## [PLNT3140 INTRODUCTORY CYTOGENETICS](http://home.cc.umanitoba.ca/~frist/PLNT3140/)    November 2023

# **Bioinformatics Lab Assignment**

# **Detection of Genome Rearrangements in Yeast Species**

This assignment is worth 20% of the lab grade.

**Due date:** December 6, 2023

**2. (4 points) Create new genome files with simpler chromosome names**

Scer.contignames

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| --- |
| replace this text with the contents of Scer.contignames |

Sarb.contignames

|  |
| --- |
| replace this text with the contents of Sarb.contignames |

Seub.contignames

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| replace this text with the contents of Seub.contignames |

**3. (4 points) Create pairwise dotplots comparing S.cer vs. S. arb and S. cer. vs. S. eub.**

**S. cereviseae vs. S. arboricola**

*replace this text with the PNG image of your dotplot*

**S. cereviseae vs. S. eubayanus**

*replace this text with the PNG image of your dotplot*

**4. (4 points) Create a Mauve alignment comparing all three genomes**

*replace this text with the PNG image of your Mauve alignment*

**5. (8 points) Report.**