



# Read construction



# Read construction



# Denovo pipeline

P  
i  
p  
e  
l  
i  
n  
e



**USTACKS**

Build loci de novo

**CSTACKS**

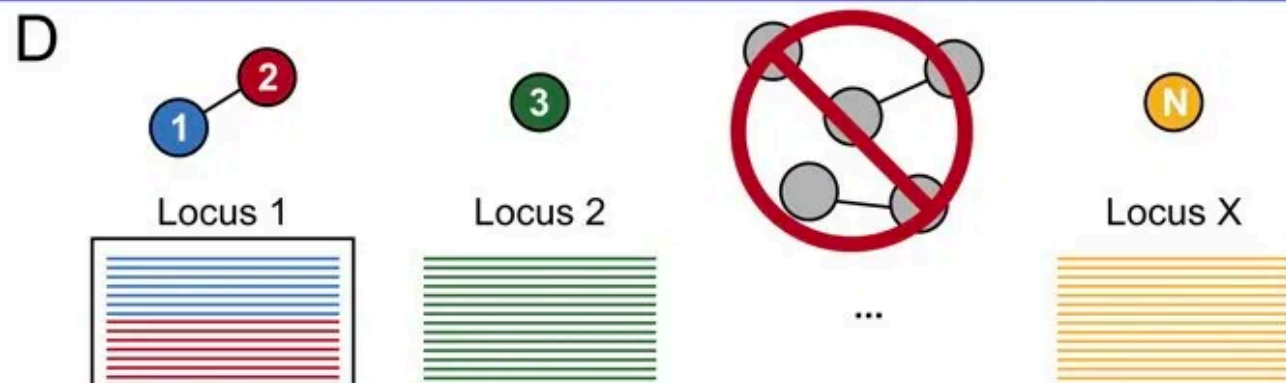
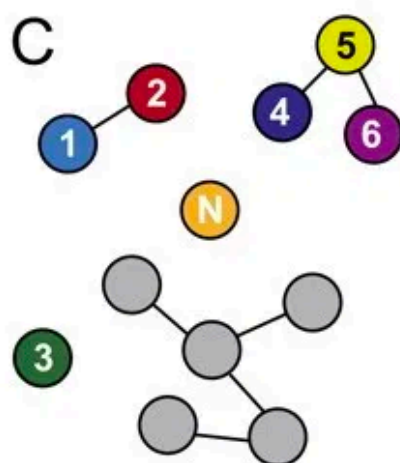
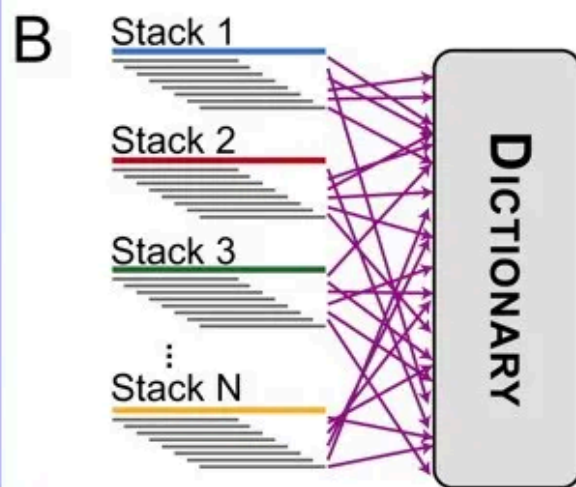
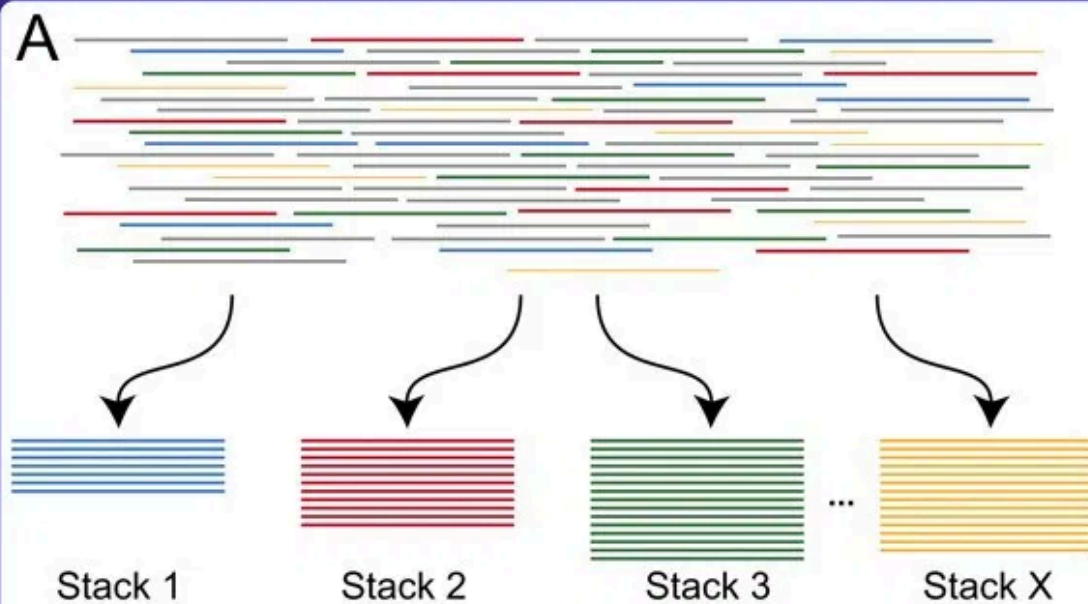
Assemble catalog

