

Title

The G-Nome Project

Artist

Andrew Leicester

Location

Molecular Biology Building

Materials

ceramic figures and
porcelain tile mosaic

Date

1992

Ceramic Sculptors

David Dahlquist and
Donovan Palmquist



G-Nome

About the Project

"In modern society we expect instant understanding...like watching television where everything is laid out before us and problems are resolved by the end of the half-hour. My art is not instantly understandable, nor is it meant to be taken lightly. Good art tends to raise questions, and it is important for artists to focus attention on the debatable. Otherwise, you get 'safe' art which serves only the prevailing popular theory." ~Andrew Leicester, 1992

The G-Nome Project fully integrates art and architecture in the Molecular Biology Building. Since the artist, Andrew Leicester, was selected at the start of the project, he was able to work with the architectural firm Hansen Lind Meyer, Inc. to incorporate the art into the building's design. As a result, Iowa State University has gained a striking example of the successful merging of art and architecture, as well as a building rich in meaning and function.

When Andrew Leicester was commissioned by Iowa State University to create public art for the Molecular Biology Building, he began to research the kinds of activities that would take place there. He found information at conferences, by attending lectures, by reading books, and through conversations. He kept a sketchbook of ideas and drawings on the subject. It became clear to him that the most debated area of current investigation in the field of molecular biology is transgenic animal research. Both the academic community and the public are expressing their opinions. Philosophers, sociologists, animal scientists, and economists are among the many people who are discussing the potential legal and economic implications of genetic research. How research should be regulated and what ethics should govern decisions are all important issues.

Made possible by the Iowa Art in State Buildings Program.

About the Art

Leicester discovered that while genetic engineering holds the promise of finding ways to prevent diseases, it also holds the potential for exploitation or accident. Even before genetics was understood scientifically, people feared the combination of species. It was thought that dragons and monsters could be the result. The sculptures and mosaics of Andrew Leicester's *G-Nome Project* ask the viewer to prepare for the future. It is our responsibility to think seriously about the ethical issues surrounding the technological frontier of genetic research.

The *G-Nomes* are the twelve-foot tall terra-cotta sculptures that stand atop each corner of the Molecular Biology Building. In each hand the figures hold X and Y chromosome rods. The stylized black and white coats worn by the *G-Nomes* are symbolic references to the black suits worn by business people and the white lab coats worn by scientists.

Together, these two professions will lead the molecular biology program at Iowa State University. The black and white squares also bring to mind crossword puzzles and the challenge of solving games. In this building, molecular biologists are trying to solve the genetic code of life. The symbolic black and white checks are repeated throughout much of the art.



G-Nome

The *G-Nome* figures may also be interpreted as "sacred guardians" of the Molecular Biology Building. Running up each side of the building beneath the *G-Nomes* is a twining pattern of ceramic tiles that represents strands of replicating DNA. Wrapped around each corner of the building, these strands symbolically hold the secrets of life that are being discovered inside. They also symbolize the fact that DNA strands contain the secret of life within themselves.



G-Nome

Leicester's title, *The G-Nome Project*, is full of meaning. It is a play on two relevant words: gnome and genome. The word "gnome" can mean a dwarf-like creature that usually guards precious treasure, or it can mean a terse saying. "Genome" is a scientific term for a complete set of chromosomes. This title also makes reference to the United States government's multi-billion dollar undertaking to map and decipher all the human genes -- *The Genome Project*. For additional information on *The Genome Project*, visit the following web site: <http://www.ornl.gov/hgmis/>.

Above the north entrance hangs a single terra-cotta relief called *Warning-Biohazard*. Two arms reach out from a design of jumbled letters on black and white tiles. When deciphered, the letters read: "HUMAN BEINGS ARE NOT YET WISE ENOUGH TO DIRECT THE COURSE OF EVOLUTION." This is a quote from Robert Sinsheimer, a noted scientist in molecular biology. The two outstretched hands look like the black contamination gloves built into the sides of controlled experimental chambers. These gloves, however, reach out from the building into the environment as if to use us and our surroundings as their experimental chamber.



