**Landscapes of Therapy at Boston Area Teaching Hospitals**

Boston-area teaching hospitals are world leaders in patient-centered care, research, and treatment. Visit five recent therapy gardens designed for these institutions to fit in tight urban situations. Tour stops will include two interior gardens, two roof-deck gardens and one waterfront therapy site designed for rising sea levels.

**Learning objectives**

1. Experience and learn how therapeutic gardens enhance and complement the healing process for patients, family and staff.
2. Learn the program potential, technical issues and design strategies for hospital roof gardens and interior gardens for immuno-compromised patients.
3. Learn about the motivations, successes and failures that influence healthcare providers’ decision-making about therapeutic gardens at their facilities.
4. Learn how hospitals along coastal areas are changing and improving the building systems and site accommodations in response to global warming.

**Co-Leaders**

Jennifer Jones, FASLA. A Principal of CRJA in Boston, Ms. Jones oversaw design of Dana-Farber’s Stoneman Healing Garden which opened in 2011. Her practice includes site master planning and design for hospitals, hospice care, senior living communities, patients with Alzheimer’s, college and university campuses, and US embassies and consultates across the world. She has lectured on Universal Design at IFLA and in Rio de Janeiro and Kyoto, and provided pro bono site designs for the first fully accessible school in Rwanda.

Rob Adams is an Associate Principal at Halvorson Design Partnership in Boston MA where he was the lead designer for the Massachusetts General Hospital Uffelder Healing Garden. His professional experience includes urban parks, plazas and streetscapes, campus design, large greenway systems and detailed garden design. He has been involved in many master planning and site specific design projects at Halvorson Design Partnership serving as principal in charge and project manager.

**Additional presenters**

James Heroux, ASLA is a Principal at the firm of Brown Sardina in Boston, MA where he was the lead designer and coordinator for the Rooftop Garden at the Paul S. Russell, MD Museum of Medical History and Innovation that opened in Spring 2012. While Director of Landscape Architecture at Payette Assoc. and owner of Strata Design Assoc., he specialized in planning and site design for medical, educational and similar institutions, including Buddhist retreats and multi-family co-housing environments, both here and abroad.

Herb Sweeney IV is a Senior Associate at Michael Van Valkenburgh Associates, Inc. where he has managed environmental sustainability projects for campus landscapes, urban spaces, private residences and green roofs. At the MGH Lunder Building, Herb guided design and construction of roof garden, green roof and atrium spaces. Herb has taken a leadership role on numerous other MVWA projects, including the George W. Bush Presidential Center in Dallas, TX, Asian Cultural Complex in South Korea and Boston Children’s Museum.

Sean Sanger is a Principal at Copley Wolff Design Group in Boston, MA. In addition to the Spaulding Rehabilitation facility, he has been involved in many notable Boston projects such as the Central Artery/Tunnel Surface Restoration and Wharf District Parks. Much of his work involves public realm projects—park master plans, playgrounds, courthouses, college campuses, green roofs, roof decks, multi-family housing and streetscapes. He has also lectured at the Build Boston conference on corporate and private roof decks.

**“Classroom session” outline**

1. INTRODUCTION TO HEALING GARDENS (Jennifer Jones, FASLA, Principal, Carol R. Johnson Associates, Inc.
2. WELCOME FROM PARTNERS HEALTHCARE (Owners of four of the featured gardens) -Wendy Krum, Senior Project Manager, Partners Healthcare
3. INTRODUCTION TO STUDY SITES (with map and handouts) by each design firm
   a. Dana-Farber Cancer Institute Yawkey Cancer Care Center Thea and James Stoneman Healing
   b. Spaulding Rehabilitation Hospital
   c. Massachusetts General Hospital, Uffelder Healing
   d. Massachusetts General Hospital Lunder Building Atrium and Roof
   e. Massachusetts General Hospital Paul S. Russell, MD Museum of Medical History and Innovation Roof
4. DEPART FOR SITE VISITS (HANDOUTS)

**Bibliography**


1. Dana-Farber Cancer Institute
2. Spaulding Rehabilitation Hospital and lunch
3. Massachusetts General Hospital

Convention Center
Massachusetts General Hospital Museum

Project Concept

Construction Completion - Winter 2011

Massachusetts General Hospital, the third oldest hospital in the country, commissioned the design team to create a museum as a celebration for its nearly two hundred years of health care innovation and contributions to medicine.

Located on a thin triangular site in Boston’s Beacon Hill/West End neighborhood, the building’s first floor was designed as an extension of the street theater to encompass the historic Resident Physician’s House as part of the exhibit space. With limited ground level open space, the roof was designed as a contemplative garden space.

In order to create a garden of medicinal plants to be both instructive and aesthetically beautiful, a series of Cor-Ten steel fin walls emerge from the seams of the paving to provide various depths of soil, and allow for a rich variety of plant species.
Massachusetts General Hospital - Lunder Building

BOSTON, MA (2011)

Working closely with NBBJ Architects, MVVA designed a series of roof garden, green roof and atrium spaces for the new emergency services building at the Massachusetts General Hospital in Boston, MA. The building floor plans were developed so that every patient room maximized exterior views, incorporating nature into the process of healing.

An 1,800-square-foot atrium garden, with a series of sculptural hanging planters filled with cascading vines, along with an area of bamboo and tropical plantings, create a healing environment on the 6th floor of the building that is accessible by the entire campus. The oversized, 4’ wide vine planters suspended above the atrium space greet visitors with an unexpected view and provide all atrium facing patient rooms with views of nature. A vegetated sculpture/seating element constructed as a stainless steel vessel similar to the hanging planters but with an interior slope carpeted with rotational plantings was conceived with an artist to provide a restorative environment for both hospital staff and family members of patients in the hospital’s intensive care unit.

