimmaUsersGuide (view=TRUE)
ChooseCDF ()
ChooseContrastParameterization ()
chooseDir ()
ChooseEbayesStatistic ()
ComputeContrasts ()
ComputeLinearModelFit ()
CopyGraph (img)
DeleteContrastParameterization ()
deleteItemFromList (list1, itemName=NULL, index=NULL)
DensityPlot ()
DensityPlotAll ()
evalRcode ()
ExportHTMLreport ()
ExportNormalizedExpressionValues ()
ExportTopTable ()
```

```
fixSeps(string)
generalPlotFunction(code="", WindowTitle="")
GetComponentstoExportInHTMLreport(contrastParameterizationIndex=NULL)
GetContrast(contrastParameterizationIndex)
GetContrastNamesForHeatDiagram(numContrasts=2, ContrastNames=c("Contrast 1", "Cont
GetContrastParameterizationName()
GetContrasts(NumContrasts=0)
GetDEcutoff()
GetGeneLabelsOptions()
GetJpegOrPngParams(graphFileType)
GetJpegOrPngX11Params(graphFileType)
GetlimmaDataSetName()
GetLogPLMDataChoice()
GetMultipleContrasts(contrastParameterizationIndex)
GetNormalizationMethod()
getPackageVersion(pkgName)
GetParameterizationName()
GetPlotLabels(plottitle="", xlabel="", ylabel="")
GetPlotSize()
GetPlotTitle(plottitle="")
GetPValueCutoff(p.value=0.01)
GetResidualTypeChoice()
GetRNATypesFrom.ContrastsFromDropDowns.String(string)
GetSetNames(numSets=2, set1="", set2="", set3="")
GetSlideNum(all=FALSE)
GetSlideNums()
GetWhichProbes(includeBoth=FALSE)
GetWtAreaParams()
GetWtFlagParams()
HeatDiagramDialog(parameterName)
HeatDiagramPlot()
HTMLplotUsingFunction(Caption = "", File = .HTML.file, GraphRelativeDirectory =
ImageArrayPlot()
ImageQualityResidualPlot()
ImageQualityWeightPlot()
initGlobals()
IntensityHistogram()
IntensityHistogramAll()
limmaHelp()
LogOddsPlot()
NewLimmaFile()
NormalizedIntensityBoxPlot()
NormalizeNow()
nstrstr(haystack, needle)
NUSEPlotAll()
onDestroy()
onExit()
OpenALimmaFile(fileName)
OpenCDFandTargetsfiles()
OpenCDFFile()
OpenLimmaFile(fileName)
OpenTargetsFile()
```

```

PlotOptions()
QQTplot()
RawIntensityBoxPlot()
Require(pkg)
Resize(img,plotFunction)
RLEPlotAll()
RNADegradationPlotAll()
SaveAsLimmaFile()
SaveGraphAsJpeg(initialfile, plotFunction)
SaveGraphAsPDF(initialfile, plotFunction)
SaveGraphAsPNG(initialfile, plotFunction)
SaveGraphAsPostscript(initialfile, plotFunction)
SaveLimmaFile()
SetupPlotKeyBindings(tt,img)
SetupPlotMenus(tt,initialfile,plotFunction,img)
SetWD()
showChangeLog(n = 20)
showCitations()
showTopTable(...,export=FALSE)
SimplifyContrastsExpression(string)
strstr(haystack, needle)
tclArrayVar()
TclRequire(tclPkg)
topTable2(fit, coef = 1, number = 10, genelist = NULL,adjust.method = "holm", so
toptable2(fit, coef = 1, number = 10, genelist = NULL, A = NULL,eb = NULL, adjus
Try(expr)
TryReadImgProcFile(expr)
UpDownOrBoth()
vennDiagramaffyImGUI(object, include = "both", names, cex = 1.5, mar = rep(1, 4)
VennDiagramPlot()
ViewContrastsMatrixAsPairs(contrastsMatrix, contrastsMatrixList,contrastParameter
ViewContrastsMatrixInTable(contrastsMatrixList, contrastParameterizationIndex =
ViewExistingContrastParameterization()
ViewRNATargets()

```

## Arguments

```

BigfontsForaffyImGUIpresentation
    affyImGUI:arg1:If set to TRUE, larger fonts are used. However, some font sizes
    are not controlled by affyImGUI and so must be adjusted in the operating sys-
    tem, e.g. in the Control Panel in Windows under Display, Appearance.
...
HTMLplotUsingFunction:arg14:and:showTopTable:arg1:and:toptable2:arg9:and:vennDiagramaffyIm
Align
    HTMLplotUsingFunction:arg8
all
    GetSlideNum:arg1
BG
    HTMLplotUsingFunction:arg12
Caption
    HTMLplotUsingFunction:arg1
code
    generalPlotFunction: arg1: a code
ContrastNames
    GetContrastNamesForHeatDiagram:arg2
contrastParameterizationIndex
    GetComponentsToExportInHTMLreport:arg1:and:contrastParameterizationIndex:arg1:and:GetContr

```

