CELL MATES

Curated By

JEANNE BRASILE
This catalogue accompanies the exhibition “Cell Mates” on view at the Walsh Gallery.

June 3 - July 18, 2013

All images contained in this catalogue are courtesy of the artists unless otherwise noted.

All measurements are provided in inches, height by width.

Catalogue © 2012 Seton Hall University

All rights reserved. No content from this book may be reproduced, stored or transmitted in any form including, but not limited to, means electronic, mechanical, photocopying or recording. Permission to reproduce these materials must be requested in writing to the Board of Trustees, Seton Hall University, South Orange, New Jersey.

Catalogue Design: Lisbeth Murray

Walsh Gallery at Seton Hall University
400 South Orange Avenue
South Orange, New Jersey 07079
Phone: 973.275.2033
Fax: 973.761.9550
www.shu.edu

Cell Mates

Gabe Benzur
Matt Drissell
Jordan Eagles
Sarah Fattori
Lorrie Fredette
Laura Gravenstine
Marianne Hamel & Nikki Johnson
Phil Hastings
Jeanne Heifetz
Caitlin McCormack
Vikki Michalios
Shuli Sadé
The Art of Science and the Science of Art

Although we may not realize it, art, much like science, is crucial in understanding ourselves and the environment in which we live. Both art and science have the capacity to challenge ideas and form shifts in the way we view the world. It wasn’t until relatively recently in the historical record that these two disciplines became distinct curricula. In Antiquity, through the Middle Ages and into the Renaissance, artists and scientists were considered the eminent observers of the natural world. Leonardo Da Vinci certainly recognized the associated characteristics of art and science. A new course of study, SciMat, acknowledges this inter-disciplinary relationship as well, and treats all human-related matters, including the arts, as part of science.

Undoubtedly artists and scientists share inherent traits and employ similar tactics. Both entail pursuits of knowledge predicated upon an innate sense of curiosity -- the standard currency of scientific and artistic queries. Both scientists and artists have a keen desire to understand the world, utilizing observation, experiments and data visualization, resulting in theoretical discourse. Science and art are also subject to constant flux due to advancements in culture and technology. This exhibition seeks to elucidate the strong relationship between art and science with the inclusion of artists who explore science through the lens of art, placing them in the role of pseudo scientists. Science has broad applications. By limiting the exhibition narrative to that of biological concerns, the multiplicity of ways in which artists employ scientific methodologies into their creative processes is more clearly articulated with a controlled subject.

Art is an alternative way of seeing. It engages both the body and the mind. Many times, it requires a shift in consciousness to create and interpret its themes and visualizations. Artist Gabe Benzur paints pathogens in psychedelic colors that emulate the stains used in microscopic slides. His oil paintings are presented in a medium format that scales the viewer proportionally to the size of viruses, bacteria and fungi that destroy their hosts. His Yersinia Pestis 1 is an interpretation of the bacterium that causes, among other illnesses, The Black and Bubonic Plagues. The minuscule cause of these devastating outbreaks is seductively depicted in lush, saturated color that belies their deadly capabilities.
Matt Drissell's *Classic White and Classic Yellow Cake with Chocolate Icing* and *Mint Chip* paintings are constituted from actual processed foods adhered to a wooden panel. The subject matter and methodology reflects his residence in Iowa, a highly industrialized agricultural state in which food products are farmed using genetically modified crops. Subsequent chemical enhancements in the processing phase further remove our food supply from the natural world. This complicated and politically charged supply chain is encapsulated in Drissell's highly textured, richly colored paintings that are saccharine in their renderings.

*LFV* by artist Jordan Eagles is rendered in blood, encapsulated in resin on Plexiglass. His process entails manipulation of the blood by various means which are the result of constant experimentation. Eagles often mixes copper, a metal essential for life, with blood to transform its pigmentation. He also burns or heats the blood to change its viscosity and appearance. These ongoing tests are part of his practice and he actively seeks new ways to work the medium. Eagles’ desire to transform and exploit the properties of blood is a metaphor for life, replete with transitions, regeneration and decomposition. On a divine level he sees the medium as sublime, with allusions to corporeal, spiritual and scientific concerns.

