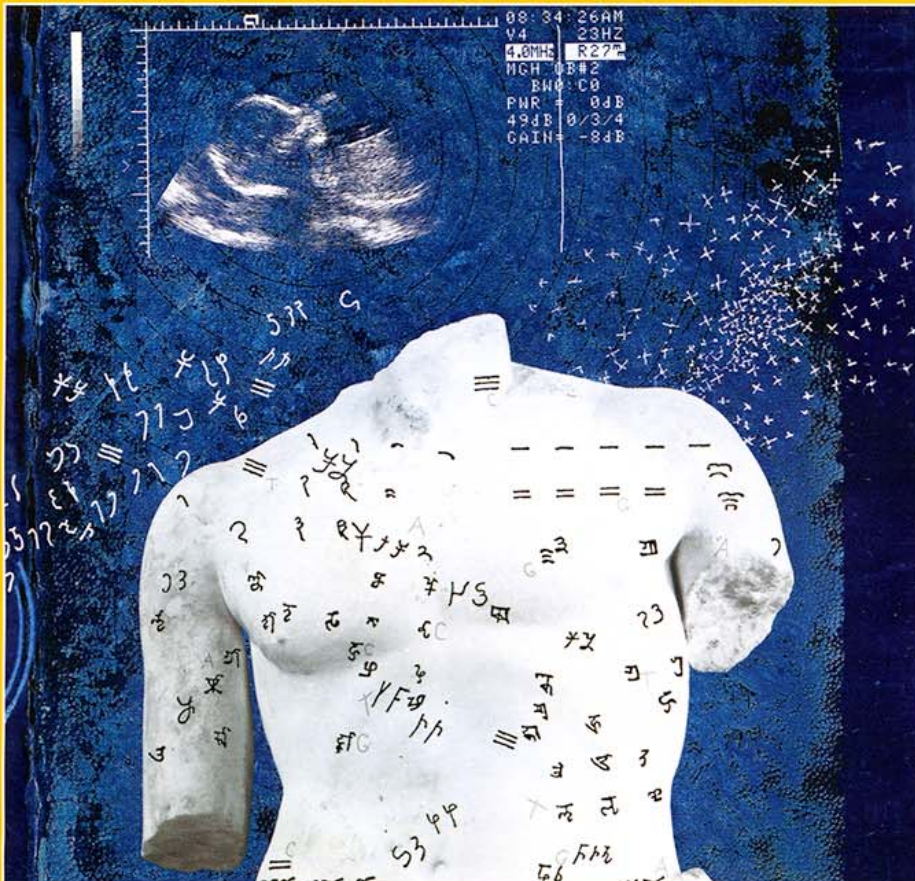
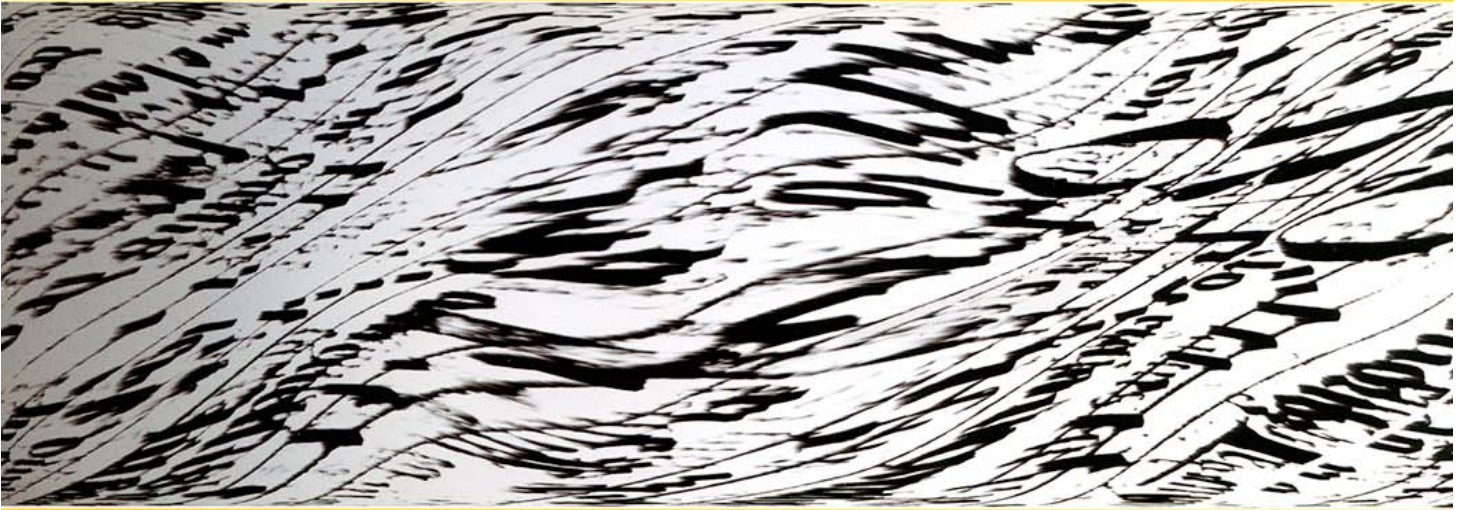


