

# CAMA

## WHITE PAPER

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DESIGNING LIFE INDOORS: ART & HEALTH

# THE OPPOSITE OF BEAUTY IS NOT UGLINESS BUT **INJURY**

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CAN EXPERIENCING  
ART & BEAUTY SPEED  
RECOVERY FROM ILLNESS?

*Designing Life Indoors* is a white paper series exploring how the built environment impacts health and wellbeing. In this paper, we explore how evidence-based healing art programs create positive distractions, reduce stress, aid wayfinding, and build community.



*Summer Field III (Sleeping Giant)*  
by Arlayne Peterson



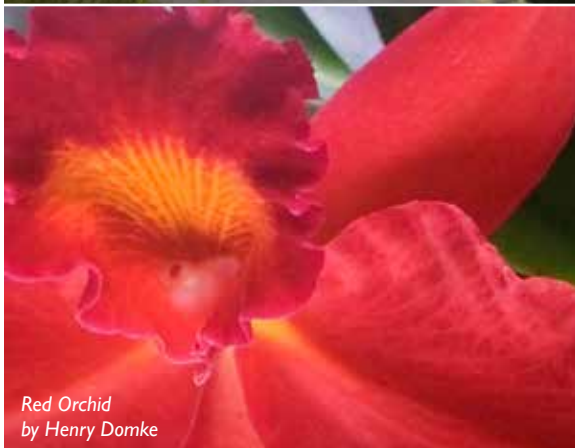
*From a Hill to a Field*  
by Paul Balmer



*Late Afternoon, Duck River*  
by Sandy Garvin



*Afternoon Walk*  
by Kevin Conklin



*Red Orchid*  
by Henry Domke



*Carp Shanghai*  
by Phyllis Crowley

## THE ART OF HEALING

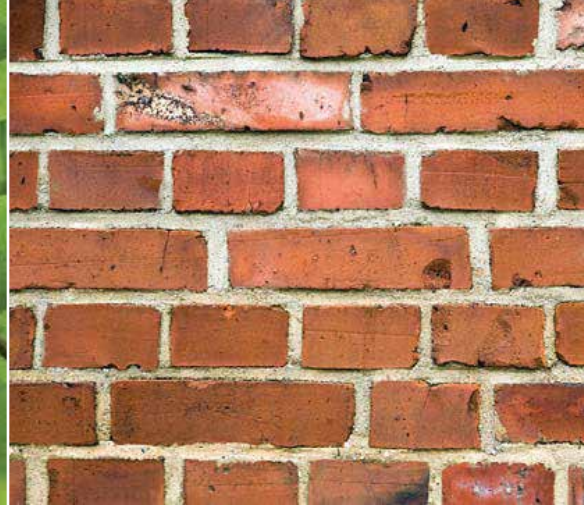
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### WHAT TYPE OF ART IS MOST CONDUCTIVE TO HEALING?

Most research exploring the impact of art on the healing process has focused on measuring patient preferences. Patients consistently respond positively to representational nature art. Even studies with children reveal a

strong preference for nature art over abstract or cartoon-like images.<sup>1</sup> Furthermore, researchers have identified particular characteristics of nature art most conducive to healing: calm or slowly moving water, verdant foliage, foreground spatial openness, park-like or Savannah-like properties, and birds or other unthreatening wildlife.<sup>2</sup>





This penchant for views of nature, especially long views with meandering bodies of water, is partly a result of our genetic wiring. E.O. Wilson describes this innate attraction to nature as *Biophilia*, and exploiting this tendency even through art can speed the healing process.<sup>3</sup> Instinctively, we have known this for a long time. In Ancient Greece, the chronically and terminally ill sought medical care at temples located on hilltops with sweeping views of the Mediterranean Sea. Throughout history there are many examples of cultures harnessing the restorative properties of nature; and yet, it was not until 1984, that scientific data finally confirmed that nature promotes healing.

The landmark study, “View through a Window May Influence Recovery from Surgery” published in *Science* magazine in 1984 was the first study to prove that patients heal more rapidly when exposed to views of nature.

Environmental psychologist, Roger Ulrich, reviewed the medical records of patients recovering from gallbladder surgery at a suburban Pennsylvania hospital. Patient rooms either overlooked a grove of trees or a brick wall. Those patients with tree views recovered almost a full day faster and required fewer doses of pain medication than those patients who viewed the brick wall.<sup>4</sup>

In subsequent research, Ulrich and colleagues measured the impact of different visual stimuli including nature art, abstract art, and a control condition with no art on patients recovering from heart surgery. Those patients exposed to a sunny, spatially open view of trees and water experienced the least anxiety and pain as compared to the other conditions.<sup>5</sup> This study demonstrates the importance of locating art such as nature photography in patient rooms, especially when an actual view of nature is unavailable.