The impetus for Sarah Fattori's *Conception* was her bout with Lyme Disease which went undiagnosed for many years. The obsessively painted swirls and circles loosely represent the spirochete responsible for the illness. In the repetition of this form, Fattori seeks to master this minute but pervasive microorganism that causes devastating symptoms in its host. Her process, which entails the application of the paint through a syringe, further synthesizes the cause and effect of this disease.

*A Pattern of Connections* by Lorrie Fredette envelops visitors as they enter the gallery, implicating the viewer in a microscopic world of pustules and spirochetes derived from her fascination with germs, bacteria and other disease causing agents. Masses of cellular forms undulate from the ceiling, forming a loosely constructed archway over the entrance and reception desk before continuing down the wall for almost 36 feet.
Fredette uses source imagery from medical journals and news outlets, altering the imagery to form a seductive landscape that undermines the treacherous nature of the microorganisms.

Laura Gravenstine’s *Punctured Spheres* is the result of her collaborations with chemists. Utilizing the PAH oxidation technique, usually used to mitigate carcinogens in the environment, she makes prints using rotted organic berries on a Plexiglass substrate. The conflation of organic berries and scientific methods developed to reverse the effects of harmful industrial by-products makes a salient point about humanity’s conflict between the comforts afforded by petroleum by-products and our desire to live greener -- encapsulated in a mixed-media rendering that can be construed as two petri-dishes, co-existing universes or separate cellular bodies.

Doctor Marianne Hamel and Forensic Photographer Nikki Johnson collaborate to create photomicrographs, magnified microscopic images of human tissue. Photomicrographs are usually used by forensic scientists to confirm the cause of death following an autopsy. *Trichrome Stain of Heart* brings to mind a surreal topographic landscape of brightly colored peaks, valleys and swirls that express the inherent beauty of the human body.

Video artist Phil Hastings manipulates source imagery taken from his i-Phone, pushing it beyond the point of recognition. He likens this process to genetic modification, mutating the imagery far beyond the original input. Patiently working pixel by pixel, 8.1.12.12.23.1.12.12.19 originated from video footage of waves crashing on Lake Erie. The end result appears as a protozoon or similar microscopic organism.

Jeanne Heifetz works intuitively, hypothesizing that true scientific understanding begins with instinctive associations of which we may not be aware. Heifetz is interested in capturing fleeting forms such as the rapidly changing structures of sea foam, soap bubbles and larger forms such as galaxies. *Surface Tension 4* approximates these complex structures in her attempt to understand nature’s complex architecture as well as cycles of growth, transformation and decay.
Supersymmetry I results from Caitlin McCormack’s observation that the structure of bone is similar visually to that of crocheted cotton string. Starting with a partial skull of a cat, she filled in the jawline by crocheting with an off-white string to re-construct the missing parts. McCormack is interested in the processes of disintegration, taxonomy and the idea that all matter will, at some point, shift back toward the “nothingness” from which it was generated.

Vikki Michalios’ Window Rafting melds together art, horticulture and sustainable technologies. Her miniature floating gardens use hydroponic techniques to further her belief in ecologically sustainable systems of food production that are cost-effective and can be done on any scale, even in the home. She wishes people to have a relationship with their food supply by bringing small-scale, do-it-yourself agriculture into the personal realm.

Working with neuroscientists, Shuli Sadé approximates memory function in digital photographs on Duraclear. Her Memory Scrolls utilize transparent imagery rolled in a column of mesh where the removal of pixels emulates the spotty nature of memory. Viewers fill in the missing visual data with their own information, assimilating their own experience upon Sadé’s recall of urban imagery. The artist’s photographs are conflated with PKM-Zeta (the protein that is responsible for keeping memories in the brain) readings from scientists. The resulting imagery is both scientific and intuitive in its approach.

As the artists in “Cell Mates” demonstrate -- visualization, abstraction, imagination, invention and reinterpretation all contribute to artistic practice and these attributes also typify scientific praxis. Both disciplines have the capacity to challenge mindsets and change lives. The multiplicity of biological concerns presented in this exhibition indicate that science is not limited to the realm of the laboratory. Art is an alternative way for us to see and understand complex ideas, bringing about a shift in consciousness that might otherwise elude us.