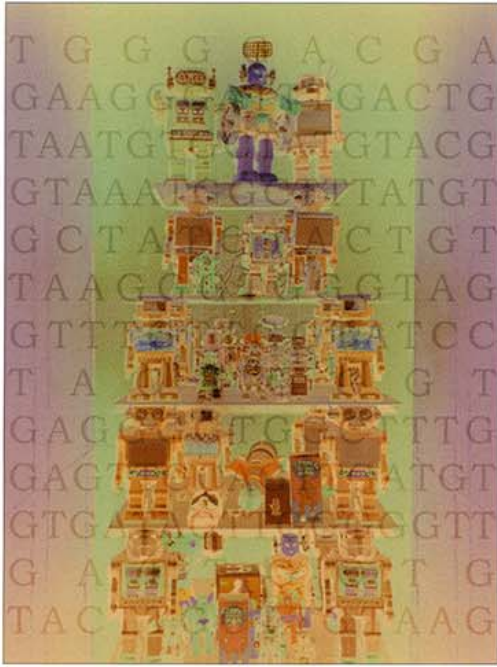
# FROM CODE TO COMMODITY: GENETICS AND VISUAL ART



Commemorating  
the 50th Anniversary  
of the Discovery  
of DNA Structure

February 13 to  
April 11, 2003





Kevin Clarke, *Eight Pages from the Book of Michael Berger, Page 5, 1999*

## FROM CODE TO COMMODITY: GENETICS AND VISUAL ART



Frank Moore, *A Train, 2001*

In scientific terms, the gene is no more than a biological structure, a DNA segment that, by specifying the composition of a protein, carries information that promotes the formation of living cells and tissues. However, its cultural meaning – reflected in popular culture and visual art – is independent of its biological definition. The signs and symbols of genetics have become icons expressing the social and ethical issues emerging from the genetic revolution.

Since the late 1980s many contemporary artists have incorporated genetic imagery into their work. Images of chromosomes, double helices and autoradiographs increasingly appear in paintings, sculpture, photography and film. Both scientists and artists use visualizations to explore the hidden meanings in the corporeal body, to probe the deeper world underlying surface manifestations and to comprehend the mysteries of life.

While science and art share a cultural context and draw referents from the same milieu, they are distinct ways of knowing the world. Scientific images reflect the fact that science, aspiring to objectivity, is evidenced based. In contrast, artists are absorbed by subjectivity, seeking a truth based on individual and private perceptions. The images created by artists, however subjective, are important in bridging the connection between the world of scientific discovery and its cultural interpretation

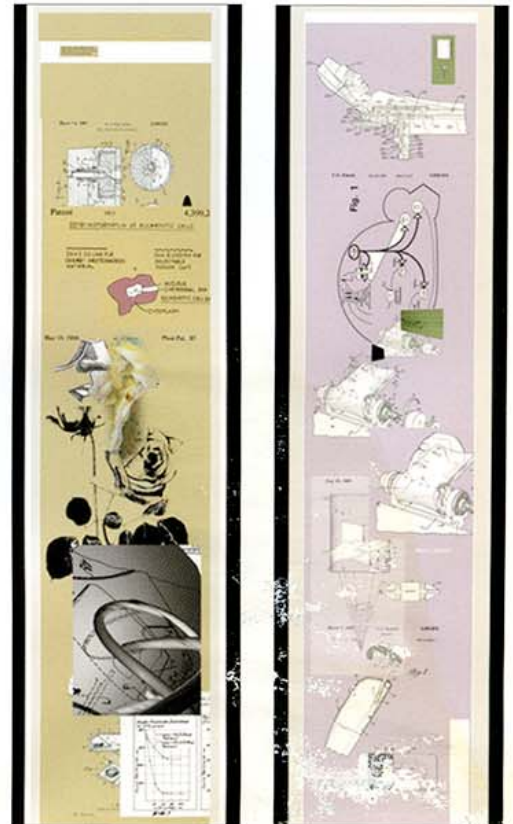


Suzanne Anker, *Cyber-chrome Chromosome (Hippopotamus), 1991*

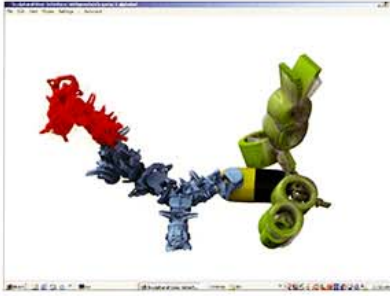
in society. These visualizations are a means to shape and analyze how culture assimilates the issues emerging from the burgeoning genetic revolution and a filter engaging our hopes and fears of a bio-engineered future.

