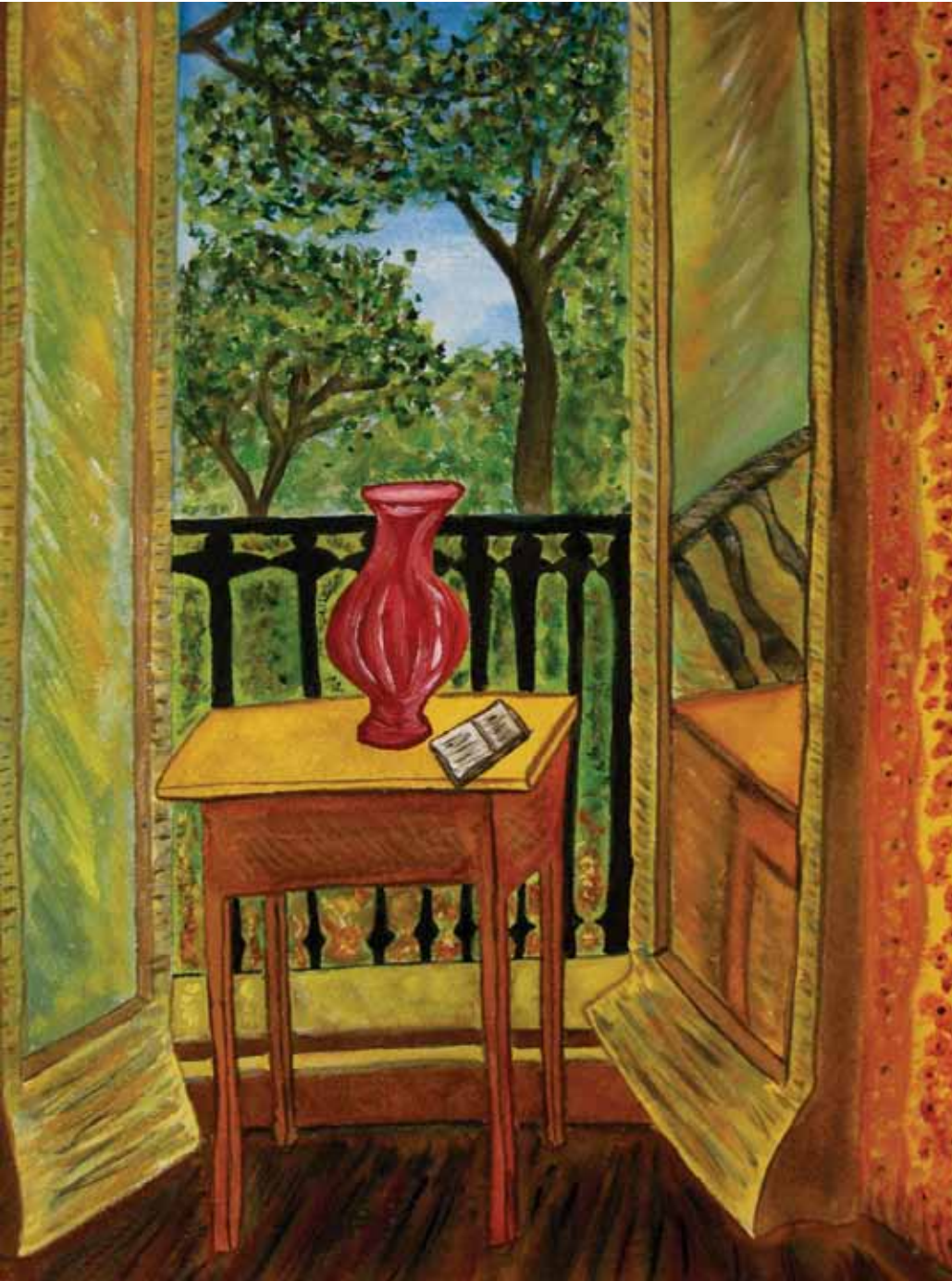


crosscurrents

AUTUMN 2011
VOL 15 NO 1

The Journal of Addiction and Mental Health



Designing minds

It's human nature

Green spaces gain ground
at treatment facilities

The picture of health

Can art be healing or harmful?

The chicken, the egg
and the cubicle farm

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more than a couch

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Centre for Addiction and Mental Health
Centre de toxicomanie et de santé mentale

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A Crooked Room of One's Own, Katherine Harper, acrylic on
paper, 11" x 17"

Katherine is a PhD student in psychology at York University in
Toronto. The cover painting was inspired by Virginia Woolf and
the Bloomsbury Group. It is displayed through the Workman
Arts Being Scene exhibit (www.workmanarts.com).



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#4453



Let's play a word-association game. "Hospital." What comes to mind? Approachable, calming, inspiring? More likely it's institutional, drab, depressing. Research and personal experience tell us that buildings and the spaces within them affect how we feel, physically and mentally. Museums know this. Recreational facilities know this. So why would our places of healing accept design that intimidates us rather than rejuvenates us? Admittedly, building hospitals and other treatment facilities is a hugely complex process, but that doesn't mean good design should be expendable.

Fortunately, we're starting to see more and more examples from around the world of mental health and addiction treatment facilities that are designing or redesigning their spaces to maximize their potential to support recovery and well-being. Sweden is a leader. So is the United Kingdom. And Canada and the United States are making progress, too.

This issue of *CrossCurrents* takes a look at innovations in health care architecture and design and the growing body of research that shows how elements of the built environment affect us, particularly people with mental health and addiction issues. We're moving toward evidence-based design that promotes better health.

And in the spirit of this theme, I wish you happy reading in a space that you enjoy—whether that's inside or outside enjoying the last days of summer.

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Check out *CrossCurrents* online www.camhcrosscurrents.net

a view from CAMH

Writing this column from Venice, Italy, seems appropriate for an issue on architecture. It's one of the most charming cities in the world and one of the most visited. Built on 117 islands, it is a maze of canals, bridges and a spectacular fusion of Baroque and Arabic architecture. When you do find open space, it is sumptuous, be it the glorious St. Mark's Square surrounded by spectacular buildings, or avenues off the beaten track with modest houses and Venetians sitting in the sun, watching the tourists pass by. And there are lots of tourists—every day, 50,000 visit this city whose population is only 250,000.

People flock to Venice from across the world because it makes them feel good. The architecture and its setting are inspiring. But Venice is a working city that made its name through trade and many of its most popular tourist attractions were once functional buildings. If anything, Venice is a testament

to the impact good architecture can have on the individual and how money made from trade can transform the most unlikely place into an inspiration for the world.

The idea that place is important is obvious. But the fact that we spend little time thinking about how best to develop healing hospital spaces is surprising. Architects have known for centuries how to create buildings and spaces that make people feel better. Lots of natural light, options for where and how to relax or interact and green spaces are key. But architects also tell us that good design costs money, and when that money comes from the public purse, people often balk at the cost and compromise on good design. Yet that doesn't happen with our banks. Sit in the executive's office at any top bank in the world and it's clear that, just like in Venice, rich traders can still produce fabulous spaces. Perhaps the question is whether we have our

values right. Perhaps we should spend as much money on design that promotes recovery as we do to create the right business environment.

At the Centre for Addiction and Mental Health, replacing its decaying, foreboding buildings with spaces that blend into the urban landscape reflects a shift in values—one that is challenging the stigma of mental illness and addiction through healing design. Read this issue to find out how CAMH and other care providers are building better health.

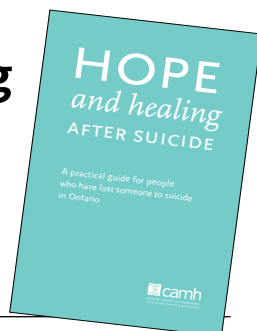
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Ethical architecture requires moral imagination

Architecture can involve readily identifiable ethical dilemmas, such as those involving tradeoffs between safety and economics, and safety and individual gain. Canada's provinces and the Northwest Territories have professional standards of practice for architects that are framed as duties to individual clients and the general public. The Royal Architectural Institute of Canada's website includes a client-architect agreement that emphasizes an architect's qualifications and technical knowledge, contractual honesty, absence of conflicts of interest and fair competition. The American Institute of Architects has developed its own code of ethics that also promotes efforts to improve both people's quality of life and sustainability of the environment.

These last two concerns reflect the more philosophical aspects of architecture. As a result, they are more complex ethically and, unsurprisingly, more debatable. But first, what is architecture? Successfully designed buildings require technical expertise, as well as knowledge of aesthetics and the ability to create beauty. The relevance of beauty increases the kinds of ethical considerations in architecture. In fact, beauty's relationship to ethics goes as far back as Plato: in *The Republic*, he wondered whether beauty, at its most basic, existed on its own or whether its fundamental source was goodness itself.

Architects pay close attention to the purpose and function of a building and other aspects of the built environment. Their attention is not limited to just a project's material outcomes, but also to how people will act, interact and live in that built environment. Individual and collective emotions and psychology, as well as individuals' physicality or bodies, are affected, either accidentally or deliberately, by design. Architects are also expected to consider the building's relationship to the surrounding community's nature and character: will it be harmonious, confused or antagonistic? Architects must also consider their projects' impact on and relevance to future generations. For instance, will a building's design and upkeep demand resources that will become increasingly scarce?

The ethical complexities go even further. History and context can matter. In a 2008 article in *Psychiatric Services* about architecture and psychiatric facilities, David Sine notes that the massive psychiatric facilities built in the 1800s were supposed to provide protective and manageable places for people who had been relegated to a community's unpredictable, harsh and lonely spaces. This fits with the views of Karsten Harries, a contemporary philosopher of art and architecture, who wrote *The Ethical Function of Architecture*: "Inseparable from the terror of space is the need for boundaries strong enough to establish place. Architecture has one source in the attempt to make what is originally a strange and alien environment more of our own, to transform space into place, so that instead of being cast into a strange and alien world we are allowed to dwell."

Sine raises two important points. First, beneficence—acting in someone else's best interests—can unintentionally devolve into disempowerment, disrespect and social control. Beneficence is always a tricky ethical principle because what is believed to constitute someone's best interests can vary a great deal and be too dismissive of the person. Second, initial levels of public funding can be difficult to sustain, given the demands of other or emerging community priorities.