-Jeanne Brasile
Yersinia Pestis 1
oil on linen
42” x 42”
2012
Classic White and Classic Yellow Cake with Chocolate Icing

sugar, enriched bleached flour (wheat flour, niacin, iron, thiamin mononitrate, riboflavin, folic acid), partially hydrogenated soybean oil, wheat starch, baking powder (baking soda, calcium phosphate, sodium aluminum phosphate), contains 2% or less of: propylene glycol, monoesters, dextrose, salt, cellulose, mono and diglycerides, corn starch, xanthum gum, artificial flavor, propylene glycol, esters of fatty acids, cellulose gum, sodium caseinate, nonfat milk, polysorbate 60, soy lecithin, sodium stearate, datem, red 40, yellow 5, TBHQ and citric acid, sugar, partially hydrogenated vegetable oil (soybean, sunflower and/or cottonseed oils), water, corn syrup, cocoa processed with alkali, corn starch, contains 2% or less of salt, distilled monoglycerides, cellulose gum, polysorbate 60, sodium stearoyl lactylate, sodium acid pyrophosphate, chocolate liquor, nonfat milk, potassium sorbate, polyurethane, on panel

31” x 24”

2013
JORDAN EAGLES

LFV
blood, preserved on plexiglass, UV resin
36” x 36”
2012
Conception (detail)
oil on canvas
42” x 48”
2009
Lorrie Fredette

A Pattern of Connections
beeswax, tree resin, muslin, brass, steel, wood, nylon line,
approximately 44” x 432” x 48”
suspended above the floor approximately 75”
2013
Punctured Spheres
PAH Oxidation Technique
organic berries, juice, & resin on acrylic
18" x 27"
2011
Trichrome Stain of Heart
Aluminized print
20” x 30”
2010
HD video
3 minute loop
2013
Surface Tension 4
quartzite, bronze, copper, zinc, nickel, iron, wax
12” x 24”
2012
Supersymmetry I
cat skull remnant, cotton string and glue
4” x 2 3/4” x 3 1/2”
2012
Window Rafting
mixed media installation
glass, water, nutrients, rocks, plants, wire,
air pump, rockwool, hydroton clay rock, LED lights
9' 11 1/2" x 42"x 6"
2013
Grid Signals

digital photograph, prints on Duraclear, wire mesh
12” – 14” x 60” ea.
2013
Cell Mates

Curated By

Lisbeth Murray
Cell Mates

Suzanne Anker
Jordan Eagles
Lorrie Fredette
Phil Hastings
Jeanne Heifetz
Taehee Kim
Hyungsun Shin
Amanda Thackray
Linda Tien
Joyce Yamada
Biologists are concerned with the study of living organisms, particularly their structure, function, growth, evolution, distribution, and organization. These scientific objectives are derived from a shared human longing for or fascination with verifiable data and about how living organisms function, self-regulate, and decompose. *Cell Mates* features artists who share this compulsion to investigate biological concerns and who visually translate their findings and data through creative means, obscuring the delineation between artistic and scientific practice. This intersection between science and art domains is not necessarily particular to our contemporary time frame. However, it was not until the early 1990s that the integration of biological sciences into the plastic arts gained international impetus and pushed artists to bypass the limits in media and methodology.

Through technological and scientific advances, we can see the cell has multifarious forms, as it is the basic structural, functional and biological unit of all known living organisms and can be considered the building block of life and transmitter of information. Simply defined, the term cell comes from the Latin word *cella*, meaning “small room.” A cell contains organic components that make a whole functioning unit. While the title *Cell Mates* partly refers to the aesthetic and thematic narrative of the exhibition, it also entails the equal division of the gallery space, an empty vessel, into two adjacent distinct group exhibitions. Given that the exhibitions took on this contextual interpretation as whole functioning units made from many necessary parts, curator Jeanne Brasile and I worked independently from each other to produce unique group exhibitions that focused on similar subject matter but pursued very different aesthetic and theoretical discourses.