Warning-Biohazard

Over the south entrance are four reliefs titled *Hybrids*. Surrounding these cross-bred figures are tiles containing the letters A, G, C, and T. These represent the four basic building blocks of DNA. The relief centered over the entrance contains three images. The central one is the mythological sphinx. On either side of the sphinx is a box and a horn. These represent the two possible outcomes of molecular research: an open Pandora's box of evil or a cornucopia of good.



Hybrids (detail)



Gene Pool (detail)

Leicester designed three ceramic mosaics on the first floor of the building. The largest fills most of the atrium floor space and is titled *Gene Pool*. It is the image of a bacterium in the act of releasing strands of DNA. Scientifically speaking, a gene pool is a collection of genes in an interbreeding population. When this mosaic "pool" is viewed from above, it actually looks like a swimming pool, and plays on the double meaning.

The entrance vestibule contains the mosaic called *Conception is Capitalization*. This work presents a complete set of scattered human chromosomes as seen under a microscope. Encasing these chromosomes is a circle of dots that represent the petri dishes that are used for growing cells in culture.

The third mosaic floor is located in the auditorium lobby. This work, titled *Novel Agents*, derives its imagery from the phylogenetic tree and the fruit tree of the Garden of Eden. The phylogenetic tree maps out the evolutionary development of all animals and plants. The two symbols at the base of the tree represent a scorpion and a tarantula. Combined with the snake wrapped around the tree trunk, these poisonous creatures represent the possible dangers of tasting the fruit from this genetic tree. Above the tree flies a "super-genetic" creature, the dragon.

Shotgun Method is the title of the 24 terra-cotta medallions that hang from the walls of the atrium. On these medallions, Leicester put ancient mythical creatures and new creatures made up from their combined body parts. The top medallions are hybrid creatures from medieval mythology. The middle row shows the random distribution of these creatures' individual body parts.

The bottom row consists of new hybrids created from the parts found in the medallion directly above. These new creatures are accompanied by hypothetical genetic codes that Leicester invented by giving each body part a number.



Shotgun Method (detail)



Forbidden Fruit

At the base of the atrium staircase stands the sculpture *Forbidden Fruit*. This female figure recalls the pose and symbolism of ancient goddesses. Many of the goddess figures that have been excavated hold snakes in their outstretched arms. Snakes symbolize the powers of regeneration since they are "reborn" by shedding their skin. Instead of holding snakes in each hand, however, Leicester's sculpture holds strands of DNA that she has just split apart. In a sense, she is giving birth, since DNA holds the key of life and reproduces by splitting. This goddess is wearing a metallic contamination suit similar to those used in some scientific experiments. Her brain is exposed through the top of the helmet and from these roots the phylogenetic tree extends its branches.

posed through the top of the helmet and from these roots the phylogenetic tree extends its branches.

Additional Information on the Artist

Visit Andrew Leicester's web site at www.andrewleicester.com.

Armstrong, Diane. "Cobumora - Myth and Magic Merge at W.S.U." *Modern Veterinary Practice*, January 1985.

Cohen, Ronny H. "Reviews, New York, Art on the Beach." *Artforum*, October 1980.

Doss, Erika. "Andrew Leicester's *Cobumora*." *Landscape Architecture*, Jan/Feb 1986.

Doss, Erika. "Andrew Leicester's Mining Memorials." *Arts Magazine*, January 1987.

Morganthau, Tom. "Get Rid of that Eyesore." *Newsweek*, August 17, 1987.

Rockcastle, Garth. "Art as Architecture." *Progressive Architecture*, October 1984.

