



## Australian scientist proposes recipe for cloning extinct tiger

In a story of life imitating art, Dr. Michael Crichton's *Jurassic Park* may have paved the way for the genetic cloning of an extinct animal — Australia's "Tasmanian tiger," a marsupial wolf also known as the thylacine.

Crichton's book envisioned the use of dinosaur DNA that had been preserved in amber-bound mosquitoes, while Professor Michael Archer is proposing to use the genetic material of thylacine cubs preserved in alcohol.

In 1998 Archer, director of the Australian Museum, discovered a whole baby thylacine, born in 1866, in the storehouse of his Sydney institu-

tion. Over the last year he tracked down 6 other pickled specimens at the British Museum in London and institutions in Australia and the US, offering the potential of a wider gene pool. "There's a population waiting to be kick-started," Archer suggested. "There have been several geneticists who are saying it's not a joke, it's not silly, it could be done."

The 2-metre long Tasmanian tiger, *Thylacinus cynocephalus*, roamed across Australia and New Guinea until several thousand years ago, when it became confined to the island of Tasmania. The last known example, Benjamin, who displayed the animal's characteristic rigid tail and tapering dark brown stripes on his lower back, died in Tasmania's Hobart Zoo in 1936. The nocturnal carnivore was hunted into extinction because it threatened sheep herds.

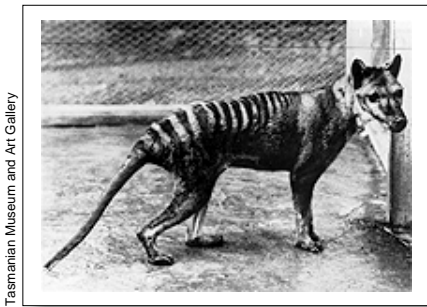
Prof. Mike Westerman, a senior lecturer in genetics at Melbourne's Latrobe University, suggests that, should a full complement of perfect DNA be found, the genetic material could be inserted into the empty egg of the female of a similar species, who could then incubate it. The process

would be a variation on the cloning of Dolly the sheep in Scotland.

"We've discovered the miracle bottle in which this time capsule is just waiting to pop back into life," added Archer. "At the rate at which this technology is increasing, I wouldn't say there's any reason why we shouldn't expect to be able to go into a pet shop and buy a pet thylacine and bring it home. We have cloning, we have DNA sequencing, we have the ability to read all the total information. If you like, the recipe for making a thylacine is there."

But British geneticists scoff at the plan. Prof. Martin Jones, an archeological scientist at Cambridge University, argues that "the DNA will be fragmented even though it is quite recently preserved."

Dr. Richard Thomas of the Natural History Museum in London added that the Tasmanian tiger has no close living relative and so successful incubation of an embryo is very unlikely. "There is a vast number of stages which we don't have the slightest idea how to do," he said. — © Gil Kezwer, Toronto



Tasmanian Museum and Art Gallery

The last known Tasmanian tiger in captivity is pictured in September 1936 at the Hobart Zoo.

### British girl recovering after forced heart transplant

A 15-year-old girl has received a heart transplant against her wishes in an English hospital. The girl, who cannot be named, developed congestive heart failure in May. She was admitted to the Freeman Hospital in Newcastle, and when her condition worsened she was told her prognosis and advised to have a transplant. She remained adamantly opposed to the procedure despite pressure from her parents, doctors, nurses and clergy. However, because she is a child her consent is not needed under British law.

On July 9 her doctors applied to the High Court for permission to

proceed with a transplant. The judge who heard the case, who specializes in family law, arranged for a lawyer to represent the girl. The girl told the lawyer: "I understand what a heart transplant means — checkups and pills. I am only 15 and don't want a transplant. I am not happy with it. I feel selfish. If I die, my family will be sad. If I had children and were old enough, I would go along with whatever is best, with what they want. If I had someone else's heart, I would feel different from anybody else [and] that's a good reason not to have a transplant, even if it saved my life."

The judge ruled that the girl was confused and allowed the operation to proceed. His decision was read out to the girl at her bedside, and she grudgingly agreed to have the operation. She is now making a normal recovery.

Lawyers have hailed the ruling as humane and just, but medical ethicists have reservations. Vivienne Nathanson, head of ethics at the British Medical Association, said medicine is "coercing children," and that children's views about their treatment are accepted only when they agree with doctors' views. — © Caroline Richmond, London