limmaGUI

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`LGchangeLog` *LimmaGUI Change Log*

Description

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

Usage

```
LGchangeLog(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

limmaGUI *Graphical User Interface for the limma microarray package*

Description

Graphical User Interface for the limma microarray package

Usage

```
AboutLimmaGUI()
AboutNormalization()
BChelp()
ChooseContrastsParameterization(parameterizationTreeIndex)
ChooseEbayesStatistic()
ChooseParameterization()
ChoosePlotSymbolByClicking(spotType, cex)
ChooseSpotType(parameterizationTreeIndex)
ComputeContrasts()
CopyGraph(img)
CreateNewParameterization()
DeleteContrastsParameterization()
deleteItemFromList(list1, itemName = NULL, index = NULL)
DeleteParameterization()
DupCorBoxPlot()
ebayesBoxPlots()
evalRcode()
ExportHTMLreport()
ExportTopTable()
fixSeps(string)
GetBackgroundCorrectionMethod()
GetBetweenArrayNormalizationMethod()
GetCoef(parameterizationTreeIndex, whichCoef = "onlyOne")
GetComponentsToExportInHTMLreport(parameterizationIndex = NULL)
GetContrastsParameterizationName()
GetContrastsParameterizationNames(parameterizationTreeIndex)
GetDEcutoff()
GetDesignOrContrasts(Design = FALSE, Contrasts = FALSE, NumContrasts = 0,
                     parameterizationIndex = 0)
GetGeneLabelsOptions()
GetImageAnalysisColumnHeadings()
GetImageProcessingFileType()
GetJpegOrPngParams(graphFileType)
GetJpegOrPngX11Params(graphFileType)
GetlimmaDataSetName()
GetlmFitMethod()
GetLowessType()
GetNEWxlim(xlim)
GetNormexpOffsetValue(CurrentNormexpOffsetValue)
GetNumParametersNoTargets()
getPackageVersion(pkgName)
GetParameterizationName()
```

```
GetParameterNames(parameterizationTreeIndex)
GetParametersAndOrContrasts(parameterizationTreeIndex, whatFor = "heat")
GetPlotLabels(plottitle = "", xlabel = "", ylabel = "")
GetPlotSize()
GetPlotTitle(plottitle = "")
GetPValueCutoff(p.value = 0.01)
GetReducedDuplicateSpacing(parameterizationTreeIndex)
GetRNATypesFrom.ContrastsFromDropDowns.String(string)
GetSlideNum()
GetSpotTypesForLinearModel()
GetSpotTypesIncludedNames(parameterizationTreeIndex)
GetWithinArrayNormalizationMethod()
GetWtAreaParams()
HeatDiagramDialog(parameterName)
HeatDiagramPlot()
HowManyDups()
HTMLplotUsingFunction(Caption = "", File = .HTML.file,
                GraphRelativeDirectory = ".", GraphAbsoluteDirectory =
                NULL, GraphFileName = "", GraphSaveAs = "png",
                GraphBorder = 1, Align = "center", plotFunction =
                NULL, Width = 600, Height = 600, PointSize = 12,
                BG ="white", res = 72, ...)
ImageArrayPlot()
ImageArrayPlotDialog(slidenum)
ImportMA()
ImportMADialog()
initGlobals()
InitNewParameterization()
limmaGUI(BigfontsForlimmaGUIpresentation = FALSE)
limmaHelp()
limmaUsersGuide(view = TRUE)
lmFitMethodHelp()
LogOddsPlot()
MAPlot()
MAPlotAvg()
MBoxPlot()
MMPlot()
NewLimmaFile()
NormalizeNow()
nstrstr(haystack, needle)
onDestroy()
onExit()
OpenALimmaFile(FileName)
OpenGALandTargetsandSpotTypesfiles()
OpenGALFile()
OpenLimmaFile()
OpenSpotTypesFile()
OpenTargetsFile()
plotMAColorCoded()
PlotOptions()
PrintTipGroupMAPlot()
QQTplot()
```

