

# Nanopore Sequencing For Human Population Genetics

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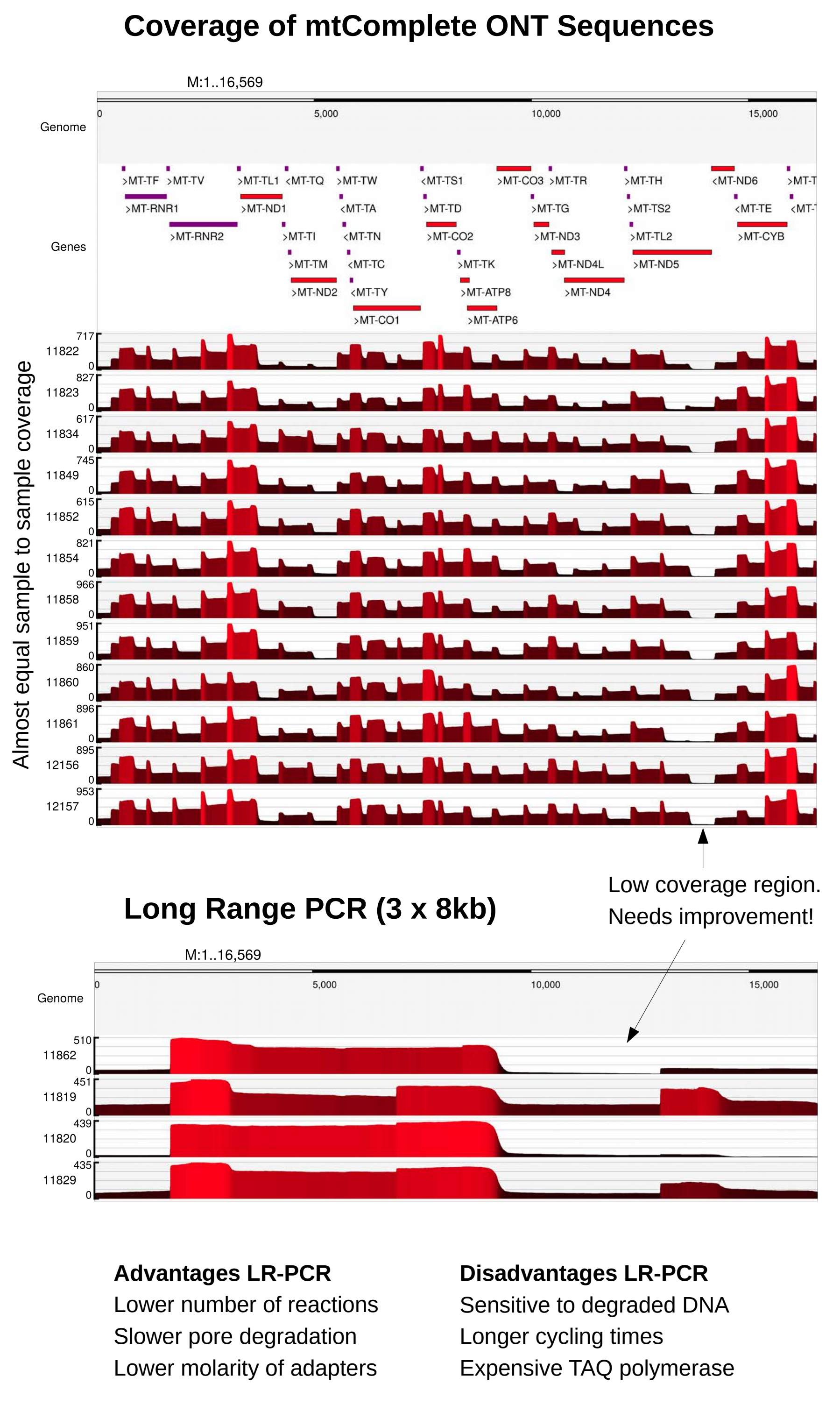
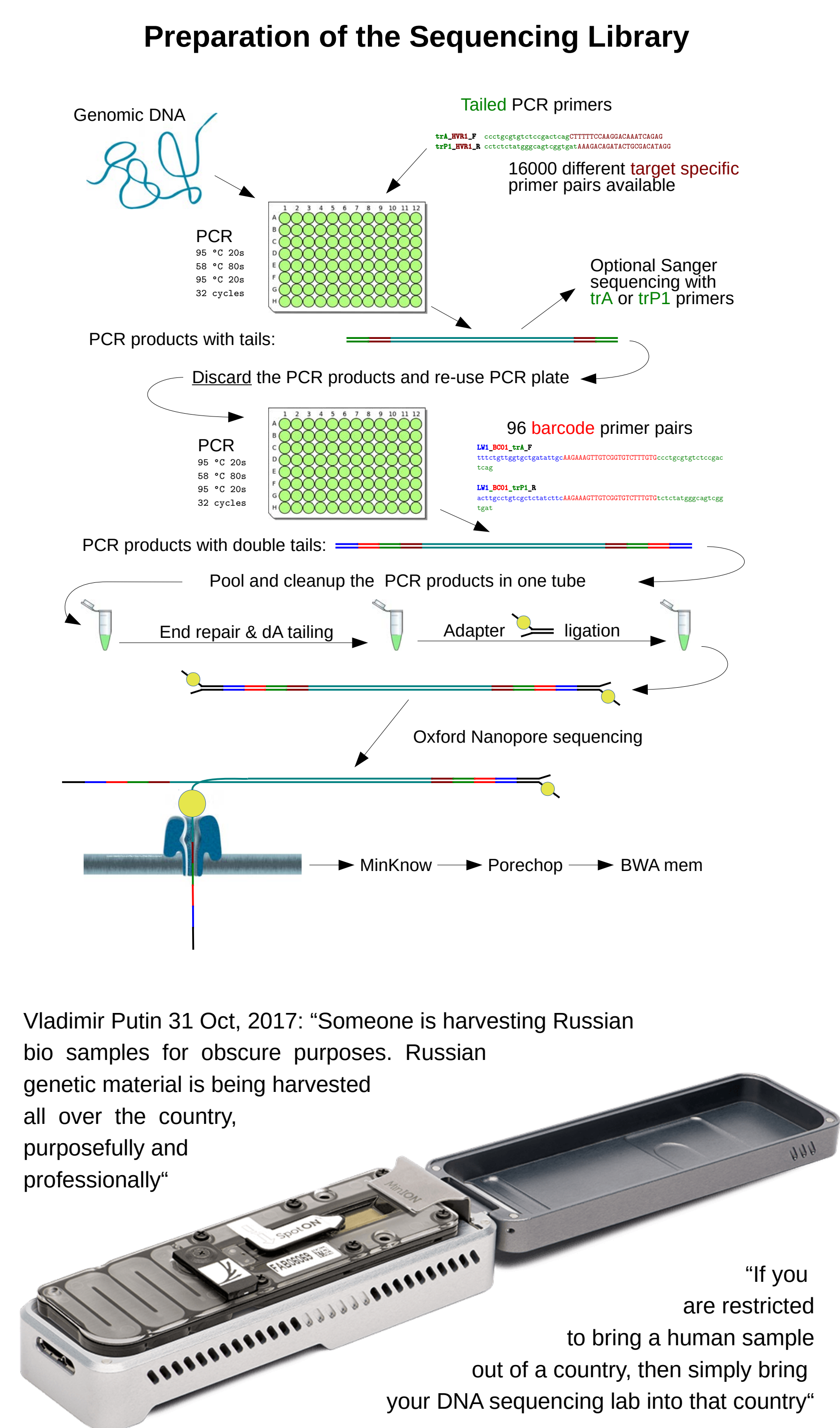
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## Abstract:

The mitochondrial DNA and the Y chromosome are useful population genetic tools to establish the direct maternal and paternal lines in deep rooting pedigrees. YSEQ has developed a robust workflow to sequence the complete mitochondrial genome as well as stable and informative sections of the Y chromosome on a MinION instrument. This PCR protocol allows up to 96 barcoded samples to get fully characterized by their basal haplogroup on a single flowcell. The ability of using this technology in the field reduces the barrier of persons donating their non-invasive cheek swab sample for DNA testing because they can see the actual results coming down from the instrument in real time. This protocol was for the first time established at a small population study of native tribes in Kamchatka.



## C-M217 Y Haplogroup Tree