Andrew Leicester's public art commissions include:

Central Area Surface Restoration Art Project, 1997, four downtown intersections across the Central Artery/Tunnel Project to the Waterfront, Boston, MA

Platonic Figure, 2001, University of Minnesota Institute of Technology, Department of Mechanical Engineering, Saint Paul, MN

Minnesota Profiles, 1995, Courtyard and Garden, Minnesota History Center, St. Paul, MN

Zanja Madre, 1992, Watergarden and Arcade, 801 Figueroa St., Los Angeles, CA

Cincinnati Gateway, 1988, Entrance to Bicentennial Park, Cincinnati, OH

THE G-NOME PROJECT

Four Roof Figures: <i>G-Nomes</i>	U91.71a-h
South Entrance: <i>Hybrids</i>	U91.72abcd
North Entrance: <i>Warning-Biohazard</i>	U91.73
Atrium Medallions: <i>Shotgun Method</i>	U91.74a-x
Atrium Figure on Podium: <i>Forbidden Fruit</i>	U91.75
Atrium Floor Mosaic: <i>Gene Pool</i>	U91.76
Entrance Vestibule Mosaic: <i>Conception is Capitalization</i>	U91.77
Auditorium Lobby Mosaic: <i>Novel Agents</i>	U91.78

Additional information on *The G-Nome Project*, other Art on Campus information sheets, and Art on Campus maps are available at the University Museums office - 290 Scheman Building (2nd floor), 515/294-3342, or visit us online at www.museums.iastate.edu.

This information sheet is intended to be used in addition to viewing the Art on Campus Collection. At no time should this sheet be used as a substitute for experiencing the art in person.

What is Art on Campus?

- Iowa State University is home to one of the largest campus public art programs in the United States. Over 2000 works of public art, including 400 by significant national and international artists, are located across campus in buildings, courtyards, open spaces and offices. In 1982, the University Museums created the Art on Campus Program, the only program of its kind that codifies acquisition, education, and care and conservation of a public art collection.

- The traditional public art program began during the Depression in the 1930s when Iowa State College's President Hughes envisioned that, "The arts would enrich and provide substantial intellectual exploration into our college curricula."

- In 1978, Iowa passed the Iowa Art in State Buildings legislation, which requires .5 percent of new construction or remodeling funds be used to acquire public art. Since 1978, Iowa State has completed 42 Art in State Buildings projects, commissioned or acquired 247 works of public art and involved over 450 faculty, students and staff in the commissioning process.

Educational Programs

- Programs, receptions, dedications, university classes, Wednesday Walks, Moonlit Walks, and educational tours are presented on a regular basis to enhance visual literacy and aesthetic appreciation of this diverse collection. A complete schedule of University Museums programs can be viewed at www.museums.iastate.edu.

Tours of Art on Campus

- To arrange a tour of Art on Campus, please contact Allison Sheridan, Education Assistant for University Museums at 515/294-4442 or email her at aclone@iastate.edu. Please be prepared to provide the preferred date, time of day, name of touring group, number in group, location for the tour, and contact information.

- All educational tours during university museum office hours are free with two weeks advance notice. Educational tours outside open hours are \$75 per hour per museum educator. There is no charge for educational tours to university classes and community school groups outside open hours (this includes evenings and weekends). Cancellations need to be made at least 48 hours in advance. Funds are used to support museum programming.

Art on Campus Poetry

- Since the 1930's, University Museums has maintained a legacy of public art poetry. Significant Iowa poets are commissioned to accentuate the Art on Campus visual experience with words. Poems for this work of art and many more can be found at www.museums.iastate.edu or at the University Museums Office (290 Scheman Bldg.) during regular business hours.

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www.museums.iastate.edu

Membership helps make University Museums programming possible. Join today!

IOWA STATE UNIVERSITY

Art on Campus

UNIVERSITY MUSEUMS AFFILIATE

HYBRIDS

Aren't we all hybrids
of dirt and sky,
of grass and wind
and animals?
What pushes light
pushes us
from the darkness,
corn from a seed,
consciousness from a stone.
As above, so below
and below that too.
Heaven waits
wherever we are,
whatever we've become,
even when we are finished
becoming
us.