In a 2002 article in *HEC Forum* about health care architecture, John Lincourt refers to an analysis of corridors in terms of space being designed to meet the needs of one group rather than another group. Traditionally, more space has been devoted to corridors compared to waiting areas. Corridor design and location has promoted efficient and safe transport of equipment and patients from one room to another. Yet waiting is a very common activity in hospitals. Moreover, Lincourt insightfully notes that there are different types of waiting: waiting for (e.g., test results, examining rooms to become available), waiting on

(e.g., serving those who are hospitalized or bed bound), and waiting with (e.g., a family member, friend, or peer worker accompanying a patient), each of which is optimized by different spatial designs.

Essentially, ethics is inescapably part of architecture. Some ethical considerations flow from the impact of built environments on community and individual well-being, now and in the future. Philosopher Maurice Lagueux, writing in 2004 in *Philosophical Forum*, holds that architectural aesthetics can help resolve a client or community's ethical problems. Furthermore, a building's meaning or symbolism can transcend its routine functions because of its aesthetic features.

With this said, however, Turkish architect Yonca Hürol, in a 2009 issue of *Science and Engineering Ethics*, offers a provocative challenge: could architecture ever be barbaric? He examines the 1999 Turkish earthquake that killed more than 17,000 citizens, in large part due to the collapse of buildings that were the product of tolerated and long-standing corrupt business and governmental dealings. Hürol concludes that architects' work that uncritically incorporates and reifies the norms and attitudes of repressive governments or societies is dehumanizing. Like art, architecture is permitted—some would say expected—to seriously critique and challenge clients and society in general and offer new perspectives, representations and aspirations.

This explains why business ethicist Jane Collier, in a 2006 issue of the *Journal of Business Ethics*, extols moral imagination as an essential ability of skilful architects. To have moral imagination is to be responsive to others' needs and viewpoints and to be able to discern what is possible. While many bioethics and feminist writers have recommended that health care professionals increase and apply such imagination, patients and families are more humanely and meaningfully served when those who design health care or health-supporting facilities do likewise.

Do you have a comment or question for ethicist Barbara Russell? Visit the Ethics Matters blog at www.camhcrosscurrents.net/blogs/ethicist and have your say.

Mark de la Hey

Favourable reaction to alcohol may be inherited

People who have close relatives with alcohol dependence have a more positive reaction to alcohol than those who have no family history of the disorder, according to a study from the University of Gothenburg in Sweden. The study included 51 participants, 22 of whom had a close relative with Type I alcohol dependence and 29 who did not. Type I alcohol dependence is the most common form of the disorder, and the risk for it depends on an interaction between environmental and genetic factors, making it less likely to be inherited than Type II alcohol dependence, whose risk depends more on genetic factors. Participants were randomly assigned to receive either alcohol or placebo and were asked to complete questionnaires measuring their mood and their response to the alcohol. Among participants with a family history of alcohol dependence, alcohol enhanced positive mood states and had greater stimulant effects than among those with no family history of the disorder. Those with a family history were also more likely to report liking alcohol, feeling high after drinking it and wanting more of it. The authors suggest that the heightened sensitivity to the effects of alcohol seen among those with a family history of alcohol dependence could put a person at risk for alcohol use problems.

Alcoholism: Clinical and Experimental Research, v. 35(8): 1–9. Anna H.V. Söderpalm Gordh and Bo Söderpalm, Sahlgrenska Academy, University of Gothenburg, Sweden.

Deficits in brain grey matter linked to psychosis risk

Individuals at high risk for developing psychosis typically show deficits in grey matter volume, but new research from King's College London in the United Kingdom shows that those who actually develop psychosis exhibit particular deficits that set them apart from those who do not develop psychosis. Researchers used magnetic resonance imaging data on 182 individuals at high risk of developing psychosis and 167 healthy controls from sites in London, Basel, Munich and Melbourne. Participants were considered to be at high risk if they had "attenuated psychotic symptoms," "brief limited intermittent psychotic symptoms" or "a first-degree relative with a psychotic disorder, plus a marked decline in social or occupational functioning." Among participants in the high-risk group, 26 per cent developed psychosis in the average 31-month follow-up period. Compared with controls, the high-risk group as a whole had less grey matter volume in three regions of the frontal cortex: the medial orbital gyrus, the gyrus rectus bilaterally and the right anterior cingulate gyrus. Within the high-risk group, what distinguished participants who developed psychosis was that they had less grey matter volume in the front part of the left parahippocampal cortex than those who did not develop psychosis. Grey matter volume in this area allowed the researchers to distinguish those who developed psychosis with up to 67 per cent accuracy. The authors conclude that their findings "suggest that neuroimaging data may facilitate the prediction of illness in individuals at high risk for psychosis and may inform the development of new interventions designed to delay or prevent its onset."

Archives of General Psychiatry, May 2011, v. 68(5): 489–495. Andrea Mechelli et al., Department of Psychosis Studies, Institute of Psychiatry, King's College London, United Kingdom.

Early cannabis use related to neuropsychological deficits

Among people who use cannabis on a regular basis, those who begin using the drug before age 15 show poorer neuropsychological function than those who start later, according to research from the Universidade Federal de São Paulo in Brazil. The study recruited 104 adults who were chronic cannabis users, 49 of whom began using the drug before age 15 (early-onset users), while 44 began using after age 15 (late-onset users). The study also involved 44 control participants who did not use cannabis. Participants were asked to perform a battery of neuropsychological tasks that tested such things as executive functioning, perseverance, attention and impulse control, vocabulary, conceptualization and mental flexibility. The researchers found no differences in IQ or vocabulary between the three groups. However, they did find that early-onset users performed significantly worse than late-onset users and controls on tasks that assessed executive functioning, sustained attention and impulse control. There were no significant differences in performance between late-onset users and controls. The authors conclude that exposure to cannabis in adolescence, a critical period in brain development, may have more neurotoxic effects than exposure later in life.

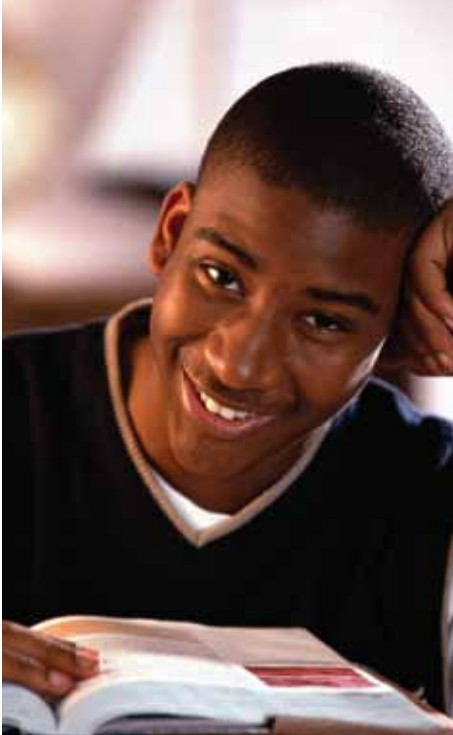
British Journal of Psychiatry, June 2011, v. 198(6): 442–447. Maria Alice Fontes et al., Departamento de Psiquiatria, Universidade Federal de São Paulo, Brazil.

Cognitive problems evident in schizophrenia even when symptoms improve

It is well known that cognitive function tends to decline among people with schizophrenia. Now, new research from Silver Mind Hospital in Mumbai, India, has found evidence of declines in cognitive function even among individuals whose schizophrenia symptoms were considered to be much improved. The study looked at 61 individuals with first-episode schizophrenia whose symptoms showed significant improvement after 10 years of treatment. Participants already showed evidence of deficits in visuo-spatial and perceptual functioning at the time of diagnosis, and then showed significant declines over the next 10 years. More than two-thirds of participants scored in the dysfunctional range for cognitive function after 10 years, even though their schizophrenia symptoms were considered to be much improved. Working memory and executive functions also showed significant declines after 10 years. The authors see their findings as suggesting "fronto-parietal lobe dysfunction in individuals diagnosed with schizophrenia that continued to deteriorate over the years following initial diagnosis." They recommend further research to determine how different forms of treatment affect cognitive abilities in people with schizophrenia.

Journal of Psychiatric Practice, May 2011, v. 17(3): 194–199. Amresh Shrivastava et al., Silver Mind Hospital, Mumbai, India.





First-episode psychosis responds well to treatment

Both psychosocial therapy and pharmacological treatment can be effective in preventing relapse among individuals with first-episode psychosis (FEP), according to research from the University of Melbourne in Australia. The researchers surveyed nine scientific studies of psychosocial interventions and nine studies of pharmacological treatment. Three randomized controlled trials of psychosocial interventions found specialist FEP programs to be more effective than treatment as usual in preventing relapse. The FEP programs included low doses of atypical antipsychotic medication, cognitive-behavioural therapy (CBT), individualized crisis management plans, family counselling and psychoeducation. While three studies found that CBT not specifically targeted at relapse was no more effective than specialist first-episode psychosis programs, one trial that combined individual and family cognitive-based relapse prevention therapy found this combination to be almost five times as likely as specialist FEP programs to prevent relapse. Another three trials found that first-generation antipsychotic medications were more effective than placebo in preventing relapse, although this did not reach statistical significance, while four trials found second-generation antipsychotics significantly more likely than first-generation antipsychotics to prevent relapse. The authors recommend further research "to identify those FEP patients who will only experience one psychotic episode and therefore may not need antipsychotic medication to prevent psychotic relapse."

Schizophrenia Bulletin, May 2011, v. 37(3): 619–630. Mario Álvarez-Jiménez et al., Department of Psychiatry, University of Melbourne, Australia.

