

Cat Glows for Science

A glow-in-the-dark feline could contribute to genetic research benefitting humans and endangered animals.

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Mr. Green Genes was cloned with a specific glowing gene by the Audubon Nature Institute in New Orleans to further genetic research. Mr. Green Genes recently appeared on NBC's TODAY show to demonstrate his unique talent: The 6-month-old orange tabby glows in the dark. His phosphorescent skills aren't a twist of nature, though. The cat was cloned with a specific glowing gene by the Audubon Nature Institute in New Orleans to aid scientists in genetic research.

"Two of our scientists at the center worked together with the Louisiana State University Health Sciences Center," Betsy Dresser, senior vice president of the Audubon Nature Institute, told TODAY's Amy Robach. "They introduced a gene that would then produce a protein that glowed fluorescent green."

Scientists cloned the kitten with the glowing gene to further genetic research, Dresser said. The hope is that scientists will eventually be able to insert good genes into humans while removing ones that cause disease. For example, the research may lead to new ways to treat diabetes in humans. "In a diabetic human, there are genes that make insulin," Dresser said. "If we can insert genes that make diabetics produce their own insulin, then we hope to stop diabetes."

The researchers cloned Mr. Green Genes because cats have a genetic makeup similar to that of humans, Dresser explained. "We wanted to know for sure that we could insert this gene into a cell and have it multiply," she said. "If nothing glows, we wouldn't know if the gene was really inserted. So, because it glows, we know we inserted the gene and were successful with that technique."

Dresser emphasized that the glowing does not hurt nor harm Mr. Green Genes in any way. The cat's fur masks the green hue when the kitten is placed under an ultraviolet light, with just his nose, eyes and ears glowing on the set of the TODAY show.