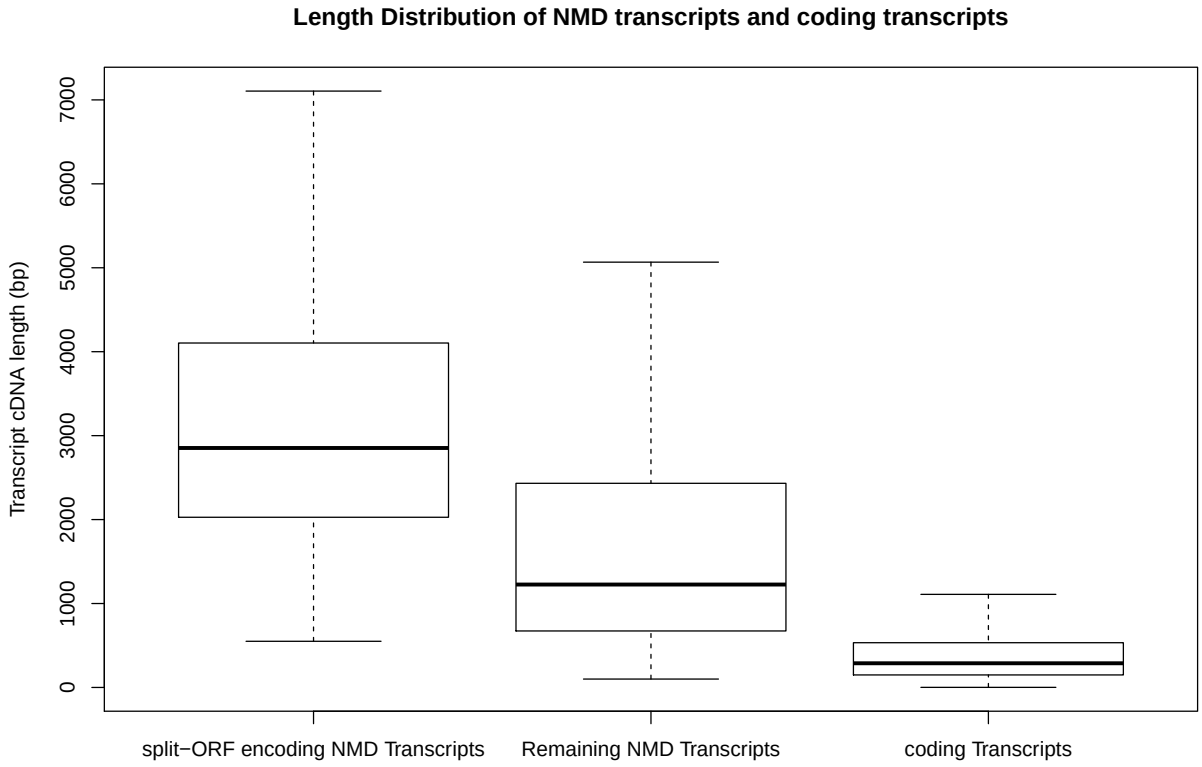
TranscriptStatistics

Human

Transcript length and Methionine density

Length Distribution and two sided t-test between split-ORF encoding NMD transcripts and coding transcripts




```
## T-test between split-ORF encoding and remaining NMD transcripts:

##
##  Welch Two Sample t-test
##
## data:  comparelengths[[1]] and comparelengths[[2]]
## t = 26.415, df = 1904.2, p-value < 2.2e-16
## alternative hypothesis: true difference in means is not equal to 0
```

```
## 95 percent confidence interval:
##  1394.242 1617.885
## sample estimates:
## mean of x mean of y
##  3377.117  1871.053
```

