The New York Times
nytimes.com



May 21, 2008

# Biotech Company to Auction Chances to Clone a Dog

By JAMES BARRON

Correction Appended

A California company is planning a string of online auctions next month to clone five dogs, with the bidding to start at $100,000.

Scientists consider dogs among the most difficult animals to clone because they have an unusual reproductive biology, more so than humans. But the company behind the auctions, BioArts International, maintains that the technology is ready, and it is calling the dog cloning project Best Friends Again. It has scheduled the auctions for June 18.

BioArts says it has licensed patents issued in the 1990s after researchers in Scotland cloned Dolly the sheep.

BioArts also arranged a partnership with the Sooam Biotech Research Foundation in South Korea. BioArts says one of the principal scientists there is Hwang Woo Suk, who in 2005 was involved in cloning a male Afghan hound. He and his Korean colleagues named that dog Snuppy, for Seoul National University puppy.

A team led by Dr. Hwang reported in 2004 that it had made cloned human embryos and stem cells. But those claims were found to be fraudulent.

"I know the association with Dr. Hwang is going to be controversial," Lou Hawthorne, the chief executive of BioArts, said in a telephone interview on Friday. "One of the contradictions of Dr. Hwang is that he made mistakes on his human stem-cell research, and he's the first to admit that."

But he said Dr. Hwang's dog-cloning work had been independently verified. "Our main concern is simply he's the best when it comes to dog cloning," Mr. Hawthorne said, "and for that reason it behooves us to work with him."

Mr. Hawthorne had hoped to clone a dog — a dog named Missy — since the 1990s. He was the

chief executive of another company, Genetic Savings & Clone, which did extensive research on cloning dogs but concentrated on the commercial potential of cloning customers' cats, something it offered to do for $50,000 apiece.

But he said Genetic Savings shut down in 2006 after giving "some pricey refunds" to customers who had paid to have their cats cloned.

"The technology was not refined," Mr. Hawthorne said, "and rather than keep an operation that was burning through several million a year, keep that going, we decided, shut that down, focus on technology and launch a new company when the time seemed right."

His new company, BioArts, began work last fall to clone Missy, he said, who was three-quarters border collie and one-quarter husky.

Missy died in 2002 at age 15. But Mr. Hawthorne had taken genetic samples from Missy in 1997, and had more taken after she died.

In December, he said, a clone was born, Mira. Two other clones of Missy, Chin-Gu and Sarang, were born in February, he said. Tests by the Veterinary Genetics Laboratory at the University of California, Davis, indicated that the three dogs were clones, not just relatives.

As for the auctions, Mr. Hawthorne said the bidding would start at $100,000. He said that was a starting price, not a minimum, and could drop.

He said that the opening and closing times for the auctions would be staggered, to reach potential customers in different time zones, and that the starting bids for the later auctions would be higher "to steer people to participate in the earlier auctions if they can, and avoid a phenomenon of everyone waiting to see how they go."

He said that BioArts would not spend the money "unless and until we deliver a cloned dog that they sign off on," and that the company would guarantee the resemblance between the customer's dog and the clone.

"We let that be subjective," Mr. Hawthorne said. "If the client doesn't feel it's extremely high, comparable to identical twins," the client can ask for his or her money back

He also said that BioArts would guarantee the cloned dog's health for a year, and that a veterinarian would examine and approve the dog before it was delivered to its new owners.

Mr. Hawthorne said cloning techniques had become more efficient over the years. He said 25

percent of embryo transfers now result in a puppy, and the survival rate of the puppies is greater than 80 percent. "That's within the range of what conventional dog breeders expect," he said.

But Dr. Robert Lanza, the chief scientific officer of Advanced Cell Technology, a biotech company with laboratories in Worcester, Mass., voiced concern when a reporter described Best Friends Again.

"If anyone thinks they're going to get Fluffy back," Dr. Lanza said, "they're gravely mistaken." A cloned dog is "likely to be a totally unknown dog, just as if you went to the pound and adopted another, unknown animal."

This article has been revised to reflect the following correction:

Correction: May 23, 2008
Because of an editing error, an article on Wednesday about the plan of a biotech company, BioArts, to use online auctions to sell chances to clone a dog misstated the percentage of embryo transfers that the company said resulted in a puppy. Lou Hawthorne, the chief executive of BioArts, said the success rate was 25 percent — not 1 percent to 4 percent.