Tobacco cessation services work for people with mental illness

People with mental illness use more tobacco than the general population, with rates as high as 90 per cent. It is estimated that people with mental illness and addiction comprise as much as 44 per cent of the US tobacco market. This translates into higher rates of tobacco-related mortality for people with mental illness. Now, researchers at the University of Colorado in Denver have found that commonly available community tobacco-cessation services can help people with mental illness quit smoking. Researchers recruited 123 individuals with mental illness who were also smokers, assigning 61 of them to receive an intervention from a telephone quit line alone, while 62 received quit-line services supplemented with up to 10 sessions of community tobacco-cessation group counselling. After six months, both groups had significantly reduced their tobacco consumption, but those who received both quit-line services and group counselling were much more likely (21% vs. 8%) to achieve a 50 per cent reduction in tobacco use. Seven per cent of participants had been able to maintain abstinence at the six-month follow-up. Both groups showed significant decreases in depression and psychotic symptoms, and their overall physical and mental health improved. However, the group given quit-line services and counselling had better physical health.

Community Mental Health Journal, May 10, 2011 online, doi: 10.1007/s10597-011-9411-z. Chad D. Morris et al., Department of Psychiatry, University of Colorado Denver, Colorado.

Nature aids in treatment of mental health disorders

Nature-assisted therapy can be helpful in treating various mental health disorders, according to research from the Swedish University of Agricultural Sciences in Alnarp, Sweden. The study involved a systematic review of 38 scientific studies covering a range of nature-assisted therapies, including horticultural therapy, wilderness therapy, adventure programs, outward bound programs and garden walks. Overall, the studies reported that nature-assisted therapy was helpful in treating schizophrenia, dementia, depression, schizoaffective disorder, alcohol dependence and other substance use disorders. Some studies found that horticultural therapy improved mood, but other studies did not find significant results. One study found that horticultural therapy combined with adventure therapy and a 12-step program helped to reduce alcohol craving, while two other studies found that horticultural therapy combined with either psychotherapy or cooking activities helped to reduce psychotic symptoms. Several trials found that wilderness therapy, either by itself or combined with group therapy or counselling, resulted in significant improvements in behaviour among youth. The authors conclude that nature-assisted therapy "can have a significant effect on psychological, social, physical, and intellectual therapeutic goals."

Scandinavian Journal of Public Health, June 2011, v. 39: 371–388. Matilda Annerstedt and Peter Währborg, Department of Landscape Planning, Swedish University of Agricultural Sciences, Alnarp, Sweden.



It's human nature

Green spaces gain ground at treatment facilities

By Ned Morgan

In 1850, the Provincial Lunatic Asylum opened in a secluded park-like location outside the then-city limits of Toronto. The therapeutic benefit of what we now call “green space” was unquestioned, and the Asylum’s head gardener was an esteemed employee who lived on the grounds with his family and tended the extensive flowerbeds and greenhouse with the help of inpatients. Most asylums of that era recognized the healing properties of green space, although the seclusion of these sprawling facilities also served to hide the occupants from society at large. This ideal notion of the therapeutic environment failed miserably when asylums became severely overcrowded and understaffed by the 1950s.

But it’s a notion that’s again gaining ground—literally. Today, the Centre for Addiction and Mental Health occupies the same ground as the old Asylum, “but now it’s in the heart of Canada’s major urban centre,” says CAMH psychiatrist Dr. David Goldbloom. “The challenge is to marry the soothing and restorative elements of green space with integration into the community.”

Naomi Sachs, founder and director of the Therapeutic Landscapes Network, has studied the role of green space in mental health facilities through the ages. She traces the recent resurgence of the idea of therapeutic green space to the writings of Harvard biologist E.O. Wilson, in particular his 1984 book *Biophilia*. The book’s premise is simple, Sachs explains: “As living beings, we’re attracted to other living things. Being in touch with nature makes us feel better.”

This simple premise is backed by scientific proof. An influential study by environmental psychologist Dr. Roger Ulrich published in

Science (also in 1984) found that surgical patients assigned to rooms with views of green space had shorter hospital stays and needed less medication than patients in rooms looking onto a brick wall. A 2009 study of more than 300,000 Dutch adults and children offers more evidence. The findings, published in the *Journal of Epidemiology and Community Health*, found that people living nearer to green space were less likely to experience depression and anxiety. And a 2008 study in *Health Environments Research and Design Journal* concluded that the design of health care units to allow nurses a greater view of green space resulted in less stress and fewer problems remaining alert over extended periods.

Ulrich’s pioneering findings were especially important, says Sachs, because they “provided a business case.” Views of green space reduced the amount of medicine and the amount of time spent in a hospital, which helps the hospital’s bottom line.

As the evidence continues to mount, the question becomes one of method: How does one approach therapeutic green-space design? According to Sachs, the best examples of healing or therapeutic spaces are designed in collaboration with horticultural therapists, other health professionals, consumers and community members, so the design is informed by a strong sense of who the population is and how the garden can best facilitate health outcomes. “The more your design is based on evidence and research, the better you’re able to serve that population,” says Sachs.

Dr. Nathan Perkins teaches at the School of Environmental Design and Rural Development at the University of Guelph in Guelph,



Nathan Perkins

Patients and clients at Homewood Health Centre in Guelph, Ont., use the hospital’s green spaces for healing rituals.

Ont. He served as landscape designer for the late-1990s redesign of the Homewood Health Centre, a mental health and addiction treatment facility with inpatient and outpatient services. Located on 55 acres in Guelph, the facility's redesign was the result of applied research about how patients and clients used Homewood's existing green space and how they could be improved. Most of the design was built on client, staff and visitor participation.

Perkins and colleagues created a master plan for 20 hectares of green space, including trails and areas where patients and clients could gather. In the process, Perkins' observations informed his design: "I had noted the symbolic attachment of clients to geometric forms in the landscape, specifically a circle of cedar trees. They felt this was a spiritual place and frequently used it for 'healing rituals' among themselves."

Perkins is cautiously optimistic about the future of therapeutic green-space design. "Green is gaining ground here and internationally, but it's still hard to convince the powers-that-be to spend the time and resources necessary. Evidence-based design is a response to the difficulty of convincing others that there are measurable benefits to hospital gardens, but for the cost of an fMRI, most facilities could have quite the garden or green space that benefits all patients, staff and visitors."

Julie Martin, a horticultural therapist at Homewood, sees the restorative effect of well-designed green spaces: "At Homewood, recovery is based on the surroundings and the environment," she says. "We use the outdoor environment—the forest, the river, the

Nature nurtures healthy communities

Research is establishing a strong body of evidence that links green space with safer communities, better concentration and self-control and other positive outcomes. Dr. Frances E. (Ming) Kuo, director of the Landscape and Human Health Laboratory at the University of Illinois at Urbana-Champaign, is leading this cutting-edge research through the laboratory she founded in 2006 to explore the relationship between health and green space.

Her unique paper "Environment and Crime in the Inner City: Does Vegetation Reduce Crime?" introduced evidence that people living in "greener" areas of cities reported "lower levels of fear, fewer incivilities, and less aggressive and violent behavior." The study, co-authored by Kuo's colleague and landscape architecture professor William C. Sullivan, was published in a 2001 issue of *Environment and Behavior*.

In a 2010 monograph for the U.S. National Recreation and Park Association, Kuo stated: "Greater access to green views and green environments yields better cognitive functioning; more proactive, more effective patterns of life functioning; more self-discipline and more impulse control; greater mental health overall; and greater resilience in response to stressful life events."

"In essence," said Kuo in a recent interview with *Cross-Currents*, "nature is helpful in addressing pain—to the extent that mental illness involves such pain, and to the extent that addicted persons need to be able to bear the pain of withdrawal without succumbing to it, we would certainly expect natural views, places and activities to help."



Edward Hill

The green spaces at Langley Green Hospital in Sussex, UK, include a bench based on a colour "emotion diary" workshop with patients.

therapeutic gardens and the crops we grow—for learning and for the patients’ recovery, so they are inspired to use the natural world for healing. We also promote sanctuary in the sense of the patient creating a safe space.”

The people that Homewood serves take advantage of diverse benefits from the green space-based treatment. “The response of a client with addiction may be a reconnection to the natural world,” says Martin. “A client with PTSD may see symptoms of panic and startle-response decrease by finding a quiet sacred space. A depressed elderly patient may feel rejuvenated with the oxygenated air or the high level of light in the greenhouse or gardens.”

Extend this green space thousands of kilometres away and you’ll find Langley Green Hospital in West Sussex, UK. In 2009, the inpatient-only psychiatric hospital won a Building Better Healthcare Award for Best External Space. Langley is an example of therapeutic green space in action on an elaborate scale. “To create and maintain connections with the outside world, the landscape design sought to heighten awareness of seasonal change,” says Helen Griffin of Devereux Architects, who worked on the project. “Sensory stimulation is provided by ensuring patients have access to a variety of landscapes with different textures, smells, attractions and overall character.” In the semi-urban site of this ground-floor-level hospital, each pavilion-like ward has its own garden, and in the middle, an outdoor therapy area links the wards. A circular path, called a “wanderloop,” connects each ward and garden, creating a sense of openness.

According to ward manager Natalie Cadman, “service users, staff, carers and relatives played key roles at all stages.” That means patients have access to spaces they find meaningful. “The external areas have proven extremely popular with patients, staff and visitors alike,” says Griffin.

Back in Toronto, Alice Liang, principal of Montgomery Sisam Architects, understands the link between designed green space and recovery. She has been deeply involved with CAMH’s major site

redevelopment since it began about 10 years ago. She recognizes that some patients are not allowed access to the outdoors, but rather than seeing this as a limitation, she and her team are extending the green therapeutic milieu, bringing it inside the walls of the facility. “For the indoor-outdoor relationship, direct views and direct physical access are ideal, but in a mental health facility, not everyone has the privilege to go outside,” she says. “But during the time they are in treatment, the time they have to be inside, they can at least view green space.”

For the next phase of the redevelopment, Liang is planning informal sitting areas off the corridors, where patients will be able to see the gardens; at the end of each corridor will be a bay window, so people in the hallways will have a view to outside green spaces. Patients on each floor will have access to a double-height terrace with potted plants, so they don’t have to wait for staff to escort them for a breath of fresh air and a view onto the park. Another important feature that allows patients views to green space is what Liang calls a “single-loaded corridor”—rooms on one side, with windows or a glass wall on the other—so the building can encircle a garden.

As the redevelopment progresses, patients, clients and the community are already engaging with the gardens. As part of CAMH’s corporate volunteers program, professionals from the community replenish the plantings every spring or summer. “Every time I take someone on a tour, the [garden] manager is so proud and points out the different patches and who helped plant them,” says Liang. It’s a really active ongoing community engagement piece.”

