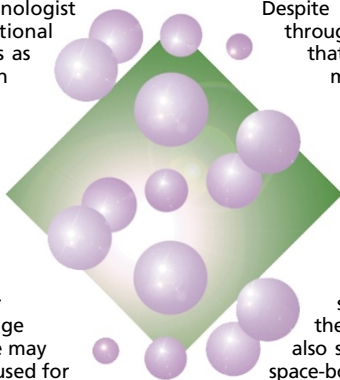


TOUCHINGbase

● Genes on the Fork

Food derived from genetically modified organisms (GMOs) has a bad reputation in some circles, especially in Europe. In an effort to change public perception, Swiss immunologist Beda Stadler has put together a book of traditional recipes, from soups to desserts, which use GMOs as basic ingredients. *Genes on the Fork*, published in German by InterNutrition, claims to be the "world's first GMO cookbook." But the food products used in the recipes have not all been genetically modified by recombinant DNA technology. In most cases the modifications occurred spontaneously in nature and were selected for by farmers. The author explains how different food products arose in so-called "Nice to Know" sections appended to each recipe. For example, there are 40 different varieties of cabbage (*Brassica oleracea*) that arose naturally. And some may not know that *granum durum*, the wheat that is used for Italian pasta, is a product of radiation breeding. In the author's view, genetic engineering is merely an extension of what farmers have been doing for years to generate variety for our kitchens. "Just think, what a poor life, if we would only have one type of wine grape," says Stadler.



● If Severino Antinori doesn't do it, the aliens will...

Renegade Italian scientist, Severino Antinori, continues to claim that he will clone the first human being by the end of the year. Despite the fact that human cloning is now banned throughout the European Union, Antinori has reiterated that he is proceeding. However, it now appears that he may face competition in his effort to be the first to clone humans. His potential competitors should have a less difficult time with ethics review boards however, given that they are aliens. The company, Team Encounter 2001, is offering a service whereby one is able to provide a small biological sample (at a fee significantly less than the \$20 m paid by the first space tourist, Dennis Tito) that will be placed on a spacecraft that the company plans to sail (yes, sail) into the great ether. To ensure that the cosmic creatures are able to get it right you can also send a photograph of yourself to accompany the space-bound DNA. If you don't like the idea of some crazy alien scientist cloning you so you can spend the rest of your new life as a plaything for his bratty alien kid, Celestis Inc. will send your cremated remains towards the heavens. It should be noted, however, that the 21 September launch failed to make orbit, and it appears that people's loved ones were given a very expensive sea burial instead.

● Of evolution and toadfish

As its name suggests, the oyster toadfish is not a pretty animal, so perhaps it is not surprising that it spends much of its time hiding in shallow murky estuaries of the east coast of the US. But it's not your average ugly fish. The toadfish is distinguished by one of its muscles—specifically, its swimbladder muscle, which males use to sound a whistle-like mating call. Of all vertebrate muscles, the swimbladder muscle is the fastest, with a contraction rate of up to 200 times per second. In the 7 October issue of the *Proceedings of the Royal Society*, Iain Young and Lawrence Rome (Univ. Pennsylvania) describe how the swimbladder muscle of the toadfish has become so highly adapted to creating sound by rapid contraction and relaxation that it can no longer contribute to locomotion. The researchers found that the swimbladder muscle is unable to create significant mechanical work when stimulated to contract at rates at which muscles contract when the fish is swimming. They calculated that to produce the mechanical work required to propel the animal forward, the swimbladder muscle would have to be larger than the entire fish. Rome observes that "no biological system can do everything. When you tune a system for one function you almost necessarily reduce its ability to perform another function." For more details on the swimbladder muscle, see <http://www.bio.upenn.edu/events/features/101501>.

● Australia goes to the polls

Amidst global uncertainty, Australia's Prime Minister John Howard has called a federal election for 10 November. At a time when the nation's focus is fixed firmly upon national and global security and on refugees seeking Australian shores, it seems unlikely that biomedical research and science in general will receive much air time. However, the outcome of the federal election will have long-lasting repercussions for the genetics and biotechnology communities of Australia. In recent years, the Australian Liberal Party has slashed federal funding to universities; economic rationalization and the creation of 'strategic alliances' with industry have become standard practice. A languishing Australian dollar means that Aussie researchers are amongst the most poorly paid in the western world. A consequence is the departure of new scientific talent to North America and Europe. The Wills Report has issued a stern warning: if federal funding of basic research is not significantly increased, Australia will not be able to remain competitive at the global level. The Labor Party, led by Kim Beazley, has tabled its proposed "Knowledge Nation" that entails a doubling of current funding of R&D and increased funding of fellowships. At this point, however, further policy details remain sketchy. Thus, it is unfortunate for Australian researchers that a visit to the website of the Science Technology and Research Party (<http://members.ozemail.com.au/~starprty/>)—whose primary platform is to "encourage basic research in all scientific disciplines by ensuring meaningful government support"—suggests that it is now defunct.



©2001 The New Yorker Collection from cartoonbank.com. All rights reserved.