



20TH ANNIVERSARY  
CONFERENCE  
30 October – 2 November 2022  
Novotel Twin Waters  
Sunshine Coast, Queensland

# Flexible and Efficient Handling of Nanopore Sequencing Signal Data with slow5tools



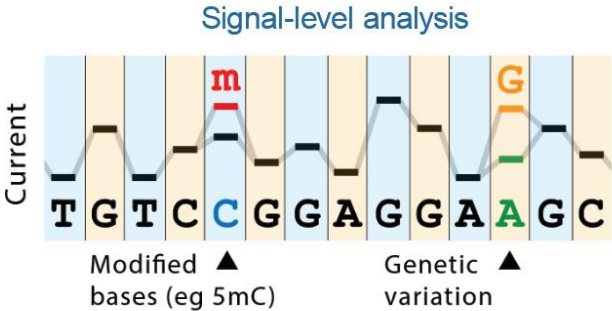
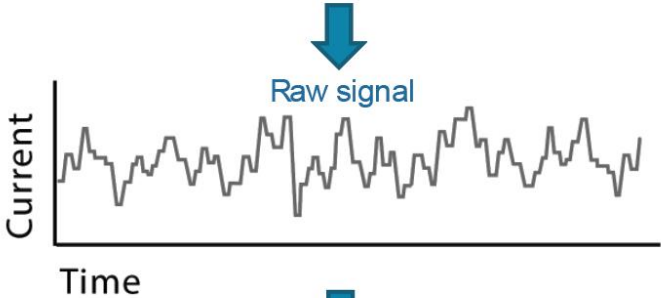
centre for population genomics



Hiruna Samarakoon

# Nanopore Data Analysis

Nanopore Sequencer (e.g., ONT PromethION)



Base-calling

CCTCTGTCCGAGGACGCTCTTATA

# FAST5 File Format



critical performance  
bottleneck



very difficult to use



large file size

# SLOW5 File Format



efficient and fast



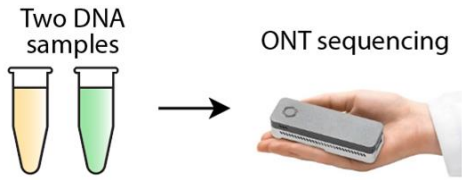
easy to use



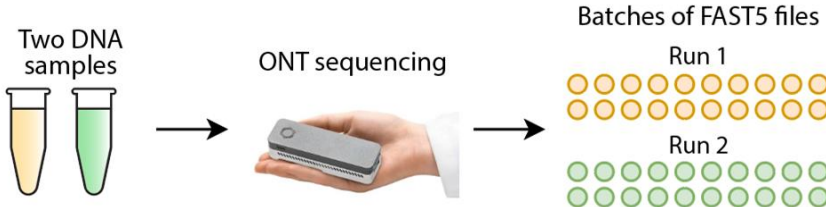
smaller file size

Gamaarachchi, H., Samarakoon, H., Jenner, S.P., Ferguson, J.M., Amos, T.G., Hammond, J.M., Saadat, H., Smith, M.A., Parameswaran, S. and Deveson, I.W., 2022. Fast nanopore sequencing data analysis with SLOW5. *Nature biotechnology*, pp.1-4.