*Cell Mates* attempted to challenge our pre-existing notions about the grotesque, morbidity, self-preservation and that which fundamentally makes us human. Some of these themes can be seen in artist Suzanne Anker’s work, through which she explores the intersection between the biomedical and social realms. Anker’s rapid prototype sculpture series, *Remote Sensing*, present a visual commentary on the novel and sometimes-controversial ways in which life can be altered through technological intervention. Rendered from plaster, resin and pigment, into fragile and colorful abstract constructions in Petri dishes, they imply aspects of biological sciences such as evolution, artificial life, and computer simulations.
Anker’s *Vanitas in a Petri Dish* series contains imagery of preserved biological specimens as well as material personal items that serve as a reminder of brevity and the ephemeral nature of life. The presence of decomposing fruits with synthetic plastics, as well as colored cauliflower and egg yolks could be a reflection on scientific quests for immortality. The artist brings into question the cultured cell, reproductive sciences such as surrogacy, and the ethical questions that come out of our laboratories as we pioneer genetic modification and gene patenting.

Artist Jordan Eagles began using animal blood as a medium in response to a philosophical debate about life after death and the connection between body and spirit. *ROZE 15* and *ROZE 16* were made by stretching loosely woven blood-saturated gauze, preserved on Plexiglass, and encasing it in resin. By implementing this technique, the grid of naturally occurring crystalline and sinewy textures are preserved between the gauze threads. Inspired by burial cloths and ancient wrapping rituals, Eagles chose to create this particular image to suggest rebirth and regeneration, allowing the medium to both signal natural decomposition and personify something that was once living.

*Proper Limits* by Lorrie Fredette was inspired by environmental and medical news stories about Lyme Disease that were collated from historical events and contemporary headlines. Her study of the structure of spirochetal bacteria, the somatic and psychological responses of the infected host and the disease’s natural resilience to antibiotics, is apparent in her process as she utilizes pigmented Strathmore paper to discharge color. Visually emphasizing the spirochetes and flagella that make up the genomic strains, Fredette also creates a compelling display of the aftermath of Lyme disease, suggesting the ways which undiagnosed and untreated Lyme disease manifests.

Phil Hastings presents 9.14.8.15.18.5.19.3.15, an art video from *The Morphology* series, a collection of invented organisms that are viscerally seductive and deliver a transformative experience for the viewer. Composed of what appears to be mutating polyps and viscous tissue, the organism swells and gradually changes color, inviting the viewer to contemplate decomposition, regeneration and cycles of growth. Accompanied by a soundtrack that was recorded from the waves undulating along the shoreline of Lake Erie, his slow motion animation alters the temporal and allows the viewer to disengage from normal time and get lost in deeper thought.
Each piece in *Surface Tension 16* by artist Jeanne Heifetz capture a fleeting arrangement of unstable forms such as clusters of foam structures found in recognizable patterns at every scale in our universe. Particularly fascinated by mathematics and the visual combination of randomness and order, Heifetz visually translates her study of formulas and data into small-scale compositions formed from minerals, metals and wax. As if under a microscope lens, she magnifies these intricate patterns to making meaning of the complex architectural patterns seen in nature.

*Flow* results from Taehee Kim’s merging of scientific technology with artistic and philosophical ideas. Created as a series of two digital prints of a lotus flower under the lens of a microscope, Kim seeks to not only show the flower’s organic nature at the microscopic level, but also its divine form wherein there is an internal flow unfolding inside the humble lotus flower. A multi-faceted symbol of Buddhist philosophy, the lotus blossom can represent fortune, purification, enlightenment, rising above human suffering, and rebirth. In a way, Kim’s scientific methodology of inquiry is also her way of delving into the depths of Buddhist philosophy, searching for spiritual meaning and a deeper understanding of the interconnectedness between the universe and the self.

Artist Hyungsub Shin executes his creative vision by patiently bending and manipulating black plastic zip ties, a material he considers to be mundane, into compelling visual representations of micro-organisms. Titled *Zip Mates*, it is composed of clusters of interconnected loops and intersecting lines, forming creature-like sculptures that occupy an entire wall of the gallery space. Shin deliberately interacts with the logistical challenges of the gallery by incorporating the exit doorway, fire extinguisher and motion sensors into his site-specific installation. Arranged in multiple trajectories, as if racing for the exit door, the zip tie creatures appear to be escaping from the gallery, echoing Darwinian ideas of survival instincts, group behavior and psychology, as well as the notion of the cell being a compilation of many structural components. As each zip tie form is made unique, the installation also speaks to natural biological processes such as replication and evolution.