```

export      showTopTable:arg2
expr       Try:arg1:and:TryReadImgProcFile:arg1
FileName   OpenALimmaFile:arg1:and:OpenLimmaFile:arg1
File       HTMLplotUsingFunction:arg2
GraphAbsoluteDirectory
           HTMLplotUsingFunction:arg4
GraphBorder HTMLplotUsingFunction:arg7
GraphFileName
           HTMLplotUsingFunction:arg5
graphFileType
           GetJpegOrPngParams:arg1:and:GetJpegOrPngX11Params:arg1
GraphRelativeDirectory
           HTMLplotUsingFunction:arg3
GraphSaveAs HTMLplotUsingFunction:arg6
haystack   nstrstr:arg1:and:strstr:arg1
Height     HTMLplotUsingFunction:arg11
img        Resize:arg1:and:SetupPlotMenus:arg4:and:CopyGraph:arg1:and:SetupPlotKeyBindings:arg2
includeBoth GetWhichProbes:arg1
index      deleteItemFromList:arg3:an index
initialfile SetupPlotMenus:arg2:and:SaveGraphAsJpeg:arg1:and:SaveGraphAsPDF:arg1:and:SaveGraphAsPNG:arg1
itemName   deleteItemFromList:arg2:an item name
list1      deleteItemFromList:arg1:a list
needle     nstrstr:arg2:and:strstr:arg2
NumContrasts GetContrasts:arg1
numContrasts GetContrastNamesForHeatDiagram:arg1
numSets     GetSetNames:arg1
p.value    GetPValueCutoff:arg1:A p-value cutoff.
parameterName
           HeatDiagramDialog:arg1
pkgName    getPackageVersion:arg1
pkg        Require:arg1
plotFunction Resize:arg2:and:HTMLplotUsingFunction:arg9:and:SetupPlotMenus:arg3:and:SaveGraphAsJpeg:arg1:and:SaveGraphAsPDF:arg1:and:SaveGraphAsPNG:arg1
plottitle  GetPlotLabels:arg1:and:GetPlotTitle:arg1
res        HTMLplotUsingFunction:arg13
set1       GetSetNames:arg2
set2       GetSetNames:arg3
set3       GetSetNames:arg4
string     fixSeps:arg1:A character string:and:GetRNATypesFrom.ContrastsFromDropDowns.String:arg1:and:SaveGraphAsJpeg:arg1:and:SaveGraphAsPDF:arg1:and:SaveGraphAsPNG:arg1
tclPkg     TclRequire:arg1
tt         SetupPlotMenus:arg1:and:SetupPlotKeyBindings:arg1
view       ALGlimmaUsersGuide:arg1:A boolean determininig if the users'd guide will be viewed

```

Width	HTMLplotUsingFunction:arg10
WindowTitle	generalPlotFunction: arg2: a title
xlabel	GetPlotLabels:arg2
ylabel	GetPlotLabels:arg3
fit	topTable2:arg1:and:toptable2:arg1
coef	topTable2:arg2:and:toptable2:arg2
number	topTable2:arg3:and:toptable2:arg3
genelist	topTable2:arg4:and:toptable2:arg4
A	toptable2:arg5
eb	toptable2:arg6
adjust.method	topTable2:arg5:and:toptable2:arg7
sort.by	topTable2:arg6:and:toptable2:arg8
object	vennDiagramaffyImGUI:arg1
include	vennDiagramaffyImGUI:arg2
names	vennDiagramaffyImGUI:arg3
cex	vennDiagramaffyImGUI:arg4
mar	vennDiagramaffyImGUI:arg5
contrastsMatrix	ViewContrastsMatrixAsPairs:arg1
contrastsMatrixList	ViewContrastsMatrixAsPairs:arg2:and:ViewContrastsMatrixInTable:arg1
n	showChangeLog:arg1
PointSize	HTMLplotUsingFunction:arg12

## Details

This function launches a Graphical User Interface for the limma package by Gordon Smyth. The GUI uses Tk widgets (via the R TclTk interface by Peter Dalgaard) in order to provide a simple interface to the limma functions for linear modelling of microarrays and identification of differentially expressed genes.

## Author(s)

James Wettenhall

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`ALGchangeLog`*affylmGUI Change Log*

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**Description**

Write as text the most recent changes from the affylmGUI package changelog.

**Usage**

```
ALGchangeLog (n=20)
```

**Arguments**

`n` integer, number of lines to write of changelog.

**Value**

No value is produced, but a number of lines of text are written to standard output.

**Author(s)**

Gordon Smyth

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