AS ANXIOUS PATIENTS TRY AND GAUGE QUALITY, THEY OFTEN FOCUS ON ASPECTS OF THE EXPERIENCE THAT THEY CAN EASILY UNDERSTAND SUCH AS A COMPASSIONATE NURSE, A CLEAN BATHROOM, OR A BEAUTIFUL PAINTING.

The recent surge in hospital art programs coincides with a shift in the marketplace as providers acknowledge that positive clinical outcomes alone are not enough to satisfy patients. Patients expect high quality clinical care, but their overall impressions of the experience have more to do with the tangible aspects of the environment such as parking,





nursing service, housekeeping, food service, and even art. A recent article in the *New England Journal of Medicine* found that

“...another style of competition appears to be emerging, in which hospitals compete for patients directly, on the basis of amenities. Though amenities have long been relevant to hospitals’ competition, they seem to have increased in importance – perhaps because patients now have more say in selecting hospitals.”<sup>6</sup>

Amazingly, patients rate nonclinical experiences as twice as important than a hospital’s clinical reputation, and they are willing to bypass the closest hospital and travel

for care at an alternative facility that offers a better overall experience.<sup>7</sup> Why do amenities matter so much?

As anxious patients try and gauge quality, they often focus on aspects of the experience that they can easily understand. In the article “Clueing in Customers” service expert, Leonard Berry, advises health organizations to more carefully consider all the environmental clues that factor into a customer experience, especially since the “product” is so difficult to judge. He explains,

“...when we’re considering a doctor or a medical facility, most of us unconsciously turn detective, looking for evidence of competence,





caring, and integrity – processing what we can see and understand to decipher what we cannot.”<sup>7</sup>

Environmental clues that convey concern for a person’s wellbeing become especially important in places where patients and families wait. Often patients and families scrutinize these environments in search of anything to divert their attention away from troubling thoughts and feelings. The Press Ganey Pulse Report found that “patients who

spent more time in waiting areas reported higher levels of satisfaction if they perceived the waiting room was comfortable and pleasant.”<sup>8</sup>

Furthermore, in a study at Weill Cornell Medical Center, researchers found “positive correlations between more attractive environments and higher levels of perceived quality, satisfaction, staff interaction, and reduction of patient anxiety.”<sup>9</sup>



The selection and placement of art in waiting and examination rooms can have a profound impact on the patient and family experience, especially when the art is thoughtfully integrated into the overall interior design scheme. At CAMA, we carefully consider how design elements such as the size of the artwork, wall composition, color, and lighting interact in order to create art installations that serve as focal points within a space. Art programs executed with such attention to detail create highly impactful art features that deliver memorable experiences.

#### ART PROGRAMS SURPRISE AND DELIGHT THE SENSES, OFTEN RESONATING DEEPLY WITH PATIENTS AND FAMILIES COPING WITH THE STRESS OF ILLNESS AND INJURY

One family member felt so moved by the artwork installed in a waiting room at Yale-New Haven Smilow Cancer Hospital that she felt compelled to contact the artist and express her gratitude. She writes,

"I am sitting at the Cancer Hospital waiting for my husband to be admitted...Your paintings are in the waiting room...and I must tell you they are beautiful. I particularly love one of a marsh at high tide with a sunny sparkle on the water. A very serene touch in a place that seems well designed to cater to patients and families that might be feeling anxious."



In another testimony, a patient's daughter expressed the positive effect that a painting hanging in her father's hospital room had on him in his final moments. The painting by Deborah Quinn-Munson of a sailboat bobbing on Long Island Sound comforted her father who lived in the area and had been an avid sailor. She writes, "The outcome was unfortunate. My father ultimately died. However, he died a healed man."

Quinn-Munson's painting is just one of 700 pieces of art that make up the Smilow Cancer Hospital's healing arts collection. This

collection showcases the work of local artists and features many scenes of nature inspired by the regional landscape.

Abe Lopeman, Vice President and Executive Director of Smilow, describes how art was carefully selected to address both the emotional and physical needs of patients and families. He explains,

"The artwork is deliberately non-institutional and unique to this building...We wanted to create spaces that would divert attention and provide inspiration and comfort."<sup>10</sup>

## MEMORABLE ART LOCATED THROUGHOUT A HOSPITAL PLAYS A CRITICAL ROLE AS WAYFINDING LANDMARKS

In addition to reducing patient and family stress by acting as positive distractions, artwork also plays an important role in helping visitors navigate large healthcare facilities.

