Module 4: Quiz

This is a preview of the published version of the quiz

Started: Mar 3 at 2:25pm

Quiz Instructions

Overview

This quiz will help you reflect on the important takeaways of this module's content. You have multiple attempts on this quiz prior to the deadline. This quiz is open book and intended to ensure that you are understanding the content of this module.

Instructions

Click the "Take the Quiz" button to begin. After answering all of the questions, please click Submit at the bottom of the page to submit your answers.

How you'll be graded

Each question is worth a certain amount of points, and you'll earn points for each correct response. To review or discuss any questions or answers in this quiz, please connect with your instructor.

Question 1 1 pts

The pseudoautosomal regions of chromosomes X and Y are 100 percent identical in sequence.

○
True

○
False

Question 2 1 pts

Many genes on the human Y chromosome are palindromic.

○
True

○
False

Question 3 1 pts

Genes on the Y chromosome are only expressed in the testis.

○
True

○
False

Question 4 1 pts

The highly repetitive nature of the Y chromosome makes it easier to assemble the chromosome reference sequence.

○
True

○
False

Question 5 1 pts

Chromosome Y genes are involved in many cellular processes.

○
True

○
False

Question 6 1 pts

Most cancers with a clear sex difference affects males more than females.

○
True

○
False

Question 7 1 pts

DNA hypermethylation is associated with more severe cancer phenotypes.

○
True

○
False

Question 8 1 pts

Several important epigenetic modifier genes are located on the X chromosome.

○
True

○
False

Question 9 1 pts

Females exhibit higher rates of lipid metabolism than males.

○ True

○ False

Question 10 1 pts

Tumor suppressor p53 does not affect X chromosome inactivation.

○ True

○ False

Question 11 1 pts

Cells from males resist activators of cellular senescence in response to cellular damage and stress which could contribute to faster accumulation of cancer-causing mutations.

○ True

○ False

Question 12 1 pts

Antigen presenting cells in males and females present antigens at the same rate.

○
True

○
False

Question 13 1 pts

Sex hormones can mediate different capacities for angiogenesis in males versus females thus affecting tumors' ability to recruit blood vessels.

○
True

○
False

Question 14 1 pts

When printing reports from R Markdown files, you can specify whether you want a report printed as a Word document, PDF, or HTML.

○
True

○
False

Question 15 1 pts

Using hard-coded values instead variables makes your code easier to reuse.

○
True

○
False

Question 16 1 pts

It is easy to remember what you were thinking when looking at code again after some time has passed.

○
True

○
False

Question 17 1 pts

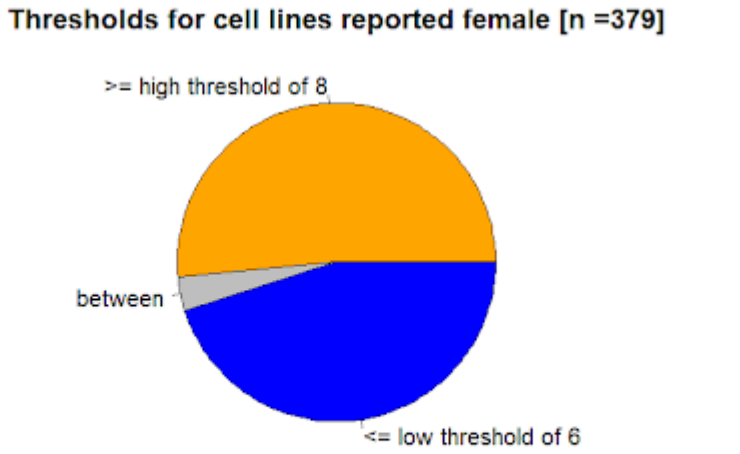
XY males are expected to have higher expression of chromosome Y genes than XX females.

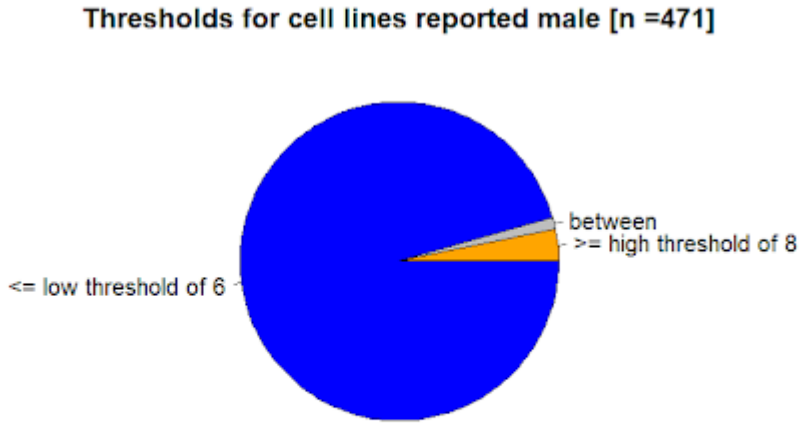
○
True

○
False

Question 18 1 pts

Using log transformed counts to quantify XIST expression, a threshold of below 6 was chosen to represent low expression and above 8 for high expression. Given the proportion of samples above and below these thresholds, the chosen thresholds are better predictors of cell lines coming from male patients than from female patients.


Thresholds for cell lines reported female [n =379]
>= high threshold of 8
between
<= low threshold of 6


Thresholds for cell lines reported male [n =471]
between
>= high threshold of 8
<= low threshold of 6

○
True

○
False

Question 19 1 pts

To make a new subdirectory called new gene in a directory called prediction, you can use this shell command:

```
mkdir new_gene/prediction.
```

○ True

○ False

Question 20 1 pts

To rename a file from

```
XIST_prediction.txt
```

to

```
DDX3Y_prediction.txt,
```

you can use this shell command:

```
rename XIST_prediction.txt DDX3Y_prediction.txt.
```

○ True

○ False

Not saved Submit Quiz