COVER
A metaphorical USB cable transmitting genetic information to "reprogram" cells symbolizes the Breakthrough of the Year for 2008. Advances in the burgeoning field of cellular reprogramming have brought scientists closer to the goal of using stem cells to better understand and someday treat disease. See the special section beginning on page 1766.

Image: Chris Bickel

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Breakthrough of the Year

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10.1126/science.1165787

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A Glucosinolate Metabolism Pathway in Living Plant Cells Mediates Broad-Spectrum Antifungal Defense
P. Bednarek et al.
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Cancerous immune cells create abnormal microenvironments in bone marrow that attract normal immune precursor cells, disrupting their function and exacerbating disease.

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A horse can peg another’s identity by whinny alone.

Ancient Battlefield Hints at Roman Persistence
2000-year-old site suggests Romans returned to area of massive defeat.

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Intelligence marks a man as a good match.

Visualizing gene expression dynamics.

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B. Vastag
New Ph.D. programs in translational medicine provide basic science training and clinical experience.

A Young Scientist at the Forefront of Cell Reprogramming
E. Pain
Curiosity, boldness, and single-mindedness won Austrian scientist Konrad Hochedlinger a place in cell reprogramming, Science’s Breakthrough of the Year for 2008. >> Breakthrough of the Year section p. 1766 and www.sciencemag.org/btoy2008/

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SCIENCE ONLINE FEATURE
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