*From Code to Commodity: Genetics and Visual Art*, an exhibition we have curated for the Academy's Gallery of Art and Science [Feb. 13 to April 11], addresses two themes that have inspired artists to adopt genetic iconography: DNA as a semiotic sign system and a bio-archive for the commercial patenting of gene sequences. Molecular biology has turned the body into a set of notations as scientists seek to understand the workings of the DNA molecule.

Many artists regard these graphic visions as an aspect of modernism's abstract legacy, a part of the iconography of the 21st century. Intrigued by the concept of the body as "code," they use the symbols of chromosomes and helices to reflect upon the complex structures of life, the inner domain of the person, and the truth underlying appearances.



Ellen K. Levy, *Chimera+Genetics: Imaging (detail), 2002*

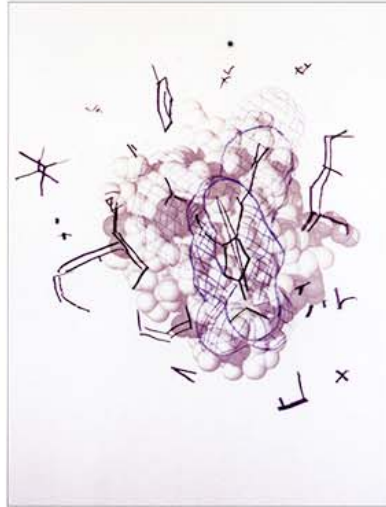


Michael Rees, *From Codescript to Commodity, in two alphabets with a ghost*, 2002

In Frank Gillette's *The Broken Code (for Luria)*, 2002, the artist converts a Gregorian chant into a meditation on mitosis. Olivia Parker's *Forms in Blue* (1998) directly addresses the body as code through letter forms imposed on a torso. So does Kevin Clarke. His digital color portrait *Eight Pages from the Book of Michael Berger, Page 5* (1999) uses the subject's own nucleotide sequence, garnered through his blood sample. The artist then overlays this genetic code on top of Mr. Berger's collection of robots, bringing together two variants of the sitter's identity. The emerging world of proteomics is another source of iconography, adopted by Steve Miller in *Eat Protein* (2002).

Michael Rees generates a linguistic sculpture using interface computer software. By typing a particular sentence into his program, he constructs a pictorial equivalent that can be turned into a rapid prototyped sculpture. Marcia Lyons manipulates her "code" in *Munging Body* (1999) to show ways in which bio-information may be used in the future to create living specimens in a variety of shapes. And Suzanne Anker's *Cyber-chrome Chromosome* (1991) addresses the concept of artificial chromosomes, which geneticists are now beginning to create in their labs.

Other artists are starting to explore an increasingly important aspect of contemporary genetics – its role in the world of commerce. Bryan Crockett's marble and resin sculpture employs the motif of a genetically-altered mouse as an instrument of science. In Frank Moore's *A Train* (2001), the commercial



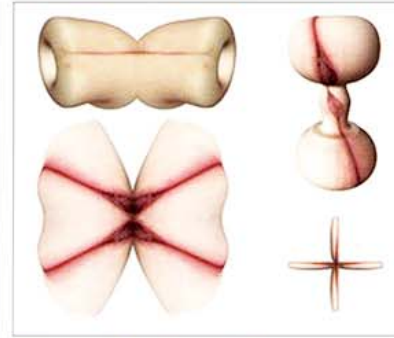
Steve Miller, *Eat Protein # 265*, 2002

icon of Mickey Mouse appears on a fingernail emerging from a double helix.

Ellen K. Levy addresses the issue of patenting life forms as an extension of the routine process of commodifying inventions. For the Storey sisters, high fashion meets high technology in a set of dresses conceived from images of fetal development and cellular script. Concerns about the way the body and its genetic materials have been mined and patented, bought and sold, banked and exchanged as commodities are expressed in Larry Miller's conceptual copyright certificates. And for Natalie Jeremijenko, the cost/benefit analysis of *in vitro* fertilization is addressed in *1/2 LIFE*.

