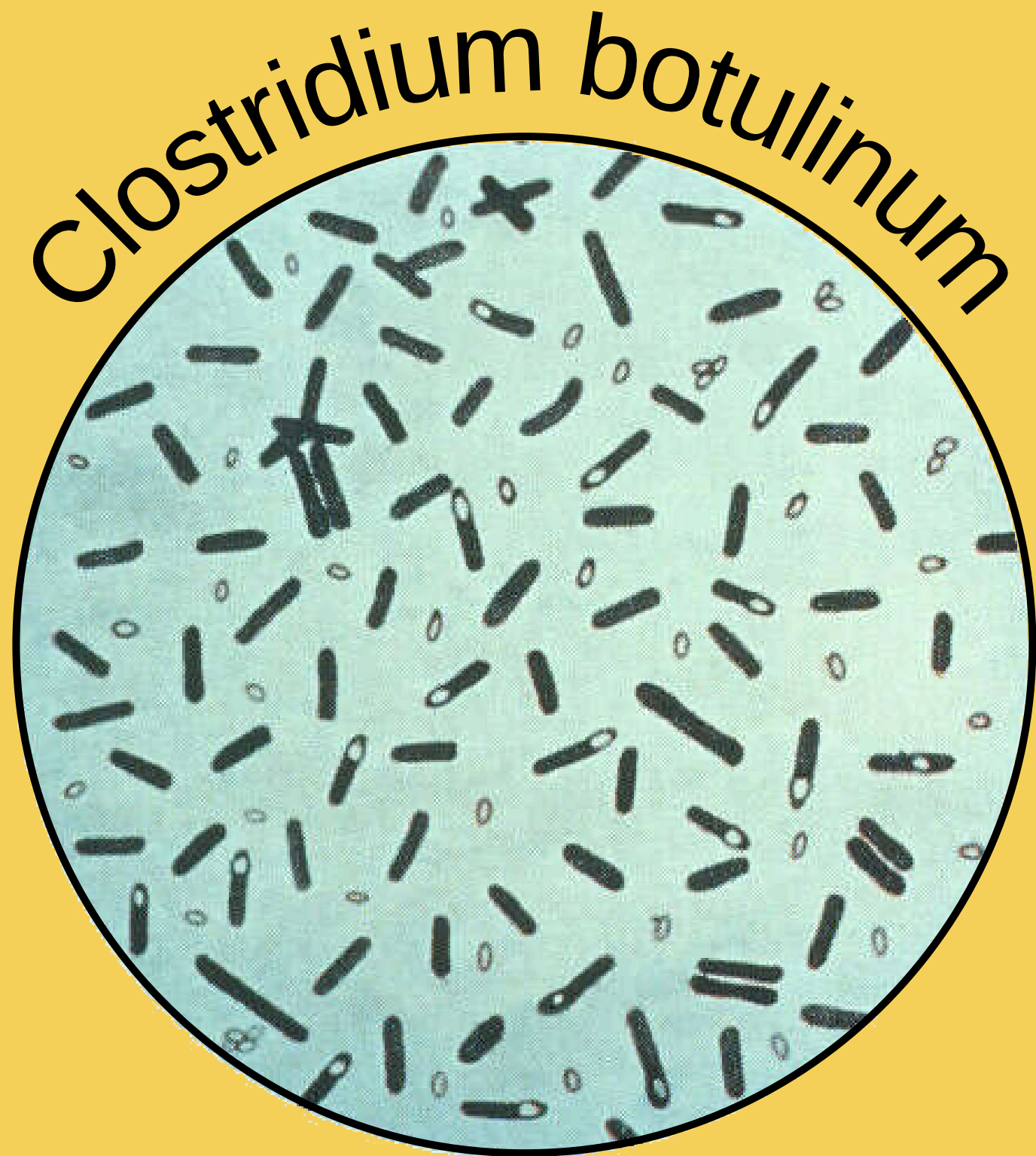


Genome Assembly and Annotation



Tayler Blee





Intro

- *C. botulinum* produces highly lethal toxin
 - LD50 = 0.03 ng/kg
- I will assemble and annotate the genome using paired-end reads

METHODS

Assemble Genome

Take the reads and
try to put them
together in one big
piece

(Abyss and Spades)

Assess Assembly Quality

Given a complete reference genome,
how well did our assemblers do?

(Quast)

Annotate Genome

Find genes and the proteins they code for

(Prokka and Rast)

Results

	Quality assessment using QUAST					Genome Annotation	
	N50	L50	Largest contig	# contigs	GC%	CDS Prokka	CDS Rast
Abyss	550,747	3	1,095,256	24	27.78	4,100	4,242
Spades	467,820	4	993,415	26	27.75	4,096	4,258

