

# SeqQual pipeline overview

Combining various tools for processing files automatically

## Part 1

Sanger-based chromatogram sequences / many fragments, N / 2N data

*Phred  
Phrap*

ace  
phd  
fasta  
poly

*Polyphred*

Polyphred.out  
Updated \*.ace

\*.phd / \*.ace  
\*.fasta

Core Bioperl scripts  
integrating quality at  
the nucleotide level

## Part 2

Large ace assembly  
files < NGS data  
fasta/fasta.qual

Ace-dealing  
Bioperl scripts

Fastq → bam  
→ ace

## Part 3

Batches of fasta alignments (low quality  
masked at chosen quality score)  
IUPAC codes for heterozygotes in 2N data

Fasta batch post-treatment  
Tools

Trimming / filtering  
Merging reads/sequences  
Alignment optimization  
SNP summary statistics  
Haplotype data phase unknown...

Updated fasta alignments,  
SNP alignments  
Un-aligned fasta  
Arlequin formatted files