

**ADAM
Transforms:**
Read ETL

avocado:
Scalable
variant
calling

gnocchi:
Parallel
variant
analysis

DECA:
Exome
copy
number
variant
calling

cannoli:
Auto-
parallel
legacy
tools

Lime:
Set theoretic
primitives for
genomics

mango:
Fast, multi-
sample
visualization

IntervalRDD

Core ADAM APIs

Pipe API

SortedRDD/RegionJoin

Apache *Spark*

Workflow engines (Toil)

Clouds (CGCloud, Databricks, EMR)

On-prem (CDH, Slurm/LSF)

Legacy file formats
(BAM/VCF)

Apache
Parquet

GA4GH
Schemas