```
read.marrayTools(MFile,AFile, path, verbose, sep, quote, header, ...)
ReadImageProcessingFiles()
Require(pkg)
Resize(img, plotFunction)
SaveAsLimmaFile()
SaveGraphAsJpeg(initialfile, plotFunction)
SaveGraphAsPDF(initialfile, plotFunction)
SaveGraphAsPNG(initialfile, plotFunction)
SaveGraphAsPostscript(initialfile, plotFunction)
SaveLimmaFile()
SelectPlotSymbols(SpotTypes)
SetLayoutParameters()
SetupPlotKeyBindings(tt, img)
SetupPlotMenus(tt, initialfile, plotFunction, img)
SetWD()
showChangeLog()
showCitations()
showGAL()
showTopTable(..., export = FALSE)
SimplifyContrastsExpression(string)
strstr(haystack, needle)
tclArrayVar()
TclRequire(tclPkg)
TryReadImgProcFile(expr)
UpdateSpotTypesStatus()
UpDownOrBoth()
VennDiagramPlot()
ViewDesignOrContrastsMatrixAsPairs(DesignOrContrasts, designOrContrastsList,
                parameterizationIndex, contrastsParameterizationIndex
                = NULL)
ViewDesignOrContrastsMatrixInTable(DesignOrContrasts, designOrContrastsList,
                parameterizationIndex, contrastsParameterizationIndex
                = NULL)
ViewExistingContrastsParameterization()
ViewExistingParameterization()
ViewRNATargets()
ViewSpotTypes()
```

Arguments

`BigfontsForlimmaGUIpresentation`	If set to TRUE, larger fonts are used. However, some font sizes are not controlled by limmaGUI and so must be adjusted in the operating system, e.g. in the Control Panel in Windows under Display, Appearance.
`...`	HTMLplotUsingFunction:arg15, showTopTable:arg1
`AFile`	Flat-file of log-intensities output by marrayTools
`Align`	HTMLplotUsingFunction:arg8
`BG`	HTMLplotUsingFunction:arg13
`Caption`	HTMLplotUsingFunction:arg1
`cex`	ChoosePlotSymbolByClicking:arg2

`contrastsParameterizationIndex`
: ViewDesignOrContrastsMatrixInTable:arg4, ViewDesignOrContrastsMatrixAsPairs:arg4

`Contrasts`
: GetDesignOrContrasts:arg2

`CurrentNormexpOffsetValue`
: GetNormexpOffsetValue:arg1

`designOrContrastsList`
: ViewDesignOrContrastsMatrixInTable:arg2, ViewDesignOrContrastsMatrixAsPairs:arg2

`DesignOrContrasts`
: ViewDesignOrContrastsMatrixInTable:arg1, ViewDesignOrContrastsMatrixAsPairs:arg1

`Design`
: GetDesignOrContrasts:arg1

`export`
: showTopTable:arg2

`expr`
: TryReadImgProcFile:arg1

`FileName`
: A file name.

`File`
: HTMLplotUsingFunction:arg2

`GraphAbsoluteDirectory`
: HTMLplotUsingFunction:arg4

`GraphBorder`
: HTMLplotUsingFunction:arg7

`GraphFileName`
: HTMLplotUsingFunction:arg5

`graphFileType`
: GetJpegOrPngParams:arg1, GetJpegOrPngX11Params:arg1

`GraphRelativeDirectory`
: HTMLplotUsingFunction:arg3

`GraphSaveAs`
: HTMLplotUsingFunction:arg6

`haystack`
: nstrstr:arg1, strstr:arg1

`header`
: See help for read.table

`Height`
: HTMLplotUsingFunction:arg11

`img`
: SetupPlotMenus:arg1, Resize:arg1, CopyGraph:arg1, SetupPlotKeyBindings:arg2

`index`
: deleteItemFromList:arg1

`initialfile`
: SaveGraphAsJpeg:arg1, SaveGraphAsPDF:arg1, SaveGraphAsPNG:arg1, SaveGraphAsPostscript:arg1, SetupPlotMenus:arg2

`itemName`
: deleteItemFromList:arg1

`list1`
: deleteItemFromList:arg1

`MFile`
: Flat-file of log-ratios output by marrayTools

`needle`
: nstrstr:arg2, strstr:arg2

`NumContrasts`
: GetDesignOrContrasts:arg3

`p.value`
: A p-value cutoff.

`parameterizationIndex`
: GetDesignOrContrasts:arg4, GetComponentsToExportInHTMLreport:arg1, GetDesignOrContrasts:arg4, ViewDesignOrContrastsMatrixInTable:arg3, ViewDesignOrContrastsMatrixAsPairs:arg3

parameterizationTreeIndex	GetParametersAndOrContrasts:arg1, ChooseContrastsParameterization:arg1, ChooseSpotType:arg1,GetCoef:arg1, GetParameterNames:arg1, GetReducedDuplicateSpacing:arg1, GetContrastsParameterizationNames:arg1, GetSpotTypesIncludedNames:arg1
parameterName	HeatDiagramDialog:arg1
path	Path to the directory containing the MFile and AFile
pkgName	getPackageVersion:arg1
pkg	Require:arg1
plotFunction	SetupPlotMenus:arg1, HTMLplotUsingFunction:arg9, Resize:arg1, SaveGraphAsJpeg:arg2, SaveGraphAsPDF:arg2, SaveGraphAsPNG:arg2, SaveGraphAsPostscript:arg2
plottitle	GetPlotLabels:arg1,GetPlotTitle:arg1
PointSize	HTMLplotUsingFunction:arg12
quote	See help for read.table
res	HTMLplotUsingFunction:arg14
sep	Column separator. ("\t" for tab-delimited text)
slidenum	ImageArrayPlotDialog:arg1
spotType	ChoosePlotSymbolByClicking:arg1
SpotTypes	SelectPlotSymbols:arg1
string	fixSeps:arg1,SimplifyContrastsExpression:arg1, GetRNATypesFrom.ContrastsFromDropDowns.Stri
tclPkg	TclRequire:arg1
tt	SetupPlotKeyBindings:arg1, SetupPlotMenus:arg1
verbose	Optional diagnostic messages
view	limmaUsersGuide:arg1
whatFor	GetParametersAndOrContrasts:arg2
whichCoef	GetCoef:arg2
Width	HTMLplotUsingFunction:arg10
xlabel	GetPlotLabels:arg2
xlim	GetNEWxlim:arg1
ylabel	GetPlotLabels:arg3

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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