The implications of gene patents – for privacy, the protection of patients and human subjects of research, and the exchange of information – are emerging as public concerns in the molecular age. This also is reflected in contemporary art.

The Academy exhibition is intended to raise several questions: Is bio-information just another commodity? Should the body be considered as a bio-archive? What



Marcia Lyons, *Munging Bodies*, 1999

are the implications for using the body as a source of coded information for personal privacy, identity and corporeal integrity?

An extended analysis, including numerous illustrations, can be found in our forthcoming book, *The Molecular Gaze: Art in the Age of Genetics* (New York: Cold Spring Harbor Laboratory Press, 2003).

-Dorothy Nelkin and Suzanne Anker

Dorothy Nelkin is university professor in the Department of Sociology and School of Law at New York University; Suzanne Anker is chair of the Art History Department at the School of Visual Arts in New York.



Helen and Kate Storey, *Design 26: Spinal Column Dress*, 1997

# ARTIST CHECKLIST

## SUZANNE ANKER

*Cyber-chrome Chromosome (Hippopotamus)*, 1991  
48" x 40" x 3"  
Steel and bronze wool  
Courtesy: The artist and Universal Concepts Unlimited, NYC

## KEVIN CLARKE

*Eight Pages from the Book of Michael Berger (Page 5)*, 1999  
40" x 30"  
Digital color print

*Portrait of Jacques Lowe*, 1992-2002  
40" x 40"  
Digital color print  
Courtesy: The artist

## BRYAN CROCKETT

*Pinkie*, 2001  
18" x 12.5" x 20.5"  
Marble and resin sculpture  
Courtesy: The artist and Lehmann Maupin Gallery, NYC

## FRANK GILLETTE

*The Broken Code (for Luria)*, 2002  
20" x 60"  
Chronogenic print on aluminum

*The Broken Code (for Luria) #2*, 2002  
20" x 60"  
Chronogenic print on aluminum  
Courtesy: The artist and Universal Concepts Unlimited, NYC

## NATALIE JEREMIENKO

*1/2 LIFE*  
8.5" x 11.5" each  
Stills from <http://www.org.com/HALFLIFE>  
Courtesy: The artist

## ELLEN K. LEVY

*Patterns + Behavior  
Patterns + Sociology*, 2002  
84" x 8" each  
Digital print

*Chimera+Genetics: Senses  
Chimera+Genetics: Imaging*, 2002  
84" x 8" each  
Digital print  
Courtesy: The artist

## MARCIA LYONS

*Munging Bodies*, 1999  
Digital prints, variable size  
Courtesy: The artist and Luxe Gallery, NYC

## LARRY MILLER

*Genomic License #9 (Mandere Adeps)*, 1999-2003  
18.5" x 14.5"  
Notarized document on masticated, laser-printed paper, ink  
Courtesy: The artist  
Collection: Anthony McCall

*Genetic Code Copyright of William de Ridder;  
Sale of Genetic Code Copyright of William de Ridder*, 1992-93  
27" x 17.5"  
Off-set print, metal foil, ink, hair  
Courtesy: The artist

## STEVE MILLER

*Eat Protein # 265, 2002*  
30" x 40"  
Silkscreen and graphite on museum board

*Eat Protein #230, 2002*  
30" x 40"  
Silkscreen and graphite on museum board  
Courtesy: The artist and Universal Concepts Unlimited, NYC

## FRANK MOORE

*A Train*, 2001  
21" x 30"  
Gouache, oil, and mixed media on paper  
Courtesy: The Estate of Frank Moore and Sperone Westwater, NYC

## OLIVIA PARKER

*Forms in Blue*, 1998  
33" x 33"  
Color photograph  
Courtesy: Robert Klein Gallery, Boston

## MICHAEL REES

*From Codescript to Commodity, in two alphabets with a ghost*, 2002  
18" x 9" x 7"  
Rapid prototype sculpture  
Courtesy: The artist and Universal Concepts Unlimited, NYC

## HELEN AND KATE STOREY

*Designs for Primitive Streak*, 1997  
Ink on Cardstock : 4" x 6"  
Courtesy: Helen Storey Foundation, London  
Photography: Justine@Rockit  
Model: Korinna@Models1



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Cover art, left to right, from top:  
Frank Gillette, *The Broken Code (for Luria)*, 2002;  
Olivia Parker, *Forms in Blue* (1998);  
Bryan Crockett, *Pinkie* (2001)

Design: Margaret Marcy Graphic Design