**SSTACKS**

Match to catalog

**Populations**

Filter loci and compute  
Population statistics



**E**

1° reads

TGCAGGACACACAGGAGCTGAGCCATTCCTGCGGCTCC	C	GACCAAACGTTTG
TGCAGGACACACAGGAGCTGAGCCATTCCTGCGGCTCC	C	GACCAAACGTTTG
TGCAGGACACACAGGAGCTGAGCCATTCCTGCGGCTCC	C	GACCAAACGTTTG
TGCAGGACACACAGGAGCTGAGCCATTCCTGCGGCTCC	C	GACCAAACGTTTG
TGCAGGACACACAGGAGCTGAGCCATTCCTGCGGCTCC	A	GACCAAACGTTTG
TGCAGGACACACAGGAGCTGAGCCATTCCTGCGGCTCC	A	GACCAAACGTTTG
TGCAGGACACACAGGAGCTGAGCCATTCCTGCGGCTCC	A	GACCAAACGTTTG
TGCAGGACACACAGGAGCTGAGCCATTCCTGCGGCTCC	A	GACCAAACGTTTG
TGCAGGACACACAGGAGCTGAGCCATTCCTGCGGCTCC	A	GACCAAACGTTTG
TGCAGGACACACAGGAGCTGAGCCATTCCTGCGGCTCC	A	GACCAAACGTTTG
TGCAGGACACACAGGAGCTGAGCCATTCCTGCGGCTCC	A	GACCAAACGTTTG