An inaccessible roof garden space located elsewhere on the 6th floor provides a viewing garden that allows individuals in overlooking spaces to temporarily disengage themselves from their surroundings. A galvanized metal walkway for maintenance personnel floats at the base of several faceted landforms robustly planted with hardy species of bamboo and evergreen groundcover. Red twig dogwood and daffodil plantings sprinkle the landforms to create highlights of color during the winter and spring seasons. The green roofs on the 6th floor and building rooftop represent more than 50% of the total building roofing system, greatly reducing the amount of rainwater that the building directs to the city’s stormwater sewer as well as providing a vegetative layer that reduces the building’s potential contributions to urban heat islands.
6TH FLOOR WEST ROOF GARDEN
(6TH FLR, 2,750 SF)

UPPER PENTHOUSE GREEN ROOF
(8,400 SF)

LOWER PENTHOUSE GREEN ROOF
(9,800 SF)

WEST ROOF GARDEN
(6TH FLR, 2,750 SF)

NORTH GREEN ROOF
(6TH FLR, 2,300 SF)

ATRIUM
(6TH FLR, 3,750 SF)

MICHAEL VAN VALKENBURGH ASSOCIATES, INC., LANDSCAPE ARCHITECTS
Spaulding Rehabilitation Hospital
Therapy Trail and Garden
Charlestown, MA

Copley Wolff Design Group’s landscape design includes a therapy trail, perimeter milestone walk with distance markers, active sports, and a green roof. The design, construction, and operation of the building has been guided by the principles outlined in the Green Guide for Health Care (GGHC).

CWDG, with Spaulding’s support, designed the therapy trail so patients could practice a variety of real world challenges within a safe and controlled environment. The primary trail is a relatively level, six-foot-wide concrete walkway with staggered stainless steel handrails to offer support during therapy when required. Secondary paths are located off the main trail and offer a safe environment for individuals to train and further test their recovery on a variety of walking slopes and surfaces that will be encountered outside the hospital setting. The paths’ materials include, wood, crushed stone, field stone with stone dust joints, and field stone with mortared joints. They also include more aggressive challenges such as granite stairs, a granite curb with paving on both sides, a 4.9% sloped walk, and a ramp with handrails. Interactive, spinning rock elements have been incorporated along the trail for upper body conditioning and tactile, sensory opportunities. In addition to mobility related therapy opportunities, the trail stimulates cognitive skill development through the use of three-dimensional interpretive elements such as discovery and scavenger hunt pieces.

To further stimulate physical development within the garden, an open lawn area allows individuals to sit, crawl, play, and interact with nature. Boulders within the garden provide additional sensory stimulation as well as play and informal seating opportunities. Active sports opportunities such as a putting green, exercise wall, and basketball court are used to challenge individuals balance, visual acuity, and muscle coordination.

Seating of various sizes and configurations is placed throughout the garden, accommodating small groups and private respites for individual reflection, rejuvenation, and inspiration. Undulating stone walls, which complement the rolling landform of the landscape and waterside setting, allow universal interaction with the surrounding natural environment.

In addition to active opportunities, the therapy trail and terraces also offer patients, family, friends, and staff a place to enjoy the tranquility and healing properties within the garden and nearby harbor.
CRJA-IBI Group worked closely with the project architects and the Healing Garden Working Group to develop designs for the Dana-Farber Cancer Institute’s Yawkey Cancer Care Center’s Thea and James Stoneman Healing Garden. The garden occupies 2,000 SF of indoor space within the new 500,000 SF outpatient treatment, research and parking facility which opened in February 2011. The purpose of the garden, as envisioned by the Working Group, was “to create an area of quiet respite in a natural environment for patients, families and staff, with adequate space for reflection and healing amid nature’s beauty.”

The interior garden space highlights DFCI’s new front door on Brookline Avenue and Jimmy Fund Way in an 18’-high glass-walled corner spanning the third and fourth floors. Key components of the design include easy and safe access for patients, families and staff; a variety of flexible, small seating spaces for contemplation and conversation; a simple and non-toxic plant palette of bamboo, lily turf with frequent rotations of colorful flowers; contained individual planters with sterile soil mix and self-watering irrigation systems; and a separate glass-walled Conservatory for immuno-suppressed patients who cannot enter the garden itself.

The Healing Garden Working Group (led by two patients and comprising hospital administrators, safety and infection control specialists, research management, the Arts and Environment Committee, pediatric and adult nurses, patient and family advocates, architects and landscape architects) played a key role in the design process, helping to ensure that the garden would provide the desired physical and psychological benefits for its users, as well as a healthy and maintainable environment. The final design, construction and maintenance were made possible with a generous donation from Thea and James Stoneman.
The Ulfelder Healing Garden unites two contemporary trends in landscape architecture: green roofs and therapeutic landscapes. The garden is located on the 8th floor of the new Yawkey Center, which provides first class clinical care for patients with cancer and other serious illnesses.

Designed by Halvorson Design in collaboration with the Yawkey Center’s architects, Cambridge Seven, this green roof is a welcoming refuge for patients, families, friends and caregivers. Directly adjacent to the pediatric cancer facility, the garden is an oasis away from the waiting rooms, machines, IVs, and treatments—a place for people to gather, talk, reflect, and be consoled.