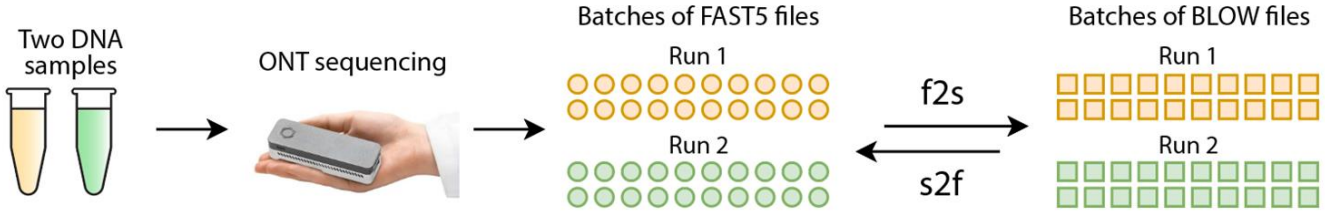
# Data Management with slow5tools



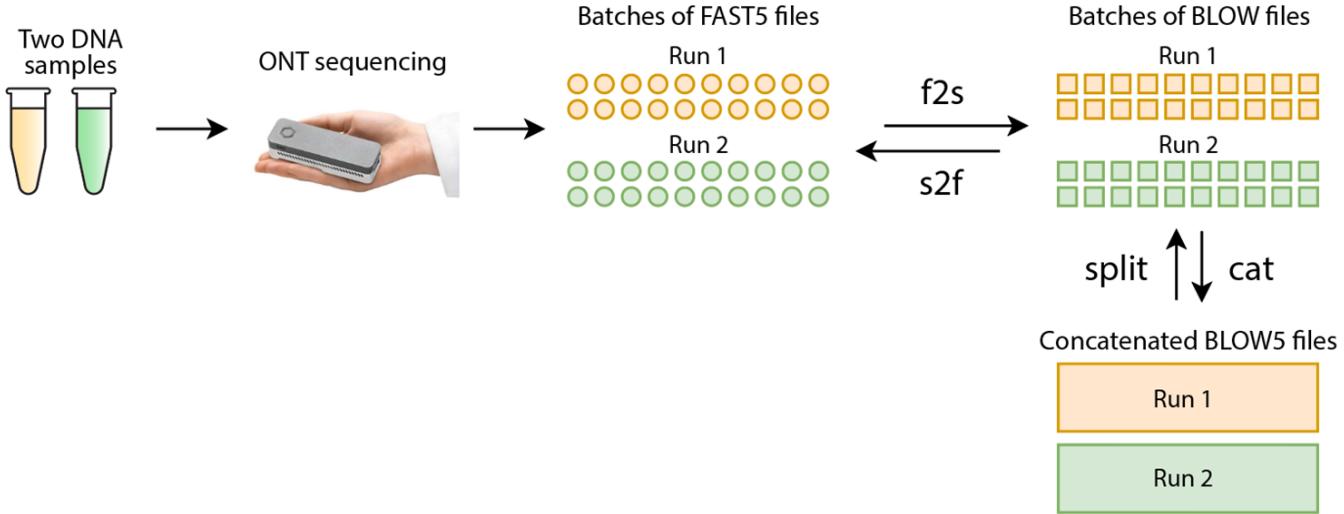
# Data Management with slow5tools



# Data Management with slow5tools

