

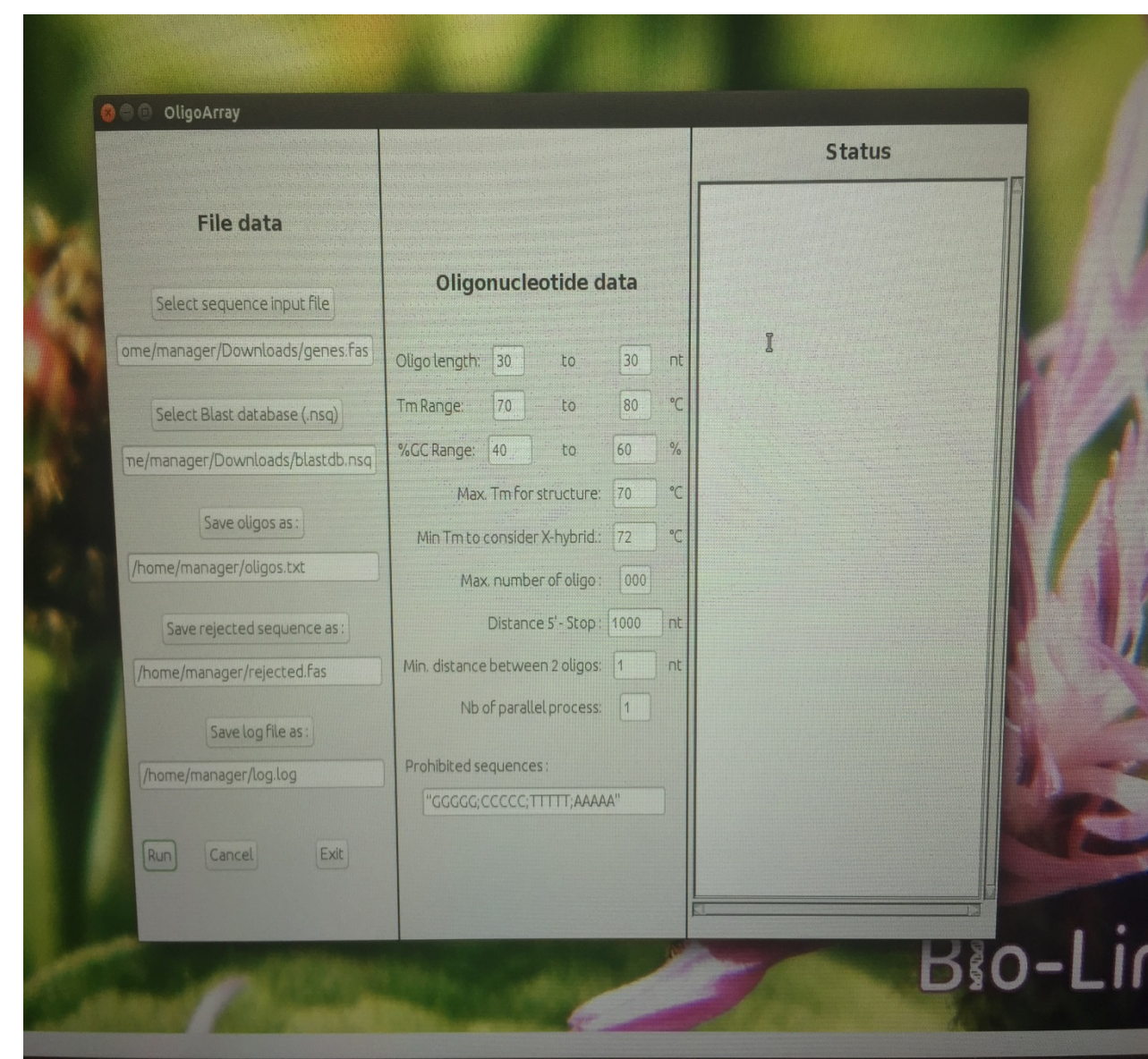


# Fluorescence In Situ Hybridization (F.I.S.H.)

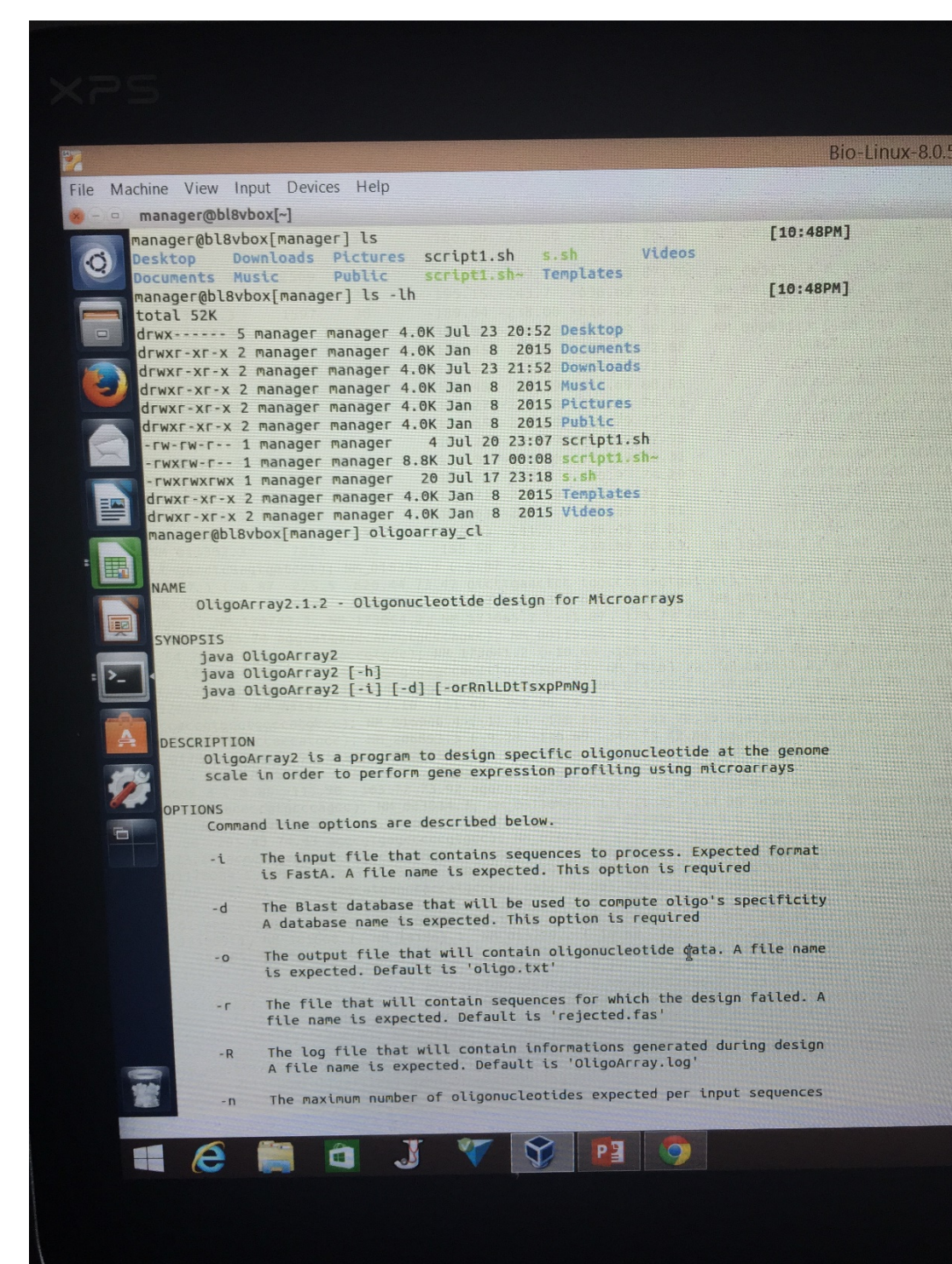
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## Oligo array



a program was used to design a specific oligonucleotide at the genome scale in order to perform gene expression profiling using microarrays

