

Science! true daughter of Old Time thou art! Who alterest all things with thy peering eyes. Edgar Allen Poe, "Sonnet - To Science" (1829)

Guest-curated by

Maureen McQuillan

Karen Arm David Arnold Dove Bradshaw Joseph Bergel Leona Christie Amanda Church Daniella Dooling Robin Dru Germany Gregory Green Theresa Hackett Kara Hammond Michael Henderson Eve Andrée Laramée Nancy Lorenz Sharon Louden David Mann John Morris Ray Rapp Kelly Richardson Christopher Sauter Karen Shaw Carol Szymanski Catherine Wagner

Phenotype - In biology, a type distinguished by visible characteristics rather than by hereditary or genetic traits.

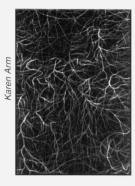
(Webster's New Twentieth Century Dictionary, 2nd Edition, 1970.)

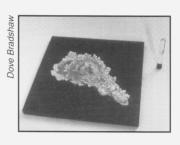
Thinking, no doubt, plays an enormous role in every scientific enterprise, but it is the role of a means to an end; the end is determined by a decision about what is worthwhile knowing, and this decision cannot be scientific. Moreover, the end is cognition or knowledge, which having been obtained, clearly belongs to the world of appearances...

(Hannah Arendt, The Life of the Mind, p. 54.)

"It's not what something is, but how it 'appears' is the research problem."

(Swiss biologist and zoologist Adolph Portmann)

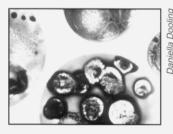


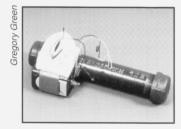


Fieldwork

Having granted *appearance* scientific status, *Phenotypology* follows a natural desire to endow abstract knowledge systems with a tangible body. Hannah Arendt considered "the urge toward self-display" characteristic of all living creatures.\(^1\) Common dictionary definitions for science, such as "the state or fact of knowing" or "the possession of knowledge," presume an objectivity that both overlooks the organic process of scientific inquiry and feigns independence from the real. Hardly an ether of pure theory, a *worldly* science behaves like a mutating organism that adapts as human knowledge expands and generates forms to reflect shifting economic, political and social conditions

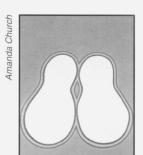
As the millennium nears, more scientists regard science as "a culture under construction," and tark continent of growth and change," that incorporates doubt as information is recognized as unstable. New technological models for representation, such as the loop, the web and the virus, enable fantasy and hallucination to become imminent reality. That these models infiltrate aesthetic practices provides further proof of the cross pollination between art and science. In effect resembling the experience of creating art, the laboratory is a "producer of inscriptions" or marks that require interpretation in order to construct meaning. Both art and science maintain an uneasy relationship with power, where the struggle over values (such as purity and objectivity versus hybridity and subjectivity) remains constant.

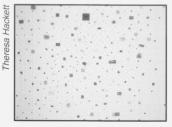


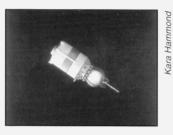


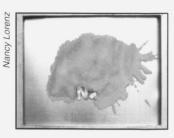
The traditional idea of a scientific method based on predictability and repeatability has given way to increasingly complex models of representation, such as fractal geometry and fluid dynamics. The overwhelming popularity of chaos theory gave rise to software packages that enabled practitioners of highly theoretical branches of science, like mathematics, to make their ideas visible by translating abstract equations into concrete three-dimensional graphic images. Chaos-guru James Gleick remarked that "chaos applies to the universe we see and touch, to objects at human scale. Everyday experiences and real pictures of the world have become legitimate targets for inquiry."

Phenotypology focuses the artist's metaphorical binoculars back onto science, thus reversing cause and effect, as well as the usual primacy of inside over outside. Rather than analyze science's meaning, grand purpose, or impetuses, Phenotypology's participants (both artists and viewers) examine science's exteriority, in terms of appearance and behavior during this period of growth and transformation. When science submits to the scope of our gaze (instead of the other way around), artistic production resembles the fieldwork of botanists and zoologists who unearth heretofore unknown specimens. Like scientists (who by virtue of their own humanity cannot help being self-interested), the artists often bend and shape gathered information into novel configurations according to their own particular interests and purposes.









Works by Amanda Church, Joseph Bergel, Theresa Hackett and Catherine Wagner examine science's categorizing strategies. Church creates uncanny iconic forms out of the overlooked and the insignificant. These oscillating, amoebae-like shapes invite viewer identification, vet thwart the process of naming. In his video, Bergel uses the familiar cliché of "comparing apples to oranges" to point to the reductive nature of classification systems. "The Mechanics of Water," Hackett's installation, consists of scores of drawings made with unconventional materials such as nail polish, glitter and plastic buttons. Pinned to the wall like specimens on display, this assortment of images resembles both the visual complexity of a wave breaking along a shore and its material fluidity. Wagner's black and white silver gelatin photographs provide passage into the inner workings of some of the most prestigious laboratories: the focus of her lens on the laboratory's mundane equipment -- a pipette, specimens in an open refrigerator, a set of test tubes -- points to how, despite relentless quantification, there is much in life that escapes measure.



