

## DNA Data in Space

Submitted by Cancer Research UK

The aim of Play to Cure: Genes in Space is to collect Element Alpha, a mist-like substance that can be traded for ship upgrades. It actually represents DNA data, and by collecting it, players are locating genetic variations that may lead to cancer for our scientists.

Image credit: Cancer Research UK

## Molecular Movies

Submitted by Chong Fang, Oregon State University, USA

Molecular "movies" of a biosensor called GEM-GECO1 captured by femtosecond stimulated Raman spectroscopy (FSRS). Sequential ultrafast laser pulses unlock the mechanism of the biosensor, which emits green without calcium (Ca²+) but blue with Ca²+. The film reel shows vivid structural snapshots of the embedded chromophore that changes dramatically upon Ca²+ binding.

Image credit: Yanli Wang, Longteng Tang, and Chong Fang (Department of Chemistry, Oregon State University, USA)