Dr. David Goldbloom reflects on the beginning of the redevelopment and the promise its green spaces hold: “At the very beginning of the process of redeveloping the property for the 21st century, we asked patients, families, staff and neighbours: How do we make the most of a gift of a 27-acre rectangle in the heart of an urban residential community? The answer was loud and clear: green space, natural light and a home-like environment.”



Architect’s rendering of the Intergenerational Wellness Centre and its green spaces at the Centre for Addiction and Mental Health in Toronto.

The picture of health

Can art be healing or harmful?

By Angela Pirisi

Picture this: You're walking down the hall of the psychiatric hospital where you recently started working when you see a painting you think might upset your clients. The large canvas depicts a shadowy faceless figure that feels ominous. You're concerned because many of your clients have trauma histories. But none of your clients have said anything. What do you do? After all, you're a clinician, not an art curator.



John Scott, *Dark Commander (Missing Arm)*, 2008–2010, mixed media on canvas, 109" x 53", courtesy of Nicholas Metivier Gallery

Does this painting have a place in a psychiatric hospital?

This fictional scenario raises many questions about the purpose of art displayed in mental health settings and its effect on the viewer: If art can heal, can it also harm? And if so, who decides and how?

"Fundamentally, the purpose of art is not to make you feel good but to elicit a response, to be provocative," says Upali Nanda, director of research at American Art Resources, an art consulting firm in Houston, TX, that works exclusively with the health care industry. "That's the exact opposite of what health care tries to do. For art in health care, loyalty is not to the arts, but to the vulnerable patients."

"Can art be deadly? No. Can it trigger you? Yes," says Lisa Brown, founder of Workman Arts, a professional arts company of mental health consumers partnered with the Centre for Addiction and Mental Health (CAMH) in Toronto. "Art can provoke strong feelings in all of us, but if you're fragile, it's more likely to trigger you."

The first principle of health care art, as with health care itself, is to do no harm, says Nanda. If the purpose of art in this context is to promote recovery, what kind of art supports that? Nanda believes the guiding criteria for selecting art should shift from work that is challenging to images that are positively reinforcing; the choice should not be dictated by aesthetics alone. In fact, "research shows that what is popular with the masses may not be what is considered high-quality art by experts," says Nanda. "And popular preference can differ from what patients prefer because they're in such a different perceptual context."

In another study, published in 2008 in *Environment and Behavior*, Nanda and colleagues found that patients made a distinction between art they would like to see in their homes and art they wanted to look at while in hospital. The hospital choice was driven more by emotional response—how the art made them feel.

Brain evidence supports such findings. Nanda and colleagues published a 2009 study in *Health Environments Research and Design Journal* that looked at neuroscience research, which shows that when hospital patients looked at art, a different part of the brain responded than when non-patients viewed the pieces. "When we're under high stress and extremely vulnerable, our primal responses become heightened," says Nanda. "Art is about perception, and in a health care setting, the patient's primal response is, 'Is this going to harm me or help me?'" Aesthetic responses, on the other hand, come from part of the brain involved in higher decision-making and cognition. Emotions, of course, play a key role in aesthetic judgment as well, but our "museum brain" and our high-stress "hospital brain" may have different neural addresses.

Basically, art in the health care milieu becomes comfort food for the brain—someone who's sick isn't going to stomach something spicy, even if it's from a five-star restaurant; they may prefer more subtle flavours, something essentially plain.

Enter evidence-based art—it takes the position that realistic, representational nature art is the way to go in health care. The concept has been promoted by Dr. Roger Ulrich, an environmental psychologist at the College of Architecture at Texas A&M University, who has conducted decades of research on art in health care settings. In a nutshell, he argues that nature imagery is healing and abstract art is neutral or even harmful—the latter view makes the art community bristle.

Supporters of evidence-based art have been accused of promoting mediocre art. But Nanda says the proof is in the patients. In perhaps the only study to ever be published by an environmental psychologist in the highly respected journal *Science*, Ulrich in 1984 presented the finding that a hospital room with a view of nature can shorten hospital stays among surgery patients, decrease need for medication and lower anxiety, heart rate and blood pressure. Another Ulrich study found that viewing sharp forms in abstract art increased inpatients' requests for painkillers. The problem, Ulrich observed, is that patients can project their negative feelings onto an abstract image.

Still, Nanda isn't opposed to abstract art flat out. "It's not enough evidence for a rule for all abstract art, but it's enough to give caution," she says. For patients, viewing objects with sharp edges, even innocuous everyday objects like sofas and tables, can trigger a fear response in the brain. "Fundamental properties like form and contours can affect you, especially when you're vulnerable," she says. But in the proper context and in common areas, such as a lobby or administrative quarters, more abstracted art can be appropriate.

Psychologist Dr. Janos Marton, curator of the Living Museum, a consumer art studio at Creedmoor Psychiatric Center, in Queens, NY, disputes the concept of evidence-based art. "I'm skeptical about the research because perception is hard to measure," he says. In fact, he

questions the distinction between patients and non-patients when it comes to art. "There's no difference between mental health patients and other people when it comes to perception," he says. "Patients may be more sensitive to stimuli in general, but that's about it." He feels that if the criteria are too strict, the choice of art narrows as well. "Some criteria say to stay away from religious, violent and sexual images, which basically excludes about 90 per cent of art," he says.

It's obvious that such images can provoke negative reactions, but what's more surprising is that nature art, too, can have a negative effect. Nanda and colleagues measured the effects on psychiatric inpatients of artwork rotated over a five-week period in the lounge of a psychiatric unit. Displayed were a photo of a savannah, an impressionistic landscape by Van Gogh and an abstract painting by Jackson Pollock. The findings, published in 2010 in the *Journal of Psychiatric and Mental Health Nursing*, showed that the need for medication to ease anxiety and agitation was lower on days when the realistic photo was displayed than on days when abstract art or no art was displayed; the need was also lower when inpatients saw the realistic photo versus Van Gogh's abstract-representational landscape, even though the two pieces were similar in content. There wasn't a significant difference between Van Gogh and Pollock.

Nature art can be abstract too. "Even a Van Gogh landscape, when you look at it carefully, can be problematic," says Nanda. "The ambiguity in brushstrokes is the beauty of the work, but because it's ambiguous, it can be mentally taxing." Another example is still-life images of flowers: Larger-than-life close-ups of flowers or leaves can miss the mark because they lack depth of field and context. "It's an unnatural way to see the world—it's nature, but it's not natural," argues Nanda. "Depth of field, context and elements of refuge are important."



Peter Mulcair, *In the Orchard*, 2009, photograph, 8" x 12", courtesy of the artist

Of hundreds of nature photos, this was the top choice among inpatients at the Centre for Addiction and Mental Health in Toronto.

At a very basic primal level, these are conducive to well-being.”

Peter Mulcair, a photographer with Workman Arts, can attest to the fact that it's not enough to just portray nature. When hundreds of his nature photographs were shown to a group of CAMH inpatients with schizophrenia to select for their bedrooms, the most popular image depicted a spring scene of white blossoms on a tree (see facing page), while one of the least popular featured a dense meadow of pale pink flowers.

Context also matters. Just as someone with a full bladder scheduled for an ultrasound wouldn't want to stare at a waterfall image in a waiting room, it's important to consider the appropriateness of certain art for specific areas of a hospital and for specific patient populations. “Patient bedrooms should feature images that are as easy to look at as possible,” says Lisa Brown. “Bedrooms are places of retreat. It's important in a highly vulnerable state that the images you see are calming.”

But Nanda laments that the “evidence” to date is fairly small, that we don't yet know enough about certain populations to make specific recommendations. Still, anecdotal evidence offers some guidance. “People with schizophrenia are sensitive to colour and light, so art needs to stay within a safe colour range and avoid distorted images and optical illusions,” Nanda explains.

Then there's the question, Who chooses the art? The general idea behind evidence-based art is putting the patient first. Nanda believes patient outcome is the litmus test for what is the “best” art choice, which may clash with aesthetic merit. She says the ideal art selection process would include a designer and art consultant working with clinical staff and patients. Some hospitals use what is called an art cart, which allows inpatients to select the art they would like for their bedrooms.

As part of its major site redevelopment project, CAMH has

developed a policy and procedure for selecting art for its public spaces. “When you display art in your home, some people will like it and others may find it disturbing,” says Brown. “Anyone can find something offensive in an image. But in a public institution, you have to be more careful; it's already so subjective that it's good to have more than one person decide what goes where.”

The Art Reference Group, which includes representatives from the arts and design communities, CAMH staff and consumers and families, is considering what art will be placed where. “Art is meant to contribute to the patient and visitor experience, so it must meet certain criteria: no violence or sex, and it must be welcoming,” says Brown.

One of those welcoming pieces is a mosaic by Workman Arts member Michael Morbach that will embellish a wall in the main lobby of the new Intergenerational Wellness Centre (see below). The abstract piece, with its lines, shapes and colours, invites viewers to interpret the piece for themselves.

It's a subjective process, but the intended message of art should be positive. “It becomes vital that the artwork patients must see day and night is something they can live with and connect with in a positive way,” says Nanda. “In an art gallery or even a hospital lobby, you choose to stop and look or keep walking. Patients don't have that choice.”

Want to know what consumers think about the art they see in mental health facilities? What art consumers and mental health professionals consider healing or harmful? Access this story at www.camhcrosscurrents.net and read the results of our survey.



Michael Morbach

A rough sketch of a mosaic by Michael Morbach to be installed in a main lobby at the Centre for Addiction and Mental Health in Toronto.

The chicken, the egg, and the cubicle farm

When design doesn't work

By Donna Hardaker

I am happy to be returning to work. It's been eight months of therapy, finding the right meds, and my doctor says I'm ready. I have a note requesting flexible hours, rest breaks and a cubicle by the window. I don't know how my co-workers will react. I don't know where I'll be able to take the rest breaks or how I'll handle the noise and constant commotion, but I'm looking forward to working again.

Many employers are building or adapting spaces to accommodate employees with physical disabilities, but what about employees with mental health issues? They often require social and organizational accommodations, but as this fictional scenario suggests, the physical environment is important, too.