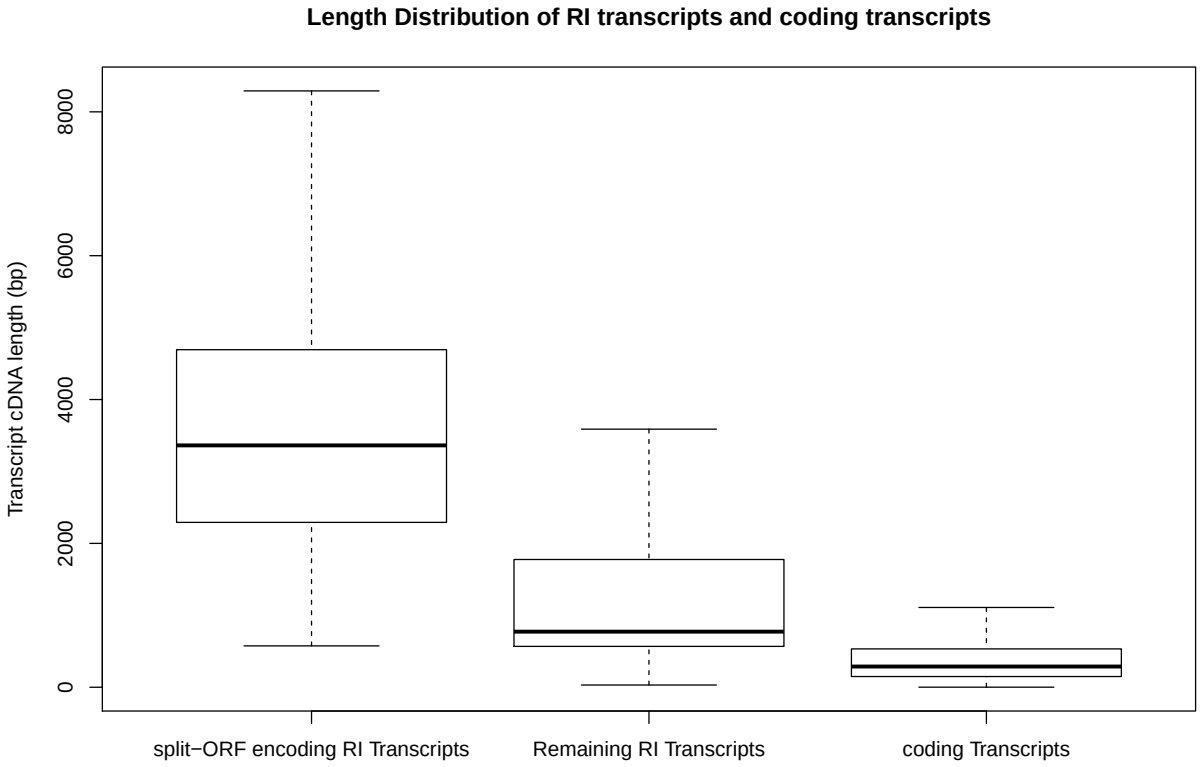
```
## T-test between split-ORF encoding and coding transcripts:
```

```
##
##  Welch Two Sample t-test
##
## data:  comparelengths[[1]] and comparelengths[[3]]
## t = 53.451, df = 1674.2, p-value < 2.2e-16
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
##  2842.503 3059.059
## sample estimates:
## mean of x mean of y
## 3377.1166  426.3358
```

```
## T-test between remaining NMD transcripts and coding transcripts:
```

```
##
##  Welch Two Sample t-test
##
## data:  comparelengths[[2]] and comparelengths[[3]]
## t = 99.899, df = 18581, p-value < 2.2e-16
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
##  1416.371 1473.064
## sample estimates:
## mean of x mean of y
## 1871.0530  426.3358
```

Length Distribution and two sided t-test between split-ORF encoding RI transcripts and coding transcripts




```
## T-test between split-ORF encoding and remaining RI transcripts:

##
##  Welch Two Sample t-test
##
## data:  RIcomparelengths[[1]] and RIcomparelengths[[2]]
## t = 52.318, df = 2015.9, p-value < 2.2e-16
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
##  2234.944 2409.024
## sample estimates:
## mean of x mean of y
##  3712.692  1390.708

## T-test between split-ORF encoding and coding transcripts:

##
##  Welch Two Sample t-test
##
## data:  RIcomparelengths[[1]] and RIcomparelengths[[3]]
## t = 75.163, df = 1898.8, p-value < 2.2e-16
```

```
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
##  3200.607 3372.106
## sample estimates:
## mean of x mean of y
## 3712.6922  426.3358
```