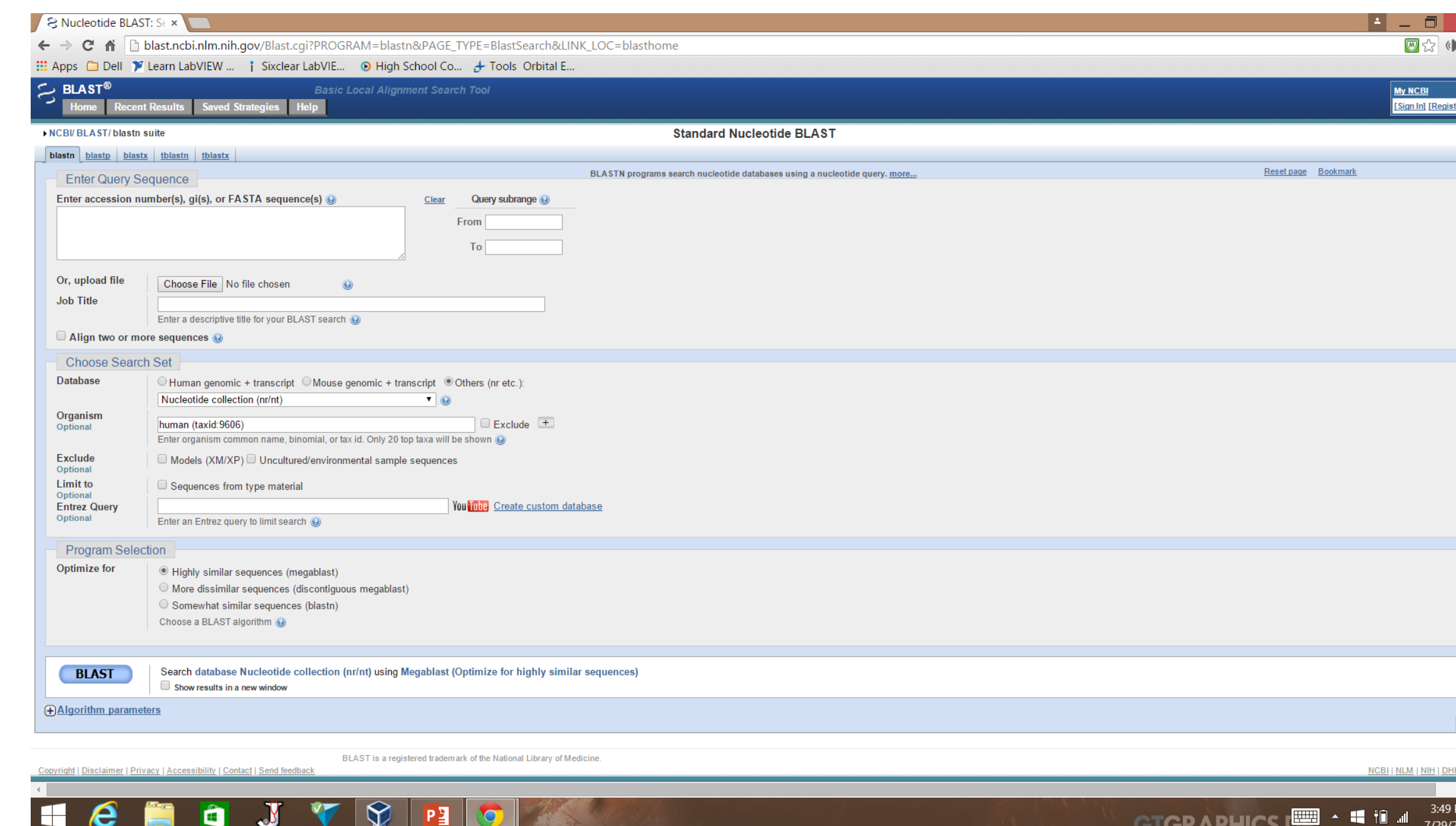