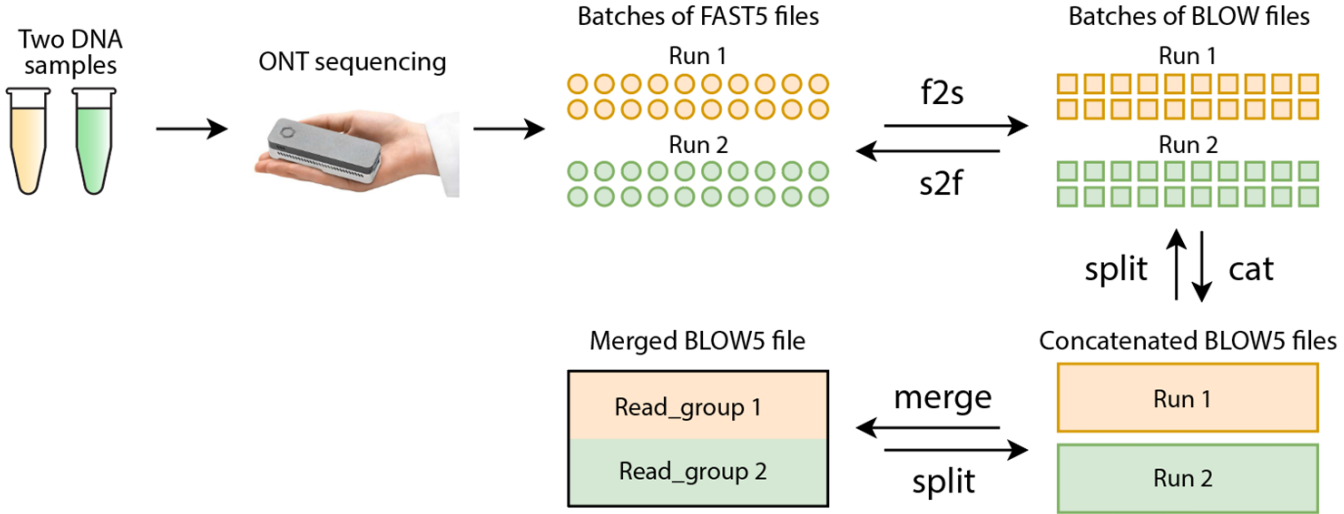


# Data Management with slow5tools

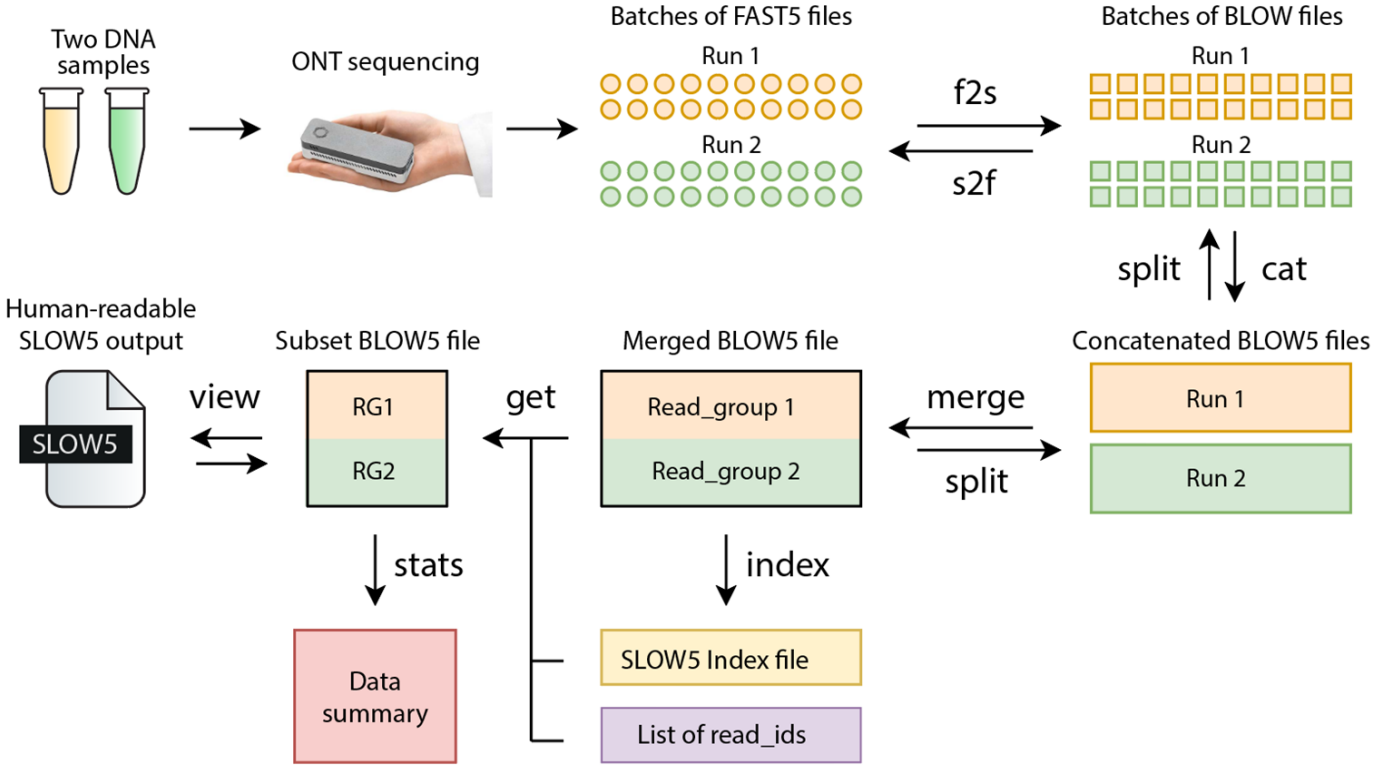




# Data Management with slow5tools



# Data Management with slow5tools



Thank you!