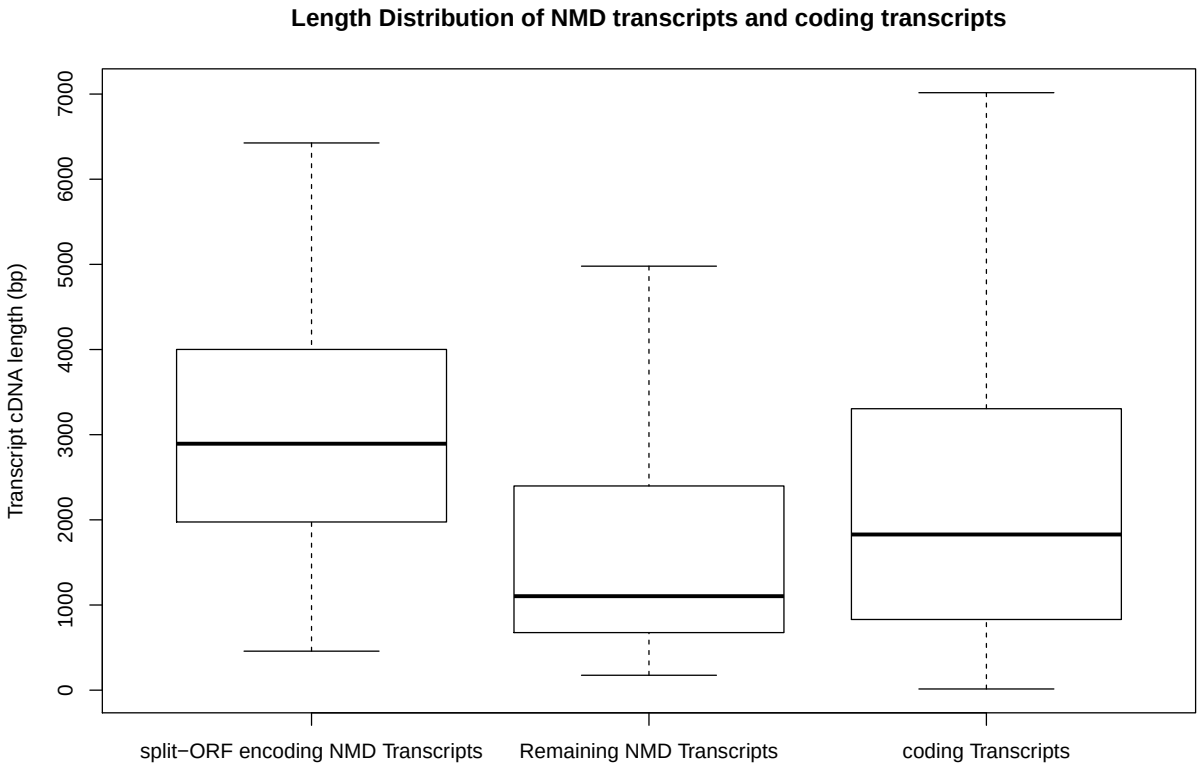
```
## T-test between the remaining RI transcripts and coding transcripts:
```

```
##
##  Welch Two Sample t-test
##
## data:  RIcomparelengths[[2]] and RIcomparelengths[[3]]
## t = 120.59, df = 35584, p-value < 2.2e-16
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
##  948.6974 980.0472
## sample estimates:
## mean of x mean of y
## 1390.7081  426.3358
```

Mouse

Transcript length and Methionine density

Length Distribution and two sided t-test between split-ORF encoding NMD transcripts and coding transcripts



