

INTIMATE SCIENCE

Jan. 21 - March 4, 2012

Guest curated by Andrea Grover

Artists: BCL, Center for PostNatural History, Markus Kayser, Allison Kudla, Machine Project, Philip Ross

Jan. 20, Fri.

12-2pm: Lectures by A. Kudla + P. Ross. Lunch provided.

@ Margaret Morrison Hall #203, CMU. Co-presented by the CMU Schools of Art + Architecture, with support from the University Lecture Series.

5pm: Exhibition Tour with Curator + Artists. Meet on 1st floor. Sponsored by the CMU Human-Computer Interaction Institute.

6-8pm: Animal, Vegetable, Mineral Reception

With support from the Western Pennsylvania Mushroom Club.

+ New Art/Science Affinities Book Launch

with Authors + Artists. Co-presented by the STUDIO for Creative Inquiry.

Jan. 21, Sat.

12-6pm: Mind Reading for the Left and Right Brain Workshop with Machine Project. Details + registration: www.cmu.edu/millergallery

March 2, Fri.

6pm: Grand Opening of the Center for PostNatural History
@ 4913 Penn Ave., Garfield

10
YEARS

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FOUNDER: REGINA GOUGER MILLER

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The most recent manifestation of artists working at the intersection of art, science and technology demonstrates a distinctly autodidactic, heuristic approach to understanding the physical and natural world. Intimate Science features artists who are engaged in non-disciplinary inquiry; they aren't allied to the customs of any single field, and therefore have license to reach beyond conventions. This kind of practice hinges on up-close observation, experiential learning, and inventing new ways for the public to participate in the process. And through their engagement with "intimate science," a more knowledgeable public might well be able to influence what research is supported and adopted by the larger culture, and the walls of science can become more transparent.

For four months in the fall of 2010, I worked at a cozy desk in the STUDIO for Creative Inquiry at Carnegie Mellon as a research fellow hosted jointly by the Miller Gallery and the STUDIO. On a daily basis, students, faculty and visiting artists would stop by my front row seat at this frenetic concourse of technoscience dispatches.

While my initial line of inquiry was artists embedded in scientific or industrial environments in the 1960s, I began to uncover a new narrative — a tactile shift in discourse and practice between that moment and this one. While artists two generations ago were dependent on access to technicians, labs, computer time or manufacturers to realize works of scientific or technological complexity, those I was presently meeting had far greater agency to conduct this kind of work themselves. Even ambitious endeavors such as independent biological experiments, materials research and micromanufacturing can be conducted by today's working artist — and not at a naive or removed distance.

Roger Malina, physicist, astronomer and executive editor of *Leonardo*, a leading journal for readers interested in the application of contemporary science and technology to the arts, describes this direction as "intimate science." He writes:

"In an interesting new development in the art world, a generation of artists [is] now collecting data about their world using technological instruments but for cultural purposes. Shared tool-using leads to overlapping epistemologies and ontologies. These artists both make powerful art and help make science intimate, sensual, intuitive."

And unlike the rare "Leonardo" polymath of the Renaissance, contemporary artists who operate across disciplines employ the expertise of the network: the network, not the individual, is encyclopedic. The Internet has provided unprecedented access to shared knowledge assets, materials, fabrication processes, microfunding, and audiences. This exhibit examines how networked communication and open source culture have contributed to this shift from artists aiding science to *doing* science, and the impact this imparts on the way scientific knowledge is acquired, utilized and disseminated.

Andrea Grover was the 2010 Andy Warhol Foundation Curatorial Research Fellow at Carnegie Mellon's Miller Gallery and STUDIO for Creative Inquiry. A densely illustrated publication, *New Art/Science Affinities* (2011), accompanies the exhibition. Co-authored by Grover, Régine Debatty, Claire Evans and Pablo Garcia, and designed by Thumb, the book features more than 60 international artists and collaboratives.

INTIMATE SCIENCE TOUR

April 20 - June 2, 2012

Southern Exposure, San Francisco, CA

Nov. 3, 2012 - March 10, 2013

Real Art Ways, Hartford, CT

Additional venues to be announced, www.cmu.edu/millergallery



General operating support for the Miller Gallery is provided by Carnegie Mellon University. The exhibitions and programs are supported in part by a grant from the Pennsylvania Council on the Arts, a state agency funded by the Commonwealth of Pennsylvania, as well as the CMU College of Fine Arts and the School of Art.

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BCL (Tokyo)

In *Common Flowers/Flower Commons* (2009), BCL (Georg Tremmel + Shiho Fukuhara) bio-hacks Suntory's genetically-modified "Moondust™" cut flowers — carnations bio-engineered to have a blueish purple petal color — back into living plants with the intention of creating an "open source" population of these flowers.

Center for PostNatural History (Pittsburgh) is a project spearheaded in 2008 by Rich Pell with the objective to advance "knowledge relating to the complex interplay between culture, nature, and biotechnology." It is a singular natural history museum that is concerned with "PostNatural" varieties of life normally excluded from scientific taxonomy, i.e., transgenic organisms that have been altered by humankind via selective breeding, genetic engineering, or other methods of biological tampering.

Markus Kayser (London) takes notions of sustainable micromanufacturing to the extreme through projects like his *Solar Sinter* (2011), which combines a custom-made 3D printer with solar power to transform sand, on site in the Sahara, into glass forms, and *Sun Cutter* (2010), a low tech 'laser cutter' that makes objects by focusing sunlight into a beam powerful enough to cut through plywood.

Allison Kudla (Seattle) combines computer fabrication technologies and plant tissue culturing to make living installations. In *Capacity for (urban eden, human error)* (2009) she uses a custom-built computer controlled four-axis positioning table to "print" seeds and algae into a delicate architectural pattern, which she describes as biological material in collaboration with an engineering mechanism.



Machine Project (Los Angeles) is a "not-for-profit arts organization and community event space dedicated to making specialized knowledge and technology accessible to artists and the general public." Machine describes its terrain as encompassing "art, technology, natural history, science, music, literature, and food," and more. Machine's style of presenting promotes hands-on engagement and engineers atypical collisions between different branches of knowledge.

Philip Ross (San Francisco) works in the realm of "biotechniques." He makes sculptural and architectural works from plants and fungi, and videos about micro-organisms. His "mycotecture" series is an experiment using reishi mushrooms as a sustainable construction material. He is also the facilitator of DIY biology events via CRITTER — a salon he founded for the natural sciences.

1 R. Malina, "Intimate Science and Hard Humanities," *Leonardo* Vol. 42, No. 3, page 184, 2009.

RELATED PUBLICATION

NEW ART/SCIENCE AFFINITIES

Published by: Miller Gallery at Carnegie Mellon University + STUDIO for Creative Inquiry

Contributors: Andrea Grover, Régine Debatty, Claire Evans,

Pablo Garcia, Thumb

bit.ly/NASAbook

Images: *Capacity for (urban eden, human error)*, A. Kudla, photo by M. Fras, 2011; From the collection of the Smithsonian: *Mus musculus domesticus*, photo by Center for PostNatural History, 2011; *Pure Culture: Ganoderma lucidum fungus*, P. Ross, 2000; *Solar Sinter*, M. Kayser, 2011

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Admission: Free + open to the public
Hours: Tues.-Sun., 12-6pm. Check our calendar for exhibition dates.
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MILLER 10 YEARS
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