

New techniques swap out codons across the genome

The language of life has been rewritten. A bacterium has had its genome recoded so that one of its genetic words has been freed up to impart a different meaning, allowing the creation of proteins that don't exist in nature.

The work has been described as the first step towards a new biology because the techniques used should open the door to reinventing the meaning of several words simultaneously. This could lead to novel types of biomaterials and drugs with exotic properties. It also raises the tantalising possibility of integrating these genetically recoded organisms (GROs) into living organisms – to create virus-resistant plants or animals, for example.

Read the full, original story here: [Reprogrammed bacterium speaks new language of life](#)