FreeHiC Pipeline

```
Input FastQ Files and
Simulation Details
        ↓
Generate HiC Files
using HiC Pipeline
        ↓
Generate Summary
of Hi-C Data's
features
```

```
Start Simulation
        ↓
Generate Simulated
FastQ Files
        ↓
Generate Hi-C Files
```

Downsimulated vs Downsampled Hi-C Data

e Down Simulated Replicates   f Downsampled Replicates

Trophozoite BioReplicate
Schizont Down Simulations
Ring Down Simulations

Ring Down-sampling
Trophozoite BioReplicate
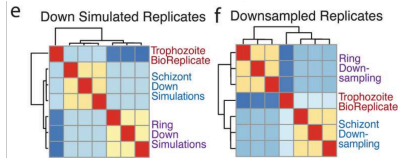Schizont Down-sampling

Zheng Y, Keles¸ S. Freehi-c simulates high-fidelity hi-c data for benchmarking and data augmentation. Nature Methods 2020;17(1):37–40.