

Generating paired-end reads longer than 100nt

We have been using FluxSimulator successfully to simulate paired-end reads of up to 100nt, using uniformly random (UR) fragmentation. However, the 200nt fragment size limitation makes it difficult to try longer read lengths (such as 120nt or 150nt) as we anticipate continued improvements in sequencing technology.

Would it be possible for us to "fool" the simulator into using longer fragments with UR fragmentation to generate longer paired-end reads? Or would it be better to abandon UR fragmentation in favor of another kind? We would like our simulations to be directly comparable so that read length is the only variable that changes. At the same time, we would like our simulations to reflect the kind of experiments people really are (or will be) doing.