Assembly Quality
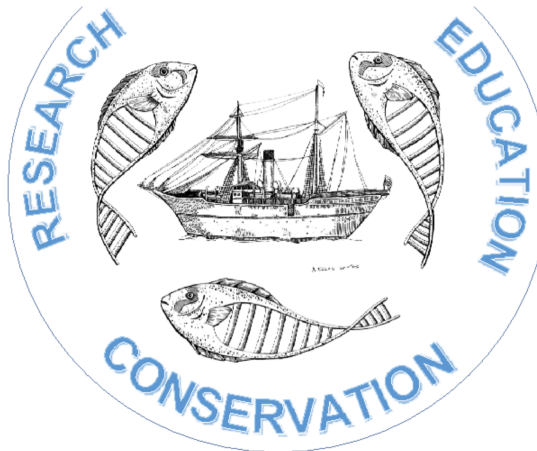

README.md
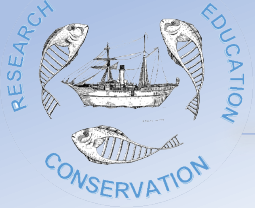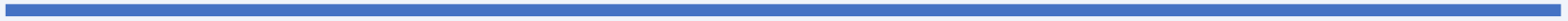
Welcome to the 2022 PIRE Omics Workshop!

Dr. Eric Garcia
Postdoc Philippines PIRE Project

July 5th, 2022
Silliman University

Assembly Quality

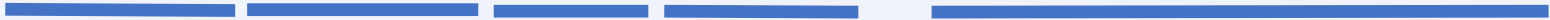genome ————————————————————————————

assembly —— —— —— —— ——— ——————————
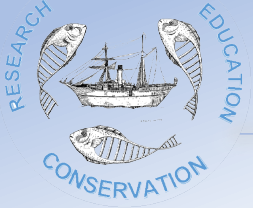
Assembly Quality
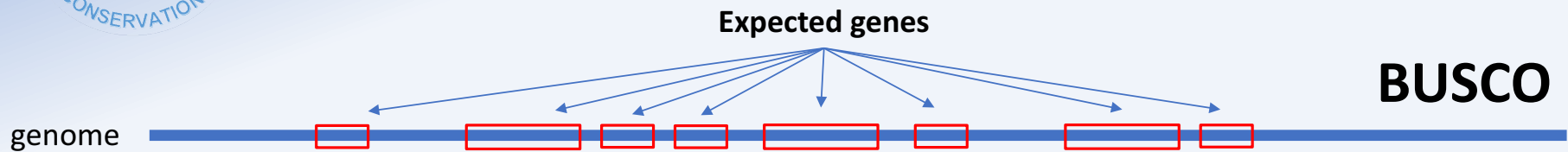
Expected genes

BUSCO

genome

Importance	Metric	Direction	Description
1st	BUSCO	Bigger is better	% of expected genes observed in your assembly
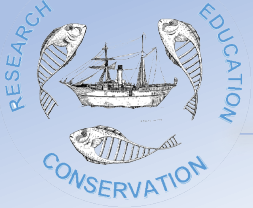
Assembly Quality

BUSCO

genome

assembly

Importance	Metric	Direction	Description
1st	BUSCO	Bigger is better	% of expected genes observed in your assembly
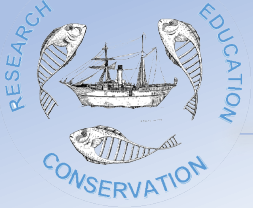
Assembly Quality
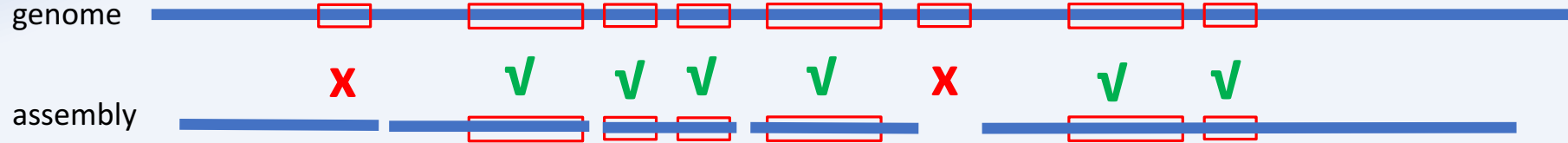
BUSCO

Importance	Metric	Direction	Description
1st	BUSCO	Bigger is better	% of expected genes observed in your assembly
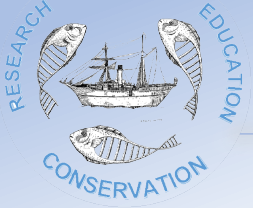
Assembly Quality

N50

genome

assembly

Importance	Metric	Direction	Description
1st	BUSCO	Bigger is better	% of expected genes observed in your assembly
2nd	N50	Bigger is better	Lenght of the smaller contig from the set of contigs needed to reach half of your assembly

Assembly Quality

% Genome Size Completeness

genome
assembly

Importance	Metric	Direction	Description
1st	BUSCO	Bigger is better	% of expected genes observed in your assembly
2nd	N50	Bigger is better	Lenght of the smaller contig from the set of contigs needed to reach half of your assembly
3rd	Genome size completeness	Bigger is better	Lenght of assembly divided by estimated genome lenght

