

Module 4: Overview

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Module Overview

In this module, we will be learning about the Y chromosome and mechanisms by which chromosome Y genes have an effect on tumor biology. After learning about genes on both sex chromosomes, you will be assigned a sex chromosome gene to research in CCLE as well as in healthy tissues (GTEx).

Module Learning Objectives

By the end of this module, you'll be able to:

4.1 Biology/Stats (2 hours)

- A. Understand effect of Y chromosome loss in cancer

4.2 Coding (2 hours)

- A. Visualize gene expression of other sex chromosome genes across CCLE cell lines
- B. Determine thresholds that could be used to predict sex based on sex chromosome genes' expression

4.3 Research/Professional development (30 min)

- A. Identify software versions, modes, and parameters used for analysis in the methods section of a publication

