Throbbing Gristle

The scientists have been experimenting with ... transplanted ge nes. The bacteria, E. coli They create the hybrid recombin ant DNA in the E. coli bacteria. E. coli multiplies very rapidl y. ... The work ... Imperial College, if he was allowed to go a head, would mean that E. coli bacteria would be created with th e ability to create castrated mice. The worry is that it might create castrated humans. ...

The argument ... capability to transfer information, which woul d interfere with the process pieces of DNA would look ver y similar ...

What for? I say that they feel the benefit of developing ... ca use infection one chance in a hundred, which is almost nothing. A more realistic figure than that would be one chance...in a m illion. But in fact, we stuck with the one chance in a hundred. Now if you combine that with that, we get the chance that that laboratory worker ... It should be carefully noted that the st rain of E. coli with which we work is the laboratory strain ... is extremely sick, very attenuated, is generally incapable of growing outside the laboratory environment. And the strain of E . coli which is known for being ... are very different from the strains we work with in the lab. And it's not just the laborat ory strain that's actually incapable of ... human beings ... Uh , so in general...the bacteria we work with are very unlike eac h other growing in the outside environment

Even less likely that they will survive outside of a carefully controlled laboratory environment. Almost everywhere the danger ... Eventually, something goes wrong. Uh, the green monkey dis ease didn't get out, of course, but it certainly infected one o f the poeple working there. In the last ten years, there have b een, uh, half a dozen incidents in which either people have bec ome infected and therefore been taken to the hospital, and led to a situation in which an organism could or- could have got ou t, or in fact there's a situation where one did get out. I don' t think that it's possible to accurately assess I know tha t some people have tried this, and ... possible and ... calcula tions...come out with some kind of a number. As far as I'm conc erned, that number is not reliable...the number of assumptions that enter the calculation are large, um, and indeed, some of t he assumptions are...unknown. Perhaps the largest, most importa nt factor is the, um, the human factor, which cannot be assesse d. Uh, try to put a probability, a number, on an accident, I th ink is virtually impossible. Um...one can make a strain of bact eria ... foreign DNA, in places where there normally would not be. Uh, some of these strains are going to be viable. They're g oing to ..., and they're going to, uh, therefore, by definition

, introduce a new species to the, uh, bacterial world. Perhaps the viral world, and maybe even the animal world....and the pla nt kingdom as well. Um...I would therefore think that, uh, for example, if a ... in the bacterial world, uh, it would be a pro cess which probably could not be stopped, because, uh, as you k now, E. coli is an organism ..., an actual contaminant in the e nvironment. And you introduced new forms of it ... the same evo lutionary pattern. There would be...no way of reversing this wi thout having to exterminate all E. coli on the planet. Uh, whic h would bring other kinds of catastrophies; E. coli is a natura 1 and necessary contaminant of our Uh, my personal belief is that we do not have the wisdom to improve on nature. I think that history shows that, whenever man has tampered with the na tural environment, it has done nothing but ruin ... face of the world. We should not be playing god. That's not a religious st atement, and it's not personal one; we're just not smart enough

...And anyway many of the experiments will be done with strains of the E. coli which we have purposefully genetically engineer ed within the laboratory to make them even less likely to be ab le to survive outside of a carefully controlled laboratory envi ronment. Almost everywhere...