

**VISIONS: THE ART OF SCIENCE**

**Creating chimeras: Embryonic stem cells, incorporated<sup>†</sup>**

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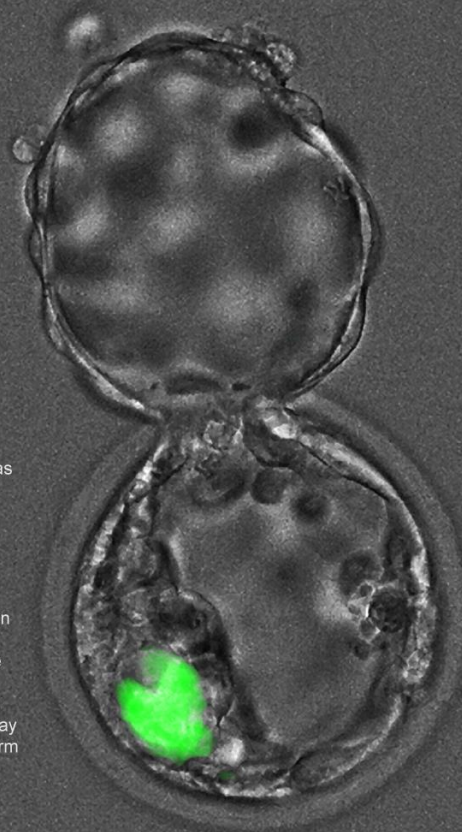
Gene modification within the murine genome has become a powerful and invaluable tool to investigate development. One example of the utility of such technology is providing a method by which researchers can follow cells throughout development via the introduced genetic modifications.

This image depicts a Day-4.5 hatching mouse embryo (C57BL/6J), with fluorescent cells visible in the inner cell mass. The blastocyst was microinjected at Day 3.5 with fluorescently tagged mouse embryonic stem cells. Twenty-four hours post-injection, these embryonic stem cells can be seen integrated into the host blastocyst. These cells may subsequently incorporate into the mammalian germ line, allowing transmission of the transgene to subsequent generations.

The authors wish to thank members of the Reproductive and Developmental Biology Laboratory of the National Institute of Environmental Health Sciences (NIEHS) for their insight and technical assistance.

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Figure 1

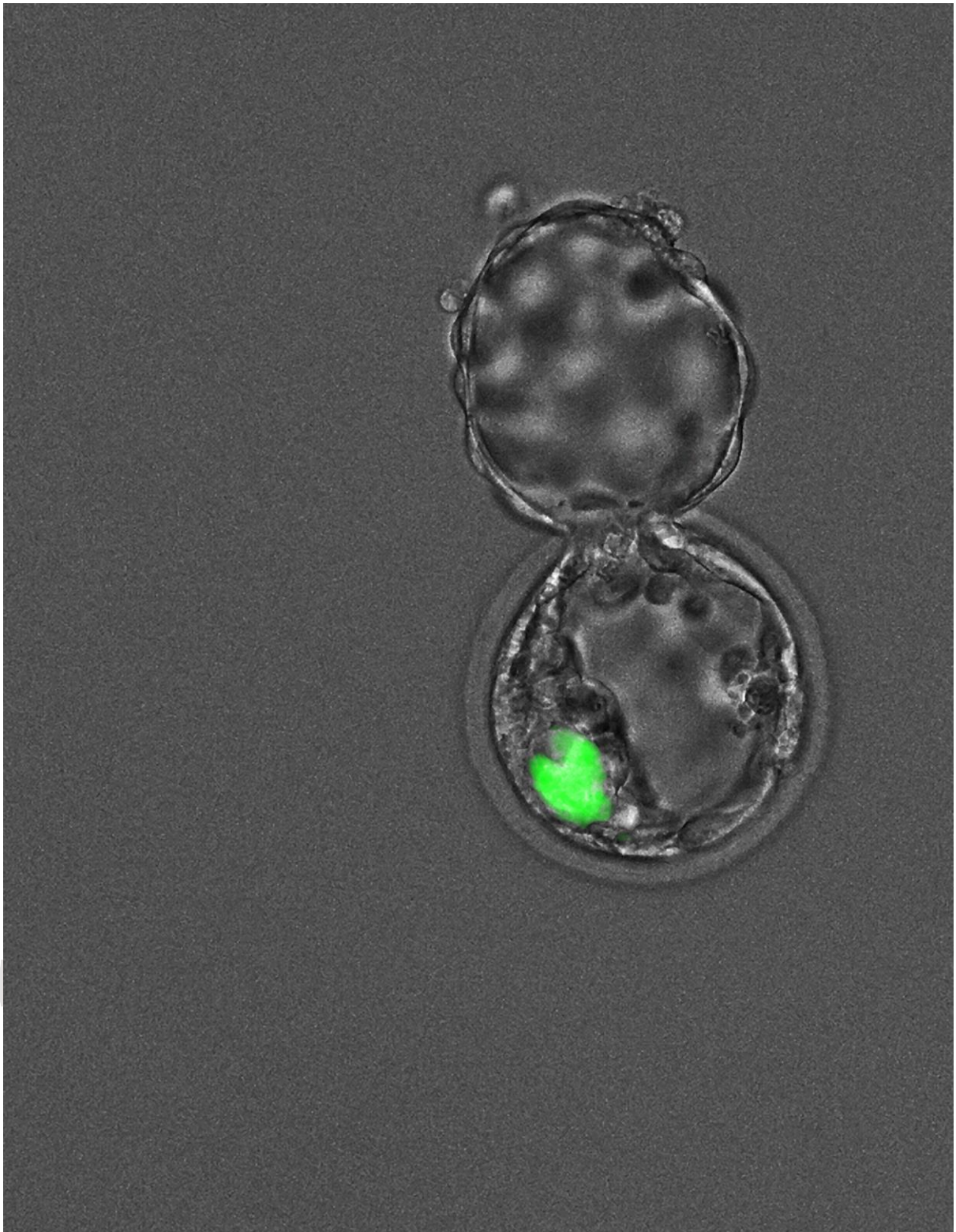


Figure 1