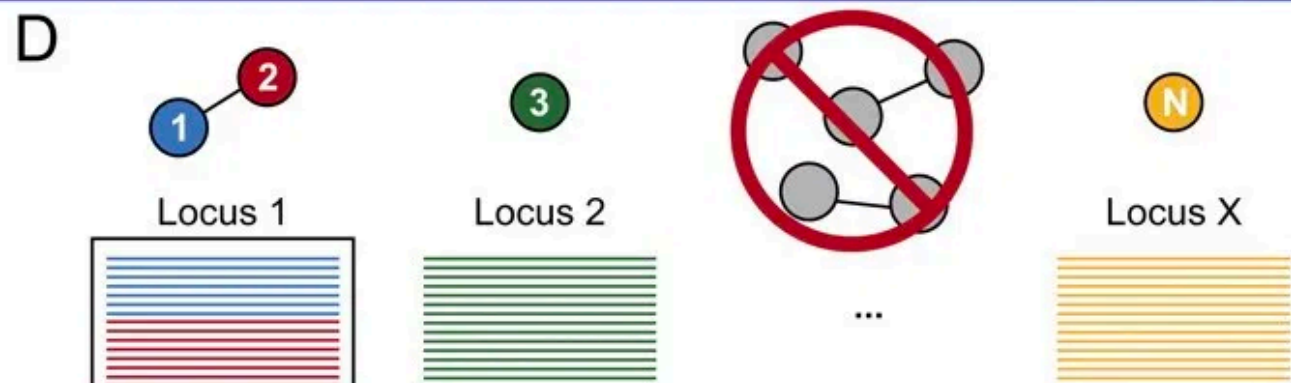
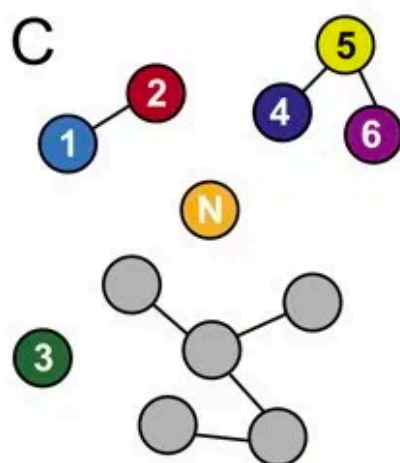
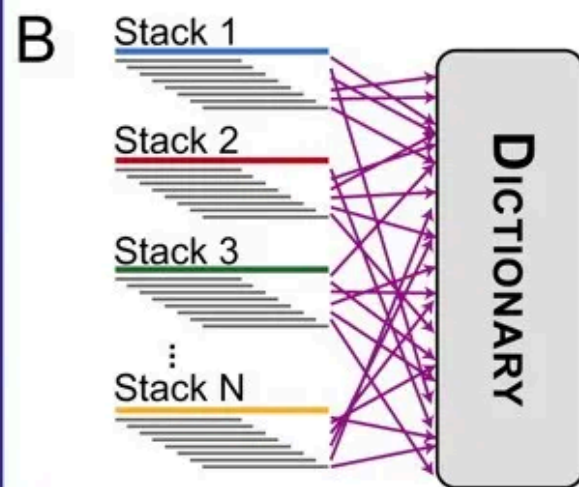
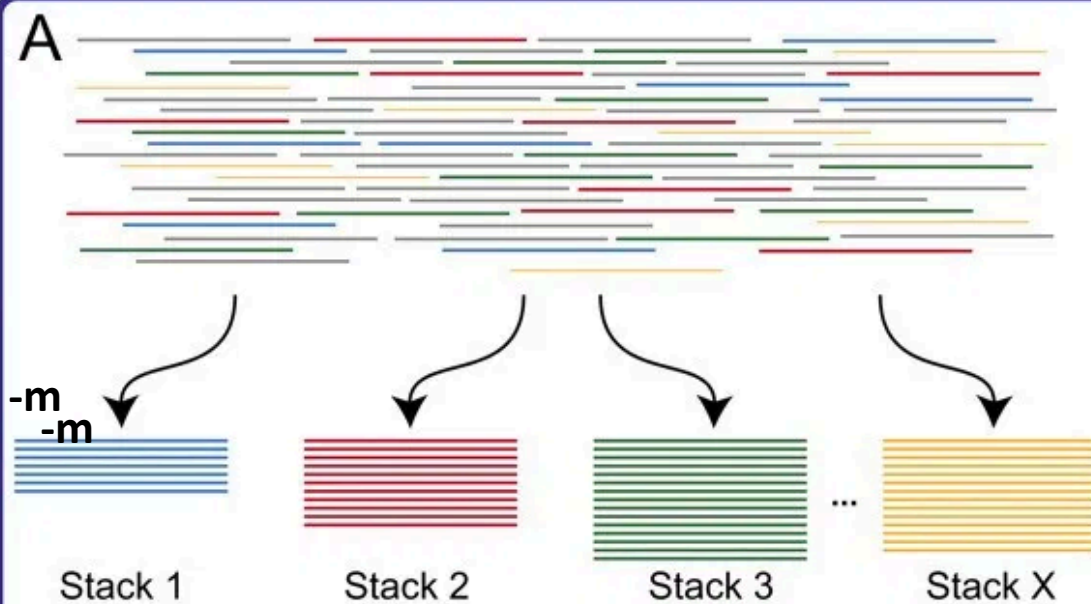
2° reads

