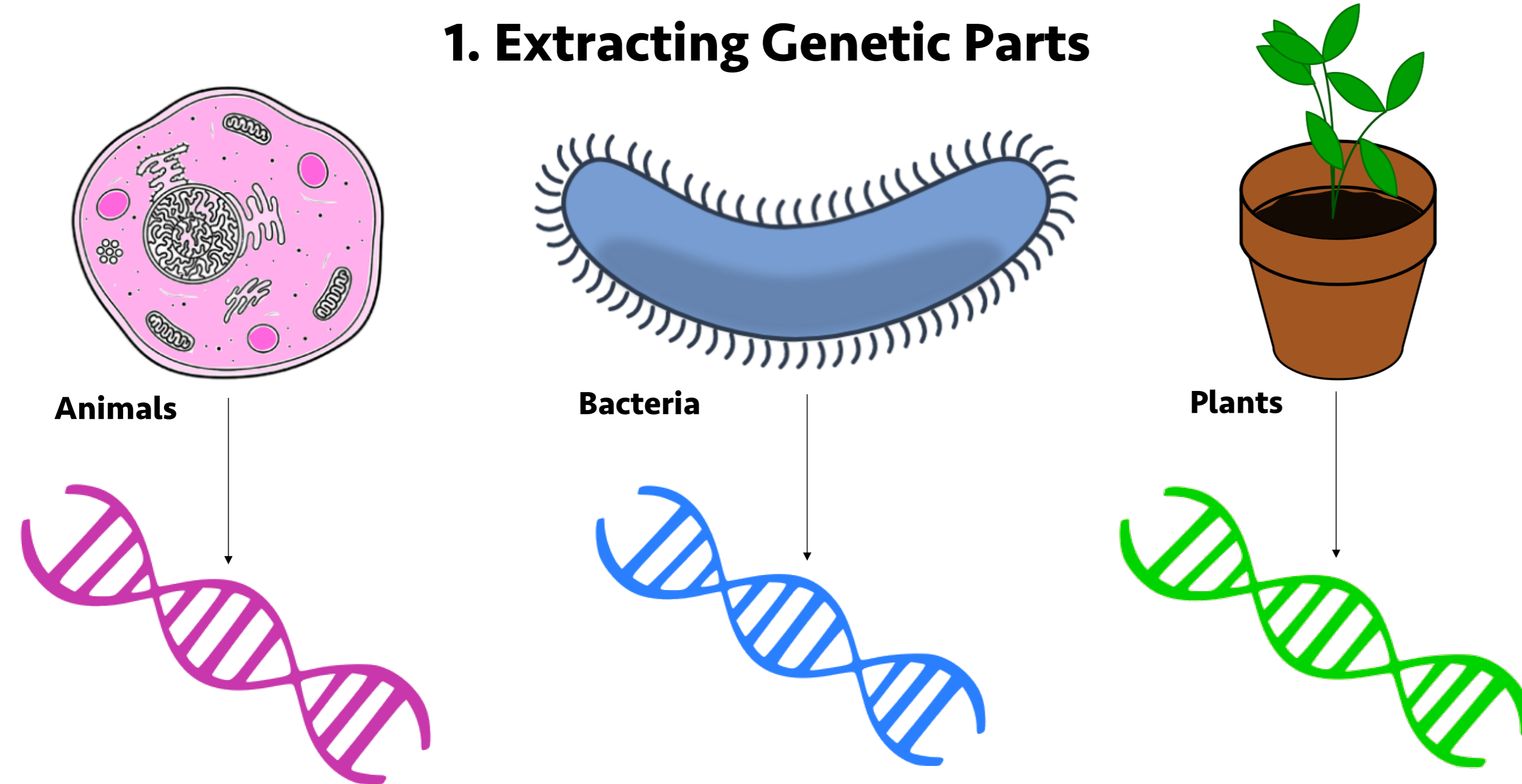


# SYNTHETIC BIOLOGY IN THE LAB

## 1. Extracting Genetic Parts

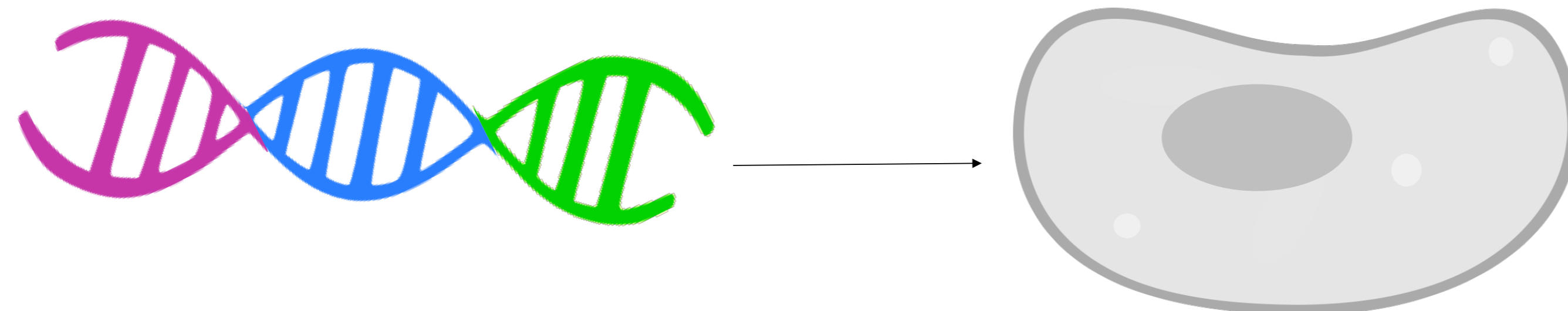


*Synthetic biology is an approach to engineering biology that involves the design and construction of new biological parts, devices and systems. It's a way to create a new system or enhance a pre-existing one by using the desired genes.*