There's reason to be concerned. In Canada, mental health claims are the fastest growing category of employer disability costs. A recent study led by Dr. Carolyn Dewa at the Centre for Addiction and Mental Health in Toronto found that the annual economic cost of workplace disability due to mental health issues is \$51 billion. The study, published in June in the *Journal of Occupational and Environmental Medicine*, also found that mental health disability leave recurs sooner than physical health leaves. Employers may assume that when a return to work isn't successful, or when an employee requires more sick leaves, it's because the employee isn't well enough to work. But what if the culprit lies elsewhere? What if workplaces themselves aren't conducive to good mental health?

Two emerging trends suggest contributing factors. Increasingly, employees are performing knowledge work, using complex thought processes and focused mental attention to analyze, synthesize and communicate information. Second, although the number of people who work from home is growing, most Canadians who perform knowledge work do it in another designated space. Since the advent of the cubicle environment in 1968, these work stations are uniform cubicles with half walls, located in large rooms filled with dozens of other cubicles under fluorescent lights with one ventilation system. The humorous and sometimes derogatory term "cubicle farm" arose out of the frustration of the cubicle experience.

My manager is trying to be helpful, but what can she do about how 40 of us are crammed into one space? I asked for a cubicle near the window—the daylight helps buffer the flicker effect of fluorescent light that gives me a headache—but it's hot by the window when the sun pours in. I can't close the blinds—everyone complains. And Karl is already angry with me for taking his spot by the window.

If the cubicle environment by virtue of its congested, noisy, exposed design is a detriment to health and recovery, aren't employers obligated to examine it more closely through the lens of employee health, psychological safety and inclusion?

Human beings are marvelously adaptive creatures when interacting with the built environment. We generally don't question the design of buildings or workspaces, even though we spend 90 per cent of our time indoors and accept poor and exclusionary design without a thought. But those of us with mental health issues tend to be more sensitive to discomfort, strain and stress related to the physical surroundings at work because we are already dealing with distressing physical and psychological challenges.

One of the accommodations I requested is to be able to take short rest breaks in a quiet space when I need them—this would be great if we had a quiet space! My manager suggested I go to the washroom and sit in a cubicle for these breaks. I look around her office as she's telling me this, and wish I could close a door and have privacy and quiet the way she can.

Reducing square footage per workstation by eliminating offices saves on leasing costs, so it appears to be a good business decision. Strategically, however, this may not be a cost-saving measure if it contributes to higher health benefit and disability claim costs and lowered productivity.

People here are so noisy! I'm trying to concentrate, but they listen to music, laugh loudly—Karl listens to his voicemail on speaker phone! What am I supposed to do? My manager tells me we're a happy, social workplace, so I should just wear earphones—but I feel uncomfortable blocking out all sound.

In the May 2011 issue of *Healthcare Papers*, environmental psychologist Dr. Jennifer Veitch points out how little we know about how the physical environment affects workers with mental health problems. The literature on workplace design tends to look at healthy populations, and the mental health literature focuses on social and occupational accommodations, not environmental factors. Employees seeking accommodations for mental health issues generally ask for modifications to tasks, schedules and processes. What are the physical equivalents of the inaccessible staircase for the employee who has a mental illness? Using a lens of occupational health and safety, does the cubicle environment harm employees who are vulnerable to mental illness or who are in recovery? Does it increase the healthy employee's vulnerability to mental illness?

Researchers are keen to find a common threshold of physical comfort for light, noise and temperature, as well as social interaction, sense of privacy, sense of personal space and perception of control to determine a consistent impact on employee satisfaction, and thus employee engagement and productivity. They come up with general common sense guidelines, but embedded in much of the literature are comments about the problematic variability of individual responses. Could it be that these variations within what is believed to be a healthy population are actually employees whose mental health is deteriorating?

Employees consistently report a strong desire for privacy and a sense of control over their environment. Yet the most common office environment, the cubicle, is one in which employees have little or no control over light, odours, noise and distracting activity around them. Lack of control over stimuli in one's environment, especially when it is unpleasant or distracting, can contribute to feelings of helplessness. When people feel helpless, they are less adept at performing tasks that require complex thought and focused attention—the very activities that knowledge workers are required to do.

Shared workspaces can increase social connection and team productivity when the spaces are thoughtfully designed. But most cubicle environments are not thoughtfully designed. The goal is to fit as many people into one space as possible, without regard to the impact of this increased social density. Research shows that as social density increases, physical comfort decreases, as does satisfaction with the work environment. And when noise, air flow, quality of light and sense of privacy are poor, employees are less satisfied with their work environment. Employees who are less satisfied have weaker employment relationships and miss more days due to illness than those who report a strong work relationship. Employees who experience physical discomfort at work have an increased risk of poor sleep. Poor sleep is a predictor for depression and other mental illnesses. So which comes first? The unwell employee or the unhealthy physical environment that makes employees unwell?

I was focused on my work, wearing the earphones, and didn't notice my manager when she came up behind me and tapped me on the shoulder. I nearly jumped out of my skin. It was so embarrassing—I had to leave for the rest of the day. I haven't been back to work in over a week. I just can't face it. My anxiety is high again, my insomnia is worse, I feel so stupid. My doctor says that maybe I should increase my meds and try again in a few weeks. But what will be different in a few weeks?

George Nelson, the visionary and designer of the original cubicle, the Action Office, voiced his dismay with how his system evolved: “One does not have to be an especially perceptive critic to realize that [the cubicle] is definitely not a system which produces an environment gratifying for people in general.” We have to ask then, why would this environment work for our most vulnerable employees?

Donna Hardaker is a workplace mental health specialist with the Canadian Mental Health Association York Region branch in Toronto.

Tips for front-line workers

Here are ways you can help clients prepare to return to work and help their employers create a positive physical work environment:

- Always include a discussion of physical workspace in the context of the mental demands of the job—considering the effects of light, sound and amount of space for working and resting on the employee's health and productivity.
- Make recommendations to mitigate any negative social consequences of an employee having a modified workspace.
- Recommend that employers provide training for everyone in the workplace to increase awareness and understanding of mental health issues.

Tips for employers

- Take a strategic fiscal approach by incorporating all aspects of employee mental health into fiscal budgets and planning.
- Commit to change where needed to provide a physically healthy and inclusive environment for everyone.
- In all accommodation discussions, talk about how the physical environment affects the employee's ability to work, and make physical modifications where necessary. Be aware of the possible effects of the modifications, e.g., isolating an employee who is bothered by noise can harm social support.
- Be prepared to re-think the cubicle workspace. If you can't avoid that setup, employees should be able to have as much control as possible over light, air and noise.

When the couch is more than a couch

Do therapists' offices affect the therapeutic process?

By Anne Ptasznik

Psychiatrist and psychoanalyst Dr. David Dorenbaum says that to facilitate the “theatre of the mind” that occurs during therapy, it’s important to create a “potentiality of space.” “It’s no different than the space where children play, a place of fantasy, a place of creativity, a place we go that opens up opportunities of possibilities,” he says.

For years, the Freudian analyst’s couch was the iconic symbol for what a therapist’s office looked like. But today, as therapeutic approaches have evolved, it’s timely to consider how therapists’ offices are changing and whether office design and décor affect the therapeutic process—and even outcomes.

Dorenbaum’s office has changed since he inherited it from a respected colleague, whose tastes for shaggy carpet, wallpaper and thick curtains differed from his own. Guided by an associate, then—head of stage design for the Canadian Opera Company, Dorenbaum transformed the office—painting the walls white to appear more spacious, replacing the overhead glaring lighting with a softer floor lamp and installing window coverings that allow clients to look out while preventing anyone from looking in.

Appearing like a stage actor himself, Dorenbaum walks around his office, dramatically narrating the origin and significance of each décor item. The tall roll-top desk, designed by famous Italian designer Aldo Rossi, allows him to take notes standing up after sitting with

clients all day. Shaped in the form of a lighthouse, it has the signification of “safety, of signaling the arrival at the port of destination,” he explains.

His ergonomic chair requires his body to be engaged, thus, in effect, becoming a work instrument that enables him to sustain attention. This he compares to Anna Freud practicing analysis while knitting in her rocking chair, which reportedly sharpened her attention. Paralleling the evolution of psychoanalysis, Dorenbaum is not the classic “speculative, silent, withdrawn” analyst, pretending to be a “neutral screen,” but rather a more active listener.

The chair, positioned behind the couch, helps to “liberate the gaze” so clients can say whatever is on their minds, without seeking approval through a nod or a smile. The couch is an armless black Eames chaise, originally designed for Academy Award-winning actor Billy Wilder, where clients say things they didn’t know they had the words to express. “The couch, rather than simply being a piece of furniture, is the invitation to go beyond language to signify that here you can talk and won’t be judged,” Dorenbaum says.

Dorenbaum now rarely changes anything in his office in order to ensure that the focus remains on his clients’ internal change, rather than external change imposed by introducing new objects or moving old ones.



Nancy Leung

Psychoanalyst Dr. David Dorenbaum provides a “safe space for exploration” that focuses on his clients’ internal changes.

This mindful approach to design is one that Dr. Katherine Morris, a Maryland psychologist, recommends all therapists take, otherwise they risk “acting out” in their space. For example, a therapist with low self-esteem may inadvertently try to build himself up, for example, by plastering a wall with diplomas and displaying books he has written or photographs of important people he knows.

Through her design business, Morris uses depth psychology, which examines unconscious influences in our lives, to help her clients organize their offices better. Morris recommends that therapists, in the company of a colleague, reflect on their space and the feelings, thoughts and fantasies they might prompt in their clients. Expensive furniture, the space’s public or private feel and the presence of family pictures, for example, impart information about the therapist. Viewing personal items or bumping into a family member in a home-based office could even blur professional and personal boundaries, according to psychoanalyst Karen J. Maroda, who advocated against home offices in a 2007 article in *Psychoanalytic Psychology* that provoked heated debate. Therapists, Morris says, should sit in the client’s chair to see their visual perspective and even go outside to see what it is like to walk into the space.

