

MuToss Developer Guide - A Tutorial for Developing new Functions for MuToss.

Kornelius Rohmeyer

February 24, 2010

Contents

1	Introduction	1
2	Writing a function for the MuToss-GUI	1

1 Introduction

2 Writing a function for the MuToss-GUI

```
bonferroni <- function(pValues, alpha) {  
  adjPValues=sapply(pValues*length(pValues),function(x){min(x,1)})  
  if (missing(alpha)) {  
    return(list(adjPValues=adjPValues))  
  }  
  return(list(adjPValues=adjPValues,rejected=adjPValues<=alpha))  
}
```

Keywords

```
mutoss.bonferroni <- function() { return(new(Class="MutossMethod",  
label="Bonferroni correction",  
errorControl="FWER",  
callFunction="bonferroni",  
output=c("adjPValues", "rejected"),  
info="

## Bonferroni correction



This simple method applies Boole's inequality to assure the FWER &alpha;  
by performing <i>n</i> tests each to the niveau <i>&alpha;/n</i>.



### Reference:



- Bonferroni, C. E. "Il calcolo delle assicurazioni su gruppi di teste." In Studi in Onore del Professore Salvatore Ortu Carboni. Rome: Italy, pp. 13-60, 1935.
- Bonferroni, C. E. "Teoria statistica delle classi e calcolo delle probabilità." Pubblicazioni del R Istituto Superiore di Scienze Economiche e Commerciali di Firenze 8, 3-62, 1936.

",  
parameters=list(pValues=list(type="numeric"), alpha=list(type="numeric", optional=TRUE))) }
```