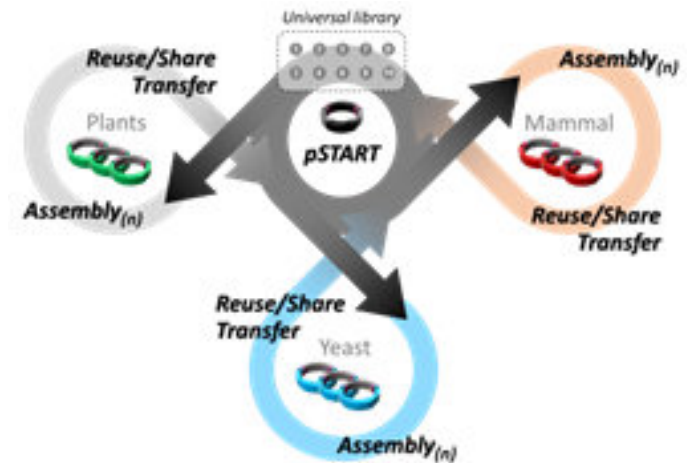


TNT Cloning System selected as a 2018 R&D Finalist

- The TNT-cloning system is for flexible DNA assembly from universal libraries to generate multi-gene constructs.
- It adopts a pre-defined three-nucleotide (TNT) signature and a buffer system for a quick one-pot reaction.
- The system assembles functional constructs from a universal library that automatically maintains open reading frames (ORFs) and does not require linkers, adaptors, sequence homology, amplification or mutation of DNA fragments in order to work properly.



Specifically designed to:

- Handle Large DNA Constructs- compatible with large nucleotide cassettes >50 kb in length (12kb fragments tested, ORNL).
- Highly Randomized and Populated Libraries- engineered to quickly assemble and select from large randomized libraries with reduced selection rounds.
- Gene Assembly Speed- the design streamlines steps for a system that is up to 80% faster than other assembly systems. Efficiency in steps and cloning speed increases with the number of assemblies. Use of high throughput and robotics has been validated with no drop in efficiency.