Research has shown that people rely on environmental cues to form cognitive maps that help them navigate to and from their destination. Appropriately scaled, memorable pieces of art, strategically located at key corridor intersections and elevator lobbies, become critical landmarks, especially if interior finishes remain fairly consistent throughout the facility.

A wayfinding system that is not intuitive can become quite costly. The annual cost of a flawed wayfinding system at a major regional 604-bed tertiary care hospital was calculated to be more than \$220,000 per year. Much of this was the hidden cost of direction-giving by people other than information staff.<sup>11</sup>

## SUCCESSFUL HEALING ART COLLECTIONS CELEBRATE LOCAL TALENT AND BUILD COMMUNITY

CAMA's healing art programs showcase the work of local artists—many of whom are patients or had family members who were patients at the health facility. By working with

these artists, CAMA is able to orchestrate and galvanize the creation of a healing arts program that generates a powerful and deeply emotional sense of pride that continues to promote the arts as a critical component of healing spaces.

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[Watch this video to learn how art is transforming the lives of cancer patients at the Smilow Cancer Hospital at Yale-New Haven.](#)

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## SMILOW CANCER HOSPITAL AT YALE-NEW HAVEN

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CAMA was brought in at the project's onset to set the goals and parameters for an evidence-based design solution. The early planning and benchmarking empowered leadership to incorporate amazing amounts of daylight into a tight urban site, including a 7th floor healing garden that is accessible to the entire medical campus. Smilow is the first single-bedded tower on the medical campus with distributed nursing allowing for safe and direct care.

Upon construction, CAMA was brought back into the project to establish and implement a healing arts program. An interdisciplinary art committee was assembled and an initial period was set aside to align the strategic goals of the project with the evidence that art supports healing. This committee established a vision and mission that guided how artists would be sought and the types of works that would be considered. This committee was dedicated to showcasing the work of local artists—many of whom were patients or had family members who were patients at Smilow. By working with these artists, we were able to orchestrate and galvanize the creation of a healing arts program that generated a powerful and deeply emotional sense of pride that continues to promote the arts as a critical component of healing spaces.

**Project:** Smilow Cancer Hospital at Yale-New Haven, New Haven, CT  
**Scope:** Evidence-Based Design Consulting, Art Consulting  
**Architect & Interior Design:** Shepley Bulfinch  
**Construction Manager:** Turner Construction  
**Size:** 516,500 SF / 700 works of art  
**Construction Budget:** \$280 million / **Art Budget:** \$750,000  
**Status:** Completed 2010  
**Awards & Recognition:** Rosalyn Cama, 2010 Arts Council of Greater New Haven Giant Steps Award

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## YALE-NEW HAVEN HOSPITAL EMERGENCY DEPARTMENT

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The interdisciplinary design team focused on the following key objectives during this project: mitigating patient and visitor stress, reducing wait times through improved flow, improving staff sightlines both for security as well as clinical care, and capturing natural light and views of nature at an urban edge. This phased project involved adding 20,000 SF of new construction to 32,000 SF of existing operational space while planning and designing a facility that would accommodate the delivery of new models of care.

**Project:** Yale-New Haven Hospital Emergency Department Expansion and Renovation, New Haven, CT  
**Scope:** Evidence-Based Design Consulting, Interior Design  
**Architect:** Salvatore Associates / **Construction Manager:** Turner Corporation  
**Size:** 86,700 SF / **Budget:** \$32 million / **Status:** Completed 2012



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## YALE-NEW HAVEN HOSPITAL CLINICAL LABORATORY

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This six-story building adjacent to the new Smilow Cancer Hospital consolidates nine clinical laboratories, pharmacy services, auditorium, and retail tenant space in support of the hospital complex. CAMA worked closely with the entire architectural team in support of the project's impressive sustainable strategies. CAMA spearheaded the evidence-based design process while aligning with LEAN initiatives already underway. Pre-programming staff visioning sessions, allowed us to envision how the new community of coworkers would like to enhance their work and respite environments. The goal of these sessions was to transform the culture within the lab in order to share spaces more collaboratively, thereby increasing clinical team integration to promote efficiency and productivity as part of the development of a new delivery model for clinical laboratory services.

**Project:** Yale-New Haven Hospital Clinical Laboratory, New Haven, CT  
**Scope:** Evidence-Based Design Consulting, Interior Design, Art Consulting  
**Design Architect:** Behnisch Architects  
**Executive Architect:** Svigals + Partners / **Laboratory Architect:** Karlsberger  
**Construction Manager:** Fusco Corporation  
**Size:** 150,000 SF / **Budget:** \$92.8 million / **Status:** Completed 2010



