



A Recipe for... the SIPNSUP protocell



opens a hole in the protocell



that lets  **suck up building blocks from outside**
to copy the parts inside.

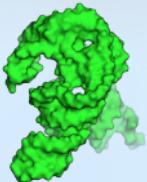


Meanwhile another  **grows the protocell**

until  **divides it in two.**

Sipnsup is parasitic: it cannot make its own food but steals it from other protocells before dividing. Without them, though, it starves.

What is... a Replicator RNA?



RNAs are made up of a strand of building block 'letters'. Some strands of letters can fold up into **3D shapes** that can make things. We invented an RNA sequence that, when folded, can **build new RNAs**. It uses another RNA as a template, choosing building blocks to link together. It can even copy itself.

What is... an oily peptide?



These worm their way into the **fatty surfaces** of protocells. By disrupting them they could help **absorb surface components** from outside, growing the protocell. They could even make a **hole** for molecules to diffuse in, giving a free supply of building blocks - in the right environment.

Find out more:



<https://mrc.io/recipe4life>

