

How do you record music as DNA?

Interview with Dr Nick Goldman, mathematician and genome scientist at The European Bioinformatics Institute.

So we invented a code which took the different possible bytes... so we took eight 'zeroes' or 'ones' in a row – that makes one byte.

There's 256 different possible bytes that might be part of a computer code and we devised a sequence of DNA letters that would represent each one of the possible 256 bytes.

And then when we read each file, we read the byte, we look up which fragment of DNA should correspond to that.

And then it's a very simple computer programme that will just read a file one byte at a time and write onto a new file this sequence of letters that looks like DNA.

[Image of data centre courtesy of EMBL-EBI. Audio interview taken from BBC Radio 4's Inside Science.]