

Lexogen 3' QuantSeq FWD

A Technical Overview

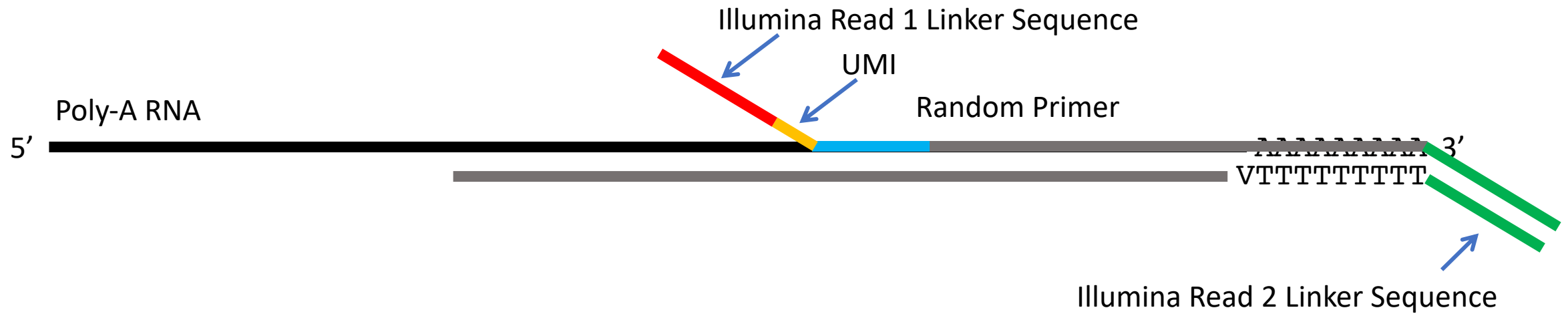
Kevin Childs

Director MSU Genomics Core

Lexogen 3' QuantSeq FWD

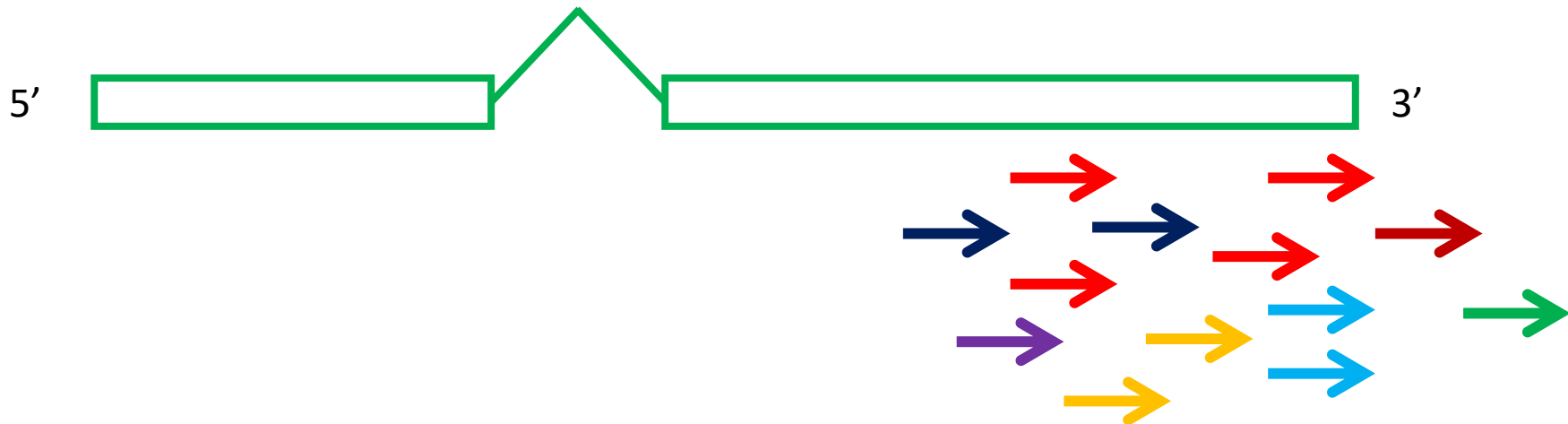
- Low-cost alternative to Illumina TruSeq Stranded mRNA libraries
- Appropriate for gene expression analysis
- Not appropriate for transcript discovery
 - Illumina vs Oxford Nanopore
- Provides one read per mRNA for sequencing
- Normalized as Counts Per Million total reads (CPM)

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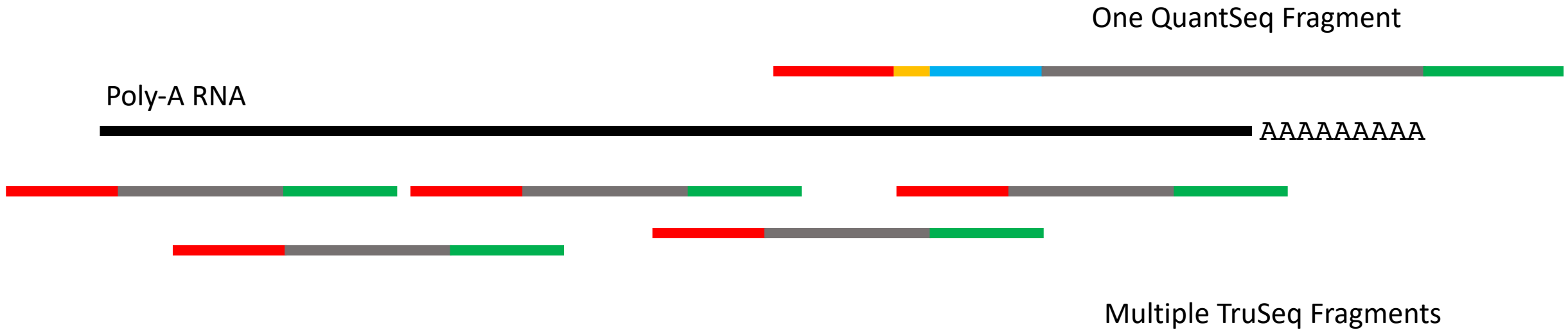


Universal Molecular Index (UMI)

- A six-base random sequence
- Used to allow the identification of PCR duplicates
- Remove duplicates if two or more mapped reads
 - Have identical UMIs
 - And their 5' ends map to identical base positions



Lexogen QuantSeq vs Illumina TruSeq



Illumina TruSeq vs Lexogen 3' QuantSeq

- Illumina TruSeq mRNA
 - Library prep - \$113
 - HiSeq 4000 SE50 lane - \$1050
 - 40 samples example
 - $(40 \times \$113) + (3 \times \$1050) = \$7670$
- Lexogen 3' QuantSeq
 - Library prep - \$62 (1-47), \$56 (48-71), \$53 (72-96)
 - NextSeq 500 SE75 lane - \$1927
 - 40 samples example
 - $(40 \times \$62) + (1 \times \$1927) = \$4407$