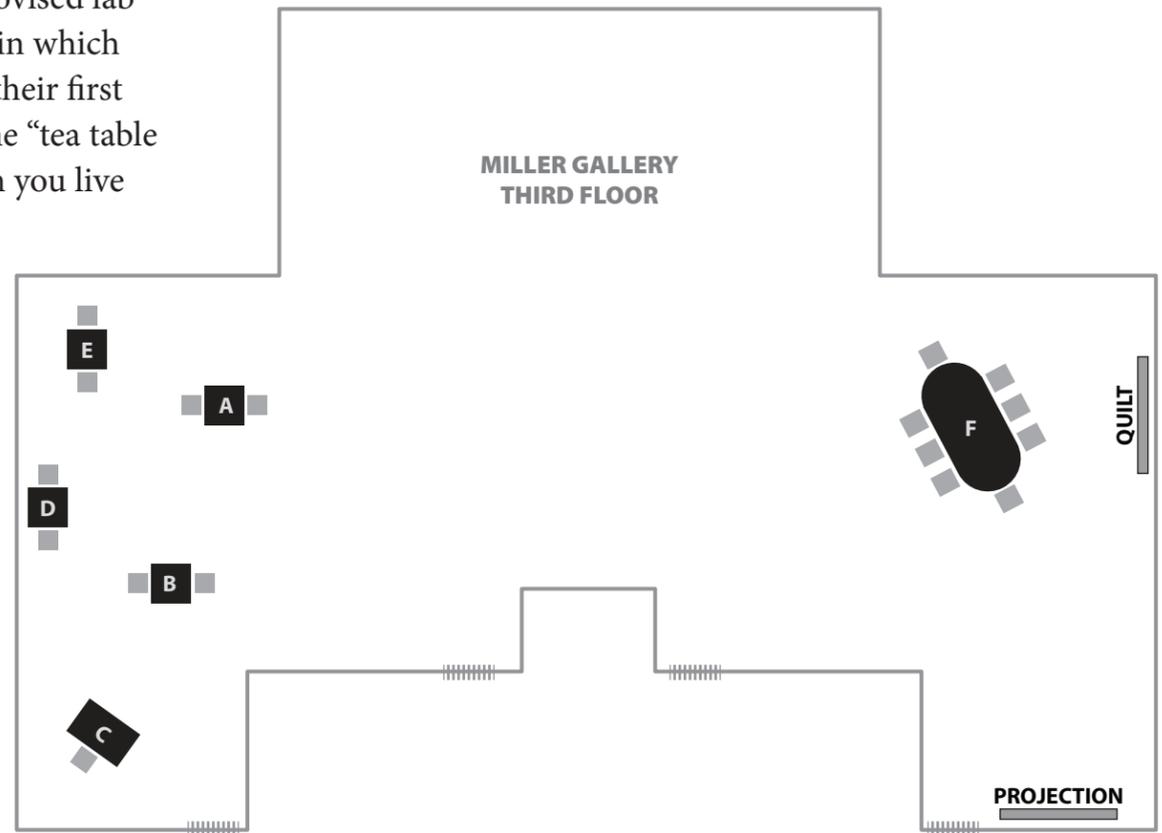


Welcome to subRosa's "tea-tables." This project initiates a collective inquiry about how feminist knowledge sharing might inform "bench-side" approaches to scientific method and science pedagogy. We invite you to sit at the different tables, alone or with another person, to think and talk about the themes, histories, and ideas embedded in each setting—and to share your responses with us in this space. We've combined notes, drawings, materials, and objects that reflect some of our own and others' meanderings and serious study in scientific, social and artistic pursuits. Our intent is to evoke intimate versions of the sometimes-improvised lab workbenches, work spaces and kitchens, in which many women scientists (and artists) did their first important work. We invite you to do some "tea table thinking" here and in the spaces in which you live and work.

A Virginia Woolf and the Omega Workshop: Lying in the dark, listening to the explosions of bombs being dropped over London, Virginia Woolf asked herself, "how we can think peace into existence..." In *Thoughts on Peace in an Air Raid* (1940) she urges women to fight without weapons, "We can fight with the mind," she writes, "There are other tables besides officers tables and conference tables." A valuable tool available to men and women alike is "private thinking, tea-table thinking," the kind of thinking with which the suffrage movement was launched. Woolf notes that, "Mental fight means thinking against the current, not with it." The patterns and colors of this tea-table were inspired by the interior decorating and furniture painting work of the early modernist Omega Workshop for which Virginia's sister, Vanessa Bell, designed and painted many tables, fire-screens, plates, and rugs. Hovering darkly over the colorful abstraction of a corn field are US drone aircraft currently used by the CIA and military alike to bomb "strategic targets" in Iraq, Afghanistan, and Pakistan. The drones are controlled remotely, often from the suburbs of Las Vegas and other US cities. This is definitely not what Woolf had in mind when she urged us to fight with our minds.