Javid Mar



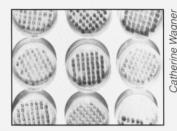
By contrast, the works of Karen Arm, Nancy Lorenz, David Mann and John Morris inquire into patterns and systems of growth, in particular, branching effects typical of trees, tiny veins and blood vessels. Wispy thin lines that split and trace their way across the surface's of Arm's obsessively detailed drawings and paintings, eventually accumulate into mesmerizing clouds of complex marks. Employing the "Periodic Table of Elements" as her starting point, Lorenz arranges each element's symbol into irregularly repeating patterns that recall fractal geometry. When she incorporates the element pictured, the material's overt sensuality subverts the formula's chain of representation. Mann's abstract paintings amass each stroke's physical form as a fluid, sensuous, dense and weighty gesture. Folding fields and interwoven ribbons of paint suggest the body's innermost structures, such as the circulatory system's blood, musculature and cell formations. With the precision of a microbiologist documenting a new find, Morris creates delicate, lacy pencil drawings, whose feathery, mutating cell-like forms germinate in his imagination. Titles that refer to computer companies and venture capitalists complicate the visual pleasure evoked by their sensitivity and detail.

Dove Bradshaw and Eve Andrée Laramée incorporate laboratory hardware into their work to different ends. Involved in an ongoing investigation of indeterminacy, Bradshaw sets up experimental situations based on unpredictable outcomes. Her work is reactive to the physical and chemical changes of its environment, thereby never remaining static but continuously transforming and remaking itself. Laramée's installations evoke the seductive and poetic out of the laboratory's dry paraphernalia, combining beakers and copper tubing with organic matter such as "burned leaves", "flowers", "dust" and "sweat" resulting in a combinative visual poetry.



Kelly Richards







Leona Christie

Works by Gregory Green, Kara Hammond, Carol Szymanski and Karen Shaw examine science's utopic promises. An anarchist with a utopian vision, Green's incendiary devices differentiate power from violence, and thus seek to blow open otherwise static social and political systems. As loving tributes to once glorious and celebrated spacecraft (now relegated to circling the earth aimlessly as "space junk"), Hammond's paintings subtly critique the linear notion of progress and scientific rhetoric's inherent optimism. Szymanski and Shaw, on the other hand, are interested in language-based systems of representation. Szymanski has coined the word "phonomorphic" to describe her creation of a "utopian alphabet" which visually and aurally unites the way language is represented. In this way, she transforms written text into her own particular form of music, meant for the eye as well as the ear. Shaw likens nonreferentiality to an entomologist's unidentified specimen. In her work, words and numbers unite in a simple system: in this way the artist is able to create sonnets from register receipts and biography from numerical equations.

Christopher Sauter and Robin Dru Germany separately examine how science constructs personality from a mix of biology and psychology. By adhering the encultured to the genetic, Sauter's work uses food to depict scientific or biological models, such as a cake layering the geological time line or bread baked to show delicate gradients of skin color. While appearing to be a seamless recording of worldly events, Germany's photographs are elaborate studio set-ups intended as psychological portraits of her subjects; in this way, she explore the way gender and identity are systematically constructed, despite the laboratory's apparent objectivity.

Fantasy infiltrates Leona Christie, Daniella Dooling and Ray Rapp's scientific studies. Reminiscent of 19th century lithographs, Christie's tightly rendered drawings of a futuristic world, in which nubile females toil effortlessly at mysterious labors (tuning cranks, paddle wheels and other industrial age mechanisms), depict the complexity of differentiating past and future, abstraction and figuration, and memory and fantasy. Using personal memories as her starting material, Dooling, a fearless scientist on a psychotropic journey towards great discovery, generates fantastical objects as souvenirs of her exploration into the way reality is constructed. Rapp's hybrid objects merge video/sculpture, abstraction/figuration, and sensual/technological components. A monitor, which displays a continuous loop of deteriorating and recreating images, rests on the soft petal of an enticing pillowed flower.

Reminiscent of Mary Shelley's *Frankenstein* and prescient of a biotechnological future, **David Arnold** electrifies animal parts to create hybrid life forms (part flesh/part machine), if only for a fleeting moment. **Sharon Louden** uses antennae wire to construct complex spatial configurations that are strangely animate and evocative of growing, transforming organisms. **Kelly Richardson** deconstructs her practice, in terms of originality, reproduction and representation, with scientific precision. Photographs of her "paintings" (which are made from holographic material and plastic webbing) generate new abstract images that form the basis for her "Failed Photographs," acrylic paintings and foam sculpture that resemble models of molecular structures. **Mike Henderson** deliberates between time as a scientific construct (an atomic clock) or a psychological one (as with dreams and memory). By layering his voice over repeated video loops of familiar visual iconography (a smiling Marilyn, NASA footage, a magnifying glass), the artist displaces time.

-Maureen McQuillan





Robin Dru Germar