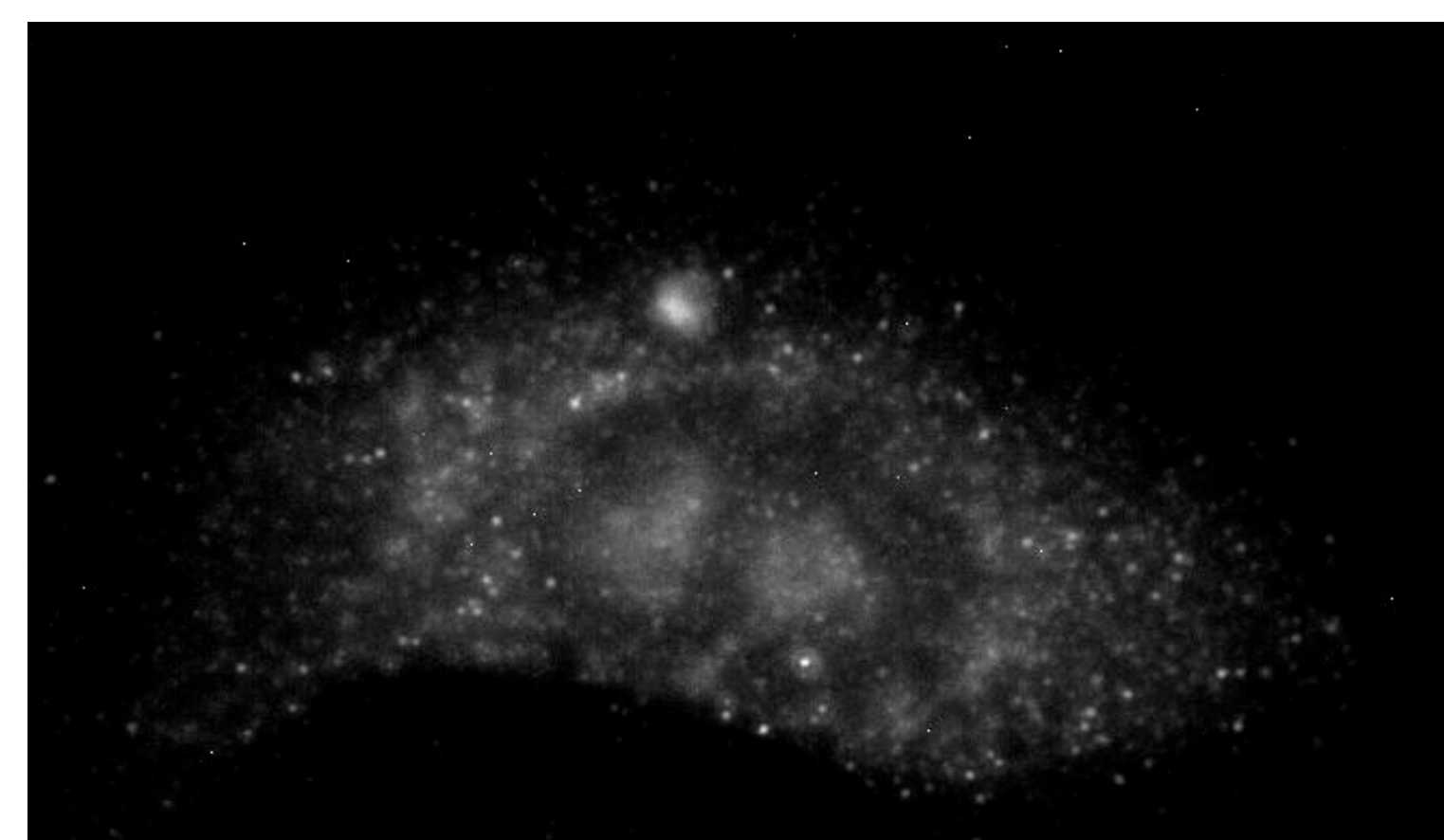