The recurring theme of ephemera in Amanda Thackray’s artistic practice is apparent in her *Monoprint Series*. Her intricate and laborious process requires her to experiment and observe the natural process of degradation that inevitably occurs when organic materials are exposed to the elements over time.
Using fruit as her medium, Thackray arranges the fruit on top of a fibrous paper surface so that as it decays and loses its moisture, the natural dyes stain the paper in vibrant hues. Thackray highlights how ephemera encountered in everyday life is oftentimes overlooked. Her prints give utilitarian ephemeral objects a sense of permanence, leaving a physical trace of something that is now irreversibly decomposed.

*Lacrimo Specimen Samples* by Linda Tien are made from copper, wool and wax, encased in glass and aluminum containers. Suspended in transparent vessels for close observation, Tien invites viewers to indulge their curiosity and reevaluate their pre-existing perceptions of the grotesque and the beautiful. The amoebic-shaped sculptures have fibrous texture and flagella sprouting from metallic and waxy surfaces that resemble a clinical sample of dried rheum, the thin mucus naturally discharged from the eyes, nose and mouth. By situating her biomedical sculptures on miniature pedestals, Tien gives them a new contextual framework for aesthetic consideration.

*Ninth Circle* is the result of artist Joyce Yamada’s fascination with the penultimate level of Dante’s Ninth Circle of Hell, which is reserved for traitors and betrayers of trust. Yamada uses a shorthand notation for cells in her work, consisting of spots, rectangles or squares that operate as poetic tropes for urban spaces as well as for cellular structures. Yamada implemented this imagery to imply both the beautiful organization of normal organ structure and the unsightly appearance of unregulated cell growth. She uses grids metaphorically to denote order that is specifically human-superimposed. The variation of warm and cold tones and layers of circular and linear striations contribute to the feeling that one is being enveloped by a dark, imposing nebulous landscape.

Each artist performed a key role in contributing to a larger conversation about the interplay between science and art. From consumer information and technology to environmentalism and medicine, these scientific concerns have come to the fore of artistic practice, providing thrust for museum and art gallery arenas to discuss new theoretical and ethical questions that may not be critiqued in a laboratory. *Cell Mates* acts as an incubator for this dialogue, demonstrating how artists successfully take on a hybrid role of a quasi-scientist as they integrate scientific methodologies and inspiration into their art practice.

-Lisbeth Murray
Vanitas (in a Petri Dish) #1
digital print
20” x 20”
2013

Remote Sensing #6
rapid prototype sculpture, plaster, resin, pigment
4” x 4” x 2”
2013
JORDAN EAGLES

ROZE 16

blood, gauze, preserved on plexiglass, UV resin
44” x 36”
2012
Proper Limits
discharged Strathmore paper, pins
20” x 25 ¼” ea.
2010
Jeanne Heifetz

Surface Tension 16 (detail)
slate, quartzite, graphite, zinc, nickel, stainless steel, iron, wax
4” x 36”
2012
Flow

electron microscope, digital printing on photo paper
15” x 15” ea.
2013
Zip Mates
black plastic zip ties, nails
site-specific installation
9’ 11 1/2” x 18’ 11”
2013
Amanda Thackray

Monoprint Series

digital prints made from strategically bled fruit stains
edition of 6
30” x 22” ea.
2012
Lacrimo Specimen Samples

copper, wool, wax, glass, aluminum

6” x 6” x 17”

2013
Joyce Yamada

Ninth Circle
acrylic and oil on canvas
40” x 60”
2011
The Walsh Gallery extends its gratitude to the following supporters who have made this exhibition possible:

Xue-Ming Bao
Jeff Barry
Dr. John Buschman
Frank Capra
Jody Lee Drafta
Carly Gamble
Justin Hall
Melanie O’Donnell
Rob Rementeria
Michael Villanueva