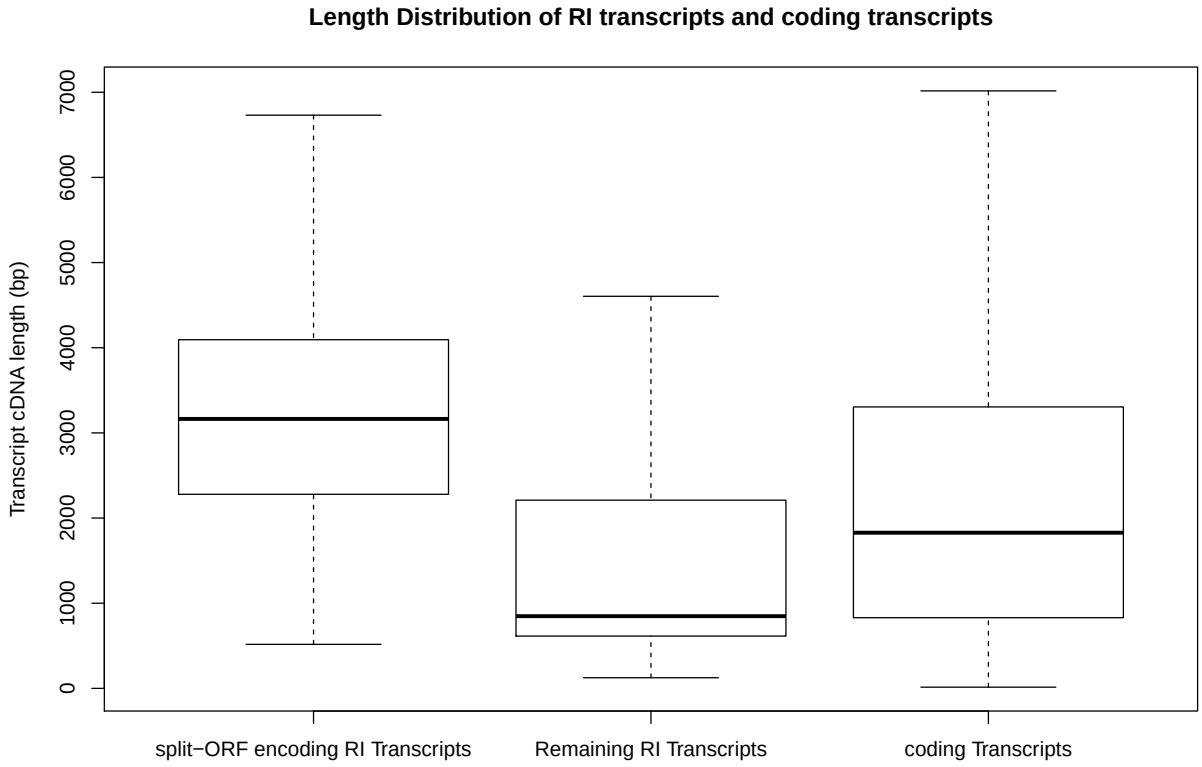

```
## T-test between split-ORF encoding and remaining RI transcripts:

##
##  Welch Two Sample t-test
##
## data:  comparelengthsMouse[[1]] and comparelengthsMouse[[2]]
## t = 17.725, df = 576.29, p-value < 2.2e-16
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
##  1290.358 1611.958
## sample estimates:
## mean of x mean of y
##  3179.973  1728.815

## T-test between split-ORF encoding and coding transcripts:

##
```

```
##  Welch Two Sample t-test
##
## data:  comparelengthsMouse[[1]] and comparelengthsMouse[[3]]
## t = 9.2874, df = 531.59, p-value < 2.2e-16
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
##  587.5133 902.7227
## sample estimates:
## mean of x mean of y
##  3179.973  2434.855
```

```
## T-test remaining RI transcripts and coding transcripts:
```

```
##
##  Welch Two Sample t-test
##
## data:  comparelengthsMouse[[2]] and comparelengthsMouse[[3]]
## t = -33.058, df = 10583, p-value < 2.2e-16
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
##  -747.9047 -664.1756
## sample estimates:
## mean of x mean of y
##  1728.815  2434.855
```

Length Distribution and two sided t-test between split-ORF encoding RI transcripts and coding transcripts




```
## T-test between split-ORF encoding and remaining RI transcripts:

##
##  Welch Two Sample t-test
##
## data:  RIcomparelengthsMouse[[1]] and RIcomparelengthsMouse[[2]]
## t = 34.658, df = 985.46, p-value < 2.2e-16
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
##  1686.849 1889.335
## sample estimates:
## mean of x mean of y
##  3298.603  1510.512

## T-test between split-ORF encoding and coding transcripts:

##
##  Welch Two Sample t-test
##
## data:  RIcomparelengthsMouse[[1]] and RIcomparelengthsMouse[[3]]
## t = 16.708, df = 993.41, p-value < 2.2e-16
```

```
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
##  762.3037 965.1929
## sample estimates:
## mean of x mean of y
##  3298.603  2434.855
```

```
## T-test remaining RI transcripts and coding transcripts:
```

```
##
##  Welch Two Sample t-test
##
## data:  RIcomparelengthsMouse[[2]] and RIcomparelengthsMouse[[3]]
## t = -68.997, df = 65455, p-value < 2.2e-16
## alternative hypothesis: true difference in means is not equal to 0
## 95 percent confidence interval:
##  -950.6013 -898.0854
## sample estimates:
## mean of x mean of y
##  1510.512  2434.855
```