TGC	G	GGACACACAGGAGCTGAGCCATTCCTGCGGCTCC	C	GACCAAACGTTTG
TGCAGGACACACAGGAGCTGAGCCATTCCTGCGGCTCC	A	GACCAAACGTTTG	C	TG
TGCAGGACACACAGGAGCTGAGCCATTCCTGCGGCTCC	A	GACCAAACGTTTG	C	GACCAAACGTTTG
TGCAGGACACACAGGAGCTGAGCCATTCCTGCGGCTCC	T	GCGGCTCC	A	GACCAAACGTTTG
TGCAGGACACAGGAGCTGAGCCATTCCTGCGGCTCC	C	GACCAAACGTTTG	G	ACGTTTG



**F**

TGCAGGACACACAGGAGCTGAGCCATTCCTGCGGCTCC  $\frac{C}{A}$  GACCAAACGTTTG



**E**

1° reads

TGCAGGACACACAGGAGCTGAGCCATTCCTGCGGCTCC	C	GACCAAACGTTTG
TGCAGGACACACAGGAGCTGAGCCATTCCTGCGGCTCC	C	GACCAAACGTTTG
TGCAGGACACACAGGAGCTGAGCCATTCCTGCGGCTCC	C	GACCAAACGTTTG
TGCAGGACACACAGGAGCTGAGCCATTCCTGCGGCTCC	C	GACCAAACGTTTG
TGCAGGACACACAGGAGCTGAGCCATTCCTGCGGCTCC	A	GACCAAACGTTTG
TGCAGGACACACAGGAGCTGAGCCATTCCTGCGGCTCC	A	GACCAAACGTTTG
TGCAGGACACACAGGAGCTGAGCCATTCCTGCGGCTCC	A	GACCAAACGTTTG
TGCAGGACACACAGGAGCTGAGCCATTCCTGCGGCTCC	A	GACCAAACGTTTG
TGCAGGACACACAGGAGCTGAGCCATTCCTGCGGCTCC	A	GACCAAACGTTTG
TGCAGGACACACAGGAGCTGAGCCATTCCTGCGGCTCC	A	GACCAAACGTTTG
TGCAGGACACACAGGAGCTGAGCCATTCCTGCGGCTCC	A	GACCAAACGTTTG

2° reads

TGC	G	GGACACACAGGAGCTGAGCCATTCCTGCGGCTCC	C	GACCAAACGTTTG
TGCAGGACACACAGGAGCTGAGCCATTCCTGCGGCTCC	A	GACCAAACGTTTG	C	TG
TGCAGGACACACAGGAGCTGAGCCATTCCTGCGGCTCC	A	GACCAAACGTTTG	C	GACCAAACGTTTG
TGCAGGACACACAGGAGCTGAGCCATTCCTGCGGCTCC	A	GACCAAACGTTTG	A	GACCAAACGTTTG
TGCAGGACACACAGGAGCTGAGCCATTCCTGCGGCTCC	A	GACCAAACGTTTG	C	GACCAAACGTTTG



**F**

TGCAGGACACACAGGAGCTGAGCCATTCCTGCGGCTCC  $\frac{C}{A}$  GACCAAACGTTTG

# Denovo pipeline

P  
i  
p  
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**USTACKS**

Build loci de novo

**CSTACKS**

Assemble catalog

**SSTACKS**

Match to catalog

**Populations**

Filter loci and compute  
Population statistics

Parameter Description	<b>denovo_map.p</b> 1 Parameter	Pipeline component	Component Parameter	Default Value
Minimum stack depth / minimum depth of coverage	-m	<b>ustacks</b>	-m	3
Distance allowed between stacks	-M	<b>ustacks</b>	-M	2
Distance allowed between catalog loci	-n	<b>cstacks</b>	-n	1



P  
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p  
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**USTACKS**

Build loci de novo

**CSTACKS**

Assemble catalog

**SSTACKS**

Match to catalog

**Populations**

Filter loci and compute  
Population statistics

reference pipeline

# Reference pipeline

P  
i  
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Alignment to a reference genome

**Populations**

Filter loci and compute  
Population statistics