Michael Carey, 1992

Inspired by *Hybrids* by Andrew Leicester
located at the Molecular Biology Building

UNTITLED

It may be true, we may be half God
and half dying animal, still
we are not as important as it seems.
Nothing dies but us
and what needs us
to survive, only each
particular incarnation.

This porcelain water
stands for everything
seen through different eyes,
the myopia of science. It is
the gene pool of the open prairie,
and man's wild attempt to stir it.
Stand with reverence before its
strange reflection. Feel what
you are and own. Know
you will dissolve eventually
into this pool of stone.

Michael Carey, 1992
Farragut, Iowa

St. Barbara McClintock of the G-Nomes

Protecting the four corners of Molecular Biology,
terra-cotta creatures, known by artists
for centuries in other forms—gargoyles
from the Renaissance? disguised angels?
gods of Aruba cloaked in Mayan robes?
these G-nomes, regulator genes, controller genes,
color conductors, turn maize kernels red,
black, pale yellow, ride protein horses,
are heritage policepersons,

O, scientists,
remember unscientific brainlock that kept
Barbara McClintock's work from recognition
thirty years. She found maize ring chromosomes
that break, repair themselves,
alleles that jump like grasshoppers, kick
up their heels, pack their DNA, move
although it wasn't proven until
the electron microscope. She asked herself
"What would I do if I were a maize G-nome?"

Get into the kernel's starchy white heart.

Alone she maps the first controlling element,
develops a "slightly scandalous suggestion"
contrary to the accepted theory that genes
were strung together like a train on a track
Linear and fixed. Barbara finds
they jump the rails, uncouple
themselves, recouple, insert themselves
between other elements, turn other genes
off and on like signal lights.

Her powers of perception so refined she knows
each plant by name, records each day's differences.
Under a microscope, sees "internal parts
of the chromosomes." She "...feels as if
I were right down there and these were my friends."

Dismissed by authorities in her field,
a geneticist, calls her "just an old bag
who's been hanging around Cold Spring Harbor too long."
Lederberg called her "either crazy or a genius."
She asks him and his colleagues to leave
her lab, throws them out for their arrogance,
"She feels she has crossed a desert alone
and no one has followed."

Thomas Aquinas saw seraphim.
Robert Millikan saw electrons.
Albert Einstein saw mathematics,
envisioned travelling on a beam of light.
Barbara McClintock sees chromosomes,
sees their parts, skittish G-nomes,
"after synapses...they elongate, get fatter,
...after anaphase in the first division...
they just unravel...second division...
chromosomes elongate--hugely long arms coming down..."
constantly changing; "...they can do anything."

Saint Thomas, Robert, Albert, Barbara,
and four G-nomes above our heads,
protect these classrooms, greenhouse, laboratories,
empower all the microscopes, magnify the pure light
of reason, shower largess for unconventional
science; encourage the open mind.

The darkness opens a little from time to time.

Ann Struthers

**GAIA:
MOSAIC ON THE FLOOR
OF THE MICROBIOLOGY BUILDING AT IOWA STATE
UNIVERSITY
by William Irwin Thompson**

Look in a dog's eyes.
The world he sees is colorless.
Your eyes have three types of conical receptors.
His only have two, so he is left forever in moonlight.
You can't tell him how brilliant the air is
after a rain when the sun shines through it.
How do you explain a rainbow? I don't mean
reflection or light simply bent into the spectrum,
but the shimmer and glimmer on deep down things.

And a bird's eye has four.
What does she see, I wonder,
that we miss, and what about
the others who have more? What
interpenetrating worlds do they see
falling from a tangle of hair,
from the soft lowering of voice?
What universe, what consciousness
dwells in a cell, in the spirochete?
What mind binds the heavens?