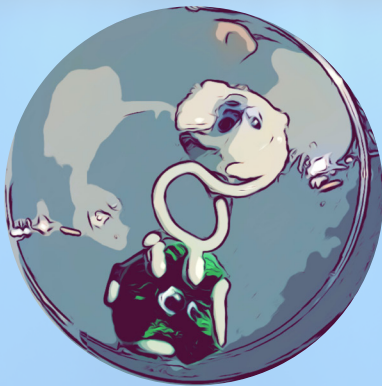




# A Recipe for... the SIPNSUP protocell



2 ×



1 ×



1 ×



opens a hole in the protocell

that lets



suck up building blocks from outside

to copy the parts inside.

Meanwhile another



grows the protocell

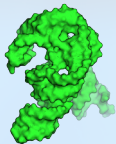
until



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>