## 2. Toolkit of Genetic Parts with known functions

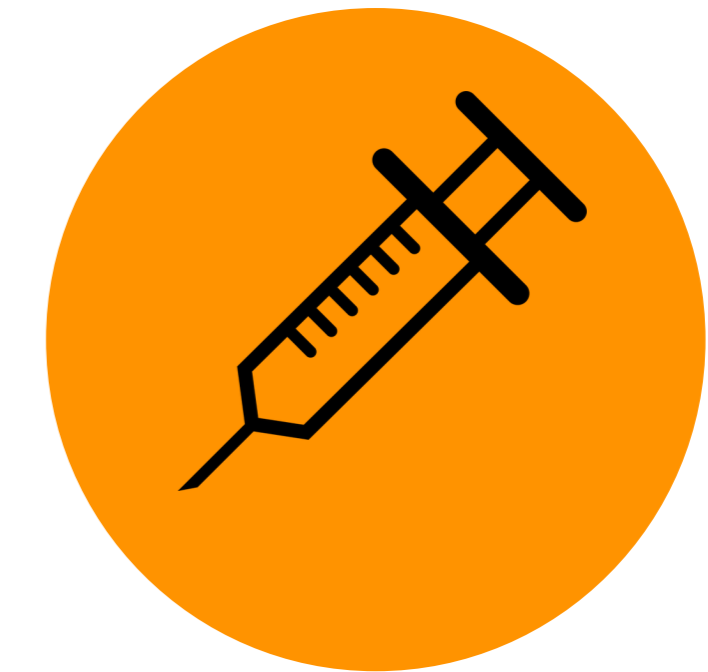


## 3. New or modified organism with desired functions

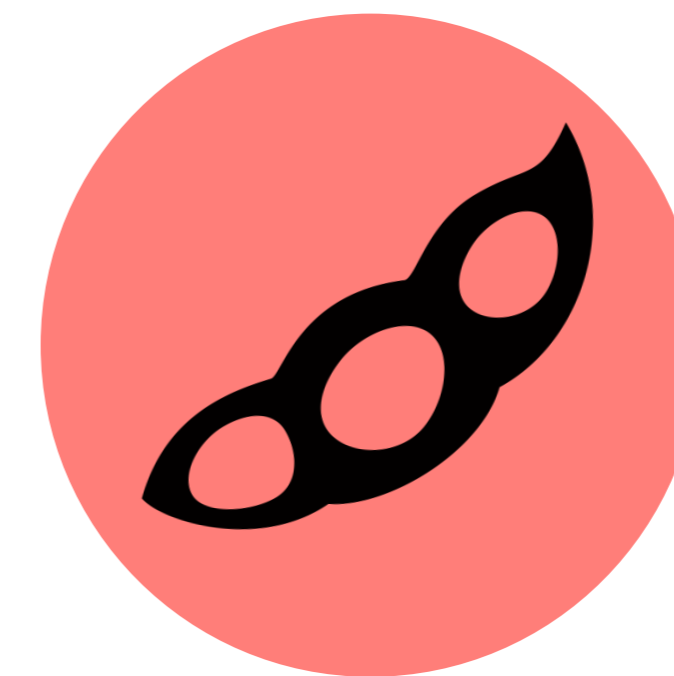


## Examples

Cells producing synthetic insulin for diabetic patients



Soybeans that are resistant to herbicides



Engineered cells that produce alternative biofuels