B Cell Life and Death: Why would an artist want to spend time in an animal tissue culture lab? Or observe the collection of prize bull sperm for the artificial insemination of cows? As feminist artists and researchers, subRosa is interested in the way human Assisted Reproductive Technologies (ARTs) have become normative in our culture, and are concerned about what the implications of this might be for the larger realm of eugenics and reproductive science, including the genetic engineering of animals, plants, and humans. Currently, most farm animals are artificially bred and their tissues and body parts used in many ways in scientific and medical research. In the animal tissue culture lab we learned many things, for example, that many of the nutrients and blood serum used to culture cells—including human cells—come from fetal calves "harvested" when their mothers are slaughtered. Observing lab practices helped us to think in concrete terms about the morphologies of life and death, consent and sacrifice, and how scientists are confronted with these ethical issues every day. At the same time, we savored the pleasure of nurturing some old sprouted potatoes at home to observe spontaneous plant generation.

C The Unsubmissive Artist: Remedios Varo (1908-1963) was a remarkable painter-philosopher-scientist, whose strange and exquisitely rendered paintings create an enchanted and intimate world peopled with female alchemists, mystics, soothsayers and inventor/philosophers who travel about in strange, delicate vehicles; or sit in vaulted chambers spinning magic webs; or contemplate time, space, nature, and women's experience in marvelous tableau-like environments. Growing up in the early avant-garde artworld, Varo had to flee both Franco's Spain, and the Nazi occupation of Paris, and found life-long refuge in Mexico City where she became close friends with fellow surrealist painter Leonora Carrington. This table is an homage to Varo's work, especially the complex painting *Unsubmissive Plant* (1961), which according to "Unexpected Journeys," Janet Kaplan's definitive book on Remedios Varo's art and life "presents Varo's mixed feelings about scientific study in a succinctly ironic image. Science, in this case botany, seeks to understand nature through abstraction but grows greedy for control and, in the process of controlling, is alienated from the very nature that was its starting point... [Varo] looked for a science open to a multiplicity of possibilities, one that would greet with wonder, and some humility, the potential of the unknown." (pp 172-4)



D Hypatia and Friends: The hydrometer is a simple instrument that measures the density of liquids. Its invention is credited to the "Greek" scholar Hypatia of Alexandria [Egypt], who made it at the request of her former student and correspondent Synesius. Initially, the hydrometer likely was used in the development of medicines and to test urine as an indicator of kidney health (Synesius probably suffered diabetes-related kidney failure). Hypatia was unique: A highly-regarded, sought-after female teacher of mathematics and allowed to wear scholars' robes in public, she was actively mentored by her father and insisted on a celibate life to avoid the advances of male students and colleagues. Tragically, Hypatia was punished for her political influence by being flayed to death by Christians, who later incorporated her into religious works celebrating virginity. The hydrometers on our table are from the Francis L. Freas Glass works (PA), where hydrometers have been hand-made since 1905. Here, they measure properties of beer, urine, and saline solution. Joining the conversation around the table are more contemporary artists, scientists and scholars who, like Hypatia, defied gender norms and did groundbreaking work—often with the life-sustaining support of renegade male mentors who gave them access to equipment and labs.

E Barbara McClintock: In *A Feeling for the Organism*, her brilliant book on the life and work of the biologist Barbara McClintock, feminist scientist Evelyn Fox Keller describes the method by which McClintock arrived at her important discoveries of the "transposition" of genes in maize chromosomes. McClintock believed that through very close daily observations of the organism under study she could get a "feeling for it," could see differences, and recognize the shape of each chromosome and the changes that were occurring. McClintock, trained in "classical" biology, spent most of her life studying the complex reproductive systems of corn plants. Every year she planted different corn patches, and spent hours examining the growing plants, as well as looking at their chromosomes under the microscope. Most of her male colleagues at Cornell had difficulty understanding her work and methods—they favored the then brand new "doctrine of DNA" and molecular genetics over the direct observation of the organism itself. McClintock's theories however stood the test of more contemporary methods, and in the end she received a Nobel Prize for her groundbreaking life's work in corn genetics.