But it’s not just intuitive. The cutting-edge field of neuro-architecture is beginning to provide brain evidence for why we

respond the way we do to spaces. Dr. Margaret DeCorte, a psychologist with the Royal Ottawa Mental Health Centre in Ottawa, Ont., explains that when people are in a vulnerable state, higher-level brain functions like cognition are compromised, and the limbic system, the “emotional brain,” is more sensitive, responding faster to natural elements in the environment. Dr. Roger Ulrich, a leader in the evidence-based design movement, argues that this is because as a genetic carryover of evolution, the brain easily processes natural elements in the environment, whereas the built environment requires more processing, thus increasing subjective levels of stress.

Based on this work, DeCorte offers suggestions for how therapists can create a more healing space. The ideal office would have windows that look out onto elements of nature, such as a garden; it would feature soothing natural wall colours and artwork depicting nature scenes. Therapists can also create a more soothing space by placing a plant or other natural feature in a corner because 90 degree angles do not exist in nature, says DeCorte. Clients should sit facing the doorway with their backs to the wall because humans are “pre-wired” to feel safer that way. Flexibility and control of the environment also enhance satisfaction with the space, so having a blanket available for a client who feels cold and furniture that can be reconfigured spatially by the client are helpful.



Anja Kessler

Control over the therapy environment, such as being able to dim lights or choose where to sit, creates a safe, comfortable space for clients.

Another important environmental feature is lighting. DeCorte says that dim lighting is best because overly bright lights make eyes constrict, which could be perceived as hostility, whereas low light dilates the eyes, making people appear friendlier. A 2006 study in *Environment and Behavior* found that dim lighting in a counselling room yielded more pleasant, relaxed feelings, more favourable impressions of the interviewer and more self-disclosure than did bright lighting.

But for most people, the relationship with the therapist outweighs any design issues. In a *CrossCurrents* survey of consumer experiences of therapist offices (see below), one respondent said that in his five years of therapy, the setting has never made a difference. “When the connection is right, nothing else really matters to me,” he wrote.

Still, comfort, safety and privacy are important features of the therapeutic environment, as well as being, as Dorenbaum says, a “space for exploration.” DeCorte agrees, saying that the human brain develops according to a universal need for both. “We want sanctuary so we feel safe. But we also want a little element of opportunity.”

Some front-line workers, particularly those who do street outreach, meet clients outside an office. Access this story at www.camhcrosscurrents.net and read the “Safe spaces in ordinary places” sidebar for practical tips.

Crossing the threshold: What clients want in a therapy office

The therapist’s space “acts like a container for everything that happens in therapy. When you open up and share, it is like the office is ‘holding’ parts of you. That needs to feel safe and secure.” That’s how one consumer described the importance of the therapy space in a *CrossCurrents* survey. But how exactly can therapists create that safe physical space? Here’s what consumers and therapists told us:

Cozy or clinical. Most consumers favoured a cozy feel. “If it’s too clinical, I’m uncomfortable, but if it’s too homey, I lose confidence in the therapist’s professionalism,” wrote one consumer. While some therapists preferred a minimalist look, others advocated a balanced approach: “Therapists’ efforts to be bland in decor can backfire by not communicating and validating the fullness of human experience beyond what is purely instrumental,” wrote one therapist.

Picture perfect. Some therapists display personal photos because it presents them as “more human,” but some consumers and therapists considered it a boundary breach. “There shouldn’t be family pictures because that can be alienating for clients who feel alienated from their own families,” wrote one consumer.

In the hot seat. Seating is a big issue. “Comfortable chairs are a symbol of respect, conveying a willingness to listen and not rush the client,” wrote one consumer. For another, “I feel intimidated if the therapist sits higher than me. And separation by a desk can be intimidating.” One therapist wrote, “Provide more than one chair so the patient can choose where to sit and has an easy get-away so they don’t feel trapped.” Size also matters: One therapist, who specializes in eating disorders, highlighted the need to have chairs that fit both large and small bodies.

Good housekeeping. Tidiness is important. “I had a psychiatrist whose office was always dusty and the garbage was overflowing,” wrote one consumer. “This told me his patients aren’t important to him.” Clutter can be distracting, even anxiety-provoking: One therapist who specializes in anxiety wrote, “I’m conscious of keeping my space tidy so anxious clients don’t feel crowded and overwhelmed.”

It’s the little things that count. Consumers appreciated little touches like pillows, tissues and water—“crying can be dehydrating,” one consumer pointed out. Plants are another calming feature, but one therapist cautioned, “Badly cared for plants will make patients feel they will be badly looked after as well.” Another tactful touch: “There are two clocks in my therapist’s office—one visible to each of us so we both know the time and aren’t surprised when the session is over.”

A matter of degree. Consumers were divided on the issue of displaying credentials. “Displayed diplomas affirm we are in good hands and can affirm the overall professionalism of the experience,” wrote one consumer. Another added, “A few diplomas are okay, but a wall of them can be intimidating. I sometimes feel the therapist is trying to create a divide—to reinforce the well professional vs. ill patient dichotomy—for their own needs.”

The art of healing. Art is tricky because it’s subjective. “Don’t have art that could be threatening to someone who feels vulnerable, although almost any image could be interpreted negatively,” wrote one consumer. “But a good therapist could explore what was behind the trigger, so I don’t think therapists ought to try for complete neutrality.” One therapist who sees clients with eating disorders agrees: “I have a print of a Modigliani nude. Anything in your office might raise questions, so be prepared to discuss it.”

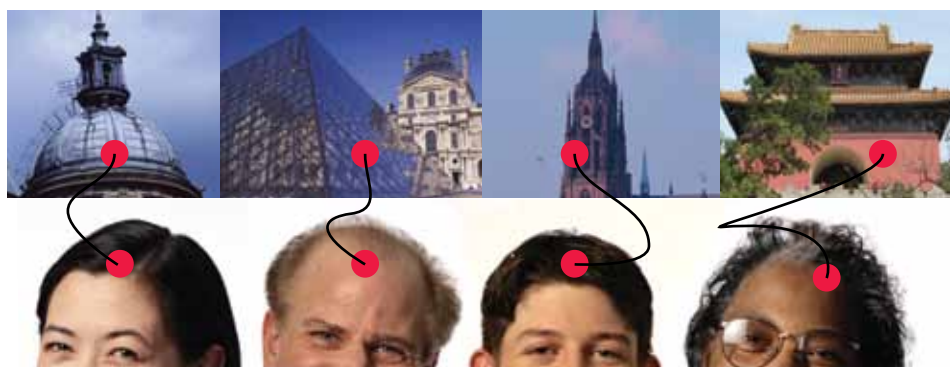
Respect diversity. “I am Inuit, and if I see culturally relevant objects, I know the therapist is aware of my heritage,” wrote a consumer. But another cautioned against tokenism and ignorance: “Clients can feel uncomfortable when clinicians misuse culture-based art or symbols as decoration for offices in an attempt to demonstrate inclusiveness.”

God and politics. “Avoid items that are overtly oppressive, including faith affiliations and heterosexist bias,” wrote one therapist. That includes politics. “A social worker where I did residency had a ‘Bush Sucks’ poster in her office,” wrote one therapist. “At that time, the majority would’ve agreed with her, but take into consideration she’s going to get people that disagree as well.”

Hema Zbogor

This is your brain on architecture

By Linda Hossie



Architects for centuries have depended on intuition and experience to create environments that generate a specific reaction in the people who use the space. But neuroscience is changing that. The ability to design the environment to elicit a specific neurological response is slowly becoming a science, spurred by the work of the Academy of Neuroscience for Architecture (ANFA), the only institution in the world dedicated to studying the connection between the brain and architecture.

Dr. Eve Edelstein is president of Innovative Design Science, a faculty member at the NewSchool of Architecture and Design in San Diego and a Research Fellow with the ANFA. She is a leading figure in this movement for evidence-based design. Trained in both neuroscience and architecture, she and others in the field are building a body of evidence that will help architects create buildings attuned to the needs of people using those spaces. Edelstein talked with *CrossCurrents* about the implications of neuroarchitecture for mental health and addiction treatment facilities.

What are examples of the links between the brain and architecture?

Lighting is a perfect example. Scientific research has discovered cells in the back of the retina that aren't used for vision. They integrate changes in light levels throughout the day and feed directly into the brain's clock; these retinal cells set the circadian clock, the response of the brain to the changing time of day. What's been so interesting is to see how circadian disruption can affect many aspects of mental function, mental health and biological function and medical health.

We can ask whether our architecture allows appropriate and natural cycles of light

into buildings, particularly for people who spend a lot of time inside. It's estimated that the workforce and certainly hospital patients spend 80 to 90 per cent of their time indoors. If our buildings don't allow a natural light cycle, the endocrine systems that are driven by the light of day can become disrupted, and that includes hormones that drive stress responses. Studies have found relationships between sleep deficiency, depression and the amount of daily light exposure. This evidence from neuroscience supports what architects intuitively know about access to light through windows and other features.

How are neuroscience findings affecting actual architecture and design in health care?

I was part of the planning team for the redesign of St. Joseph's Healthcare Hamilton, a mental health hospital in Hamilton, Ont. The light research drove our suggestions for how the entire building would be designed. That included proposing a garden space that would allow natural light inside and around the sides of the building. We also created wayfinding strategies using atria of different sizes and shapes, so that by virtue of the light coming into the atrium, people can understand where they are. We also created winter gardens, multi-storey atria in the middle of the building so people can sit by, see and be bathed in natural light at any time of year.

A lot of new design seems to focus on creating a calming environment. Does neuroscience support this trend?

In neuroscience, we look at stress responses and hormonal changes. Calming effects relate to elements like noise levels. We are

finding interesting relationships between sound, unwanted-noise stress formers and cardiac responses and cortisol changes. Studies of night traffic, for instance, have found that increased cortisol levels and shifts in the normal daily cycle of cortisol are related to sound levels. Sightlines, views and access to and experience of outdoor spaces seem to be correlated with mental and physical health in terms of heart and stress levels. We have few definitive empirical studies, but taken together, the studies reveal a trend, a strong indication, in some cases, that design has a real biological and neurological impact.

Does neuroarchitecture have a role in the design of psychiatric facilities?

