RNA mimic destined for synthetic genome

US scientists have taken another step towards the goal of creating self-replicating molecules like those thought to have spawned life on Earth. The researchers made RNA-like polymers capable of copying short sections of genetic code that they suggest could act as genomes in synthetic cells.

When life began, the cellular machinery for copying DNA had not yet evolved. So, as the theory goes, the first information-carrying molecules must have been self-replicators. Making self-replicators in the lab has proved difficult, although scientists have had some success using RNA molecules that are also enzymes capable of catalysing their own replication. The new study, however, led by Jack Szostak at Massachusetts General Hospital in Boston, US, focuses on another type of system – one that works without enzymes.

Read the full, original story here: RNA mimic destined for synthetic genome