Bibliography as Quilt

As a craft form, quilts likely were invented simultaneously by women in many different cultures out of necessity—scraps of Inca quilts have been found in burial mounds. While usually pieced together from pieces of leftover materials and clothing, quilts have developed aesthetic complexity over time, and simultaneously can serve as a story-telling device. They sometimes incorporate political, social, and personal commentaries, or carry hidden messages such as those present in some slave and abolitionist-made quilts in the US, for example. The act of finishing a quilt is often a collaborative process where women come together for quilting bees and exchange news, techniques, and food. Some of the early suffrage meetings were held during quilting bees. Our paper quilt is also a reading list—a collection of books by international feminist scholars and practitioners, addressing science, gender and the body.

Gathering Space

We invite you to sit at our table and take time for contemplation, conversation, and collective "Fighting with the Mind" about subjects of concern to you. We encourage you to read some of the trenchant *Letters to a Feminist Scientist* gathered here, and write your own—or collaborate—on responses to them. Thinkers, makers, activists, and wise women—such as Rachel Carson, Barbara McClintock, and Remedios Varo's female alchemists and scientists—hint at vital links to hidden pasts and possible future(s) for feminist art and scientific practices. Activist scientist Vandana Shiva wrote that we need research in "epidemiology, ecology, evolutionary and developmental biology... and experts on taxonomic groups such as microbes, insects, and plants to respond to the crisis of biodiversity erosion." She warns of the dangers of ignoring useful and necessary research, and concentrating only on what's profitable. (*Biopiracy: The Plunder of Nature and Knowledge*, p. 17). Please let us know what you consider "useful and necessary."

Projected images

What are the spaces and conditions in which women artists and scientists do their work? Our research shows that many groundbreaking women artists and scientists of the past did their first important work in non-professional spaces such as bedrooms, kitchens, sheds, and basements. Our slide show includes images of our own work and living spaces; views of the corn plants we grew in Pittsburgh this summer from Zapatista seed (Chiapas, Mexico), and images of other scientists' and artists' laboratories and workspaces that we hope will inspire you to do interesting work, "in spite of."

Prepared by subRosa for the 2011 PITTSBURGH BIENNIAL Sept. 17 - Dec. 11, 2011 at the Miller Gallery at Carnegie Mellon University. www.cmu.edu/millergallery

REFUGIA

MANIFESTO FOR BECOMING AUTONOMOUS ZONES

“A place of relatively unaltered climate that is inhabited by plants and animals during a period of continental climate change (as a glaciation) and remains as a center of relict forms from which a new dispersion and speciation may take place after climatic readjustment.” (*Webster's New Collegiate Dictionary*, 1976)

Sections of agricultural fields planted with non-transgenic crops, alternating with transgenic crops. This is thought to limit the rate of resistance mutation caused in susceptible insect and weed species by gene transfer from GE mono-culture crops.

A *Becoming Autonomous Zone* (BAZ) of desirous mixings and recombinations; splicing female sexual liberation and autonomy with cyberfeminist skills, theory, embodiment, and political activism.

A critical space of liberated social becoming and intellectual life; a space liberated from capitalist Taylorized production; a space of unregulated, unmanaged time for creative exchange and play; experimental action and learning; desiring production, cooking, eating, and skill sharing.

A reproducible concept that can be adapted to various climates, economies, and geographical regions worldwide. Any useless space can be claimed as a refugium: suburban lawns, vacant urban lots, rooftops, the edges of agricultural lands, clear-cut zones in forests, appropriated sections of mono-culture fields; fallow land, weed lots, transitional land, battle-fields, office-buildings, squats, etc. Also currently existing Refugia such as multi-cultivar rice paddies, companion planted fields, organic farms, home vegetable gardens, etc.

A post-modern commons; a resistant biotech victory garden; a space of convivial tinkering; a commonwealth in which common law rules. Not a retreat, but a space resistant to mono-culture in all its social, environmental, libidinal, political, and genetic forms.

A habitat for new AMOs (Autonomously Modified Organism) and agit-crops; for example, *ProActiva*, an herb that is a grafting of witch-root, mandrake, and all-heal.

A place of asylum for the recuperation, regeneration and revitalization of useless GE crops that have been corrupted by capitalist viruses and agribusiness greed.

A place of imaginative inertia that slows down the engines of corporate agro/biotech and allows time to assess its risks and benefits through long-term testing.

Neither a utopia nor a dystopia, but a haunted space for reverse engineering, monstrous graftings, spontaneous generation, recombination, difference, poly-versity hybridization, wildlings, mutations, mongrelizing, crop circles, anomalies, useless beauty, coalitions, agit-crops, and un-seemly sproutings. Biotech and transgenic work in Refugia will be based on desire, consensual public risk assessment, informed amateur experimentation, contestational politics, nourishment and taste value, non-proprietary expertise, convivial delight, and healing.

subRosa's on-going cyberfeminist hothouse of strategies and tactical actions.

www.cyberfeminism.net