It's helpful to look at the scientific evidence from biology and psychiatry. The difficulty is taking the information and translating it into something a designer can use. When I surveyed clinicians at St. Joseph's Healthcare, I asked about different psychiatric conditions and their accompanying needs. It was clear that a continuum of needs exists and that it depends on the individual and their state of acuity. In any one individual you might find a multitude of needs that change over time. That's true of all of us. Our needs change throughout the day, across time, according to our state of health, or the tasks we're being asked to engage in. The challenge is, how can architects design for flexibility? I think flexible social space, flexible light, flexible quiet, flexible temperature, smell and colour are what people need and desire, and with a respect for these dynamic needs we can drive architecture in the right direction.

Many psychiatric facilities are moving towards private patient bedrooms and communal spaces for activities like cooking and eating. Is there brain evidence for this trend?

Many studies have examined the effects of crowding, privacy and control, but it's difficult to achieve statistical significance in small research studies. However, there are some interesting findings about the impact of isolation on depression, the increase in negative affect with isolation and the increase in positive affect by being with a social partner. In one study of large hospital wards, people tended to isolate themselves more, but not in places with individual rooms.

Historically, psychiatric facilities have used isolation rooms to calm agitated patients. Does brain evidence show that this environment is indeed calming?

I found a study that showed an increase in cardiac risk factors, even in people without a prior history of heart issues. But it's an

enormously complex question. The question also relates to the impact of one person's isolation on other patients. The question for design is, how do you create a space that both serves the agitated individual and serves the rest of the individuals in that space? If we had sufficient staff and space to manage situations, including crises, it would be easier. What a designer can do is ask, what are the physiological responses at the simplest level of human beings so we can design to minimize an agitated state? We know that noise is related to agitation, and we have evidence that lighting is related to agitation as well, particularly among people with dementia.

Nurses at St. Joseph's related a very interesting anecdote. The existing facility had exterior balconies, veranda spaces that were safe for patients and that opened to the air. The nurses told me, "We don't need isolation rooms because if patients begin to feel agitated, or if we find they're agitated, our first response is to direct them to have a moment to sit outside." This suggests empirical evidence of some of the research attesting to the calming effects of nature and access to the outdoors.

To find out more about the connection between neuroscience and architecture:

Academy of Architecture for Health
www.aia.org

Academy of Neuroscience for Architecture
<http://www.anfarch.org>

Center for Health Design
<http://www.healthdesign.org/chd>

InformedDesign
<http://www.informedesign.org>

Sensing Architecture blog
<http://sensingarchitecture.com>

MINDSPACE

Architecture affects not only how we perceive the world, but also how we interact within it. Here's what research tells us.

Privacy and aggression. People with Alzheimer's disease who have private rooms containing their own personal objects exhibit less aggression and anxiety and fewer psychotic symptoms.

Into the light. Retirement home residents living in buildings with a lot of daytime light show less cognitive decline than residents of darker buildings.

Dimming the mind. Bright light seems to boost cognition, but it also counteracts relaxation and openness. A study of school counsellors found that students interviewed in a dim room felt more relaxed, viewed the counsellor more positively and disclosed more than students interviewed in a bright room.

On the edge. A Harvard Medical School study found that people shown photos of everyday objects like couches and clocks preferred items with rounded edges over those with

sharp angles. The researchers speculate that our brains are hard-wired to avoid sharp angles because we perceive them as dangerous.

When clutter is a good thing. A study by the Michigan Institute of Technology and the U.S. National Institute of Mental Health found that a generous scattering of objects in a room increases the room's memorability and establishes a reassuring sense of place.

Hitting the ceiling. Ceiling height in a room affects how people process information. A lower ceiling promotes greater attention to detail. Higher ceilings promote abstract and creative thinking.

Seeing green. Studies of children and university students found that views of natural settings improve focus. Other studies have found that attending to urban settings requires more cognitive work than gazing at elements of nature.

For references, access this Q&A at www.camhcrosscurrents.net

Hema Zbogar

Deconstructing the architecture of madness

Asylum: Inside the Closed World of State Mental Hospitals is a powerful, exquisite visual essay on the history of the world of mental illness. I reviewed it from the perspective of a “lay person” and of an architect who has worked extensively in mental health care.

Christopher Payne’s provocative cover photograph of a straitjacket, overlaid with the word “asylum,” conjures up all the stereotypical images associated with a subject that remains taboo. “Haunting, sad, melancholy, disturbing, frightening, horrifying, cruel” are words that reflect how many of us imagine the mental hospitals—“lunatic asylums”—of the old days.

As the project principal for the last 10 years on the design team redeveloping the Centre for Addiction and Mental Health (CAMH) in Toronto, I have collaborated and consulted with clients, patients families and clinical staff. I have come to appreciate how profoundly stigma can hinder the path to recovery. Beautifully presented as a coffee table book, Payne’s artful documentation invites readers to discover and confront mental illness and exposes how it was contained and hidden away from society, perpetuating the stigma.

Based on a model established in Europe at the beginning of the 19th century—the model of “moral treatment”—physician Thomas Story Kirkbride established the “guidebook” for the construction of most U.S. psychiatric hospitals at the time. As a hospital superintendent, Kirkbride believed that a well-designed, beautifully landscaped facility, often in a working farmstead setting, could heal mental illness.

This ideal notion of the therapeutic environment failed miserably when state asylums became severely overcrowded and understaffed by the 1950s. Sociologist Erving Goffman, author of the seminal book *Asylums*, described these mental hospitals as “total institutions,” where “there is an unbridgeable gulf between staff and inmates, where rigid rules and roles preclude any sense of fellowship or sympathy, and where inmates are de-individuated, deprived of all autonomy or freedom or dignity or self, reduced to nameless ciphers in the system.”

Seen through Payne’s eyes, the evocative photos of generous sunlit corridors, abandoned personal belongings, courtyard gardens



Typical ward, Kankakee State Hospital, Illinois

overgrown with ivy, the cage-like enclosure on the forensic ward and the unclaimed urns of ashes on shelves—a world closed within the walls of these grand institutions—speak volumes about the dilemma between a vision for a healing environment and one of physical confinement. In the end, the custodial model trumped the therapeutic approach.

The historic pendulum-swing in the approach to treating mental disorder has been met with reactionary and ever-changing design solutions over the last two centuries. The poignancy of Payne’s eerily beautiful documentation illustrates the lessons we can learn from a bygone era.

The evident shortcoming of the original asylum concept was its formulaic template, which created massive institutions that did not foster a normalized experience for those in treatment. Our current approach to design for client care is to create a sense of community in a more intimate setting, to cultivate a sense of belonging for those who feel disenfranchised and marginalized, through design that promotes and supports client and staff interaction.

The positive physical aspects of these stately estates—“the high ceilings, lofty windows, spacious landscaped grounds providing abundant light and fresh air, promoting physical exercise and wellbeing”—continue to be the essential planning and design priorities for us today in creating new healing and therapeutic settings through the CAMH redevelopment.

The book features two particularly thought-provoking images—the juxtaposed photos of an open nurse station and one that is enclosed, each positioned with different degrees of visual observation of the wards. This element of front-line clinical care, more than a century later, continues to be at the forefront of the ongoing planning and design discourse. As an architect immersed in this dialogue, I can hear in Payne’s images echoes of the discussion in the corridors of peeling paint and abandoned work stations.

Asylum: Inside the Closed World of State Mental Hospitals. Photographs by Christopher Payne, text by Oliver Sachs. MIT Press, Cambridge, MA, 2009, 216 pp., \$45US.

Alice Liang is principal at Montgomery Sisam Architects in Toronto.



Patient suitcases in ward attic, Bolivar State Hospital, Tennessee

Christopher Payne, courtesy of MIT Press.

Demolishing stigma: It takes more than an urban village

Wayne Skinner

What should an academic health sciences centre do if it had the opportunity to redevelop a historic 27-acre site? For the Centre for Addiction and Mental Health (CAMH) in Toronto, the answer was to build an “urban village.” Equipped with that appealing phrase to represent the concept and the strategy, CAMH has embarked on one of the most ambitious redevelopments of a health care campus in the world today.

In 1850, the original 200-acre site on Queen Street was opened as one of the most progressive developments of that time. The Provincial Lunatic Asylum, as it was called, was more or less self-sufficient, growing much of its own food. It was a walled facility, and the thought of being brought there surely a fearful prospect, despite the efforts of pioneers to humanize care. The task of moving from the model of madness as moral malady to mental illness started then, and continues today. Over the years, the institution grew to become the largest psychiatric hospital in Ontario. But as the city grew around the hospital, it became less self-sufficient. It remained a place of confinement and protection in a world that continued to be phobic about mental suffering.

I was introduced to 999 Queen St., as it was called by then, in 1971, when as a social sciences student I went to work there. It changed my life. Two years later, I was a graduate student in social work at the University of Toronto, and my career has focused on addiction and mental health ever since.

Back then, I worked in the original building, a massive structure that showed its age, but that also revealed magnificent proportions and a classic design that deserved to endure. Instead, the building was demolished, replaced by a set of four buildings connected by an enclosed walkway in the mid-’70s, fronted by an administration building in the functional ugly style that prevailed through much of the mid-20th century.

Tearing down that old building would have probably not been permitted today. Its destruction would be the equivalent of destroying the equally noble building that the Toronto General Hospital moved to on College Street in 1910. Now revitalized, it serves as the hub for a set of new medical science buildings. Is there something in the way we look at things that makes us want to preserve a historic medical building and tear down a historic psychiatric hospital? I suspect so, and I suspect that our approach to that space on Queen Street still reveals a problematic relationship between contemporary society and mental illness.

Urban architecture and landscape design, as evidenced by other developments in North American cities, is inclined towards ecological values. Around the University of Toronto, for example,

streets have been redesigned to expand pedestrian space, and others have been closed off to vehicles. Such changes reflect the urban village concept.

CAMH’s strategy is to integrate the new site with the surrounding neighbourhood by extending existing streets to create new city blocks in order to create a safe, welcoming setting for care in which the institutional stigma long associated with the property is eliminated. But it is hard to understand how transposing what was once a contiguous, very green 27-acre campus into a few new city blocks is supposed to break institutional stigma. Although there are gestures in the redevelopment that recognize the past—most importantly, saving parts of the wall—the greater effect of this design is division, erasure and forgetting.