A **command-line interface** or command language interpreter (CLI), also known as command-line user interface, console user interface (CUI), is a means of interacting with a computer program where the user (or client) issues commands to the program in the form of successive lines of text



The majority of **fluorescence microscopes**, especially those used in the life sciences, are of the epifluorescence design shown in the diagram. Light of the excitation wavelength is focused on the specimen through the objective lens

F.I.S.H. probe spots under epifluorescence microscope



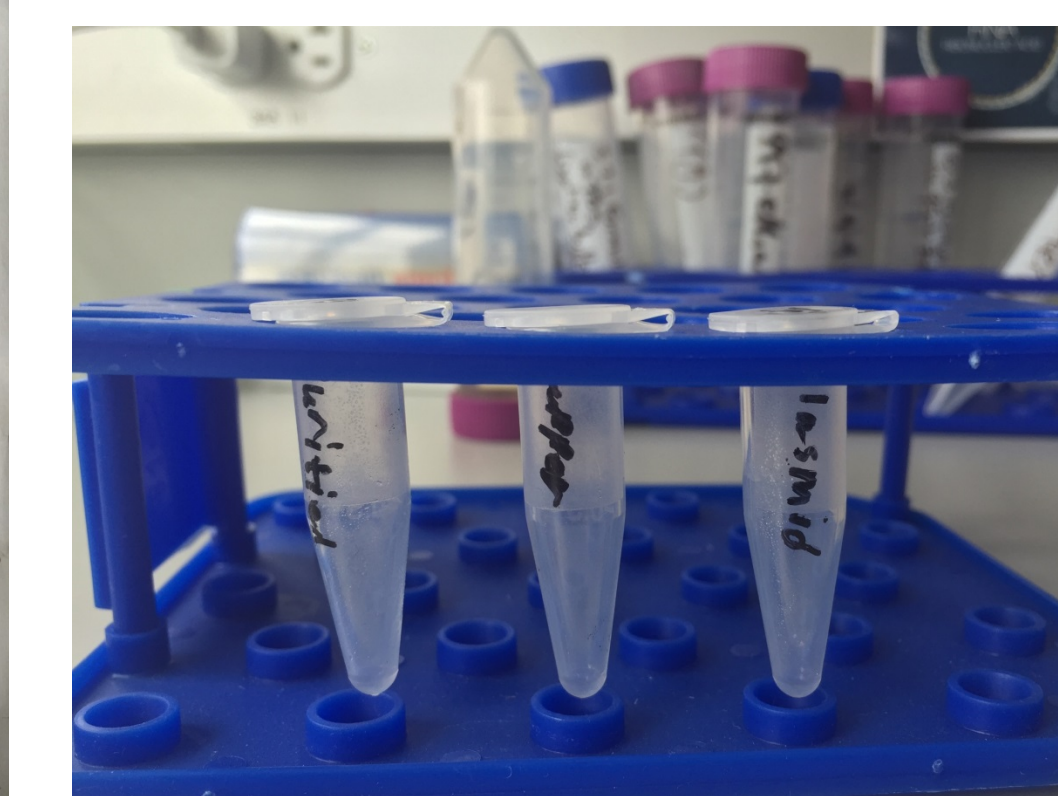
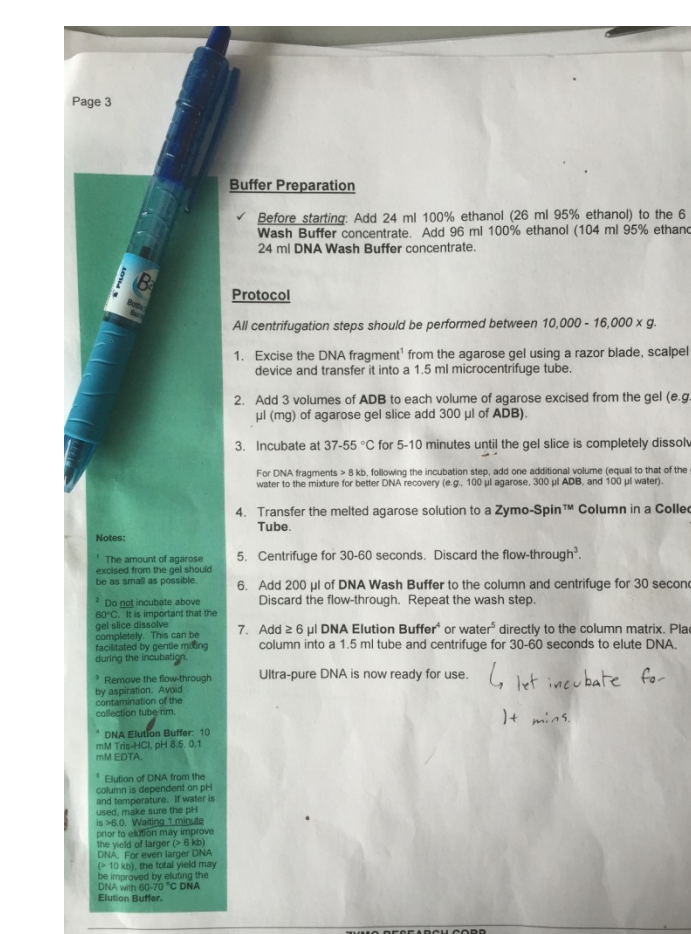
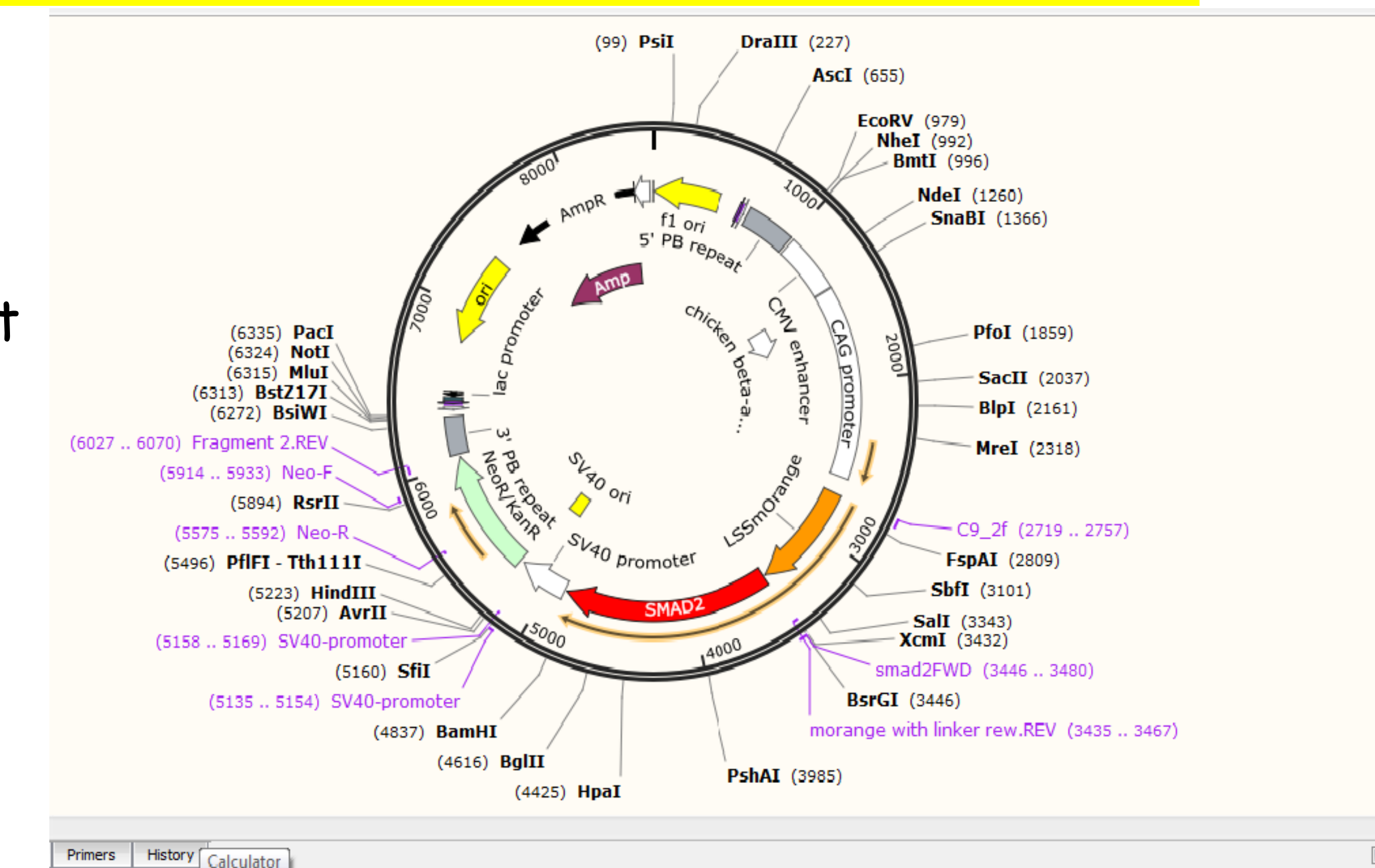
The Basic Local Alignment Search Tool (**BLAST**) finds regions of local similarity between sequences. The program compares nucleotide or protein sequences to sequence databases and calculates the statistical significance of matches. BLAST can be used to infer functional and evolutionary relationships between sequences as well as help identify members of gene families.

## Wollman Lab



## Plasmids

In situ assembled reporter construct



Following **protocol** to purify DNA

**Gel electrophoresis** is a method for separation and analysis of macromolecules (DNA, RNA and proteins) and their fragments, based on their size and charge



**Polymerase chain reaction**, or **PCR**, is a laboratory technique used to make multiple copies of a segment of DNA. PCR is very precise and can be used to amplify, or copy, a specific DNA target from a mixture of DNA molecules