Assembly Quality

% Genome Size Completeness

genome

assembly

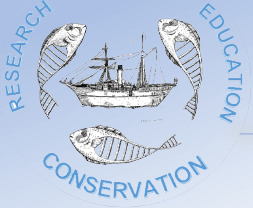| Importance	Metric	Direction	Description
1st	BUSCO	Bigger is better	% of expected genes observed in your assembly
2nd	N50	Bigger is better	Lenght of the smaller contig from the set of contigs needed to reach half of your assembly
3rd	Genome size completeness	Bigger is better	Lenght of assembly divided by estimated genome lenght

Assembly Quality

L50

genome

assembly

1   2   3   4   5

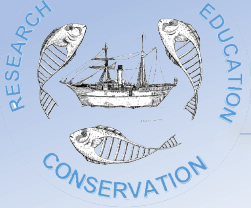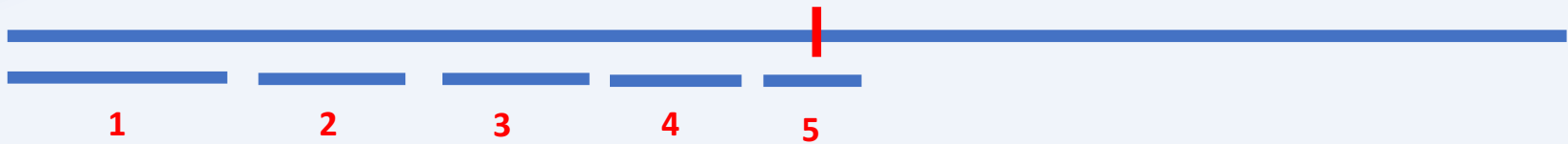| Importance	Metric	Direction	Description
1st	BUSCO	Bigger is better	% of expected genes observed in your assembly
2nd	N50	Bigger is better	Lenght of the smaller contig from the set of contigs needed to reach half of your assembly
3rd	Genome size completeness	Bigger is better	Lenght of assembly divided by estimated genome lenght
4th	L50	Smaller is better	Number of contigs needed to reach half of your assembly

Assembly Quality

Largest contig

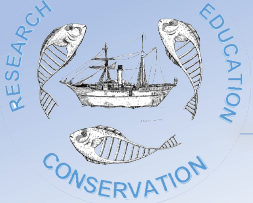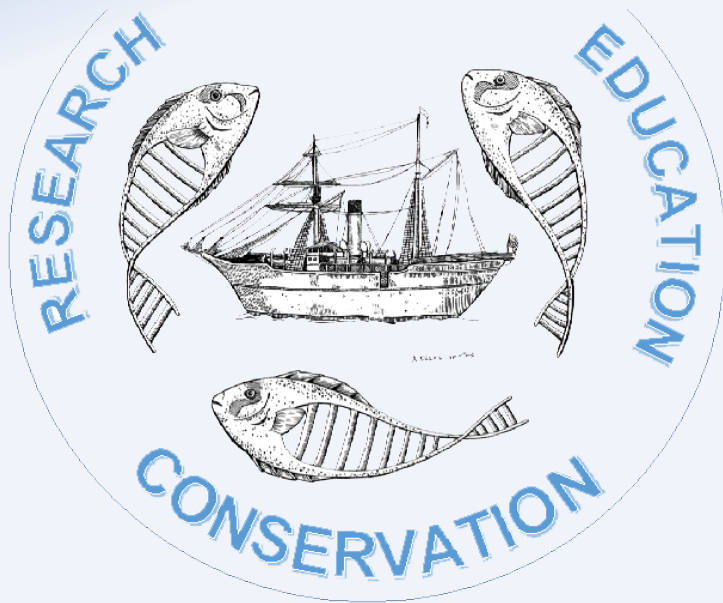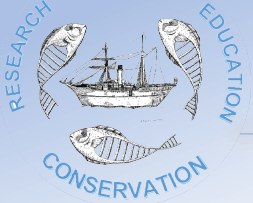| Importance	Metric	Direction	Description
1st	BUSCO	Bigger is better	% of expected genes observed in your assembly
2nd	N50	Bigger is better	Lenght of the smaller contig from the set of contigs needed to reach half of your assembly
3rd	Genome size completeness	Bigger is better	Lenght of assembly divided by estimated genome lenght
4th	L50	Smaller is better	Number of contigs needed to reach half of your assembly
5th	Largest contig	Bigger is better	Lenght of largest contig

The Philippines PIRE Project

Assembly Quality

Importance	Metric	Direction	Description
1st	BUSCO	Bigger is better	% of expected genes observed in your assembly
2nd	N50	Bigger is better	Lenght of the smaller contig from the set of contigs needed to reach half of your assembly
3rd	Genome size completeness	Bigger is better	Lenght of assembly divided by estimated genome lenght
4th	L50	Smaller is better	Number of contigs needed to reach half of your assembly
5th	Largest contig	Bigger is better	Lenght of largest contig