Perhaps the greater opportunity is to imagine a true urban village that proclaims the whole campus as a site dedicated to mental health. This is how the great institutions in health care represent themselves—by *standing out* as something positive, even though they have histories of medical treatment that seem as barbaric as does the history of psychiatric care. Psychiatrist Dr. Vivian Rakoff recently noted that it reflects a lack of historical understanding to evaluate the well-intentioned actions of past generations through the lens of today’s more advanced knowledge. I hope that future generations will remember our efforts with such a wise gaze.

Even more important, we need to challenge ourselves to do the best we can with the knowledge and resources we have. So much of the CAMH redevelopment has been successful. The ability to excite and recruit private and corporate donations has been remarkable. New and improved purpose-built buildings are being constructed. But is there a tradeoff? Are we paying an unfortunate price? Imagine not a lattice of streets that will draw more vehicular traffic and divide a campus that could otherwise be remarkably and distinctly unified. Imagine instead a place that not only provides the best care, but that can become a model environment, where buildings and landscape stand out and cohere to create a welcoming community of sanctuary and health.

The goal of redevelopment can be more than making the site look like any other set of city streets which just happen to hold Canada’s largest mental health and addiction facility. The site needs to be a space that proclaims itself as a place of caring, learning, healing, recovery and community. That is a different mission than trying to fit in. It is about standing out and leading the way. It is about showing pride of place. That is what great institutions do.

Wayne Skinner is deputy clinical director of the Addictions Program at the Centre for Addiction and Mental Health in Toronto.

To see photos of the buildings discussed in this article, visit the Last Word blog at www.camhcrosscurrents.net





CANADA

Royal Ottawa Health Care Group Schizophrenia Conference: "The Role of Families as Caregivers"

September 23, Ottawa, Ontario
tel 613 722-6521, ext. 6811
e-mail Lucie.Moore@rohcg.on.ca
<http://www.rohcg.on.ca/education/events-e.cfm>

1st Canadian Conference on Family Group Conferencing

September 25–27, Toronto, Ontario
tel 416 987-7725
toll-free 800 227-4645
e-mail fgdm@americanhumane.org
www.oacas.org/circle/

Psychological Rehabilitation Canada Annual Conference

September 26–29, Cape Breton, Nova Scotia
toll-free tel 866 655-8548
e-mail support@psrrpscandada.ca
<http://psrrpscandada.ca>

Royal Ottawa Health Care Group Forensics Conference: "Mental Health in Corrections – Problems and Solutions"

September 29–30, Ottawa, Ontario
tel 613 722-6521, ext. 6811
e-mail Lucie.Moore@rohcg.on.ca
www.rohcg.on.ca/education/events-e.cfm

Canadian Association for Suicide Prevention National Conference

October 3–5, Vancouver, British Columbia
tel 604 822-7524
e-mail ipad@interchange.ubc.ca
www.casp2011.ca

Royal Ottawa Health Care Group CBT Workshop: "CBT of Psychosis, Post Traumatic Stress Disorder and Dissociation"

October 13–14, Ottawa, Ontario
tel 613 722-6521, ext. 6811
e-mail Lucie.Moore@rohcg.on.ca
www.rohcg.on.ca/education/events-e.cfm

Canadian Psychiatric Association 61st Annual Conference

October 13–15, Vancouver, British Columbia
tel 613 234-2815
e-mail conference@cpa-apc.org
www.cpa-apc.org

American Academy of Child and Adolescent Psychiatry 58th Annual Meeting

October 18–23, Toronto, Ontario
tel 202 966-7300
e-mail meetings@aacap.org
www.aacap.org

Prévenir et intervenir en dépendances : INTERAGIR

October 23–26, Trois Rivières, Québec
tel 450 646-3271
e-mail secretariat@aitq.com
<http://aitq.com/activites/colloque.htm>

6th Education Conference on Mental Health: Child and Youth Mental Illness – Pathways to Cross Cultural Care

October 28, Toronto, Ontario
tel 416 444 8455
e-mail info@careconferences.com
www.careconferences.com

Association for the Treatment of Sexual Abusers 30th Annual Conference

November 2–5, Toronto, Ontario
tel 503 643-1023
e-mail atsa@atsa.com
www.atsa.com/conf.html

HealthAchieve: Engage, Recharge, Focus, Network and Expand

November 7–9, Toronto, Ontario
tel 416 205-1434
e-mail mromero@oha.com
www.healthachieve.com

2011 Canadian Association for School Health Conference

late November (TBD), Montreal, Quebec
tel 604 575-3199
e-mail info@cash-aces.ca
www.cash-aces.ca

Canadian Society of Addiction Medicine Annual Meeting and Scientific Conference

November 3–6, Vancouver, British Columbia
tel 403 813-7217
e-mail admin@csam.org
www.csam.org

Issues of Substance 2011 (Canadian Centre on Substance Abuse National Conference)

November 6–9, Vancouver, British Columbia
tel 613 235-4048
e-mail ios@ccsa.ca
www.issuesofsubstance.ca

Association for Behavioral and Cognitive Therapies 45th Annual Convention

November 10–13, Toronto, Ontario
tel 212 647-1890
e-mail tchilders@abct.org
www.abct.org/Conv2011

Early Years Conference 2012

February 2–4, 2012, Vancouver, British Columbia
tel 604 822-0054
e-mail ipcde2@interchange.ubc.ca
www.interprofessional.ubc.ca/Early_Years.htm

International Neuropsychological Society 40th Annual Meeting

February 15–18, Montreal, Quebec
tel 614 263-4200
e-mail bornstein.1@osu.edu
www.the-ins.org/future-meeting-of-ins

American Association for the Advancement of Science Annual Meeting

February 16–20, Vancouver, British Columbia
tel 202 326-6450
e-mail meetings@aaas.org
www.aaas.org/meetings

UNITED STATES

American Psychotherapy Association National Conference

October 13–14, Branson, Missouri
toll-free tel 800 423-9737, ext. 168
e-mail conference@americanpsychotherapy.com
www.americanpsychotherapy.com/conference/

25th Annual Conference of the American Psychiatric Nurses Association

October 19–22, Anaheim, California
tel 703 243-2443
toll-free 866 243-2443
e-mail info@apna.org
www.apna.org

13th Annual Conference of the Collaborative Family Healthcare Association

October 27–29, Philadelphia, Pennsylvania
tel 720 940-4880
e-mail CFHA@ascentmeetings.com
www.cfha.net/pages/Conference/

American Psychiatric Association Institute on Psychiatric Services

October 27–30, San Francisco, California
toll-free tel 888 357-7924
e-mail: apa@psych.org
www.psych.org

42nd Annual Meeting of the American Academy of Psychiatry and the Law

October 27–31, Boston, Massachusetts
tel 860 242-5450
e-mail execoff@aapl.org
www.aapl.org/meetings.htm

American Public Health Association 139th Annual Convention

October 29–November 2, Washington, DC
tel 202 777-2521
e-mail natalie.sorkin@apha.org
www.apha.org/meetings

24th Annual U.S. Psychiatric and Mental Health Congress

November 7–10, Las Vegas, Nevada
tel 951 219-2881
e-mail brian.bales@cmellc.com
www.psychcongress.com

Neuroscience Education Institute 2011 Psychopharmacology Congress

November 10–13, Colorado Springs, Colorado
tel 760 931-8857
toll-free 888 535-5600
e-mail customerservice@neiglobal.com
www.neiglobal.com/Default.aspx?tabid=123

Society for Neuroscience 41st Annual Meeting

November 12–16, Washington, DC
tel 202 962-4000
e-mail info@sfn.org
www.sfn.org/am2011

American College of Neuropsychopharmacology Annual Meeting

December 4–8, Waikaloa, Hawaii
tel 615 324-2360
e-mail acnp@acnp.org
www.acnp.org/annualmeeting/default.aspx

AAAP 22nd Annual Meeting and Symposium

December 8–11, Scottsdale, Arizona
tel 401 524-3076
e-mail events@aaap.org
www2.aaap.org/meetings-and-events/annual-meeting

Society for Social Work and Research 16th Annual Conference

January 11–15, 2012, Washington, DC
tel 703 352-7797
e-mail info@sswr.org
www.sswr.org/conferences.php

American College of Psychiatrists Annual Meeting

February 22–26, Naples, Florida
tel 312 662-1020
e-mail angel@ACPsych.org
www.acpsych.org/meetings-and-news/annual-meeting

ABROAD

2nd International Congress on Dual Pathology, Addictive Behaviors and Other Mental Disorders

October 5–8, Barcelona, Spain
tel 34 91 361 2600
e-mail secretariat@cipd2011.com
www.cipd2011.com

World Congress of the World Federation for Mental Health

October 17–21, Cape Town, South Africa
tel 27 21 914 2751
e-mail info@wmhc2011.com
www.wmhc2011.com

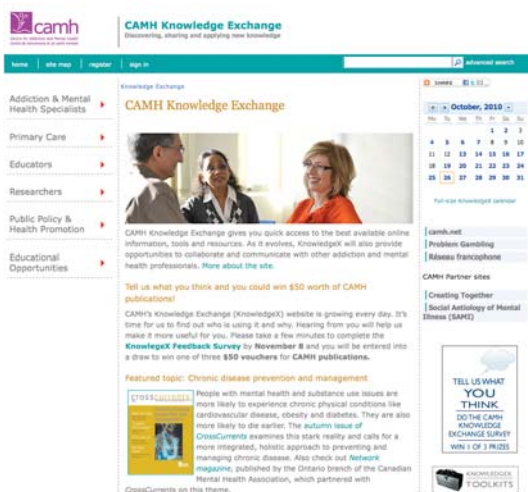
7th European Congress on Violence in Clinical Psychiatry

October 19–22, Prague, Czech Republic
tel 31 20 409 0368
e-mail conference.management@freeler.nl
www.oudconsultancy.nl/prague_cfa

Conference of the Five Continents: "Psychosocial Effects of Globalization on Mental Health"

October 19–22, Lyon, France
tel 33 4 72 43 10 11
e-mail congresdescinqcontinents@univ-lyon1.fr
www.congresdescinqcontinents.org/en

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