

ARCHITECTURAL SHOWCASE

BONE MARROW TRANSPLANT DEPARTMENT

Perkins Eastman NEW YORK, NY

Memorial Sloan-Kettering Cancer Center NEW YORK, NY



Perkins Eastman provided a 17,000-sq.-ft. renovation at Memorial Sloan-Kettering Cancer Center to create a new inpatient department dedicated to treating bone marrow disorders. This is just one of the projects to transform its existing six-story inpatient tower to meet the changing paradigm of comprehensive cancer care and provide disease-specific floors for targeted treatment planning.

Perkins Eastman worked with department physicians and staff in developing a patient- and family-focused design for this unique inpatient floor, where patients generally remain in the hospital for several weeks after a transplant. Through a rigorous series of user-group meetings, the design goals for the project became clear: to provide a state-of-the-art bone marrow transplant unit with patient-focused care; to create a protected environment for the patient without sacrificing patient or family comfort; to maximize IT access; and to create a welcoming and beautiful interior design.

Because of the high risks of infection to bone marrow transplant patients, particular design emphasis focused on infection control measures. After patients undergo transplantation, numerous precautionary measures are taken to protect the patient from infection, such as wearing protective masks, washing hands prior to entering the room, and barring fresh fruit, plants, or cut flowers, as these can carry disease-causing molds and bacteria. As bone marrow transplant patients are severely immunodepressed, all of the single patient rooms are HEPA-filtered with positive pressure to provide critical infection control. All surfaces had to be nonporous and resistant to wear. Epoxy paint was used on wall surfaces, solid materials were used for all countertops, and seamless vinyl was used for the floor, allowing for thorough and frequent cleanings.

Furniture selections were made based on their ability to repel infections that could interfere with the patient's healing process. The pull-out couches



Project category: Remodel/Renovation (completed December 2005)
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 Firm: Perkins Eastman, (212) 353-7200
 Design team: Mary-Jean Eastman, Partner-in-Charge; Jeffrey Brand, Medical Planning Principal; Maureen Carley, Project Designer; Pamela Basch, Project Architect; Jay Epstein, Medical Planner
 Photography: Chuck Choi
 Total building area (sq. ft.): 17,000
 Construction cost/sq. ft.: Not released
 Total construction cost (excluding land): Not released

provided for family members' extended stays are made of 100% vinyl, leather-like material, and all fabrics used in the room have antimicrobial and moisture-barrier treatments. In the lounge, an area rug made of chilewich (a woven vinyl flooring) offers sound-absorptive qualities, as well as texture to add warmth to the setting. These materials all innovatively provide a sterile environment that decidedly departs from typical clinical settings.

Since the average stay for transplant patients is more than 30 days, creating a comforting healing environment was key. Each patient room accommodates family members with a large family pantry and family shower room. Interior design finishes

evoke a homelike feel through a neutral beige color palette, with warm wood elements and bold accents of forest green. Artful photographs of contemplative nature scenes line the walls, providing a calming mood and a vibrant dose of color. Bathrooms include luxurious finishes, such as large-scale porcelain tiles, elegant sconces, and large handicap-accessible showers. The finest amenities, including Internet access and computers, flat-screen televisions, and DVD players and VCRs are provided in each patient room and the family lounge.

The design team also had the goal of creating a high-performing hospital environment to meet the operational





needs of fellows, nurse practitioners, physician assistants, and medical and nursing staff. The centrally located and open nurses' station doubles as a shortcut for staff to go from one side of the building to the other. This plan for the nurses' station is patient-friendly and accessible and gives the nurses the illusion of more space. Nurse servers are located directly adjacent to each patient room; each is equipped with a sink and areas for charting, organizing, and disposing of biomedical waste and clean and soiled linens. The corridors were also designed with staff input. To create a warm floor design without carpeting, which can harbor infection, the team used large tiles in neutral color patterns to create a smooth walking surface and prevent patient falls.

