# Code for plotting abundance, cpm, by sampling event

04\_plots\_Abundance.R

### Plot a subset with rounded numbers

### example of code to keep the number on the top of the bar from

## getting cut off: scale\_y\_continuous(expand=expansion(mult=c(0,0.15))

abunRound <- abundance %>%

mutate\_at(vars(TotalCpmI), funs(round(., 0)))

p <- ggplot(subset(abunRound, samp\_ev %in% "YBP1"), aes(group\_size, TotalCpmI))+

geom\_bar(stat = "identity", fill = "grey")+

scale\_x\_discrete ("") +

scale\_y\_continuous(trans = "log10",

expand = expansion(mult = c(0, 0.1)))+ #, breaks = c(2, 10, 25, 100, 200, 500, 2500, 10000))+

theme(axis.text.x = element\_text(angle = 60, hjust = 0.8, vjust = 0.8, size = 9),

strip.text.x = element\_text(size = 14),

axis.title.y = element\_text(size = 12))+

facet\_wrap(~ samp\_ev, ncol= 2, scales="free") +

xlab("Taxa Groups with Sizes") +

ylab("Cells"~ mL^-1)+

geom\_text(aes(label=TotalCpmI), position = position\_dodge(width = 0.9),

vjust = -.25, size = 3)+

wimGraph()

p

### Cells per ml totals per event, with numbers on top of bars

data <- read.csv("data/Abundance/AbEventsOnly.csv")

head(data)

ggplot(data, aes(x=samp\_ev, y=TotalCpmI))+

geom\_bar(position='stack', stat='identity')+

geom\_text(aes(label=TotalCpmI), position = position\_dodge(width = 0.9),

vjust = -.25, size = 3)+

labs(x="",title = "Abundance")+

ylab("Cells"~mL^-1)+

wimGraph()

### Total cells per event with numbers on top of bars

data <- read.csv("data/Abundance/AbTotalsEventsOnly.csv")

head(data)

ggplot(data, aes(x=samp\_ev, y=TotalCpmI))+

geom\_bar(position='stack', stat='identity')+

geom\_text(aes(label=TotalCpmI), position = position\_dodge(width = 0.9),

vjust = -.25, size = 3)+

labs(x="",title = "Abundance")+

ylab("Total Cells")+

wimGraph()